

Appendix H

DETAILS OF EAP AND EXPERTISE

EAP and expertise

The details of the EAP who compiled the BAR and the expertise of the EAP to perform the Basic Assessment process.

Curriculum vitae: Ms FI GRESSE

Name : **GRESSE, FRANCIENA ISABELLA**
 Date of Birth : 14 March 1985
 Profession/Specialisation : Impact Assessment Practitioner
 Years with Firm : 7
 Nationality : South African
 Years experience : 7

Key qualifications

Franci is a senior environmental practitioner in Aurecon's Cape Town office. She has been involved in various environmental investigations, including environmental impact assessments (EIAs), environmental management plans (EMPs), environmental management programmes (EMPs), rehabilitation plans, maintenance management plans (MMPs) and fatal flaw analysis.

Franci has been involved with the Working for Wetlands rehabilitation programme for the past five years, of which she has been acting as the Team Leader for the environmental assessment practitioners (EAPs) for the last three years. The Working for Wetlands project won the 2012 Aurecon Chairman's Award for its positive contribution to the natural and social environment. In addition, Franci has also been involved with a number of projects in the renewable energy sector.

Franci served on the committee of the South African affiliate of the International Association for Impact Assessment (IAIA) for the Western Cape Branch from 2009 to 2011, and remains a member. She completed a Bachelor of Science and an Honours Degree in Conservation Ecology at the University of Stellenbosch (South Africa).

Employment record

2012 - Date	Aurecon, Senior Environmental Consultant
03/2009 - 2012	Aurecon, Environmental Consultant
2008 - 02/2009	Aurecon, Candidate Environmental Consultant

Experience record

Maintenance management plans (MMPs) for flood damaged road infrastructure (Western Cape Province, South Africa) 06/2015 - Date. *Project Staff.* The project entails the compilation of maintenance management plans (MMP) for two local municipal areas (Laingsburg and Worcester), as well as obtaining the necessary permits/ water use authorisations. Involved during the project commencement with regards to strategy development, meetings with the relevant authorities and assistance with the development of the MMPs. (Western Cape Provincial Department of Transport and Public Works).

Implementation of the Klipgats Pan Environmental Authorisation (EA) (Northern Cape Province, South Africa) 11/2013 - 2014. *Project Leader.* Mulilo Renewable Energy received Preferred Bidder Status for one of their photovoltaic facilities near Copperton and required assistance with the implementation of the Environmental Authorisation (EA), including updating of the Environmental Management Plan (EMP). Responsible for the management of tasks and review of all documentation. Also assisting client with questions on the EIA process. (Mulilo Renewable Energy).

Implementation of the Hoekplaas Environmental Authorisation (EA) (Northern Cape Province, South Africa) 11/2013 - 2014. *Project Leader.* Mulilo Renewable Energy received Preferred Bidder Status for one of their photovoltaic facilities near Copperton and required assistance with the implementation of the Environmental Authorisation (EA), including updating of the Environmental Management Plan (EMP). Responsible for the management of tasks and review of all documentation. Also assisting client with questions on the EIA process. (Mulilo Renewable Energy).

Environmental impact assessment and compilation of an environmental management plan for the Swakopmund-Mile 7 Water Supply, Phase 2 (Swakopmund, Namibia) 11/2013 - 2014. *Project Leader.* NamWater appointed Aurecon to assist with the environmental impact assessment process for the proposed construction of a new water pipeline between Swakopmund and Mile 7. Responsible for the management and review of the EIA reports and processes, as well as the project's finances. (NamWater).

Working for Wetlands plan 2014 - Date (Western Cape Province, South Africa) 06/2013 - 12/2015. Task Leader. The South African National Biodiversity Institute (SANBI) appointed Aurecon to provide environmental and engineering services for the Working for Wetlands Programme which is a national wetland rehabilitation programme. Responsible for the management of the environmental authorisation component of the project, as well as the compilation of Basic Assessment Reports (BAR) for the country. Other responsibilities include the compilation of Wetland Rehabilitation Plans for the Western Cape, Northern Cape, North West and Limpopo Provinces, liaison with authorities and the public (public participation process) and management of wetland specialists. (South African National Biodiversity Institute (SANBI)).

Environmental impact assessment (EIA) for the expansion of approved solar energy facilities located near Prieska and De Aar (Northern Cape Province, South Africa) 03/2013 - Date. Phase Leader. Mulilo Renewable Energy decided to expand the approved solar energy facilities on the farms Hoekplaas and Klipgats in Prieska, as well as on the farms Badenhorst Dam and Du Plessis Dam in De Aar. The expansion of Hoekplaas farm in Prieska includes ten additional 75MW photovoltaic (PV) facilities and six additional PV units at Klipgats Pan farm. The expansion at Badenhorst Dam farm includes four additional 75MW PV facilities and three additional PV units at Du Plessis Dam farm. Responsible for the management and review of the EIA reports and processes, as well as the project's finances. (Mulilo Renewable Energy).

