
Name	:	Natanya Whitehorn
Profession	:	Environmental Management and Geographic Information Systems (GIS)
Date of Birth	:	06 August 1979
Parent Firm	:	Zutari (Pty) Ltd
Position in Firm	:	Associate: Environment and Planning
Years with firm	:	18
Nationality	:	South African
BI & Male/Female Status	:	White, Female
Education	:	BA (Hons) Geography; BA Geography and Environmental Management
Professional Accreditation	:	Environmental Assessment Practitioners Association of South Africa (EAPASA); Geo-Information Society of South Africa (GISSA); International Association for Impact Assessment (IAIASa)
Languages	:	English, Afrikaans
Countries of Work Experience	:	South Africa
Current Position on Team	:	Lead Environmental Assessment Practitioner

KEY QUALIFICATIONS

Natanya is as an environmental assessment practitioner (EAP) at Zutari. She specialises in environmental auditing and her expertise consists of risk assessment, environmental monitoring and social impact assessments (SIAs), including the study of human interaction with one another and the natural environment. She has experience in fieldwork for impact assessments, environmental monitoring as well as the public participation process (PPP), where, she has facilitated and translated at various landowner, stakeholder and public meetings and also gained experience in environmental compliance monitoring by working on a large construction project. Further significant experience includes her role as Project Manager (Environmental Lead) on various integrated environmental management (IEM) processes such as environmental impact assessments (EIAs), basic assessment reports (BARs) and the development of environmental management plans (EMPs).

She has previous working experience in geo-informatics and geographic information systems (GIS). She has more than a decade of experience working with GIS, which she has gained whilst working on projects for the government, local authorities as well as the private sector. She has also gained skills in spatial representation and interpretation through her involvement in the engineering environment. Natanya has specialised in spatial analysis, data processing and mapping while her technical responsibilities include inter alia the evaluation of data, digitising, editing and converting spatial data and non-spatial data from various formats and manipulating data in Esri ArcMap with extension (XTools, ET Geowizards, ET Geotools), ArcView 3.2 and Planet GIS. She has research experience on biodiversity, natural resources management, and human developmental issues and tutoring experience at a tertiary institution in the field of Information Science (IS).

RELEVANT EXPERIENCE

- 08/2021 to 12/2024: Project Manager/Environmental Lead: God's Window Skywalk – Motsamay Tourism Group (Pty) Ltd**
 Responsible for:
 Overall project management, including writing the inception, scoping, EIA and EMP reports. Also responsible for managing all specialists and sub-contractors as well as overall financial management of the environmental component of the project.
- 04/2021 to 12/2022: Project Manager/Environmental Lead: Environmental Impact Assessment (EIA) and Water Use Licence Application (WULA) for the Seriti Kriel LifeX Project – Seriti Coal (Pty) Ltd**
 Responsible for:
 Overall project management, including writing the inception, scoping, EIA and EMP reports. Also responsible for managing all specialists and sub-contractors as well as overall financial management of the environmental component of the project.

- **02/2019 to 05/2020: Project Manager/Environmental Specialist: Environmental Impact Assessment (EIA) and Water Use Licence Application (WULA) for Bierspruit Opencast Mining Project – Anglo American Rustenburg Platinum Mine**

Responsible for:

Overall project management, including writing the inception and ESIA reports. Also responsible for managing all specialists and sub-contractors as well as overall financial management of the project.

- **Environmental and Social Impact Assessment and Resettlement Action Plan for Zones 2 and 3 of the Lesotho Lowlands Bulk Water Supply Scheme: Lesotho Water Commission
06/2018 to 03/2019: Project Manager/Environmental Specialist**

Responsible for:

- Overall project management, including writing the inception and ESIA reports. Also responsible for managing all specialists and sub-contractors as well as overall financial management of the project.

To undertake the Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP) for the proposed Zone 2 and 3 of the Lesotho Lowlands Bulk Water Supply (LLBWSS).

