# **COMPANY PROFILE**

# UTMOST CONSULTANTS

(STRUCTURAL & CIVIL ENGINEERING CONSULTANTS)



#### UTMOST CONSULTANTS COMPANY PARTICULARS

#### 1.1 **History of the Firm**

The firm was incorporated in February 1990 under certificate No. 42301 as attached. Since then it has established itself very formidable in all fields of engineering Consultancy. The firm is capable of offering Consultancy in most fields of Engineering such as Civil, Structural, Electrical and Mechanical in liaison with its several associates where deemed necessary

#### 1.2 **Registered Office & Statutory Registration**

The firm is located in southern wing of Mombasa Trade Centre, 10<sup>th</sup> Floor and the address is P.O. Box 83660 - 80100, Mombasa. The main telephone line is 041 -2229926, Mobile No. 0729 706339 Mombasa. The firms E-mail address is info@utmostconsultants.com. The V.A.T Registration No. is 01264282R and PIN No. is A00061011F.

#### 1.3 Office Establishment

The firm has the necessary office furniture and equipment. These include desks, chairs, drawing boards, stationary, filing cabinets and typewriters. Computers have also been installed in the firm with CAD facilities, which are used in carrying out all our design works. Other support tools such as scales and survey equipment are also available in the firm.

Specialized requirements such as materials testing's and geotechnical investigations are hired out from our associating firms and consultants.

#### 1.4 Key Personnel

Utmost Consultants has the following technical professional either in their permanent staff or are readily available for any project commissioned to the firm: -

#### a) Director:

- (i) Joseph N. Muraya Director
- Kenya Registered Engineer since 1981

## b) Engineers/Consultants:

- (i) Paul C. Wambugu Consultant
- Kenya Registered engineer since 1979
- (ii) Joseph Riwo Consultant

over 25 years experience

- (iii) A. Shamala over 35 years experience
- (iv) Peter K. Kahiro over 35 years experience
- (v) Timothy Ndeleva over 11 years experience
- (vi) Bramwel M. Wanyoyi over 8 years experience

#### c) Surveyors:

- (i) Zablon Njuguna over 20 years experience
- (ii) George S. Kimani over 35 years experience

#### d) Technician/Inspectors:

- (i) Ziporah Gitero over 17 years experience
- (ii) Nelson Taara over 26 years experience

#### e) Support Staff:

2 No. Draughtsmen

Secretarial

Administrative

The firm will be able to draw on the service and experience of other professional personnel as and when required for efficient and speedy execution of the projects assigned to the company. The detailed Curriculum Vitae for the Principal and some of our consultants are appended.

#### 1.5 Summary of Projects Undertaken

Some of the projects recently or currently being undertaken by the firm are summarized as hereunder: -

#### (i) Rehabilitation of Fire Fighting Facilities at Kenya Ports Authority Oil Jetties

The principal consultants for the above works were M/s J.O. and Associates. Utmost Consultants was involved in the Structural/Civil Consultancy Works contained in the project. This included checking the structural capability of the Shimanzi and Kipevu Oil Jetties to take the new loading from equipment to be installed for fire fighting together with other related existing structures such as pump houses which are all constructed inside the sea. Several new structures such as generator houses to accommodate the above facilities were also designed and constructed. Structural design for the support system for pipelines and fire installation such as remote control monitors was also included.

Civil works include lying of the water and foam pipes along the shoreline and at the jetty. Works involved also rehabilitation of the eroded shoreline.

Construction of the above works has been competed and commissioned at a cost of 150 Million.

#### (ii) Kwale Minerals Project

The above project involves the development of Kwale Titanium Mineral Project with a production capacity of approximately 500,000 tonnes per annum of the

product that is to be transported by road trucks to the ship loading facilities to be established at Shimoni. Utmost Consultants were involved in the preliminary design of: -

- Upgrading of Road D546 measuring approximately 8.5 Km.
- Rehabilitation of portion of highway A14 measuring approximately 13.1
   Km
- Upgrading of Road D543 measuring approximately13.5 Kms
- New Road off D543 to connect to the proposed terminal at Shimoni measuring approximately 2.4 Kms
- Mining area on site roads connecting the dry and wet process plants.

The estimated total cost for the above works was Kshs. 600 Million. Utmost was also involved in the feasibility studies jointly with others for the development of the ship loading facilities at the Shimoni.