Fatal flaw study for two potential Wind Energy Facility (WEF) sites (Northern and Western Cape Provinces, South Africa) 03/2013 - 04/2013. Environmental Practitioner. The study entailed a fatal flaw analysis of two potential Wind Energy Facility (WEF) sites in the Northern and Western Cape Provinces. Responsible for the assessment of the sites and compilation of the fatal flaw report. (Juwi Renewable Energies (Pty) Ltd).

Repair of flood damage to road structures in the Eden District Municipality (Western Cape Province, South Africa) 2012 - 2013. Environmental Practitioner. The project entails the compilation of Maintenance Management Plans (MMP) for seven areas with the Eden District Management Area to repair. Responsible for compilation of MMPs, review of reports and liaison with stakeholders and authorities. (Western Cape Provincial Department of Transport and Public Works).

Richtersveld Wind Energy Facility (WEF) (Northern Cape Province, South Africa) 07/2012 - 08/2012. Environmental Practitioner. The project entailed a due diligence of the proposed Wind Energy Facility (WEF) to review compliance with the requirements of the Department of Energy's Independent Power Producer (IPP) process. Responsible for the review of the environmental reports and compilation of the due diligence report. (TRE Tozzi Renewable Energy S.p.A and Guma Group).

Three Photovoltaic (PV) energy facilities near Copperton (Northern Cape Province, South Africa) 09/2011 - 2012. Environmental Practitioner. The project entailed three Environmental Impact Assessments (EIAs) for three Photovoltaic (PV) energy facilities comprising 75MW to 150MW, located near Copperton. Responsible for the management the EIA process and project specialists, compilation of scoping and EIA reports and liaison with authorities. (Mulilo Renewable Energy (MRE)).

Fatal flaw study for four potential Wind Energy Facility (WEF) sites (Northern and Western Cape Provinces, South Africa) 11/2011 - 05/2012. Environmental Practitioner. The study entailed a fatal flaw analysis of four potential Wind Energy Facility (WEF) sites across the Northern and Western Cape Provinces. Responsible for the management of specialists, review of reports, assessment of the sites and compilation of the fatal flaw report. (Mainstream Renewable Power South Africa).

Proposed Paarl Mountain and Ysterbrug pumping main upgrades (Western Cape Province, South Africa) 2011 - 2013. Environmental Advisor. The Drakenstein Municipality appointed Aurecon's engineers to investigate and plan the proposed upgrade of the Paarl Mountain and Ysterbrug Pumping Scheme. The upgrading of the pipelines feeding the Meulwater Water Treatment Works from the Bethel and Nantes dams, also part of this scheme, was also investigated. Responsible for providing advice on environmental processes required. Other responsibilities included the management of the independent Environmental Assessment Practitioner and the review of all EIA documentation. (Drakenstein Municipality).

Proposed Rehabilitation of Wetlands as Part of the Working for Wetlands (Western, Northern, Limpopo and Gauteng Provinces) 2010 - 2013. Environmental Practitioner. Appointed by the South African National Biodiversity Institute (SANBI) to conduct Environmental Impact Assessments (EIAs) for the rehabilitation of specific wetlands in all provinces of South Africa over a five year period. Responsible for the compilation of Basic Assessment Reports (BAR) and Wetland Rehabilitation Plans for the Western Cape, Northern Cape, Gauteng and Limpopo Provinces. Other responsibilities included liaison with authorities, public participation

process, management of specialists and general project management of the environmental component of the project. (South African National Biodiversity Institute (SANBI)).

Environmental impact assessment (EIA) for the proposed extension of the Ash Dam facility at Kriel Power Station (Mpumalanga Province, South Africa) 2010 - Date. *Environmental Practitioner.* Appointed by Eskom to conduct an Environmental Impact Assessment (EIA) for the proposed construction of a fourth ash dam facility at the Kriel Power Station. Responsible for the general project management and finances, screening process, compilation of the scoping and EIA reports, public participation and the compilation of a waste management licence application. (Eskom Holdings).

Environmental impact assessment (EIA) for proposed solar energy facility, Onder Rietvlei Farm (Aurora, Western Cape Province, South Africa) 2010 - 2012. *Environmental Practitioner.* Appointed by Solaire Direct to undertake a basic environmental impact assessment process for the proposed construction of a 10 MW solar energy facility. Responsible for the compilation of the draft and final reports, public participation process, management of specialists and general project management. (Solaire Direct Southern Africa).

Environmental impact assessment (EIA) for proposed relocation of solar energy facility, Onder Rietvlei Farm (Aurora, Western Cape Province, South Africa) 2010 - 2011. *Project Leader.* Appointed by Solaire Direct to undertake a basic environmental impact assessment (EIA) process for the proposed relocation of an approved, but not yet constructed 10 MW solar energy facility. Responsible for the management and review of the EIA process and finances. (Solaire Direct Southern Africa).