- **Scoping and Environmental Impact Assessment (EIA) for the Brixton Reservoir and Tower
02/2017 to 12/2018: Senior Environmental Consultant: Johannesburg Water (JW)**

Responsible for:

- Overall project management of the environmental component, including writing the scoping and EIA reports, as well as compiling the Environmental Management Programme (EMP).

To undertake an innovative, design-led thinking approach to the installation of a reservoir and tower in Brixton, Johannesburg. The project involves undertaking a Scoping and Environmental Impact Assessment (EIA) process, due to the preferred site's location on a ridge that was identified as highly sensitive by the Gauteng Department of Agriculture and Rural Development. The project also involved an extensive public consultation process.

- **Design and Construction Supervision for the Mokolo Crocodile Water Augmentation Project (MCWAP): Trans-Caledon Tunnel Authority (TCTA)
09/2009 to 08/2017: Geographic Information Systems (GIS) Support Expert**

Responsible for:

- Providing general Geographic Information Systems (GIS) assistance to the project team and compiling maps specifically designed for the land acquisition process.

Extensive augmentation of water supply in the Lephalale region is required for the development of the Medupi Power Station and related coal mining and industrial activities. The infrastructure is being developed in two phases. Phase 1 comprises a 4.5 MW pump station and 43 km of up to 1.1 m diameter pipeline, delivering approximately 40 Mm³/a at a rate of 1.6 m³/s from the Mokolo Dam. This will be constructed parallel to and tying in with infrastructure supplying Grooteegeluk Mine, Matimba and Medupi Power Stations and Lephalale Municipality. Phase 2 will comprise an abstraction weir in the Crocodile River, de-gritting channels with high and low lift pump stations, and a 160 km of pipeline with brake pressure and balancing reservoirs. The abstraction weir has a capacity of 25.5 m³/s, and the estimated pump capacities for the low lift and high lift pumps will be 3.6 MW and 15 MW, based on an initial demand of 5.4 m³/s. The 160 km of pipeline consists of a 30 km rising main and a 120 km gravity main. Pipe diameters range from 1m to 2.3 m. The final configuration of Phase 2 is yet to be confirmed.

- **Olifants River Water Resources Development Project, Phase 2 (ORWRDP-2): Trans-Caledon Tunnel Authority (TCTA)
09/2009 to 06/2017: Geographic Information Systems (GIS) Support Expert**

Responsible for:

- Providing general Geographic Information Systems (GIS) assistance to the project team and compiling maps specifically designed for the land acquisition process.

The second phase of the Olifants River Water Resources Development Project (ORWRDP-2) is an extensive water resource development project to supply water for domestic and industrial (mining) use in Limpopo. The project was divided into two main schemes. The first scheme comprised a 70 km-long pumping main from the Flag Boshielo Dam to Mokopane, including three 6 MW pump stations en route. The second scheme consisted of the abstraction and distribution of water from the De Hoop Dam to various end points. Both schemes were monitored and controlled from a single remote-control point with all

elements linked via approximately 180 km of fibre optic cable. Zutari's scope included the tender design and documentation, detailed design, construction supervision, contract administration, preparation of an environmental management plan (EMP), environmental impact assessments (EIAs) and a water quality baseline study.

- **Technical Feasibility Study for the Botterkloof and Merino II Hydro Power Plants: NuPlanet (Pty) Ltd**

01/2007 to 08/2016: Environmental Practitioner/Geographic Information Systems (GIS) Support

Responsible for:

- Obtaining Environmental Authorisation (EA) and providing Geographic Information Systems (GIS) support.

To undertake a technical feasibility study, preliminary geotechnical investigations, and the preliminary design of hydropower stations near Bethlehem. These power stations would use the increased flow from the Lesotho Highlands Water Project (LHWP) and would be cascading schemes. Two of the power stations generate in the order of 4.2 MW each, whilst a third station generates 3.1 MW. All three stations are typical run-of-river installations with proposed 8 m-high diversion weirs, headrace canals and penstocks. Zutari also received a separate appointment to undertake the environmental studies required for the development of all three schemes and the provision of the necessary support to the client for the statutory Water Use Licence Applications (WULAs).

