IMESA
Northern Provinces Branch
Annual Seminar and AGM

27 August 2010
Vision, mission and values

• Vision

• Mission
  • We foster human development by:
    – Deploying deep-rooted professional technical skills; and
    – Teaming with our clients for positive outcomes

• Values
  • We foster human achievement through excellence, innovation and collaboration
  • We respect others by celebrating diversity and acting with integrity and honesty
  • We work to build a vibrant and brighter future for all
Aurecon was created in March 2009 by the coming-together of three world-class companies, namely:

- Africon
- Connell Wagner
- Ninham Shand
Global network, global resources

- 6,000 employees
- 85 offices
- 28 countries
• The group is privately owned and principally by the management who are all full-time employees and intimately involved in managing and delivering project outcomes on behalf of clients.
Global Board

Prof Jakes Gerwel
Global Chairman

Paul Hardy
Global CEO

Anthony Barry

Dr Gustav Rohde

Tony McCusker

Teddy Daka

Dr Charlie Miller

Dr Glenn Hooper

Arnie Möhr

Isabella Loh

Paul Thorstenson

Dr Pieter Viljoen
Africa-Middle East (AME) Zone Board

Barney Tsita
Chairman

Dr Gustav Rohde
Chief Executive

Arnie Möhr
Dep. Chief Executive

Dr Dwight Trieugaardt

Fanus le Roux

Mzolisi Dliza

Albert Geldenhuyis

Dr Yvonne Muthien

Dr Paul Lombard

Peter Biersch

Dr Lulu Gwagwa
Aurecon’s service offering encompasses the following industry sectors:

- Community development and infrastructure
- Energy
- Mining and industrial
- Property
- Transport
- Water
Aurecon provides extensive support towards township establishment and the conceptual planning of new developments. Our planning skills span the full spectrum of the municipal environment. In particular, the following services are provided:

- Strategic master planning on municipal, provincial and national level
- Preparation of policy and design guidelines
- Feasibility and financial affordability studies
- Funding and financing applications
- Assistance and engineering support for township and development rights establishment
- Environmental impact studies and formulation of EMS
- Integrated land use and infrastructure planning
- Community consultation and participation
- Negotiations and liaison with local authorities/statutory bodies
- Arrangements and interpretation of topographical surveys

Alexandra urban renewal project, Gauteng Province, South Africa, 2005
Development services

Engineering design

Aurecon has extensive experience in the engineering design and construction monitoring of the following services:

- Mass earthworks
- Bulk water supply, water treatment and storage
- Pumps and pump stations
- Water supply and reticulation
- Sewer drainage and sewer reticulation
- Sewage treatment facilities and effluent control
- Gas reticulation systems
- Stormwater drainage systems and reticulation networks
- Roads, access routes, intersections, parking areas and traffic
- Electrical supply and reticulation systems
- Solid waste disposal facilities
- Irrigation systems
- Security and electronic/data networks
- Civil and building structures.

Moreleta Spruit outfall sewer, Gauteng, 2012

Upgrading of the greater Atteridgeville bulk sewerage system, Gauteng, 2004

Ceres waste disposal site
Development services

Where called upon, the following may be included:

- The management of large multi-company, multi-disciplinary teams for projects and programmes
- Design reviews
- Approval of designs and drawings with local authorities
- Provision of contract and tender documentation
- Contract administration, implementation and management
- Construction monitoring and site inspections
- Quality control
- Financial auditing
- Budget reporting.
Aurecon has an entrenched management system encompassing all its operations worldwide.

The management system has been certified by external auditors according to international ISO 9001 standards.
Awards

- Aurecon’s commitment to fostering human achievement through excellence, innovation and collaboration has been recognised by way of numerous business and industry association awards.
Aurecon is involved in projects around the world that have a direct impact on people’s lives. The group’s intention is that these projects should create lasting legacies based on social, environmental and economic sustainability.