Environmental sensitivity study (ESS) for a proposed solar energy facility on a farm Near Aurora (Western Cape Province, South Africa) 2010. *Environmental Practitioner.* Appointed to provide and Environmental sensitivity study (ESS) which inter alia highlights the potential constraints ("red flags") and opportunities presented by the site from an environmental perspective. Responsible for the compilation of the ESS. (Solaire Direct Southern Africa).

Proposed erection of Eskom communication sirens/PA systems (Blaauwberg, Western Cape Province, South Africa) 2009 - 2010. *Environmental Practitioner.* The project entailed three Environmental Impact Assessment (EIA) processes for the (a) erection of 10 new sirens in the Parklands area, (b) the relocation of one siren in Bloubergstrand, and (c) the upgrade of five sirens on farms near Melkbosstrand. Responsible for compiling EIA reports, and the public participation process. (Eskom).

Proposed construction of a new pipeline from Bovlei Winer to Withoogte Dam (Wellington, Western Cape Province, South Africa) 2009 - 2010. *Environmental Practitioner.* The Drakenstein Municipality proposed to replace a section of the existing pipeline extending from the Withoogte Dam to the Welvanpas Reservoir near Wellington as part of the municipality's water master plan in order to improve the overall water supply. Responsible for the compilation of the Environmental Impact Assessment (EIA) report, management of specialists and the public participation process. (Drakenstein Municipality).

Proposed remediation, rehabilitation and restoration of the Spruit, Krom, Leeu and Palmiet Rivers (Western Cape Province, South Africa) 2009 - 2010. *Environmental Practitioner.* Appointed by the Drakenstein Municipality to undertake the requisite Environmental Impact Assessment (EIA) process for the rehabilitation, remediation and stabilisation of four rivers in Paarl and Wellington. Responsible for the EIA and public participation processes. (Drakenstein Municipality).

Overberg District Municipality: Integrated Transport Plan (ITP): strategic environmental informants (Western Cape Province, South Africa) 2009. *Environmental Practitioner.* Aurecon's Transportation Unit was appointed to revise the Integrated Transport Plan (ITP). The Environmental Unit was sub-contracted to provide environmental input. Responsible for identifying and describing the relevant informants. (Overberg District Municipality).

Overberg District Municipality Integrated Transport Plan (ITP) strategic environmental informants (Western Cape Province, South Africa) 2009. *Environmental Practitioner.* Aurecon's Transportation Unit was appointed to revise the Integrated Transport Plan (ITP). The Environmental Unit was sub-contracted to provide environmental input. Responsible for identifying and describing the relevant informants. (Overberg District Municipality).

Annandale Commercial: development of petrol filling station on portion of Erf 5561 (Kuils River, Western Cape Province, South Africa) 2009. *Environmental Practitioner.* Appointed to compile a Construction Environmental Management Plan (CEMP) for the construction of a filling station on the corner of

Gladioli Street and Amandel Drive, Kuils River. Responsible for the compilation of the project specification document as part of the CEMP. (Communicate).

Pre-feasibility and feasibility studies for augmenting the Western Cape water supply system (South Africa) 2008 - 2013. *Project Staff.* The Department of Water Affairs commissioned pre-feasibility and feasibility studies for the augmentation of the Western Cape water supply system through the further development of the surface water resources. Surface water schemes to be investigated were identified by the Western Cape water supply system reconciliation strategy study. Responsible for the public participation process, managing environmental specialists, and compiling a socio-economic overview of the study area. (Department of Water Affairs (DWA)).

Environmental Impact Assessment (EIA) for the proposed Langezandt Quays development in Struisbaai Harbour (Western Cape Province, South Africa) 2008 - Date. *Environmental Practitioner.* Aurecon was appointed to undertake an Environmental Impact Assessment EIA process for the proposed development of a four storey development on Erf 848 within the Struisbaai harbour precinct. Responsible for drafting responses to the Department of Environmental Affairs' independent review report on the proposed development. (Golden Falls (Pty) Ltd).

Proposed redevelopment of the Blaauwberg Conservation Area: Eersteste Node (Western Cape Province, South Africa) 2008 - 2010. *Environmental Practitioner.* The project entailed an Environmental Impact Assessment (EIA) process for redeveloping the Eersteste Conservation Area on the West Coast. Responsible for compiling the EIA report, as well as managing specialists and the public participation process. (City of Cape Town).

Table Mountain Group aquifer feasibility study and pilot project (Western Cape Province, South Africa) 2008 - 2010. *Environmental Control Officer.* The City of Cape Town initiated a study into the Table Mountain Group Aquifer as a potential water source to augment the city's supply. The feasibility and pilot project phase Record of Decision (RoD) required completion for site-specific Environmental Management Plans (EMPs) for drilling sites that were assessed to be environmentally sensitive. Site-specific EMPs were designed for sensitive sites to ensure minimal environmental impact during the drilling phase. Responsible for monitoring compliance with the RoD and EMP during the drilling phase. (City of Cape Town).