- **Extension of the Sunderland Ridge Wastewater Treatment Works (WWTW): City of Tshwane Metropolitan Municipality (CTMM)**

01/2007 to 03/2016: Environmental Control Officer (ECO)

Responsible for:

- All environmental site inspections, the compilation of inspection and process reports, attending the monitoring and liaison committee's (MLC's) meetings and assisting with the compilation of an operational environmental management plan (EMP).

To provide the engineering services for the extension of the Sunderland Ridge Wastewater Treatment Works (WWTW) to 95 Ml/d. The purpose of the project was to provide a feasibility study for the 30 Ml/d extension; licence applications; Environmental Impact Assessments (EIAs) and the relevant authorisations for the 30 Ml/d extension and process design of the extension.

- **Upgrading and Replacement of a Bulk Water Pipeline along Simon Vermooten Road: City of Tshwane Metropolitan Municipality (CTMM)**

06/2006 to 02/2014: Geographic Information Systems (GIS) Support

Responsible for:

- All Geographic Information Systems (GIS) support.

The project involved the upgrading of the Simon Vermooten Road to a two-carriageway road in both directions, which required the relocation of the existing 625 mm nominal diameter steel pipeline. The scope of work involved the supply, delivery, and installation of a new 700 mm nominal diameter steel pipeline between Lynnwood and Waltloo Roads as well as the supply, delivery and installation of a 400 mm nominal diameter steel pipeline Waltloo and Stormvoël Road. Zutari carried out the preliminary and detailed design, including a site survey, geotechnical investigations, tender documentation and adjudication, construction supervision and project management, contract administration and record drawings and environmental services.

- **Monograph Study for the Limpopo River Basin: Limpopo Water Course Commission (LIMCOM)/Deutsche Gesellschaft für Internationale Zusammenarbeit**

02/2012 to 02/2014: Geographic Information Systems (GIS) Support to Social Team

Responsible for:

- All Geographic Information Systems (GIS) support.

The project comprised the compilation of essential information regarding water resources, land use, environmental and water quality, infrastructural and climate change, on the Limpopo River Basin. The information is required for the development of Limpopo River Basin Integrated Water Resources Management (IWRM) strategy for the sustainable management of the basin. The study collects, collates and compiles key information that is necessary for scenario development and ultimately an IWRM plan. The data feeds to the Limpopo River Basin Management Information System (LIMIS) that is used for the

long-term monitoring of the impacts of economic and social development of the water resources of the basin.

- ***Vaal River Eastern Subsystem Augmentation Project (VRESAP): Trans-Caledon Tunnel Authority (TCTA)***

12/2004 to 12/2013: Environmental Practitioner/Geographic Information Systems (GIS) Support

Responsible for:

- Geographic Information Systems (GIS) support, overseeing all environmental aspects of the project, and the compilation and submission of 28 borrow pit closure plans to the Department of Minerals and Energy (DME).

Appointed for the design and construction supervision of the Vaal River Eastern Sub-System Augmentation Project (VRESAP), an emergency water transfer scheme that abstracts water from the Vaal Dam and pumps it to the Knoppiesfontein division structure over a distance of 115 km. From the division structure the water is gravitated to the Bosjesspruit and Trichardtsfontein Dams. The project, with a design capacity of 5.4 m³/s, comprised abstraction works in the Vaal Dam, a low-lift pump station and a high-lift pump station as well as a rising main. It also included a 10 Ml surge tank to control dynamic transients, a concrete division structure at Knoppiesfontein, a number of road and rail crossings and various pipeline appurtenances such as in-line isolation valves and air valve and scour installations. Cathodic protection of the pipeline and a sophisticated control and instrumentation (C&I) system were also provided.

- ***Closure of a Sludge Dam and Overflow Facility for Rand Water: Rand Water***

07/2007 to 07/2013: Environmental Practitioner/Geographic Information Systems (GIS) Support

Responsible for:

- Public participation, obtaining Environmental Authorisation (EA) for exemption application and providing general Geographic Information Systems (GIS) support to the project team.

