CURRICULUM VITAE

IGNATIUS WILHELM HENNING

CONTACT INFORMATION

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EMPLOYMENT HISTORY

Current Employer

Employer VIP Consulting Engineers

Pretoria, South Africa

Period of employment 1 February 1989 to date

Position Director and co-owner

Responsibilities Company strategic management

Company general management

Marketing

Program leader and project leader for infrastructure projects

Design and documentation for infrastructure projects

Procurement and contract administration

1st Previous Employer

Employer Industrial Development Corporation of South Africa

Johannesburg, South Africa

Period of employment July 1986 to 31 July 1988

Position Professional Officer

Responsibilities Financial analysis and market analysis for funding applications

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Employer BKS Consulting Engineers (now Aecom)

Pretoria, South Africa

Period of employment 1 June 1981 to 30 June 1986

Position Senior Engineer

Responsibilities Construction monitoring of infrastructure projects

Design and documentation for infrastructure projects

Flood hydrology and run-off hydrology

System modelling for large river systems

WORK EXPERIENCE

Consulting Engineering

1. CONSTRUCTION MONITORING AND CONTRACT ADMINISTRATION

1.1

Full time resident engineer for the construction of a 20 Ml/day activated sludge sewage treatment works from June 1981 to December 1983.

My responsibilities included;

- · Monitoring the execution of the works for compliance with design and specification
- · Monitoring progress for compliance with implementation program
- Observe contractor's quality management system
 - Issue instructions to the contractor in event of non-compliance or sub-standard work
- · Measurement of quantities and issue of payment certificates
- · Assessment of claims by contractor for additional compensation
- · Amend designs and issue revised drawings as required
- Monitor the installation and commissioning of electrical and mechanical equipment
- · Assist in the commissioning of the Works and process optimization
- · Attend to defects reports during the defects liability period
- Assist client in implementing an effluent monitoring program
- · Adjustment of project budget and cash flow projections
- As-built drawings and close-out reports

Overhead construction monitoring and supervision of site staff on more than 100 projects from January 1984 to December 2003.

My responsibilities included;

- Provide guidance to resident engineers and site staff on construction monitoring issues
- Advise contractors and site staff on the interpretation of contract documents and specifications
- · Review implementation programs and progress reports
- · Review project budgets and cash flows
- · Assessment of claims by contractors for additional compensation
- · Attend to disputes in terms of contractual dispute resolution procedures
- · Alert client of potential cost or time overruns and propose remedies
- Issue instructions and variation orders to contractors

Projects included the construction of township infrastructure, sewage treatment works, water treatment works, reservoirs and dams for regional water supply.

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1.3 Director responsible for procurement and contract administration from January 2012 to date.

My responsibilities include;

- Identify industry best practices and appropriate procurement strategies for implementation of construction projects
- Prepare proforma procurement documentation for appropriate procurement strategies
- Advise project leaders on appropriate procurement strategies and Standard Forms of Contract
- Establish internal procedures for contract administration and related documentation and certificates
- · Give guidance to project leaders on dispute resolution
- Give guidance to project leaders on the preparation of dispute notices, referrals and replies in adjudication processes.

2. PLANNING

Development of various master plans for regional water supply systems, regional sanitation systems, municipal road systems and regional stormwater drainage systems from February 1989 to date.

My responsibilities include;

- · Client liaison
- · Project assessment and preliminary design
- · Cost estimates and budgeting
- · Implementation programs
- Prepare planning reports and business plans

3. DETAIL DESIGN AND SPECIFICATION

Detail design and specification of various township infrastructure projects, bulk water supply projects, bulk sanitation projects, pump stations and rising mains, regional stormwater systems and dams from February 1989 to date.