Aurecon is an active member of the Green Building Councils of Australia, New Zealand and South Africa.
Aurecon is committed to the implementation of BBBEE

Aurecon South Africa has been verified as a Level 4 contributor to BBBEE – this translates into a 100% procurement recognition level

Broad-based black economic empowerment (BBBEE)
Black Economic Empowerment Verification Certificate

Measure Entity

Registered Name: Aurecon SA (Pty) Ltd
Reg. Number: 1977/00371/07
Trade Name: AureconSA
Location: 1040 Boundary Street
          Hatfield
          Pretoria
          0001
VAT Number: 143201602D

BEE Status

Certificate Number: BEE 0177
Verification Date: 2013/02/02
Entity Code: BEE-GEN
Applicable Scorecard: BEE-GEN
Verified Status: Level Four Contributor
Programme Recognition Level: 100%
Black Share Ownership: 23.6%
Black Female Ownership: 5.5%
Vale Crown Company

BEE Score Per Element

Ownership: 25.165%
Management Control: 7.614%
Employment Equity: 5.465%
Skills Development: 17.668%
Preferential Procurement: 17.746%
Entrepreneur Development: 0.0%
Broad Economic Development: 0.0%
Total: 83.096%

BEE Verification Agency CC (BVA014) has assessed the BEE credentials of the above verified entity and certifies hereby that the BEE status, as certified above, is a true and impartial reflection of the BEE status of the enterprise.

Aurecon Compliance Manager
BEE Verification Agency CC
www.bearver.co.za
Ownership

• 23.6% of the Aurecon South Africa’s equity is under Black ownership

Management control

• AME Zone Board
  • Comprises 11 executive members of whom five (45%) are Black people while two (18%) are Black women

• AME Executive Committee
  • Comprises 16 members of whom one (6.25%) is a Black person

Note 1: Percentages calculated according to the definitions as set out in the Construction Sector BBBEE Charter as gazetted on 9 Feb ’07
Note 2: Percentages provided are based on the Aurecon BBBEE Scorecard that was verified in Jan ’09
Employment equity

• Representation of Black people at all management levels – 33%
• Representation of Black women at all management levels – 11%
Skills development

- **Training costs**: 49% of expenditure spent on Black people
- **Learnerships**: Black learnerships as a % of total learnerships – 63%
- **Bursary costs**: 43.6% of payroll spent on Black people
- Aurecon also has an approved mentorship programme
Procurement

• Percentage procurement spend from Black suppliers and service providers – 48.36%

Enterprise development

• Provided management support to over 70 Black enterprises
• Cooperated with more than 200 Black enterprises on different projects
Corporate social investment

- Various initiatives including:
  - SAICE bridge building competition - training session
  - SAACE Job Shadow Day
  - Construction Week
Why choose Aurecon?

- Clients have access to the group’s global resource pool
- Clients benefit from the group’s global delivery capability
- Clients share in Aurecon’s extensive project experience and thought leadership
- Clients gain peace of mind through Aurecon’s sound understanding and knowledge of critical project success factors
- Clients experience a close relationship with Aurecon ensuring that their business and project objectives are clearly understood.
Showcase projects

Rabat Saphira Project (Phase 1)

- **Country:** Morocco
- **Completion date:** Ongoing
- **Services & solutions:**
  - Master planning of the marine, traffic, roads and infrastructure engineering which includes:
    - Marine erosion studies
    - Marine edge protection designs
    - Establishing safe setback lines
    - Traffic analysis and modelling
    - Road network surveys
    - Road geometry designs
    - Road upgrades
    - Bulk infrastructure calculations and assessments
Showcase projects...continued

Peter Mokaba Sports Stadium

- **Country:** South Africa
- **Completion date:** 2010
- **Project cost:** ± $115 million USD
- **Services & solutions:**
  - Detailed structural engineering design
  - Contract documentation
  - Construction supervision
- **Value adding:**
  - Structural design is not only elegant but cost-effective with the repetitive concept of the structural elements reducing construction time by a year when compared to similar projects
Showcase projects...continued

Malibamatso Bridge

- **Country:** Lesotho
- **Completion date:** 1990
- **Services & solutions:**
  - Bridge engineering, including:
    - Planning
    - Design
    - Documentation
    - Support
    - Supervision
- **Awards:**
  - Fulton Award for Excellence in the Use of Concrete
  - SAICE Branch Award for Excellence in Civil Engineering
- **Interesting facts & figures:**
  - Length of bridge – 465.5 m
  - Pier heights – 16m to 85 m
Lesotho Highlands Water Project (Phase 1A)