The embankment of the old sludge dam adjacent to the Zuikerbosch pumping station failed a couple of years ago and sludge was discharged into the Vaal River. Appointed to inspect and register the dam as a "dam with a safety risk" in the Category II as well as for the design of the closure and decommissioning of the sludge dam and overflow facility. The scope of works included surveying, geotechnical investigation, Environmental Impact Assessment (EIA), design, reporting and supervision.

- ***Mokolo Crocodile (West) Water Augmentation Study: Department of Water and Sanitation (DWS)***

03/2007 to 07/2013: Geographic Information Systems (GIS) Support

Responsible for:

- Providing general Geographic Information Systems (GIS) assistance to the project team.

This Mokolo Crocodile River (West) Water Augmentation Scheme will provide water to strategic users in the Lephalale area, such as Sasol, Eskom and various coal mines. The client had a need to conduct a feasibility study to determine the best option for supplying the area with water. It included supply from Mokolo Dam and transferring water from the Crocodile River to the growth hot spots around Lephalale, 130 km to the north. The project also entailed a single 1.9 m diameter rising main covering a distance of 115 km.

- ***Raising of North Boundary Dam: AngloGold Ashanti***

02/2009 to 04/2013: Environmental Practitioner/Geographic Information Systems (GIS) Support

Responsible for:

- Obtaining Environmental Authorisation (EA) and providing general Geographic Information Systems (GIS) support throughout the project team.

The project entailed providing assistance to the client with the re-evaluation of the North Boundary Dam's capacity and making recommendations to reduce overflow, especially during rainy seasons to avoid polluting the downstream river system. Following the feasibility studies in 2008, Zutari was appointed to undertake the detailed design, tender process and construction supervision for the raising of the dam in Carletonville. Zutari also carried out the Environmental Impact Assessment (EIA) for the raising of the dam in an advisory capacity.

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- ***Laudium-Iliso Pipeline Environmental Support: Iliso Consulting***
05/2008 to 06/2011: Environmental Practitioner/Geographic Information Systems (GIS) Support
Responsible for:
 - Public participation, obtaining Environmental Authorisation (EA), fulfilling the Environmental Control Officer (ECO) function and providing general Geographic Information System (GIS) support to the project team.

The project entailed a Basic Assessment (BA) in terms of the National Environmental Management Act's (NEMA's) Environmental Impact Assessment (EIA) Regulations for the installation of a 700 mm internal diameter potable water pipeline over a distance of 600 m.
 - ***Basic Assessment (BA) for the Upgrading of the Valhalla Reservoir: City of Tshwane Metropolitan Municipality (CTMM)***
10/2006 to 11/2010: Environmental Practitioner
Responsible for:
 - Obtaining Environmental Authorisation (EA) and providing Geographic Information Systems (GIS) support.

The project entailed a basic environmental assessment for the authorisation of the construction of a new reservoir adjacent to an existing reservoir in Valhalla, Pretoria.
 - ***Laudium and Waterkloof Pipelines: City of Tshwane Metropolitan Municipality (CTMM)***
10/2006 to 07/2010: Environmental Practitioner
Responsible for:
 - All the Environmental Control Officer (ECO) duties during construction.

The project consisted of a Basic Assessment (BA) in terms of the National Environmental Management Act's (NEMA's) Environmental Impact Assessment (EIA) Regulations for the removal of the existing 700 mm diameter pipeline and the replacement thereof with a new pipeline, over a distance of 1.5 km.
 - ***Basic Assessment (BA) for the Rand Water R5 Pipeline between Rietvlei Dam and Mamelodi, Phase 2: Rand Water***
01/2009 to 01/2010: Geographic Information System (GIS) Support Expert
Responsible for:
 - Providing general Geographic Information Systems (GIS) assistance to the project team.