Application for rectification in terms of Section 24G of the National Environmental Management Act (NEMA) for the unlawful commencement of a fruit processing factory on Op de Tradouw Farm, Number 69 (Barrydale, Western Cape Province, South Africa) 2008 - 2009. *Environmental Practitioner.* The project consisted of an application for rectification in terms of Section 24G of NEMA. Responsible for compiling an environmental impact report and an Environmental Management Plan (EMP) for the application, as well as managing the public participation process. (Schoonies Family Trust).

C.A.P.E. Olifants-Doring Catchment Management Agency project: development of a catchment management strategy water resource protection sub-strategy for the Olifants-Doring Catchment (South Africa) 2008 - 2009. *Environmental Practitioner.* Appointed by CapeNature to compile a catchment management strategy water resource protection sub-strategy for the Olifants-Doorn catchment. Responsible for compiling a database that lists all institutions and their respective mandates in terms of water resource protection and biodiversity conservation decision making for the Olifants-Doring Catchment, workshop arrangements, and general project related work. (CapeNature).

Proposed extension of Lock Road (Kalk Bay, Western Cape Province, South Africa) 2008 - 2009. *Project Staff.* The project comprised an Environmental Impact Assessment (EIA) process for extending Lock Road to an existing erf. Involved during the final stages of the application. (Mr Rick Bartlett).

Proposed development of apple and pear orchards on Soetmelksvlei Farm (Western Cape Province, South Africa) 2008 - 2009. *Project Staff.* This Agri-development project involved the development of 50ha of apple and pear orchards in the Rivieronderend region. Responsible for compiling the basic assessment report, Environmental Management Plan (EMP), and managing the specialists and public participation process. (BETCO).

Water reconciliation strategy for the Algoa water supply area (Eastern Cape Province, South Africa) 2008 - 2009. *Environmental Practitioner.* This project provided an assessment of the environmental opportunities and constraints for a suite of water schemes in the Algoa water supply area. This was undertaken as part of a broader study in the area.

Environmental sensitivity study for the proposed Dasdrif Poultry Farm (Moorreesburg, Western Cape

Province, South Africa) 2008. Project Staff. The project consisted of an Environmental Sensitivity Study (ESS) which, inter alia, highlighted the potential constraints (“red flags”) and opportunities presented by the site from an environmental perspective. Responsible for compiling the ESS. (Eikenhoff Poultry Farms (Pty) Ltd).

Department of Economic Affairs, Environment and Tourism (DEAET) decision-making support (South Africa) 2008. Project Staff. Responsible for assisting the DEAET with the review and processing of Environmental Impact Assessment (EIA) applications in terms of the Environment Conservation Act. (Department of Economic Affairs, Environment and Tourism (DEAET)).

Joint Maputo River Basin water resources study (Mozambique, Swaziland and South Africa) 2008. Project Staff. The project provided an environmental opportunities and constraints assessment of a suite of potential dams in South Africa and Swaziland, within the Maputo River Catchment. This was undertaken as part of a broader study into the catchment.

Education

2007 : BSc (Hons) Conservation Ecology, University of Stellenbosch, South Africa

Professional affiliations

Member, International Association of Impact Assessment (IAIA)

Languages

	Reading	Writing	Speaking
English	Excellent	Excellent	Excellent
Afrikaans	Excellent	Excellent	Excellent

By my signature below I certify the correctness of the information above and my availability to undertake this assignment.

Signature of Staff Member

Date

Curriculum vitae: Ms C BLANCHÉ

Name : **BLANCHÉ, CLAIRE**
 Date of Birth : 11 November 1977
 Profession/Specialisation : Senior Environmental Scientist
 Years with Firm : 3
 Nationality : South African
 Years of experience : 13

Key qualifications

Claire is currently employed as a Senior Environmental Scientist in Aurecon's Cape Town office where she has worked on South African projects within the Environmental Impact Assessment (EIA) process, and has a good understanding of the South African laws and regulations associated with these procedures.

In her capacity as a lead environmental scientist, Claire has led teams of consultants, specialists and scientists, focusing specifically on large-scale linear-type developments. She has gained skills in the execution of plant rescue and rehabilitation in linear projects, and has contributed towards research and State of Environment Reporting, specifically in the fields of air quality and climate change.

She studied at the University of KwaZulu-Natal, South Africa and obtained a master's degree in 2001 for environment and development, including integrated environmental management (IEM) procedures, project management and planning, environmental auditing, environmental law, and rural land and community development), with specialisations in water resources and catchment management.

Between 2009 and 2011 Claire was an elected member of the national executive committee as well as a vice-chair KwaZulu-Natal committee member for the International Association for Impact Assessments South Africa (IAIASa). She is currently also an lifetime inaugural member of the Golden Key International Honour Society (GKIHS) as well as an interim inaugural member of the Environmental Assessment Practitioners Association of South Africa (EAPASA).