- **Country:** Lesotho
- **Completion date:** 1998
- **Project cost:** R3.5 billion
- **Services & solutions:**
  - Surface water resources - planning and integrated management
  - Groundwater - availability and pollution assessment
  - Heavy civil engineering
  - Water treatment
  - Wastewater treatment
  - Stormwater management and flood control
- **Interesting facts & figures:**
  - Highest dam in Africa – 185 m high
- **Awards:**
  - SAICE Engineering Award of the Century – awarded for Technical Excellence in the Water Sector
  - Concrete Society of South Africa – Fulton Award for the effective use of paving at the Ash River outfall of the Delivery North Tunnel
Kgalagadi District Sanitation Programme

- **Country:** South Africa
- **Completion date:** 2007
- **Project cost:** ± $250 000 USD
- **Services & solutions:**
  - Establishment of a programme management system which included:
    - Distribution
    - Finance
    - Payment
    - Reports
  - Training of community members
  - Developing a health and hygiene campaign
  - Monitoring and evaluation of project
Maguga Dam and Maguga Hydropower Project

- **Country:** Swaziland
- **Completion date:** 2002
- **Project cost:** R522 million
- **Services & solutions:**
  - Groundwater - availability and pollution assessment
  - Dams
  - Water treatment
  - Wastewater treatment
  - Stormwater management and flood control
  - Institutional and Advisory - institutional and policy development support
- **Awards:**
  - SAACE Golden Jubilee Award for Technical Excellence
  - SAACE Commendation of Maguga Dam joint venture for a project value greater than R5m
  - SAICE Awards for Most Outstanding Civil Engineering Achievement in the International Category
Nova Vida Housing Development (Phase 1 & 2)

- **Country:** Angola
- **Completion date:** 2009
- **Project cost:** ± $362 million USD
- **Services & solutions:**
  - Detailed engineering design
  - Construction supervision
  - Contract management
- **Interesting facts & figures:**
  - Site covers 400 ha
  - 4,397 residential units
Eland Substation and Power Lines

- **Country:** South Africa
- **Completion date:** 2007
- **Project cost:** $19 million USD
- **Services & solutions:**
  - Management of the complete life-cycle of the sub-transmission from project design to energising and commissioning of the substation
  - Project management responsibilities included:
    - Material procurement and management
    - Procurement of internal and external contractors
    - Planning and coordination of network outages
    - Design modifications
    - Project status and progress feedback
Lubango-Ondiva Road and Cunene Bridge

- **Country:** Angola
- **Completion date:** 2008
- **Project cost:** ± $75 million USD
- **Services & solutions:**
  - Feasibility studies
  - Engineering surveys
  - Pavement and materials investigations
  - Detailed engineering design
  - Bridge condition assessments
  - Construction supervision
  - Contract management
Showcase projects...continued

Gautrain Rapid Rail Link Project

- **Country:** South Africa
- **Completion date:** Ongoing
- **Services & solutions:**
  - Detailed design of a section of the rail network, including:
    - Principle review
    - Construction design and as-built drawings
  - Design of viaducts and bridges
  - Design of large culvert and retaining walls
  - Earthworks
  - Local road upgrades
  - Geotechnical design
  - Project management
Berg Water Project

- **Country:** South Africa
- **Completion date:** 2009
- **Project cost:** R1.3 billion
- **Services & solutions:**
  - Surface water resources - planning and integrated management
  - Groundwater - availability and pollution assessment
  - Dams
  - Pumps and pipelines
  - Water treatment
  - Wastewater treatment
  - Stormwater management and flood control
  - Coastal engineering
  - Institutional and Advisory - institutional and policy development support
- **Awards:**
  - CESA Glenrand MIB Engineering Excellence Award for engineering excellence with a value greater than R5m
  - Wiehahn SAICE Award for Technical Excellence
  - SA Chapter of the International Association for Impact Assessment Premium Award
Emergency Medical Services Information System (EMS)