The project entailed conducting a basic assessment (BA) and compiling an environmental management plan (EMP) to obtain the necessary environmental authorisation (EA) for the construction of a water supply pipeline for Phase 2 from the Rietvlei Nature Reserve to Mamelodi.
 - ***Upgrading of Riverview Wastewater Treatment Works (WWTW): Emalahleni Local Municipality***
10/2008 to 10/2009: Environmental Practitioner/Geographic Information System (GIS) Support Expert
Responsible for:
 - Public participation, obtaining Environmental Authorisation (EA) for exemption application and providing general Geographic Information Systems (GIS) support to the project team.

The effluent from the Riverview wastewater treatment works (WWTW) has to comply with the special limit discharge standards applicable to the upper Olifants River. It was recommended that the existing WWTW be retrofitted, and the reliable treatment capacity of the facility be improved to increase the present design capacity of 11 MI/d to 14 MI/d to make provision for the higher organic loading received and the expected increase in flow due to future growth. The project scope included work on the inlet screen, primary settling tanks (PSTs), sludge pump station, aerators, bio-filters, final clarifiers, return pump station and humus pump station.
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- ***Basic Assessment (BA) for the McHardy Stream Diversion: De Beers Group***
07/2006 to 09/2007: Environmental Practitioner

Responsible for:

- Obtaining Environmental Authorisation (EA) and Geographic Information Systems (GIS) support.

The project consisted of a Basic Assessment (BA) in terms of the National Environmental Management Act's (NEMA's) Environmental Impact Assessment (EIA) Regulations for the diversion of the McHardy stream through the Cullinan Diamond Mine grounds to establish separation of polluted runoff from mining activities and unpolluted natural stormwater flow.

- ***Basic Assessment (BA) for the Upgrading of the Khutala Pumpstation: Department of Water and Sanitation (DWS)***
03/2007 to 08/2007: Geographic Information Systems (GIS) Support

Responsible for:

- Providing Geographic Information Systems (GIS) support to the project team.

The project entailed a Basic Environmental Assessment for the authorisation of the upgrading and replacement of water mains at the Khutala pumpstation in Kriel to ensure increased capacity and reduced operating costs of the facility.

- ***Basic Assessment (BA) for the Duplication of the Vlakfontein-Mamelodi Water Supply Pipeline, Phase 2: Rand Water***
07/2007 to 04/2013: Geographic Information Systems (GIS) Support

Responsible for:

- Providing Geographic Information Systems (GIS) support to the project team.

The project entailed conducting a Basic Assessment (BA) and compiling an Environmental Management Plan (EMP) to obtain the necessary Environmental Authorisation (EA) for the construction of a water supply pipeline for Phase 2 from Vlakfontein in Benoni to the southern boundary of the Rieffvlei Nature Reserve.

OTHER EXPERIENCE

- **05/2021 to 10/2022: Environmental and Geospatial Lead: Master Plan of the Feeder Roads and Bridges:- Polihali Reservoir, LHWP Phase II – Lesotho Highlands Development Authority (LHDA)**
Responsible for:
Coordinating all inputs into the infrastructure inventory and final options to be considered during the final master plan. Also responsible for all mapping relating to natural and social environmental sensitivities and features and their relevance feeding into the master plan.
- **05/2015 to 06/2018: Geographic Information Systems (GIS) Support Expert: Various Overhead Lines (OHL) – Mogalakwena Local Municipality**
Responsible for:
Geographic Information Systems (GIS) support to the project team.
- **08/2017 to 06/2018: Project Manager/Senior Environmental Consultant: Design Concept for South Dunes Beach – Transnet National Ports Agency**
Responsible for:
Overall project management, coordination of specialist inputs and environmental inputs.
- **04/2016 to 04/2018: Environmental Consultant: Botswana-South Africa (BOSA) Transmission Interconnector Project – Southern African Power Pool (SAPP)**
Responsible for:
Providing environmental support to project team.
- **02/2017 to 02/2018: Project Manager/Environmental Consultant/Geographic Information Systems (GIS) Expert: Rooiwal Photovoltaic (PV) Facility – New GX Metsena Joint Venture**
Responsible for:
Overall project management, review of reports and Geographic Information Systems (GIS).
- **08/2016 to 12/2017: Geographic Information Systems (GIS) Support Expert: Section 24G Environmental Application for Nkomazi Game Reserve – Nkomazi Game Reserve**
Responsible for:
Providing Geographic Information Systems (GIS) support to project team.
- **08/2011 to 11/2017: Project Manager/Geographic Information Systems (GIS) Support Expert: Merino Photovoltaic (PV) Power Plant – EAB-Astrum Energy (Pty) Ltd**
Responsible for:
Obtaining Environmental Authorisation (EA), overall project management and providing Geographic Information Systems (GIS) mapping requirements.
- **09/2017 to 11/2017: Senior Environmental Consultant: Pre-Feasibility Study for the Mandela Gateway to Kruger – Thebe Tourism Group**
Responsible for:
Environmental screening and reporting.
- **10/2012 to 08/2017: Environmental Consultant: Transaction Management Services for the Mauritius Light Rapid Transit (MLRT) System – Aurecon Singapore**
Responsible for:
Environmental specialist coordination and liaison.