Employment record

05/2012 - Date	Aurecon, Senior Environmental Scientist
08/2005 - 04/2012	Knight Piésold Consulting, Principal Environmental Scientist
01/2002 - 07/2005	JB Projects, Environmental Scientist
2002	University of KwaZulu-Natal, Research Assistant and Course Facilitator

Management experience

2005 - 2012	In her role as Principle Environmental Scientist, she led a team of six Environmental staff members in the KwaZulu-Natal division of Knight Piésold. The team included a Biodiversity Specialist, a Heritage (Anthropologist and Archaeologist) Specialist, two Junior Environmental Scientists and a Senior Environmental Scientist.
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Experience record

Shire River Basin Management Program (SRBMP) catchment and infrastructure development guideline (Shire River Basin, Malawi) 06/2013 – Date. *Project staff.* The aim of the project is to compile a set of practical guidelines for catchment management plans (CMPs) and rural infrastructure development plans (IDPs). The guidelines will target different scales (from village, district and catchment to national) as well as different literacy levels. The project will include intensive stakeholder engagement, requiring data collection and review of existing manuals and guidelines as well as field reconnaissance to determine the types of projects and scale application. From this, draft guidelines are produced, which will be implemented through capacity building and training at the various scale levels. The project will update the national guidelines. Responsibilities include the contribution to the compilation of training work manuals, course curricula and training video material. Also will facilitate two training workshops in Malawi aimed at disseminating guideline information to extension officers and agricultural representatives. (Ministry of Water Development and Irrigation/ Shire River Basin Management Programme).

Maintenance management plans (MMPs) for flood damaged road infrastructure (Western Cape Province, South Africa) 06/2015 – Date. *Project staff.* The project entails the compilation of maintenance management plans (MMP) for two local municipal areas (Laingsburg and Worcester), as well as obtaining the necessary permits/ water use authorisations. Involved during the project commencement with regards to strategy development, meetings with the relevant authorities and assistance with the development of the MMPs. (Western Cape Provincial Department of Transport and Public Works).

Borrow pits for the Department of Transport and Public Works (Western Cape Province, South Africa) 11/2012 - Date. *Team Leader (NEMA Component).* This project involves basic assessment processes and environmental management plans (EMP's) for approximately 50 borrow pits which will be used as material sources for road re-gravelling and maintenance programmes within the Overberg, Eden and Central Karoo Districts of the Western Cape. The broader project includes the identification of suitable material sources, and the legalisation of preferred borrow pits in terms of the National Environmental Management Act, No. 107 of 1998, the Minerals and Petroleum Resources Development Act, No. 28 of 2002, the National Heritage Resources Act, No. 25 of 1999, the National Water Act, No. 36 of 1998 and the Land Use Planning Ordinance, No. 15 of 1985. The project therefore required the coordination of these processes and detailed liaison with the relevant Organs of State. (Western Cape Government Department of Transport and Public Works).

Working for Wetlands Programme (Regional, South Africa) 05/2012 - Date. *Co-Team Leader (Environmental Component).* Working for Wetlands (WfWetlands) is a government programme managed by the South African National Biodiversity Institute (SANBI), and is a joint initiative of the Departments of Environmental Affairs, Water Affairs and Agriculture, Forestry and Fisheries. The programme is mandated to rehabilitate damaged wetlands and to protect pristine wetlands throughout South Africa, with an emphasis on complying with the principles of the Expanded Public Works Programme which seeks to draw significant numbers of unemployed people into the productive sector of the economy, gaining skills while they work and increasing their capacity to earn an income. This project involves the basic assessment process to apply for environmental authorisation to work in many wetland projects throughout South Africa. It also involves the coordination of wetland ecologists, engineers and environmental scientists to deliver detailed Rehabilitation Plans for each wetland project, as well as the public participation processes associated with the rehabilitation proposals. (South African National Biodiversity Institute (SANBI)).

Piketberg stormwater infrastructure upgrade project (Western Cape Province, South Africa) 05/2012 - 02/2013. *Project Leader.* This project involved the basic assessment process and environmental management plan (EMP) for the proposed upgrade of the stormwater infrastructure in the town of Piketberg.

Horizontal dust flux monitoring for the Port of Saldanha terminal (Western Cape Province, South Africa) 10/2011 - 04/2012. *Project Leader.* This project involved the servicing of 24 horizontal dust flux monitoring stations for Transnet at their port terminal in Saldanha, and the monthly reporting on dust derived from the iron ore handling facilities. The project also included two annual audits. (Transnet Ports Terminal (TPT)).

Jack Muller Park Core Conservation Zone (CCZ), Belville (Western Cape Province, South Africa) 04/2011 - 08/2011. *Project Leader.* This project involved the compilation of a specific Environmental Management Strategy and Plan (EMS and EMP) for the operation of the Core Conservation Zone (CCZ) within the greater Jack Muller Park. The CCZ comprises the threatened Cape Flat Sand Fynbos ecosystem, and required detailed aims and objectives for fire management, recreational activity management, invasive plant control, educational opportunities, and general park maintenance activities.

Air Quality Management (AQM) training and air emissions licensing training (Western Cape Province, South Africa) 03/2011 - 06/2011. *Project Leader.* The aim of the project was to empower the Cape Winelands District Municipality in Air Quality Management (AQM) and emissions licensing in terms of the National Environmental Management: Air Quality Act (NEMAQA), enabling them to fulfil their responsibilities as air quality authorities across five local municipalities in the Cape Winelands District. (Cape Winelands District Municipality).

