



**T-SQUARE  
ENGINEERS**

*"your innovation & creative partner"*

# COMPANY PROFILE

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[www.tsquareeng.co.za](http://www.tsquareeng.co.za)



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# About T-Square Engineers

T-Square Engineers was founded and established in June 2011 as a Consulting and Project Management Company by a dynamic professional with vast experience within the Consulting, Construction, Engineering and Project Management industry. The company provides its services in various Provinces within South Africa. Made up of skilled and experienced staff members, various software, tools and equipment, the company is well resourced and experienced to complete any project appointed for. The company has proven to be a force to be reckoned with the consulting services. The Company is a multidisciplinary Consulting practice specialising in Planning of Services, Engineering Designs, Construction Management, Project Management, Programme Management and People Development Programmes. It is also our policy and philosophy to implement our projects appointed for in a partnership with our Clients. Being dedicated to developing South Africa, we make it our business to empower our stakeholders, business partners, clients and the communities in which we work and live in.

Our proven track record and that of our strategic partners speaks for itself, our approach is built on rock solid foundations of customer satisfaction, excellence and innovation. The Company is 100% HDI owned and operating within South African borders, our multidisciplinary services approach allows for the development of cohesiveness between our Clients and ourselves to more fully meet the needs and outcomes required on any project irrespective of where it is based and how big or small it is.



CREATIVITY



COMMITMENT



PROFESSIONALISM



ETHICS



INNOVATIVE



# About T-Square Engineers

T-Square Engineers exemplify a culture of collaboration, sustainability, and excellence with a focus on fostering innovation, creating client-centered solutions, and maintaining ethical standards. The company is committed to delivering high-quality, impactful engineering solutions which places significant value on continuous learning, employee development, and creating an inclusive, supportive work environment that promotes work-life balance.

Ultimately, the culture of T-Square is built on the belief that strong engineering solutions can make a lasting positive impact on both the built environment and society at large.



## **Our Vision 2020**

To be the major black owned Consulting Company in South Africa by the year 2020.

## **Our Mission**

Everything we touch is Innovative and Creative as we believe that every community deserves quality services within specified standards & timeframes.





# About T-Square Engineers

## OUR STORY

**2011**

T-Square Engineers cc is established.

T-Square Group (Pty) Ltd is established.  
T-Square Engineers & Focus Power  
becomes part of the Group.

**2014**

**2016**

T-Square Events and Properties are  
introduced to the group.

T-Square Technologies is established as  
a specialised services company.

**2020**

**2024**

T-Square Incorporated is established as  
a Law Firm specialising in Construction,  
Property & Commercial Law.

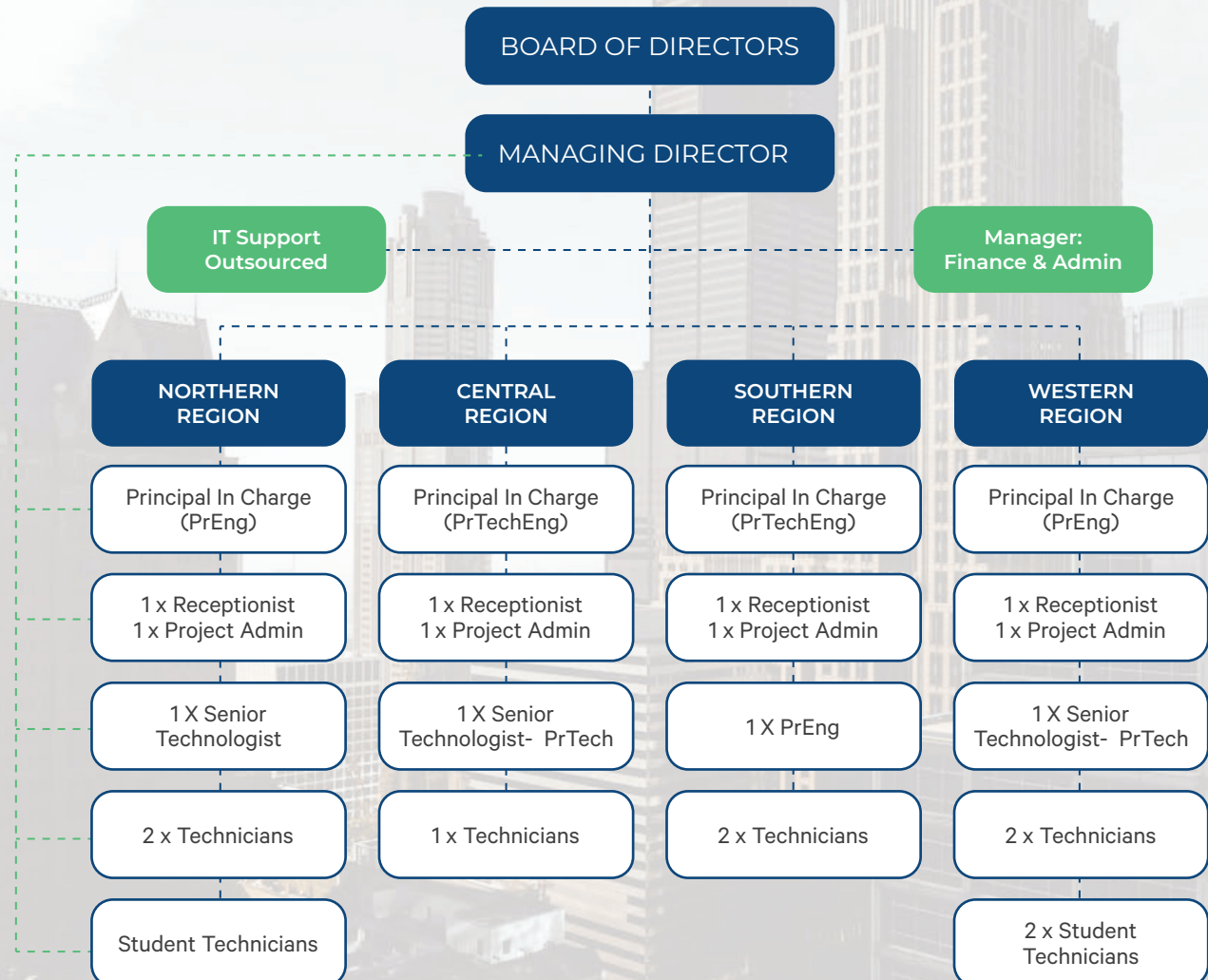
The Group is rebranding.