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- **08/2015 to 06/2017: Project Manager/Environmental Consultant/Geographic Information Systems (GIS) Expert: Viljoenskroon Substation Transmission Basic Assessment (BA) – Eskom Free State Operating Unit**
Responsible for:
Overall project management, public participation, review of reports and geographic information systems (GIS). Duties included the compilation of a Basic Assessment Report (BAR) and Environmental Management Programme (EMPr), addressing comments received from the public and landowners, requesting extension from competent authority, revision of specialist reports and commenting on authority and specialist interactions.
 - **06/2009 to 12/2016: Geographic Information Systems (GIS) Expert: Construction of Siphofaneni Bridge – St Phillips Road: Phases I, II and III, Swaziland – Delegation of the European Union to the Kingdom of Swaziland**
Responsible for:
Geographic information systems (GIS) assistance to the project team.
 - **04/2014 to 12/2016: Geographic Information Systems (GIS) Expert: Exxaro Grootegeluk Roads Building Feasibility Study – Exxaro Coal**
Responsible for:
Geographic information systems (GIS) support to the social project team for the Exxaro Grootegeluk Mine roads upgrade feasibility study and social baseline assessment.
 - **01/2015 to 12/2016: Project Manager/Environmental Practitioner/Geographic Information Systems (GIS) Expert: Basic Assessment Report (BAR) for the Ga-Rankuwa Cemetery – City of Tshwane Metropolitan Municipality**
Responsible for:
Overall project management, public participation, compilation of reports and Geographic Information Systems (GIS).
 - **01/2015 to 12/2016: Geographic Information Systems (GIS) Support Expert: Environmental Authorisation (EA) for Khanyisa Power Station – ACWA Power Africa Holdings**
Responsible for:
Geographic Information Systems (GIS) support to the project team.
 - **01/2014 to 12/2016: Geographic Information Systems (GIS) Support Expert: Waste Management Licence Applications for Rooiberg Landfill – Department of Environmental Affairs (DEA)**
Responsible for:
Geographic Information Systems (GIS) support to the project team.
 - **01/2015 to 07/2016: Project Manager/Environmental Practitioner/Geographic Information Systems (GIS) Expert: Hatherley Cemetery Expansion Basic Assessment – City of Tshwane Metropolitan Municipality (CTMM)**
Responsible for:
Overall project management, public participation, compilation of reports and Geographic Information Systems (GIS).
 - **01/2015 to 06/2016: Project Manager/Environmental Practitioner/Geographic Information Systems (GIS) Expert: Basic Assessment Report (BAR) for the Mabopane Cemetery Expansion – City of Tshwane Metropolitan Municipality (CTMM)**
Responsible for:
Overall project management, public participation compilation of reports and Geographic Information Systems (GIS).