Extension to Parys Cemetery, Paarl (Western Cape Province, South Africa) 02/2011 - 07/2011. *Project Leader.* This project involved the Basic Assessment (BA) process and Environmental Management Plan (EMP) for the proposed extension of the Parys cemetery in Paarl. The property proposed for development was considered of biodiversity significance, and careful layout design to avoid sensitive portions was required. The extension would also impact on the unmarked graves that historically formed part of the cemetery activities.

Hillside 2 stormwater detention ponds and pipelines, Beaufort West (Western Cape Province, South

Africa) 02/2011 - 07/2011. Project Leader. This project involved the Basic Assessment (BA) process and Environmental Management Plan (EMP) for two stormwater detention facilities (dams) and associated pipelines and culverts. The development alleviates flood risk to residential properties, as well as improves stormwater infrastructure for the town of Beaufort West.

Demolition of Athlone Cooling Towers (Western Cape Province, South Africa) 03/2010 - 08/2010. Project Leader. This project involved the expedient demolition of two benign cooling towers due to structural instability. Responsible for undertaking the development of an appropriate Environmental Management Plan (EMP) for the planning, demolition and clean-up of the towers. The project required the coordination of specialist teams for noise, dust and vibration mitigation, as well as the relocation of Peregrine Falcon nesting boxes, and the general Public Participation Process (PPP). This project won the Consulting Engineers South Africa's (CESA) Aon 2011 Commendation Award for projects under R50 million. (City of Cape Town).

Rehabilitation of the Western Aqueduct, Phase 1 (KwaZulu-Natal Province, South Africa) 01/2009 - 12/2010. Project Leader. The Western Aqueduct project is a bulk water supply project. Responsible for managing the design and compilation of the Environmental Management Plan (EMP), rehabilitation strategy, rehabilitation specification and Bill of Quantities (BoQ) for the rescuing of indigenous plant materials from the proposed footprint of the 73km bulk water pipeline, and the rehabilitation of the 30m-wide corridor following construction. This project was awarded the International Association for Impact Assessment South Africa's (IAIASa) 2011 Special Recognition Certificate for excellence in project execution. (eThekweni Water and Sanitation).

Umgeni Water pipeline specialist studies, Pietermaritzburg (KwaZulu-Natal Province, South Africa) 2007 - 2008. Project Leader. The project involved the potential development of an eco-estate, nature reserve and a conservation area characterised by the presence of endangered mistbelt species, including the near-extinct *Gerbera aurantiaca* (Hilton Daisy). The social aspects of the project required a holistic approach to client, authority and general public communications. Responsible for managing the biodiversity specialist study and the Public Participation Process (PPP), which formed part of the Basic Assessment (BA) process, for a water pipeline project.

Bulk water pipeline, reticulation network and abstraction/treatment plant, Macambini (KwaZulu-Natal Province, South Africa) 2007 - 2008. Project Leader. The project provides potable water to agricultural and rural communities in Northern KwaZulu-Natal, and required the construction of an abstraction and treatment facility. Responsible for managing the Public Participation Process (PPP) for 170km of bulk water pipelines and reticulation networks aimed at providing treated water to previously neglected areas (in terms of infrastructure provision).

School access road upgrade project, Umzumbe (KwaZulu-Natal Province, South Africa) 2007. Project Leader. Responsible for supervising the Basic Assessment (BA) process and associated Public Participation Process (PPP) for an access road linking rural schools with local communities.

Environmental Impact Assessment (EIA) for the Western Aqueduct (KwaZulu-Natal Province, South Africa) 01/2006 - 12/2008. Project Leader. Responsible for undertaking the Public Participation Process (PPP), and the scoping and Environmental Impact Assessment (EIA) processes associated with the 73km bulk water pipeline, with a diameter of 1.6m. Duties included the design of an appropriate methodology to deal with the variety of biophysical and socio-economic environments along the route; the coordination of four renowned specialist teams; the public consultation with all Interested and Affected Parties (I&AP), including government departments, stakeholders and interest groups; the liaison between the engineering design team, the client and the specialist teams; and the compilation of the relevant reports, documents and correspondence. (eThekweni Water and Sanitation).

Valley of a Thousand Hills reservoir, Botha's Hill (KwaZulu-Natal Province, South Africa) 2006. Project Leader. Responsible for managing and undertaking the environmental scoping investigations and Public Participation Process (PPP) for the construction of a water reservoir to supplement existing bulk water infrastructure.

Upgrading of Main Road P100, Ndwedwe (KwaZulu-Natal Province, South Africa) 2006. Project Leader. This project was an African Renaissance Road Upgrading Programme (ARRUP) initiative promoting development within a rural community. Responsible for managing and undertaking the environmental scoping investigations and Public Participation Process (PPP), and developing the Environmental Management Plan (EMP) for the construction and upgrade of the P100 Main Road in Ndwedwe, KwaZulu-Natal. Also responsible for managing the associated specialist investigations and compiled the environmental reports.