**2025**

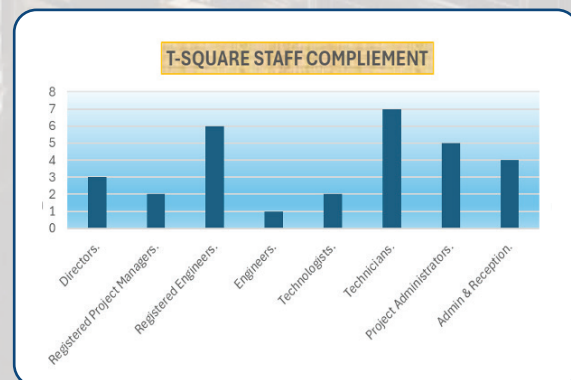


# About T-Square Engineers

## COMPANY STRUCTURE



T-Square Engineers is proud of its staff complement which consists of a wide range of people from different backgrounds and with different skills, experience and expertise. The current breakdown of the company's staff complement can be summarised as follows:



“Through a well-managed process of regular staff coaching, mentoring, assessments, combined with the feedback we obtain from the project Client Satisfaction Forms, we strive to ensure that our projects are completed successfully and within time.



# About T-Square Engineers

## SOCIAL RESPONSIBILITIES

### T-SQUARE FOUNDATION

Through our Foundation that was founded in 2016 we have committed ourselves to supporting communities that are in need in trying to alleviate poverty, "Talking about making a difference within the communities we live and work in". We from time to time partner with local NGO's and collaborate with individuals in the implementation of our poverty alleviation initiatives. Our achievements in this regard speaks for themselves

### SOCIAL RESPONSIBILITIES

T-Square Group through its foundation is involved in a number of charity events and community up-development initiatives. From purchasing Groceries for needy, donating our sound equipment whenever requested to sponsoring events financially.

Projects completed thus far  
**65 in number**

Area of operations in SA thus far  
**7 out of 9 Provinces**

Expenditure on Foundation Initiatives  
**Over R330K**



## SUSTAINABILITY

Sustainability is the ability to meet the needs of the present without compromising the ability of the future generations to meet their own needs. It's a broader concept that encompasses environmental, social, and economic dimensions. It is about ensuring the long-term viability of systems and processes develops and benefits our people:

### Our Bursary programme

The bursary programme allows deserving scholars to study at universities and universities of technology in a field of study specifically dictated by the areas of competency development and on-going capacity planning. Secondary considerations are development with a specific role and career path. T-Square Group gives on-going financial support to deserving technical students who also benefit by doing their in-service training at our companies.





# About T-Square Engineers

## WE ARE TRANSFORMATIVE

“The company is currently a Level 1 Contributor in terms of the Construction Industry Charter and attracts 135% BBBEE recognition.”