- **Country**: South Africa
- **Completion date**: 2004
- **Project cost**: ± $150 000 USD
- **Services & solutions**:
  - Turnkey emergency readiness solution
  - Control centre software
  - Fleet management
  - In-ambulance software
  - Emergency ward software
- **Value adding**:
  - Modular system (allowing further expansion)
  - Web portal (allowing real-time monitoring)
Madinat Jumeirah Arabian Leisure Resort Development

- **Country:** UAE
- **Completion date:** 2004
- **Services & solutions:**
  - Geotechnical studies
  - Detailed engineering design of 3.5 km water canals
  - Structural engineering design
    - all bridges
    - external civil structures
  - Fire safety design and coordination
  - Design and commissioning of the gas reticulation system
Moreleta Spruit Outfall Sewer

- **Country:** South Africa
- **Completion date:** Ongoing
- **Project cost:** ± $25 million USD
- **Services & solutions:**
  - Feasibility studies
  - Preliminary and detail design
  - Project documentation
  - Environmental impact assessment
  - Construction engineering
  - Geotechnical investigation
  - Construction supervision
R-1000 Traffic Study

- **Country:** UAE
- **Completion date:** 2006
- **Services & solutions:**
  - Designing the public transportation system
  - Expanding the private transport network
  - Citing environmental stressors, such as air and noise pollution
  - Addressing the lack of space for the construction of new roads

- **Interesting facts & figures:**
  - The network will include:
    - 100 km of new major corridor extensions
    - 200 km of upgraded corridors
    - an extensive secondary network covering 350 km
    - 250 new improved junctions
HIV/Aids Strategy Plan for the Construction Industry

- **Country:** South Africa
- **Completion date:** 2004
- **Project cost:** ± $170 000 USD
- **Services & solutions:**
  - Development of best practice
  - Procurement documentation
  - Programme monitoring and evaluation
  - Project management
  - HIV/Aids strategy revision
  - Training
  - Facilitation
Showcase projects…continued

Malawi Expanded Public Works Programme

- **Country:** Malawi
- **Completion date:** 2005
- **Project cost:** €23 million

- **Services & solutions:**
  - Programme management
  - Technical assistance

- **Interesting facts & figures:**
  - More than 200 000 beneficiaries
  - Rehabilitated 2 481 km of district feeder roads
  - Constructed 69 bridges
  - Planting and forestry management of 35.5 million trees
  - Planting of 30 214 fruit trees
  - Establishment of 1 552 nurseries
  - Brought 400 ha under irrigation
The Palm Deira

- **Country:** UAE
- **Completion date:** Ongoing
- **Services & solutions:**
  - Detailed master planning
    - Infrastructure and utilities
    - Lighting
    - Marina facilities
    - Transportation
- **Interesting facts & figures:**
  - World’s largest man-made island
  - Comprises 23 interconnected islands in the form of a palm
  - Will extend 12.5 km into the sea and will be 6.5 km wide
  - 1.14 billion m³ of sand will be reclaimed during its construction
Rehabilitation of the Pungue River Bridge

- **Country:** Mozambique
- **Completion date:** 2002
- **Project cost:** ± $300,000 USD
- **Services & solutions:**
  - Engineering surveys
  - Detailed structural engineering design
  - Construction supervision
- **Awards:**
  - SAACE Engineering Excellence Award
- **Engineering solutions provided to overcome:**
  - Remoteness of the site – 6 week lead time required on materials
  - Limited design information
  - Need to accommodate traffic during construction. Achieved by means of a Bailey bridge bridging two portions of decking that had to be demolished and rebuilt
Delft-Leiden Housing Project

• **Country:** South Africa
• **Completion date:** 2003
• **Services & solutions:**
  • Engineering surveys
  • Detailed structural engineering design
  • Construction supervision
  • Contract documentation
  • Tender evaluation

• **Interesting facts and figures:**
  • The single largest housing project ever undertaken by the City of Cape Town on a turnkey basis
  • Encompassed 6,320 residential units

• **Awards:**
  • Housing Best Practice Award presented by the Western Cape Institute of Housing
Kruger-Mpumalanga International Airport