My responsibilities include;

- · Establish appropriate design criteria and design standards
- Conceptual design
- Detail design and design calculations
- Supervise and review preparation of tender drawings and working drawings
- · Obtain approvals and licenses (if appropriate)

My detail design functions include;

- · Layout of water and sewer network systems
- · Water network analysis and optimization
- Process design for water and sewage treatment works

- · Hydraulic design of pipelines and pumping system
- · Run-off hydrology and flood hydrology
- · Design flood determination
- · Hydraulic design of stormwater systems, canals, spillways and stilling basins
- · Design of flood attenuation systems for stormwater management
- · Geometric design and pavement design of roads
- Stability analysis for dam walls
- Yield analysis for dams

4. WATER SUPPLY SYSTEMS ANALYSIS

Member of the professional team for the system analysis of the Vaal River System (the primary raw water source for Gauteng) from June 1985 to June 1986. The purpose of this study was to determine the safe yield of the system and identify projects to increase the yield of the system.

My responsibilities included;

- Assessment of total demand (domestic, industrial, agricultural) on the system
- Assessment of all reservoirs (dams) and wetlands in the system
- · Obtain rainfall records and create system rainfall sequences for run-off simulation
- · Obtain flow records at all available gauging stations for model calibration
- · Develop and calibrate systems model
- · Perform system yield analysis and risks analysis

Similar analysis were performed for water supply to an industrial development project near Umtata in the Eastern Cape in 1986 and municipal water supply to Vrede and Villiers in the Free State in 1996 and 1997 respectively.

5. PROCUREMENT

Compilation of contract documents for the construction of various township infrastructure projects, bulk water supply projects, bulk sanitation projects, regional stormwater systems and dams from February 1989 to date.

My responsibilities include;

- · Advise client on selection of appropriate General Conditions of Contract
- Draw up tender documents and contract documents including special conditions of contract and Works Information
- Supervise tender process
- Tender adjudication and recommendation
- · Attend to signature of contract documents on acceptance of tender by client

6. PROJECT FUNDING

Assist public sector clients to access appropriate government funding programs from February 1989 to 2012. Funding programs included the DWAF subsidy scheme for bulk water and sanitation projects, the National Housing Commission Fund, the

government's Housing Subsidy Scheme, the Municipal Infrastructure Program and the Municipal Infrastructure Grant.

My responsibilities included;

- · Establish project funding requirements
- · Match project with funding program criteria
- Prepare and submit project business plans and funding applications
- · Prepare and submit progress reports and drawdown applications
- · Prepare and submit closedown reports to funding authority

7. CONSTRUCTION MANAGEMENT OF LABOUR INTENSIVE PROJECTS

Construction management of various labour intensive infrastructure projects that were implemented under various government programs for job creation from 1995 to 2000.

My responsibilities included;

- Establish Project Steering Committee (PSC) with community and local authority representatives to function as forum for community participation
- · Establish terms and conditions for employment of local labour with PSC
- Define tasks (work that can be performed by a person in a day) and establish task rates
- Identify team leaders from the local community and implement appropriate training programs
- Establish project management and materials management procedures and appoint staff to implement
- Review progress against program and expenditure against budget and implement corrective action where required

8. TENDERS

The majority of VIP's public sector appointments since 2000 have been secured through successful tendering in an open tender process.

My responsibilities in respect of tendering include;

- Progressively aligning VIP structure, policies and practices with public sector requirements for Black Economic Empowerment and preferential procurement
- Maintaining an impeccable reputation in the industry
- Align company skills and expertise with public sector client requirements
- Competitive pricing
- · Comply with conditions of tender

9. QUALITY ASSURANCE

The South African Institute for Consulting Engineers require all member firms to implement an ISO 9001 quality management system from January 2006.

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My responsibilities include overseeing the development and implementation of the quality management system and ISO 9001 accreditation.