### WE EMPOWER

Our objective is to ultimately reflect the demographics of South Africa in terms of our staff complement. The company has an active transformation strategy resting on three inter-related pillars.

- Building and growing T-Square in a sustainable manner;
- Investing in our Staff, Building the T-Square brand, and;
- Continuously reviewing and improving our corporate governance systems to gain our Clients trust.

### COMPANY OWNERSHIP

We are a 100% black owned with black shareholding being held by the companies Board of Directors. On an annual basis an independent SANAS accredited Auditor undertakes annual verification of our company for broad based economic empowerment.

### COMPANY MANAGEMENT

The company is on a day-to-day basis managed by three dynamic and widely experienced and versatile individuals.

### SKILLS DEVELOPMENT

The mental, emotional, economic and physical well being of our employee's paramount to the company, we achieve this by:

- Team Building Initiatives;
- Mentoring
- Coaching;
- Attendance to training & workshops;
- On job Training;
- Continues Professional Development – CPD initiatives.







# Our Expertise



Civil  
Engineering



Structural  
Engineering



Project and  
construction  
management



Occupational  
Health & Safety



Advisory  
Services



Specialised  
Services



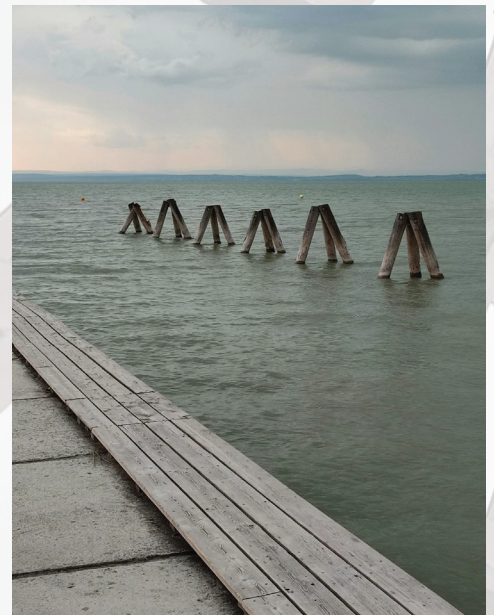




## CIVIL ENGINEERING

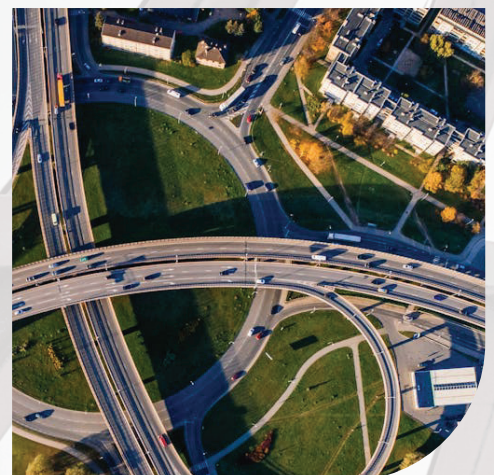
### ROADS & STORM WATER SERVICES

- Visual assessment, planning & design of road and storm water network.
- Preparation of roads & storm water master plan.
- Design of bridges and culverts.
- Labour intensive design and construction methods.
- Maintenance of roads & storm water networks.
- Traffic counting services.
- Preparation of Pavement Design Certificate.
- Transportation planning and engineering.
- Public transportation.
- Borrow pit investigations
- Technical Evaluation of roads and highways.
- Traffic calming and management.
- Complex junction and interchange appraisal & design.



### MUNICIPAL ENGINEERING SERVICES

- Municipal water and sewer reticulation
- Bulk infrastructure and rural water supply
- Main water feeder lines.
- Ring-feed network system.
- Surfaced, gravel and interlocker paved roads.
- Labour intensive design and construction methods.
- Maintenance of roads and construction methods
- Traffic Engineering.
- Earthworks and platform design for buildings and major structural services.