## (iii) Replacement of 24" Crude Oil Delivery Pipeline at K.O.T for Kenya Petroleum Refineries Ltd.

The above Project involved dismantling of an existing 24" diameter crude oil delivery pipeline between Kipevu Oil Terminal and Kenya Petroleum Refineries Tank Farm at Port Reitz, which had corroded beyond economical repair. It also involved installation of a new 600-mm pipeline and rehabilitation of the supports both over the sea and on dry land. The project, which the total cost, was Kshs. 80 Million is now complete and commissioned.

# (iv) Construction of One Stop Center at the Container Terminal for Kenya Ports Authority

The Project involved construction of a one-stop center for processing and clearing of the containers at the Kenya Ports Authority Yard. Utmost Consultants were commissioned as the lead consultants for both the design and supervision

thus leading a team of Engineers, Architects and Quantity Surveyors engaged on the Project. The Project construction is now complete and handed over at a cost of Kshs. 70 Million including Client supplied items.

#### (v) Parking Facilities for One Stop Centre at Container Terminal for Kenya Ports Authority

The Project involved construction for the parking facilities including a box culvert over a wide open storm water outfall drain. Utmost Consultants were retained by the Client M/s Kenya Ports Authority for the design and supervision of the works. The Project with the construction cost of over Kshs. 70 Million is now completed and handed over.

#### (vi) Bulk Liquid Storage Project for M/s Gulf Stream Investment within Kenya Ports **Authority**

The Project involved construction of several storage tanks for edible oil for M/s Gulf Stream Investments at the Shimanzi area of the Kenya Ports Authority. Two sites were developed, one for Truck Loading and the other for Rail Loading. The works also included the development of the above loading facilities for trucks and rails as well as delivery pipelines from the berths to the two project sites. At the road and rail crossing the pipes are supported on new bridges which were constructed. In this project which is completed and handed over, Utmost Engineering Consultants were retained as the Structural Consultants for Design and Supervision of all the works.

#### (vii) Extension of Crane Beams and Associated Piles at Berth 16 - 18 within Kenya **Ports Authority**

The Project involved rehabilitation of landward and seaward beams including construction of a new beam at Berth 18 to carry loads imposed by new ship to shore gantry (SSG) cranes to be deployed. Utmost Consultants in association with Halcrow Group Ltd., of United Kingdom were retained by the Client M/s Kenya Ports Authority to investigate and determine the residual structural capacities of the existing beams as well as the associated piles. The work involved also the preliminary and detailed designs of a new crane beam and piles along the length of Berth 18 plus any additional structural members that may be required to supplement the existing beam and piles based on the investigation as above. Utmost/Halcrow were thereafter to supervise the construction works. The Project with a construction cost of Kshs. 750 Million is now completed and handed over.



Crane beam nearing completion and new SSG mounted

## (viii) Front Office Building for Bandari Sacco Ltd., within Kenya Ports Authority

The Project involved construction of a front office building including banking facilities for Bandari Sacco Ltd., at Kenya Ports Authority.

Utmost Consultants were retained as the Structural and Civil Engineers for the Project. The Project which is now completed and occupied costed around Kshs. 50 Million at completion.

#### (ix) Grain Bulk Handling Facilities for M/s Grain Bulk Handlers Ltd. at Shimanzi -Phase 2

The project involves extension of the grain bulk handling facilities at Shimanzi by erection of 32 No. steel silos each with a capacity of 5000 metric tonnes. The silos each with a diameter of 18-metres and a height of 20-metres are supported on raft foundation slab which include tunnels for the loading conveyors. Also provided in the project is the connection underground tunnel carrying the conveyors between the new and existing facilities separated by a distance of more than 200-metres, where a busy public road as well as rail siding is located. The project also includes construction of the loading facilities for both trains and trucks as well as parking bays. Included also in the project is fuelling facilities for the trucks. The initial phase of the above involving 10 No. Silos at an estimated cost of Kshs. 600 Million are now complete and commissioned while construction of the balance 22 No. silos at an estimated cost of Kshs. 1.5 Billion is nearing completion. Utmost Consultants have been retained as the structural/civil consultants for both design as well as supervision of works.

#### (x) Mbaraki Bulk Terminal Facilities on Plot No. 185/XLVII/MI

The project involves development of dry cargo bulk handling facilities with a storage capacity of 120,000 metric tonnes to handle fertilizer, clinker and coal. The facilities will include conveyor belt from Mbaraki Wharf to the terminal a distance of approximately 1 km, two reinforced concrete sheds each with a height of over 32 metres above and 4 metres below the ground. Each shed has a length of approximately 105 metres and a breadth of 27 metres. Loading facilities for both trucks and rail is also being provided. The project which is estimated to cost over Kshs. 1.2 Billion is tendered and construction will commence soon. Utmost Engineering Consultants have been retained for the Civil and Structural Engineering design of the facilities as well as the supervision thereafter.