10. PROGRAM MANAGEMENT - PUBLIC PROGRAMS

Project leader for the following public development programs;

- The Gauteng Department of Housing's Essential Services Program in Ekurhuleni (2002 to 2012)
- EMM Housing Department's multi-year program for the provision of municipal infrastructure through turnkey contracts

(2007 to 2012)

The GDOH is a provincial government department and is responsible for the delivery of subsidized housing in terms of the national government's Housing Subsidy Scheme to homeless people in Gauteng. The delivery of housing is implemented in phases. The first phase is the Essential Services Program and comprises town planning and construction of engineering infrastructure. The GDOH appointed six Regional Professional Teams in 2002 to provide professional services for the implementation of the Essential Services Program in the six regions of Gauteng. VIP Consulting Engineers (VIP) was appointed as the Lead Consultant for the Regional Professional Team for Ekurhuleni The appointment was for a term of four years and was extended in 2006 for a further period of four years.

Ekurhuleni is one of six Metropolitan Municipalities in South Africa and has a population of 2.5 million people.

The Regional Professional Team comprises 20 independent consulting firms in the disciplines of Environmental Impact Assessment, Engineering Geology, Town and Regional Planning, Traffic Engineering, and Civil Engineering. The Regional Professional Team is responsible for the feasibility assessment, environmental impact assessment, geotechnical investigation, township establishment, General Plan approval and the design and specification, tender documentation, procurement and contract administration for the construction of engineering infrastructure.

The Regional Professional Team was involved in the planning and implementation of some 100 projects in Ekurhuleni comprising 90 000 residential stands since commencement of the appointment in 2002.

My role and responsibilities as project leader of the Regional Professional Team included:

- Negotiate with candidate firms on participation in the Regional Professional Team and establish multi party agreement between participating firms
- Develop tender proposal for submission to the GDOH in response to their tender enquiry
- Conclude formal agreement with GDOH on acceptance of our tender
- Identify projects in co-operation with the local authorities for inclusion in the Essential Services Program

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- Develop overall implementation program and budget in consultation with client and the local authority
- Develop detail project programs and activity schedules in cooperation with participating firms
- · Appointment of participating firms on a per task basis
- Regular report back sessions with participating firms and monitoring of project programs for compliance with agreed time frames
- Identify critical issues and implementation of action plans to ensure that time frames are met
- Establish financial control procedures and invoicing procedures
- Quarterly review meetings with client to review overall performance and to identify issues that can improve delivery

The GDOH's budget for the Essential Services Program in Ekurhuleni exceeds R120 million/annum. The professional services component amounts to R20million/annum.

The EMM Housing Department's budget for the provision of municipal infrastructure amounts to R250 million/annum.

11. PROGRAM MANAGEMENT - PRIVATE DEVELOPMENTS

Member of the professional team for the development of the Riverfields Commercial and Logistics Precinct from January 2011 to date.

The Riverfields is a private development that is located 6km north of the O R Tambo, International Airport. The development is located in a strategic development zone along one of the major transport axis radiating from the airport. The development is 1 600ha in extent and will ultimately comprise of business parks, logistics parks, industrial parks, distribution centres, technology centres and wholesale marts.

My role and responsibilities include;

- · Liaison with client and other members of the professional team
- Planning and coordinating of civil engineering activities to comply with project requirements
- Planning of bulk infrastructure and liaison with the statutory authorities for the provision of bulk infrastructure and services (including Services Agreements)
- Supervision of design and implementation for all civil engineering infrastructure
 Acted as adjudicator for construction contract disputes since 2014.

Adjudication
Housing Projects

VIPCON, a sister company of VIP, constructed 12 000 houses in terms of the Housing Subsidy Scheme over the period 1994 to 2003.

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My responsibilities in this venture included;

- · Strategic Management
- Identify beneficiary communities and establish a Social Compact (agreement) with community representative body
- Project planning, design and budgeting
- Prepare and submit project business plans to appropriate Provincial Housing Board
- · Conclude funding agreement with Provincial Housing Boards
- · Project management
- · Arrange for the transfer of completed housing units to qualifying beneficiaries

Corporate Funding

Employed by the Industrial Development Corporation of South Africa from July 1986 to July 1988. Responsible for evaluation and risk assessment of funding applications.