Upgrading of Florida Road, Somtseu Road, and Florence Nightingale Drive in Durban (KwaZulu-Natal Province, South Africa) 2006. *Project Leader.* Responsible for managing and undertaking the environmental scoping investigations and Public Participation Processes (PPPs) for three road upgrade projects in the Durban area, aimed at improving safety and relieving congestion/parking inadequacies.

Tyburn Boulevard water pipeline, Westville (KwaZulu-Natal Province, South Africa) 2006. *Project Leader.* Responsible for managing and undertaking the environmental scoping investigations and Public Participation Process (PPP) for a new section of water pipeline linking the Dawncliff Reservoir water supply to the West End Office Park in Westville, KwaZulu-Natal. Also responsible for managing the associated specialist investigations for the environmental work.

Five projects on intersection and pedestrian safety improvements in the Greater Durban Area (KwaZulu-Natal Province, South Africa) 2006. *Project Leader.* Responsible for supervising the environmental investigations associated with the exemption applications for five separate road projects aimed at improving intersection and pedestrian safety.

Westriding Aqueduct (KwaZulu-Natal Province, South Africa) 2005. *Project Leader.* Responsible for undertaking the environmental scoping investigations, social study and Public Participation Process (PPP) for the construction and upgrading of a water supply system (pipeline and reservoirs) in the Hillcrest area.

Arlington Sawmill, Nottingham Road, Pietermaritzburg (KwaZulu-Natal Province, South Africa) 2005. *Environmental Scientist.* Responsible for managing and undertaking the environmental scoping investigation and Public Participation Process (PPP) for the relocation and upgrading of the Arlington Sawmill, including a scheduled process in terms of the Atmospheric Pollution Prevention Act (APPA). Also responsible for undertaking the specialist studies regarding air quality and noise level monitoring.

Cathedral Peak Hotel, Drakensberg (KwaZulu-Natal Province, South Africa) 2005. *Environmental Scientist.* Responsible for assisting with the compilation of the Environmental Management Plan (EMP) for the hotel and infrastructure, including recreational and mountain activities, the golf course, the sewerage works, a trout farm, a piggery and chicken farm, and surrounding wilderness management; all stakeholder engagement, client/authority liaisons, and report design and compilation.

Daimler-Chrysler Franchise and Industrial Park (KwaZulu-Natal Province, South Africa) 2005. *Project Leader.* Responsible for managing and undertaking the environmental scoping investigations and Public Participation Processes (PPPs) for projects requiring a change in landuse from agriculture to light industrial type.

Victoria Country Club Estate, Pietermaritzburg (KwaZulu-Natal Province, South Africa) 2004. *Environmental Scientist.* The project entailed the merger of the Queen Elizabeth Park, headquarters of Ezemvelo KZN Wildlife, and the Victoria Country Club; and the addition of a five-village residential and office park estate to create an exclusive wildlife, recreational, commercial and residential development. Responsible for undertaking the design and compilation for the Environmental Management Plan (EMP) for the construction and operation of the golf and wilderness estate.

Skozani aluminium recycling facility, Pietermaritzburg (KwaZulu-Natal Province, South Africa) 2004. *Environmental Scientist.* Responsible for managing and undertaking the environmental scoping investigation and Public Participation Process (PPP) for the proposed aluminium recycling facility, including a scheduled process in terms of the Atmospheric Pollution Prevention Act (APPA). Also responsible for undertaking the specialist studies regarding air quality and noise level monitoring.

Mabhobhane access road, Maphumulo, Tugela Valley (KwaZulu-Natal Province, South Africa) 2004. *Project Leader.* Responsible for managing and undertaking the environmental scoping investigation and Public Participation Process (PPP), and developing the Environmental Management Plan (EMP) for the construction and upgrading of 13km of gravel road to provide a community access route to areas previously only reachable by four-wheel drive vehicles.

Magabeni Community Project, Mnini (KwaZulu-Natal Province, South Africa) 2003. *Environmental Scientist.* The project's aim was to provide community skills development, food security, and income sustainability for 30 households. Responsible for managing and undertaking the environmental scoping investigation and Public Participation Process (PPP), and developed the Environmental Management Plan (EMP) for the proposed change in landuse from grazing land to irrigated agriculture, utilising treated effluent from the Magabeni Wastewater Treatment Works (WWTW).

Valencia Dam, Gacemann Farm, Bergville (KwaZulu-Natal Province, South Africa) 2003. *Environmental Scientist.* Responsible for assisting with the environmental scoping investigation and Public Participation Process (PPP) for the 700 000 cubic metre farm dam; all stakeholder consultation, research, and report design and compilation.

Academic experience

University of KwaZulu-Natal, South Africa

- From 2004 to 2005, she lectured the Integrated Environmental Management Courses at the University of KwaZulu-Natal, which were designed as both modules for the Master degree in Environment and Development, and as Certificate courses for external students.
- In 2002 she served as Course Facilitator in an Introductory Course to River Rehabilitation and Planning presented to Master students at the University of Natal.