- **Country:** South Africa
- **Completion date:** 2002
- **Project cost:** $51 million USD
- **Services & solutions:**
  - Engineering surveys
  - Detailed structural engineering design
  - Construction supervision
  - Airport and airside infrastructure
  - Geometric and geotechnical design
  - Pavement, road, parking, terminal building design
- **Value adding:**
  - Construction completed within 16 months
Lobatse and Kanye Bypass Roads

- **Country:** Botswana
- **Completion date:** 2004
- **Project cost:** ± $2 million USD
- **Services & solutions:**
  - Detailed engineering and geometric design
  - Material investigations
  - Pre-contract services
  - Construction supervision
Pinnacle Point Beach and Golf Resort

- **Country:** South Africa
- **Completion date:** 2006
- **Services & solutions:**
  - Detailed civil and structural engineering design
  - Contract documentation
  - Construction supervision
- **Engineering solutions provided to overcome:**
  - Environmental sensitivity of the site
  - Water seepage
  - Steep slopes
  - Hard rock conditions
  - Architectural and landscaping challenges
- **Awards:**
  - SAICE Branch Award for Excellence in Civil Engineering
Showcase projects…continued

The Freedom Park (Phases 1-3)

- **Country:** South Africa
- **Completion date:** 2009
- **Services & solutions:**
  - Detailed engineering design
    - Civil
    - Electrical & mechanical
    - Structural
    - Wet services
  - Construction supervision
- **Engineering solutions provided to overcome:**
  - Geometrical design of Sikhumbuto
  - Extensive use of high-quality, exposed off-shutter concrete with minimal construction joints
  - Use of quartzite cladding to blend in with the environment
Upgrading of Route EN1 (Inchope Caia Road)

- **Country:** Mozambique
- **Completion date:** 2002
- **Project cost:** $1 billion USD
- **Services & solutions:**
  - Environmental and material investigations
  - Bridge, pavement, geotechnical and topographical surveys
  - Economic analysis
  - Detailed roads and bridge engineering design
  - Construction supervision
  - Rehabilitation and repair of bridges and stormwater drainage systems
Modimola Expanded Public Works Programme

- **Country:** South Africa
- **Completion date:** 2006
- **Services & solutions:**
  - Detailed engineering design
  - Construction supervision
  - Programme management
  - Environmental impact assessment
  - Socio demographic assessment
  - Local economic development
- **Interesting facts & figures:**
  - 2,400 beneficiaries
  - 180 permanent and 260 temporary jobs created
  - 46 SMMEs established
  - ± $480,000 USD generated by construction and maintenance activities
Central Terminal Building, OR Tambo International Airport

- **Country:** South Africa
- **Completion date:** 2009
- **Project cost:** ± $250 million USD
- **Services & solutions:**
  - Detailed engineering design
  - Construction supervision
Bucket Toilet Eradication Programme

- **Country**: South Africa
- **Completion date**: 2008
- **Project cost**: R9.5 million
- **Services & solutions**:
  - Technical and management support to 56 municipalities
  - Assessment of obstacles to the eradication
  - Development and implementation of a Project Execution Plan (PEP)
  - Document lessons-learnt report
The Asbestos Cement (AC) Pipe Replacement Project

- The Project commenced in July 2007 with a mandate from eThekwini Water and Sanitation (EWS) to relay asbestos cement pipes of 150mm or less in diameter throughout eThekwini Metro.
- Priority Zoning for pipe relay was allocated to areas with the most burst prone pipes.
- Information from eThekwini’s Faultman system was used to identify these areas.
Temporary Relocation Village consisting of living and storage units
Aurecon Training Academy (ATA)

ATA primary focus is to provide
  - innovative accredited training products in the water sector, and
  - best practice capacity building consulting services to municipalities, private sector and parastatal clients.

One of the primary features of this market
  - is the lack of institutional capacity and skills

Who do we train?
  - Operators & Supervisors
  - Unemployed youth

Recently appointed by DBSA as training service provider
  - Water treatment plant operators
  - Asset management
PATULA CONSTRUCTION – GAUTRANS Road Construction Project
242 Learners

- Technical Training – Guardrails, stonepitching, paving etc.
- Occupational Health & Safety Training
- HIV Training

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Thank you