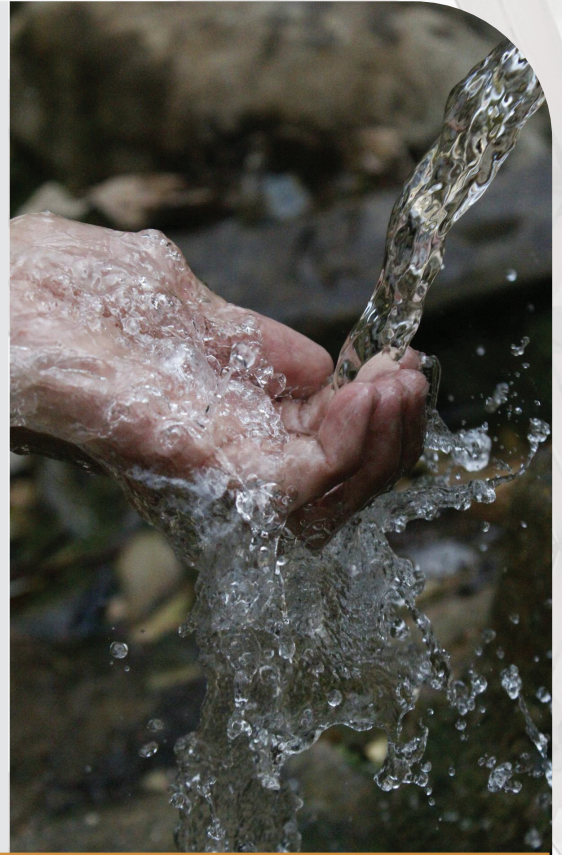


## CIVIL ENGINEERING

### WATER & SANITATION SERVICES

#### WATER

- Water resource planning.
- Design of bulk water storages.
- Bulk water augmentation.
- Water network reticulation.
  - Hydraulic modelling of water systems.
  - Leakage & uncounted for water studies.
  - Design of water purification works.
  - Operation & maintenance of water systems.
- Tunnelling and geotechnical services.
- Telemetry and network monitoring.
- Water quality assessments
- Advanced technology water meter reading services.



#### WASTEWATER

- Status quo investigations of existing plant conditions.
- Feasibility studies & technical report preparations.
- Flow and load analysis
- Raw water intake systems.
- Refurbishments, upgrading & alterations to existing plants.
- Construction of new works & retrofitting of existing works using the revolutionary HYBAC systems.
- Wastewater recycling and reuse.
- Pump-station designs.
- Process design, analysis and modelling.
- Flow and load analysis.
- Raw water abstraction systems
- Double screening of inlet works.
- Final effluent disinfection.
- Health & hygiene programmes: Source of funding & implementation.



## CIVIL ENGINEERING

### DAMS AND UNDERGROUND WORKS

#### *WATER RESOURCE PLANNING*

The increasing scarcity of fresh water necessitates assessment of the quantity and quality of existing water resources. Our expertise covers water and bulk-water resource planning, supply, storage and conveyance and flood risk management with services included:

- Water Demand Forecasting.
- Surface runoff hydrological studies.
- Flow and Load Analysis.
- Reservoir yield determination.
- Preparation of Hydrological data in line with the National Water Act.
- Computerised based Models and geographic information.



#### *BULK WATER STORAGE*

Feasibility Studies, design, inspection, monitoring, risk evaluation, refurbishment and remedial works design in all stages of the life cycle of dam projects with following services included:

- Hydraulic Analysis and Design Concepts. Structural Analysis and Design.
- Geotechnical and geological analysis and modelling and foundation treatment.
- Topographic Modelling.
- Value Engineering.
- Contract documentation and administration. Construction Supervision.
- Rehabilitation and remedial work.





## CIVIL ENGINEERING

### TRAFFIC AND TRANSPORTATION SERVICES

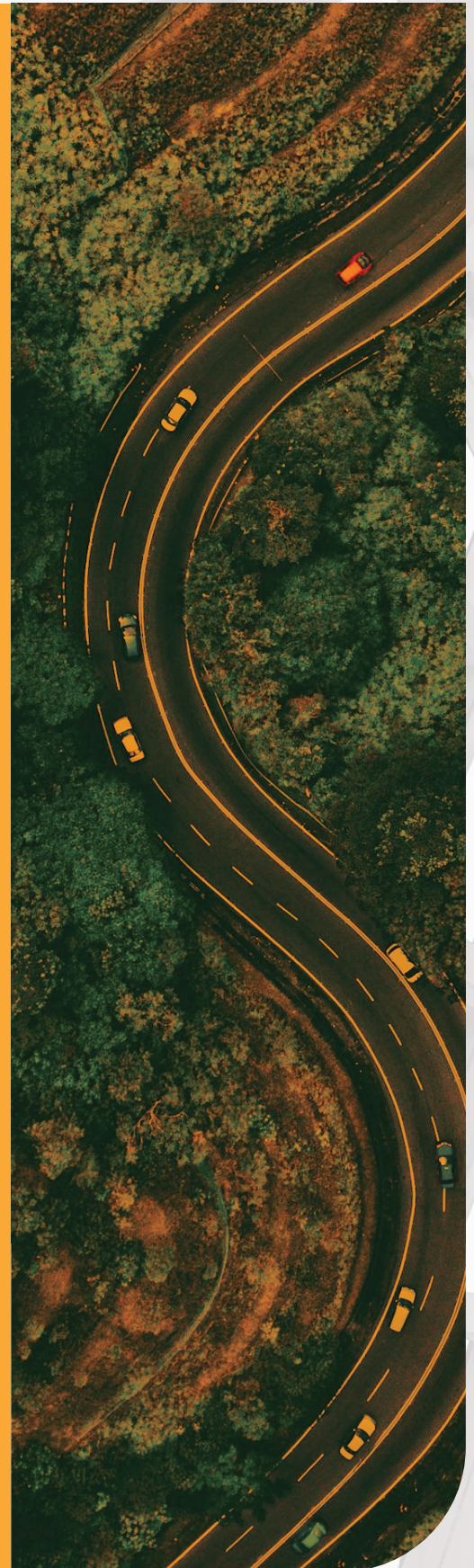
We provide specialised Consulting services in Traffic Engineering and Transportation Planning. Our studies focuses on a single mode or multi-modal integration in local, metropolitan and regional jurisdiction. Our team has vast experience in the development of transport plans at national, provincial, district and local authority level. Our areas of expertise include but not limited to the following:

#### *TRAFFIC ENGINEERING*

- Transport and Traffic Impact Studies and Data Collection.
- Road Intersection and network capacity analysis.
- Traffic Modelling: Regional & Local
- Traffic Signal and Control Systems Design plus Implementation.
- Road Safety Audits and Design.
- Traffic and Access Management Schemes.
- Intelligent Transport Systems (ITS) planning and design.
- Commuter needs Assessments.

#### *TRANSPORTATION PLANNING*

- Land use and transportation studies.
- Public Transport Planning & infrastructure design.
- Transport Policy Developments.
- Transportation Modelling.
- Integrated Transport Plans.
- Non Motorised Transport Planning & Design.
- Rural Transport Planning & Design.
- GIS and Mapping.
- Special needs passenger planning.







## CIVIL ENGINEERING

### RAILWAY ENGINEERING SERVICES

#### WATER RESOURCE PLANNING

We have established a specialist sector fully focusing in technologically excellent, cost effective Rail Engineering Solutions from planning, design and contract management. Our areas of expertise include but not limited to the following:

#### PERMANENT WAY ENGINEERING

- Railway Infrastructure maintenance management.
- Railway Track Design and operations.
- Feasibility Studies for new main-line and light rail construction.
- Design and Implementation planning for new works, remodelling and rationalisation.
- Line speed improvement and upgrading of infrastructure.
- Research and Analysis into track behaviour.
- Siding and Depots Layout.
- Survey of existing infrastructure.



#### RAILWAY SYSTEMS

- Feasibility Studies for new stations and facilities upgrades.
- Planning & Design and implementation of new works.
- Asset Condition Assessment.
- Procurement Management.
- Infrastructure Interface Analysis.
- Reliability Studies.
- Modernisation and upgrades.
- Survey of existing installations.
- Service Problem Solutions.
- Technical Design Solutions.





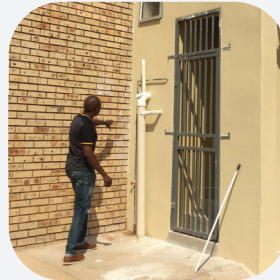
## STRUCTURAL ENGINEERING

### BUILDING SERVICES

- Offices, residential, commercial and retail Structures.
- Public Utilities, stations and buildings.
- Educational and Health care Institutions.
- Sport, leisure and stadium developments.
- Factories and warehouses.
- Water retaining and Civil Engineering Structures.
- Concrete rehabilitation and refurbishment.
- Design of Reinforced, prestressed and precast concrete.
- Design of structural steel, timber and masonry structures.
- Design of Bridges and road related structures.
- Design of Silo's.
- Subsurface structures.
- Design, Project Management of Low Cost housing.

### HUMAN SETTLEMENT SERVICES

- Municipal Wet Services, bulk infrastructure and water & sewer reticulation.
- Water and Wastewater Treatment.
- Institutional Support.
- Asset Management.
- Solid Waste.
- Water conservation and demand management.
- Labour Intensive design and construction methods.
- Low Cost Housing: Planning, design and implementation.