Wildlife society

- In 2011 and 2012, she lectured the component on Environmental Best Practice at the WESSA Training Course on Environmental Impact Assessment and Environmental Law (Cape Town, South Africa).

Education

- 2001 : MSc Environment and Development, University of KwaZulu-Natal, South Africa
- 1999 : BSc (Hons) Applied Environmental Science: Physical and Human Geography, University of KwaZulu-Natal, South Africa
- 1998 : BSc, University of KwaZulu-Natal, South Africa

Career enhancing courses

- 2013 : MS Projects Proficiency Course, Aurecon Project Support Office
- 2012 : Certified Green Building Practitioner, Green Building Council of South Africa (GBCSA)
- 2012 : Certificate in Conflict Resolution, Centre for Conflict Resolution (CCR), Cape Town, South Africa
- 2010 : Certificate in Environmental Engineering, University of Stellenbosch, South Africa
- 2009 : Certificate in Geographical Information Systems (GIS), Global Land Cover Facility: Global Inventory Modelling and Mapping Studies (GIMMS)
- 2006 : Certificate in Environmental Law: National Environmental Management Act (NEMA), Interactive Training Dynamics (ITD)
- 2005 : Certificate in Environmental Law: Environment Conservation Act (ECA), Interactive Training Dynamics (ITD)
- 2002 : Certificate in River Rehabilitation and Planning, University of Natal, South Africa
- 2000 : Certificate in Project Planning and Management, University of Natal, South Africa
- 2000 : Certificate in Wetland Rehabilitation, University of Natal, South Africa

Professional affiliations

Interim Inaugural Member, Environmental Assessment Practitioners Association of South Africa (EAPASA)
 Lifetime Inaugural Member, Golden Key International Honour Society (GKIHS)
 KwaZulu-Natal Committee Member: Vice-Chair, International Association for Impact Assessments South Africa (IAIASA)
 Elected Member of the National Executive Committee, International Association for Impact Assessments South Africa (IAIASA)

Languages

	Reading	Writing	Speaking
English	Excellent	Excellent	Excellent
Afrikaans	Excellent	Good	Fair

Research projects

Mangaung Local Municipality, Environment Management Unit, Bloemfontein, 2003. "Manguang State of Environment Report". Part of the research team investigating Air Quality and Climate issues for the Manguang State of Environment Report.

Institute of Natural Resources for the Department of Agriculture and Environmental Affairs, Cedara, 2005. "KwaZulu-Natal State of Environment Report". Part of the research team investigating Air Quality and Climate issues for the KwaZulu-Natal State of Environment Report.

Water Research Commission, 2002. "South African Technical Training Manual for the Rehabilitation of Rural and Urban Rivers". Assisted in the research and development of a South African Technical Training Manual for the Rehabilitation of Rural and Urban Rivers.

Blanché, C, 2000. "The use of riparian buffer zones for the attenuation of nitrate in agricultural landscapes". MSc Compliant Thesis.

Blanché, C, 1999. "The Agri-Village Concept: is this an answer for landless rural farm communities?". Dissertation.

Honours and awards

Construction World Best Projects 2011 Award, Crown Publications, Highly Commended: Demolition of the Athlone Cooling Towers. Kayad Knight Piésold, 2011.

Consulting Engineers South Africa (CESA) Aon Engineering Excellence Awards: Commendation Award in the category for projects less than R50 million - The Demise of the Athlone Cooling Towers for the City of Cape Town Electrical Services. Kayad Knight Piésold, 2011.

International Association for Impact Assessment South Africa (IAIASa): Special Recognition Award in the Premier Award category for Excellence in Environmental Management and Project Execution - The Western Aqueduct. Knight Piésold and eThekweni Municipality 2010.

Publications

Simpson, A and Blanché C, 2005. "Air Quality and Climate". Chapter in the KwaZulu-Natal State of Environment Report: Institute of Natural Resources for the Department of Agriculture and Environmental Affairs, Cedara.

Simpson, A, Blanché C and Ryder, H, 2003. "Air Quality and Climate". Chapter in the Mangaung State of Environment Report: Mangaung Local Municipality (MLM), Environmental Management Unit, Bloemfontein.

Blanché C, and Quinn N, 2003. "The Use of Riparian Buffer Zones for the Attenuation of Nitrate in Agricultural Landscapes". Published in: A Decision Support System for Rehabilitation and Management of Riparian Systems. Report No. 1097/1/03. Water Research Commission (WRC).

Challen D, Quinn N, and Blanché C, 2003. "Assessing Riparian Habitat: An Approach for Planning Rehabilitation". Published in: A Decision Support System for Rehabilitation and Management of Riparian Systems. Report No. 1064/1/03, Water Research Commission (WRC).

Referees

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By my signature below I certify the correctness of the information above and my availability to undertake this assignment.

A handwritten signature in black ink, appearing to be 'C. Blanche', written over a horizontal line.

Signature of Staff Member

Date