- **05/2014 to 05/2016: Geographic Information Systems (GIS) Support Expert/Report Reviewer: Klipplaats 400 kV Line Deviation – Glencore Xstrata Coal South Africa (Glencore South Africa (Pty) Ltd)**
Responsible for:
Geographic Information Systems (GIS) support to the project team as well as document reviewer.
- **03/2015 to 03/2016: Geographic Information Systems (GIS) Support Expert: Landau Dragline Relocation Concept Study – Anglo American Coal South Africa**
Responsible for:
Geographic Information Systems (GIS) support to the project team.
- **04/2010 to 12/2015: Project Manager: Boston and Ouhout Environmental Impact Assessment (EIA) – NuPlanet (Pty) Ltd**
Responsible for:
Obtaining EA and providing Geographic Information Systems (GIS) mapping requirements.
- **03/2014 to 12/2015: Project Manager/Geographic Information Systems (GIS) Expert: Shisha River Bridge Basic Assessment (BA) – Gibb Engineering and Science/South African National Parks (SANParks)**
Responsible for:
Obtaining Environmental Authorisation (EA), overall project management and providing Geographic Information Systems (GIS) mapping requirements.
- **06/2014 to 12/2015: Geographic Information Systems (GIS) Support Expert: Environmental Impact Assessment (EIA) at the Komati Mill – TSB Sugar**
Responsible for:
Geographic Information Systems (GIS) support to the project team.
- **04/2014 to 10/2015: Project Manager/Geographic Information Systems (GIS) Support Expert: Eskom Vaaldam Basic Assessment Report (BAR) - Eskom**
Responsible for:
Obtaining Environmental Authorisation (EA), overall project management and providing Geographic Information Systems (GIS) mapping requirements.
- **04/2015 to 07/2015: Environmental Practitioner: Environmental Impact Assessment (EIA) for Esizama Gas-Fired Generation Plant – Aggreko**
Responsible for:
Environmental specialist coordination and liaison.
- **02/2013 to 06/2015: Geographic Information Systems (GIS) Support Expert: Environmental Impact Assessment (EIA) for the Swaziland Rail Link Project – Transnet Capital Project (TCP)**
Responsible for:
All Geographic Information Systems (GIS) functionalities on the project.
- **02/2010 to 09/2014: Project Coordinator: Basic Assessment (BA) for Conference Facilities and Guest Accommodation in Irene – University of South Africa (UNISA)**
Responsible for:
Geographic Information Systems (GIS) mapping requirements and project coordination.
- **10/2010 to 08/2014: Geographic Information Systems (GIS) Support Expert: Environmental Impact Assessment (EIA) for the Sigma-Theta Powerline – Eskom**
Responsible for:
Geographic Information Systems (GIS) mapping requirements and project coordination.

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- **01/2014 to 07/2014: Geographic Information Systems (GIS) Support Expert: Nkomazi Environmental Management Framework (EMF) – Nkomazi Local Municipality**
Responsible for:
Geographic Information Systems (GIS) mapping requirements and project coordination.
 - **05/2013 to 06/2014: Project Manager/Geographic Information Systems (GIS) Support Expert: Basic Assessment (BA) for the 88kV Pangaea/Kanga Powerlines – Eskom**
Responsible for:
Overall project management and Geographic Information Systems (GIS) functionalities on the project.
 - **04/2007 to 02/2014: Environmental Practitioner/Geographic Information Systems (GIS) Expert: Engineering Services for a New Sasko Bakery in Woodmead – Pioneer Food Group**
Responsible for:
Obtaining Environmental Authorisation (EA), overall project management and providing Geographic Information Systems (GIS) mapping requirements.
 - **01/2011 to 01/2013: Project Manager/Environmental Practitioner: De Hoop Dam Borrow Pit Closure – Vela VKE/Department of Water and Sanitation (DWS)**
Responsible for:
 - Obtaining Environmental Authorisation (EA), overall project management and providing Geographic Information Systems (GIS) mapping requirements.
 - **09/2009 to 12/2012: Geographic Information Systems (GIS) Support Expert: Expansion of the Iron Ore Line from Sishen to the Port of Saldanha – Transnet Capital Projects**
Responsible for:
Geographic Information System (GIS) support to the project team.
 - **02/2007 to 06/2011: Environmental Practitioner/Geographic Information Systems (GIS) Support: Environmental Management System (EMS) for Automotive Supplier Park (ASP) – Supplier Park Development Company (SPDC)**
Responsible for:
All Geographic Information Systems (GIS) support.
 - **09/2006 to 08/2008: Environmental Practitioner: Overhead Powerline From Ha Lejone to Liqhobong Mine – Liqhobong Mining Development Company (LMDC)**
Responsible for:
Providing Geographic Information Systems (GIS) support for the EIA process, report compilation and submission for final authorisation.
 - **01/2007 to 01/2008: Environmental Practitioner/Geographic Information Systems (GIS) Support: Basic Assessment (BA) for the Upgrading of the Jericho Bridge 4062 – Department of Water and Sanitation (DWS)**
Responsible for:
Obtaining Environmental Authorisation (EA) and the compilation of reports.
 - **04/2006 to 12/2007: Environmental Practitioner: Rietfontein Weir Environmental Management Plan (EMP) – Department of Water and Sanitation (DWS)**
Responsible for:
Obtaining Environmental Authorisation (EA) and providing Geographic Information Systems (GIS) support.