## PROJECT AND CONSTRUCTION MANAGEMENT

Our Project and Construction Management expertise are focused on Contract Management, construction supervision and monitoring, quality management, planning, design and construction, quality and safety management. Our areas of expertise include but not limited to the following:

### *PROJECT MANAGEMENT*

- Project Inception.
- Project Concept and Viability.
- Design Development.
- Documentation and Procurement.
- Contract Administration and Inspection.
- Project Close-Out

### *CONSTRUCTION MANAGEMENT*

- Specific Client needs.
- Procedures applied for all construction Works.
- Appointment and responsibilities of supervision and monitoring staff; Resident Engineer and Engineer Representative.
- Progress Monitoring.
- Quality Control.
- Protection of Services.
- Materials Inspection.
- Inspection of Works.
- Control of tests equipment.
- Issue of Drawings and Documents.
- Preparation of monthly project and construction reports.







## OCCUPATIONAL HEALTH AND SAFETY

### OH&S SERVICES

- Legal Compliance Audits.
- Risk Assessment and Hazard Identification.
- Audits and Surveys.
- Health and Safety Systems.
- Incident Investigations.
- OHS Agent Services
- Construction Kit







## ADVISORY SERVICES

Our Advisory Services encompass a range of professional services designed to guide our Clients, Companies and Individuals in making informed decisions and provide better implementation strategies for more sustainable solutions.

We work hand in hand with our Clients, services providers and the community at large. In our efforts off being the change we want to see in the communities we work and live in, we incorporate the following development strategies in our project lifecycle:

- Mentorship and Coaching of Technical Resources towards Professional Registration with various Built Environment Professional Bodies
- Contractor Development Programme linked to Cidb Grading Improvement
- Project based Job Creation Initiatives that benefits the local community.







## ADVISORY SERVICES: CONTRACTOR DEVELOPMENT



### OUR USP CRITERIA

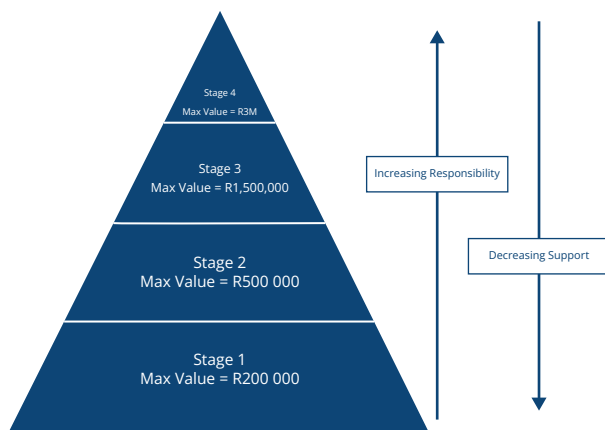
- The entry to the programme will be CIDB Grading Level 1.
- The main objective of the programme will be to move a level 1 Contractor to level 4 by providing sustainable projects and income for a period of 12 months.
- Once the Contractor reaches level 4, he/she exits the programme as the Contractor will now be ready for the corporate market.
- Companies to be registered entities in good standing with SARS.
- Company Owner and Site Supervisor to be full time employed by the company to ensure 100% participation in the programme.

### CIDB GRADING CATEGORIES

CIDB GRADING LEVEL	PROJECT VALUE LESS THAN OR EQUAL TO:
2	650 000.00
3	2 000 000.00
4	4 000 000.00
5	6 500 000.00
6	13 000 000.00
7	40 000 000.00
8	130 000 000.00
9	NO LIMIT

### OUR STRATEGY

Ring Fence 10 Contractors within the Municipality, 1 from each Ward.



### AIM AND OBJECTIVES

- Promote and support affirmable local businesses.
- Promote equity in the construction sector.
- Create more self-sufficient Employers and meaningful employment.
- Ability to earn a sustainable and well deserved income.
- Obtain much needed Work Experience.
- Promote community Participation.
- Provide opportunities to emerging contractors and entrepreneurs in a protected in environment.
- Provide structured training, skills and business development.
- Training is linked to CIDB Contractor Grading System.
- Create sustainable opportunities for small businesses.
- Create sustainable opportunities for small businesses.
- Community: Alleviation of Poverty.
- Reduce the rate of unemployment in our community.