My responsibilities included;

- Market analysis of applicant market sector including size, growth prospects, market share and market risk
- Analysis of overhead costs, production costs and risk factors associated with cost structure
- Development of cash flow projections for applicant and assessment of viability of funding applications
- Preparation of report and recommendation to the IDC Management Committee and presentation of proposal to the management committee.
- Assessed some 40 funding applications during the two year term. The most significant application was for a R100 million capital expansion program by Mondi.
 Mentoring of Engineers in Training and Technologists in Training towards professional registration.

Mentoring

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My responsibilities include;

- Agree with candidate on schedule of activities to be performed to comply with registration requirements
- · Agree with candidate on implementation program
- Agree with candidate on reporting frequency and reporting format
- · Review progress and recommend remedial action when required
- Complete assessment documents as required by the Engineering Council of South Africa

Prodigies include; S Prinsloo (Pr Eng)

H du Toit (Pr Eng)

J J v Rensburg (Pr Tech)
R J Ramalope (Pr Tech)
D C de Bruyn (Pr Eng)
P Strauss (Pr Eng)

G Muller (Candidate Engineer)
L van Willich (Candidate Engineer)
L Rudman (Candidate Engineer)

General Management

I am a co-owner and director of VIP Consulting Engineers. I have been involved in the top management of the company since my appointment as director in 1992.

My management responsibilities include;

- · Strategic management
- Recruitment of personnel and employment contracts
- · Disciplinary procedures
- Black Economic Empowerment and Affirmative action

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EDUCATION

High School Voortrekker High School, Pietermaritzburg, South Africa (1969 – 1973)

Matriculated in 1973 with exemption and distinctions in maths and science

University Full time studies

University of Pretoria, Pretoria, South Africa (1974 - 1978)

Obtained the degree Bachelor of Engineering (Civil Engineering) in 1979

Post graduate (part time) studies

University of Pretoria, Pretoria South Africa (1981 - 1984)

Obtained the degree Bachelor of Engineering (Honours) in 1985

School for Business Leadership, University of South Africa (1986 – 1989)

Obtained the degree MBL (Master in Business Leadership) in 1990

Continued Education at the University of Pretoria, Pretoria South Africa (2013)

Obtained the Certificate in Construction Adjudication in 2013.

Kings College, London (2014 – 2015)

Currently studying towards an MSc in Construction Law and Dispute Resolution

CONTINUED PROFESSIONAL DEVELOPMENT

Complies with the Engineering Council of South Africa's requirement for Continued Professional Development (compulsory since January 2006 for all registered professionals)

Courses and workshops attended include;

- · Design of small dams
- Water resources management
- Labour intensive construction methods
- · Public sector procurement
- General Conditions of Contract for NEC3 and GCC2004
- Institute of Municipal Engineers of South Africa's annual conventions
- Meeting Management
- · Ridding Stormwater of Litter
- Contract Law 2009
- · Value Engineering in Projects
- · Construction Adjudication

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PROFESSIONAL REGISTRATION

Registered as Professional Engineers with the South African Council for Engineers (3 October 1984)

PROFESSIONAL MEMBERSHIP

Member of the South African Institute for Civil Engineers

Associate of the South African Association of Arbitrators (South Africa)

Associate of the Association of South African Quantity Surveyors

Member of the Adjudication Society (UK)

Member of the Society for Construction Law (UK)

OTHER PROFESSIONAL ACTIVITIES

Member of the Engineering Council of South Africa's Professional Advisory Committee for Civil Engineering from 2009 to 2011

Registered as an adjudicator with the South African Institution of Civil Engineers, Consulting Engineers South Africa, the Association of South African Quantity Surveyors and the Association of Arbitrators (South Africa).

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