Top slab of office block

Office block

# (xi) Custom Bonded Motor Vehicle Depot for M/s Uganda Properties Holdings Ltd., at Kibarani

The above project involves development of car parking facilities for the Ugandan vehicles on transit. It involves construction of open paving yard to accommodate well over 2000 cars at any one time. The terrain of the plot necessitated construction in three split levels with the lowest being more than 10 metres from the highest. Provision of reinforced concrete slabs over the lower levels has also been provided in the design to accommodate future parking space. Ancillary facilities including office have been provided. Our Firm was retained as the Civil/Structural Engineering Consultants for the development. The project with an estimated construction cost of Kshs. 250 Million is now completed and handed over.

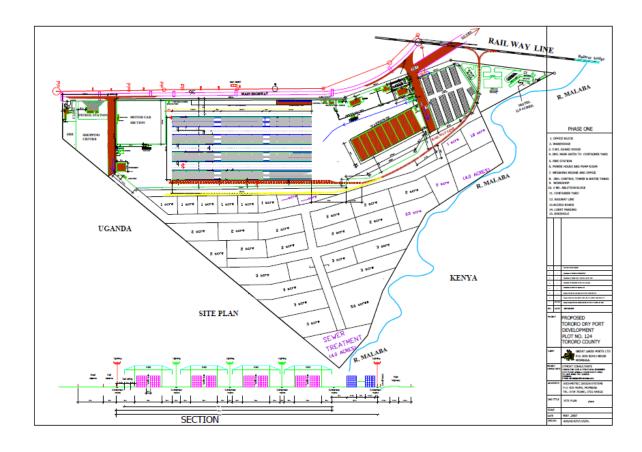
#### (xii) Mariakani CFS Terminal for M/s Great Lakes Ltd.,

The project involves construction of Custom Bonded Container Freight Station (CFS) with a total paved area of over 85,000-m<sup>2</sup>. A warehouse with a total floor area of 3,000-m<sup>2</sup> will also be constructed including other ancillary facilities such as Fire Station and Administration Office Block. A railway siding will also be

provided to the CFS and an access road from the main Nairobi – Mombasa Highway. Utmost Engineering Consultants have been retained to provide the Structural/Civil Engineering Design and thereafter supervision of the construction works. As the Lead Consultants, Utmost Consultants will also coordinate the design as well as supervision services as related to all the other consultants. The above project with an estimated construction cost of Kshs. 1500 Million has been tendered and awaiting award.

#### (xiii) Uganda Inland Port on Plot No. 124 Block 4 - Tororo, Uganda

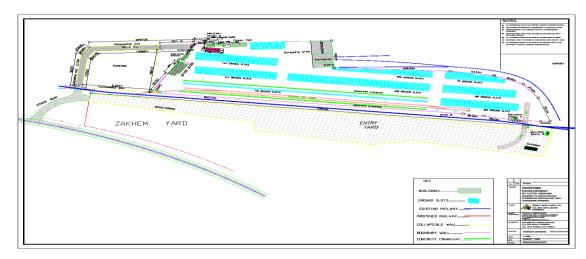
The above project is to be developed on approximately 125 Hectares plot and will consist of a container terminal with a paved area of 16 Hectares, Car Depot of approximately 4 Hectares, Clearing Agents block, Administration Office block and other ancillary buildings. The port will also have parking facilities for trucks and serviced plots for industrial development for export market. In this project, Utmost Engineering Consultants have been retained as the Lead Consultants as well as for provision of Structural/Civil Consultancy services. The project whose construction has now commenced is estimated to cost Kshs. 5.2 Billion at the completion.



## (xiv) Changamwe CFS Terminal for M/s Great Lakes Ltd.

The project involves construction of Custom Bonded Container Freight Station (CFS) for Uganda bound Cargo with a total area of 75,000-m<sup>2</sup>. A warehouse with a ground area of 1900-m<sup>2</sup> is also to be provided as well as administration office with an area of 330-m<sup>2</sup>. Railway siding is also provided and an access road from Magongo Road is to be constructed.

The project which is now completed and operational had a construction cost of Kshs. 500 Million. Utmost Engineering Consultants was retained as the Lead Consultants as well as to provide the Structural/Civil Engineering Services for the project.