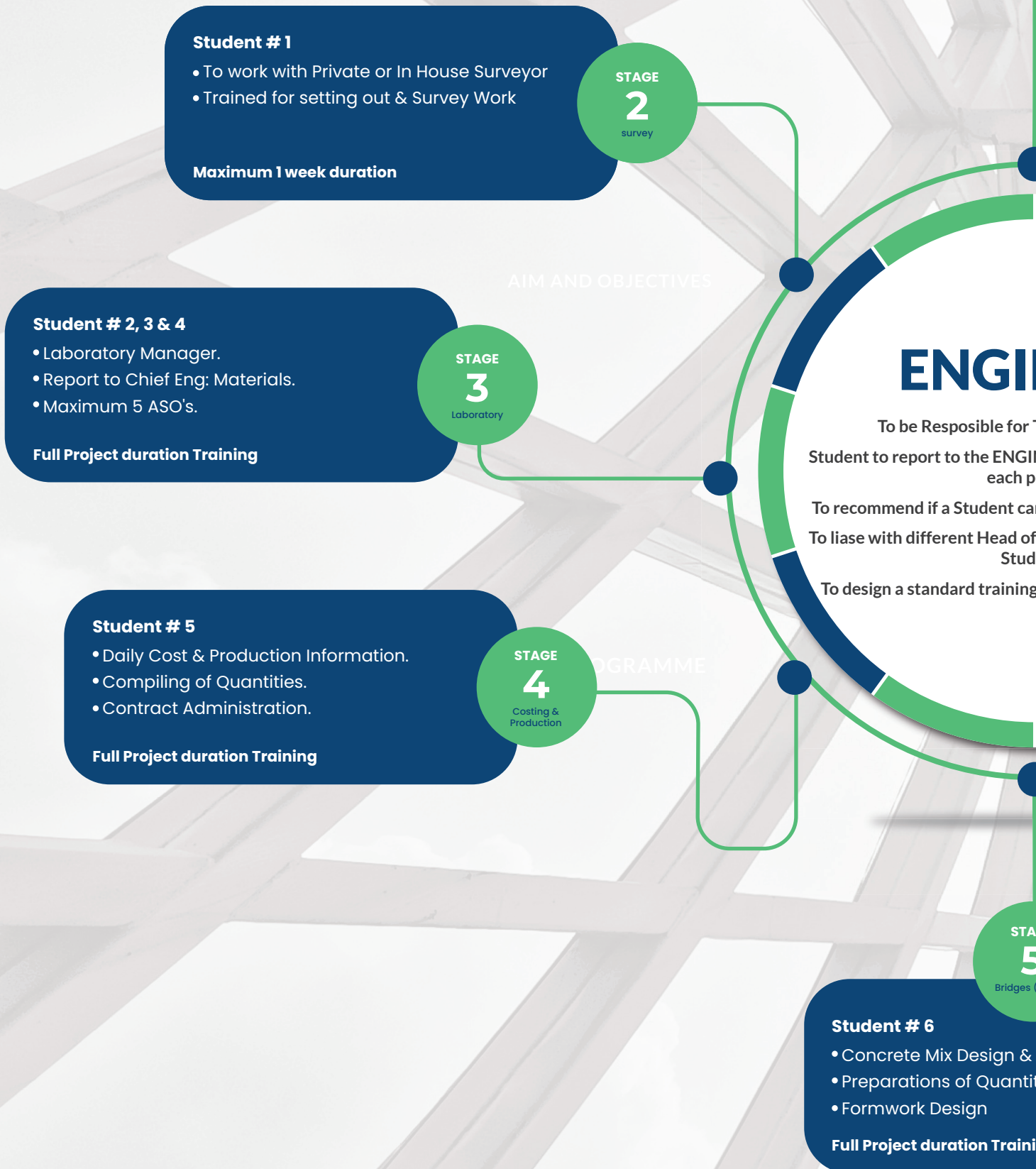
### OUR PROGRAMME

- Advertisement of Bid Calling for Emerging Contractors residing within the area of jurisdiction of the Municipality to submit Proposals and Company Profiles.
- Ward Councilors to sign Contractors application forms to ensure that the applicant resides in the ward.
- Database of approximately 10 Successful Contractors is established.
- Each Contractor will be supplied with a Unique Number.
- Only Contractors that are registered on the Database will be used as Sub-Contractors in all Municipal Projects.
- The remaining responsive Contractors to be placed on standby/ waiting list should any successful Contractor exit the programme due to any reason, next Contractor in line is admitted.
- Establish a verifiable Database – Admission via rigorous evaluation criteria to establish skills levels and ensure the business is genuine and that it meets the objectives of the program.
- Database will be governed by strict clearly defined Rules & Regulations.
- Companies that transgress the rules are excluded from further participation in the program.
- Companies that show NO Commitment to the program will be replaced by companies on standby list.
- The programme to run for a minimum of 12 months.



## ADVISORY SERVICES

### STUDENT COACHING AND MENTORING PROGRAMME





with Built Environment

ENGINEER to discuss Duties  
Sections.

adopted

# ENGINEER

Training of Students.

ENGINEER after the completion of  
period.

can be moved to the next stage.