- **06/2007 to 09/2007: Environmental Control Officer: Upgrading of Rietfontein Nature Reserve – Johannesburg City Parks (JCP)**
Responsible for:
Communication of Environmental Management Plan (EMP) components and requirements to the contractors and sub-contractor as well as EMP planning, implementation and inspection during the construction phase.
- **03/2006 to 09/2007: Environmental Practitioner: Proposed New Coal-Fired Power Station in the Northern Free State – Eskom Generation**
Responsible for:
Providing assistance with the public participation process (PPP).
- **01/2005 to 01/2006: Environmental Practitioner: Proposed new Coal-Fired Power Station in the Witbank Area – Eskom Generation**
Responsible for:
Providing assistance with the public participation process (PPP).
- **01/2009 to 11/2009: Environmental Practitioner/Geographic Information Systems (GIS) Support: Upgrading of the Muela Hydropower Station – Lesotho Highlands Water Commission (LHWC)**
Responsible for:
Assistance in terms of the Environmental Impact Assessment (EIA) and general Geographic Information Systems (GIS) support.
- **01/2009 to 06/2009: Geographic Information Systems (GIS) Support: Thune Dam Examination for the Possible Construction of Dams – Government of Botswana**
Responsible for:
Providing Geographic Information Systems (GIS) support.
- **01/2005 to 11/2005: Geographic Information Systems (GIS) Support: Due Diligence Assessment for the Development of Bishop's Glen into a Residential Golf Estate – Golf Data**
Responsible for:
Environmental sensitivity mapping.
- **01/2007 09/2007: Environmental Practitioner: Relocation and Protection of Petronet Utility – Transnet**
Responsible for:
Liaising with the Department of Agriculture and Environmental Affairs (DAEA), bio-physical and socio-economic data gathering, public participation process (PPP), the compilation of an Environmental Impact Report (EIR) and the Environmental Management Plan (EMP) and site inspections.
- **01/2009 to 11/2009: Project Manager: Basic Assessment (BA) of Dams in Benoni – Ekurhuleni Metropolitan Municipality (EMM)**
Responsible for:
Geographic Information Systems (GIS) mapping requirements and project management.
- **01/2018 to 04/2018: Senior Environmental Consultant: Anheuser-Busch InBev (AB InBev) Greenfields Brewery – Anheuser-Busch InBev (AB InBev)**
Responsible for:
Environmental inputs and review of the fatal flaw analysis.

DECLARATION

I confirm that the above information contained in the CV is an accurate description of my experience and qualifications and that, at the time of signature, I am available and willing to serve in the position indicated for me in the Proposal for Professional Services for the ORWRDP-2, for the durations and at the locations indicated therein.

Signature of Staff Member

Date