Sections for progress of each  
ent.

report system for Students.

Management  
ties

ng

## OFFICIAL READY TO SUBMIT REGISTRATION REPORTS TO ECSA & SACPCMP

**4 YRS MAXIMUM**

STAGE

**8**

Crusher

### Student # 9

- Crusher Quantities
- Crusher layout
- Machine Hours

**Full Project duration Training**

## AIM AND OBJECTIVES

STAGE

**7**

Small Structures

### Student # 8

- Pipe laying & Small works
- Quantities
- Payment Certificates for Emerging Contractors.

**Full Project duration Training**

STAGE

**6**

Earthworks &  
Layerworks

### Student # 7

- Quantities.
- Payment Certificates for Emerging Contractors
- Levels Check

**Full Project duration Training**

## CONTINUOUS PROCESS

1. Students will be rotated for the full project duration.
2. Progress reports to be signed by Sectional Heads.
3. Log Sheets to be Signed by ER.
4. Student gets out of the system after being cleared by all sections & confirmation received from ER.



## SPECIALISED SERVICES

### UNDERGROUND INFRASTRUCTURE DETECTION

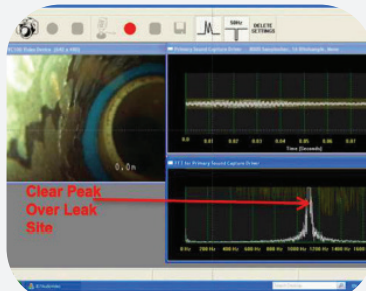
This service is tailored to customers needs and can comprise of the following:

- Underground Penetrating Radar (GPR) surveys – to locate and determine the depth and position of metallic and non-metallic underground storage tanks (USTS) and associated piping, voids, sub surface concrete structures, utility duck banks, ground variations and location of burial sites.
- Locating and tracing of a specific cable, pipe or other object across a site over a maximum range 5m below ground level.
- To clear a planned excavation or borehole area.
- A comprehensive full-scale mark-out survey of all underground and otherwise buried services on a site, along a road or any other landscape.
- Preparation of detailed subsurface infrastructural services AS-Built Plans.
- Water and wastewater leak detection.

### CCTV PIPELINE INVESTIGATION

This service is tailored to Customers needs and can comprise of the following:

- Pipeline and manhole inspections/ investigations from 100mm Dia up to 1500mmDia.
- Surveys for blockage, cracking, disjoining, damage, illegal connections and water infiltration.
- Specialised Panorama system captures still images as it moves through the pipeline, which overlap to produce high-resolution 3D colour digital modelling and dimensioning.
- Suitable for pipelines 50mm to 2m in diameter and up to 500m long.
- Zoom capability and powerful LED illumination {with additional bolt-on lighting} for focus and detail in any situation.
- Deep sound locator - for locating pipes up to 20m deep.
- Digital inclinometer readouts of pipeline gradient, pitch and direction changes.
- Reporting via DVD, pipeline inspection reports, and as-built plans when required







# Regions of Operations



## North-West

Willow House, Unit 2  
139 Peter Mokaba Avenue  
Potchefstroom  
North West, 2520  
South Africa

## Gauteng

Waterfall Terraces, Block 3,  
Unit 6 - Waterfall Park,  
Bekker Street  
Midrand - Gauteng  
1685 - South Africa

## Western Cape

Unit 78, Pimlico Place 2  
88 Avonmouth Crescent,  
Parklands  
Cape Town - Western Cape  
7441 - South Africa

## Free State

Suite 5 - 74-78 President  
Rietz Avenue, Westdene  
Bloemfontein - Free State  
9301 - South Africa

## Eastern Cape

Gecko Business Park,  
First Floor, Unit 4-5  
9 Buffelsfontein Road,  
Mount Pleasant  
Gqeberha - Eastern Cape  
6070 - South Africa

## Kwa-Zulu Natal

Broadlands Office Park,  
Block A, Unit 21  
9-11 Mountview Close,  
Mount Edgecombe  
Durban - KwaZulu-Natal  
4319 - South Africa

## Accreditations



## Our Quality Statement

***Oxford Dictionary defines quality as “a degree of excellence”.***

At T-Square our degree of excellence is defined in our ISO 9001 Quality, OHS 18001 Occupational Health and Safety and ISO 14001 Environmental Implementation Certification.



**T-SQUARE  
ENGINEERS**

*"your innovation & creative partner"*

#### HEAD OFFICE

Unit 4-5, Gecko Business Park 9  
Buffelsfontein Road Mount Pleasant PORT  
ELIZABETH, 6070

## Contact Us

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