Site location and work involved

## (xv) Special Assistance for Project Formation (SAPROF)

The above project with possible financing by the Japan Bank of International Cooperation (JBIC) involves a development of a second Container Terminal at the Kenya Ports Authority comprising of the following: -

- (a) Three new berths with depths of 15m (length: 600m) and 12m (length: 300m), and two new side berths with water depths of 9m (length: 190m) and 4.5m (length: 80m),
- (b) Three new marshaling yards behind the berths with an area of 10.9 Ha each,
- (c) Three new administration areas behind the marshaling yards with an area of 3.9 Ha each,
- (d) Railway marshaling yard of about 13 Ha, and
- (e) Green belt along the shoreline.
- (f) There are access facilities to be planned, i.e. an access channel, basins and access roads(s).

Utmost Engineering Consultants were retained as local counterpart for the Civil Engineering works more so as regard to access roads as well as port operation and maintenance during the carrying out of the feasibility studies. The feasibility

studies which are now completed and handed over to the Client indicated an estimated construction cost of over Kshs. 25 Billion for the project.

#### (xvi) Commercial Jetty for African Marine & General

The Jetty to be constructed at the African Marine and General site has a quay length of 180-m at a position where 11-m draft was achievable. The access way is designed as 6-m wide over approximately 25-m from the dry land and the width of the Jetty is approximately 20-m. The Jetty is designed capable of carrying an off loading crane load.

The design of the Jetty is completed, tenders invited and now awaiting construction.

## (xvii) African Gas and Oil Company Ltd (AGOL) LPG Handling Facilities at Miritini Mombasa

The above project being developed by M/s AGOL Terminal Ltd., at the Port of Mombasa comprises of the following:

- (a) Offshore Ship Loading Facilities for Liquid Petroleum Gas (LPG).
- (b) 1.6 km length of 300-mm Ø Marine LPG Pipeline to the shoreline slipway
- (c) 2.6 km length of 300-mm Ø onshore LPG Pipeline from Slipway to the Common User Manifold (CUM) at Miritini.
- (d) Common User Manifold Facilities allowing connection for minimum 4 No.LPG operators.
- (e) 500-mm length of 300-mm Ø pipeline between CUM and AGOL Storage Facilities for LPG
- (f) LPG storage facilities initially comprising of 4 No. storage mounded tanks of 1,800 MT capacity each totaling to 7,200 MT as a first phase but an ultimate storage capacity of 14,400 MT LPG to be capable of handling ocean cargo of 12,000 14,000 MT LPG.

(g) Distribution Terminal Facilities with rail and road transport systems including administrative as well as marketing offices, loading facilities for both road trucks and rail wagons.

The above project with an estimated completion cost of Kshs. 5 Billion where Utmost Consultants were retained as the Civil/Structural Engineering Consultants' is now completed and commissioned.





Laying and welding of PLG pipes in sea and mechanical works:





Stabilization, Pavement and drainage works





Excavation and setting out and foundation works:





Formwork and scaffolding, reinforcement and concrete works:





Retaining walls and boundary walls construction

# (xviii) Proposed 10" diameter delivery pipeline from Kenya Pipeline Company (KPC) PS1 to Hashi Energy Terminal in Changamwe

Arising out of the increase in demand for white petroleum products for both local as well as regional market for M/s Hashi Energy from as low as 9000-m3 per month to 30,000-m3 per month, Utmost Engineering Consultants were appointed to explore various proposals to enhance the delivery. Currently it was noted that Hashi Energy were limited to constrained Kenya Petroleum Refineries Limited (KPRL) 8"supply line. It was further noted that the KPRL line was unable to meet the oil markets deliveries at the Shimanzi Oil Terminal (SOT) to Changamwe and are therefore subjected to pumping schedule. Various options of connectivity were explored and finally the one connecting a 10" dedicated line to KPC PS1 was considered the most viable. The works involved designing and construction supervision of

- Tie-in in to the KPC system at PS1.
   Laying of the 10" diameter delivery pipeline between KPC and
   Hashi Energy Terminal a distance of approximately 2.5 Km.
- ii. Tie-in to the shared manifold at Hashi, Kenol/Kobil and Total Kenya.

The above works involved design, tendering process and thereafter construction supervision where Utmost Engineering Consultants were retained as the Lead Consultants.

The works with an estimated total cost of Kshs. 150 Million is now completed and commissioned.

#### (xix) Mombasa Storm Water Drainage Improvement Phase II

The above project which is funded by the World Bank involves:-

- The installation of storm water drainage outfalls
- Rehabilitation of affected roads including cross falls to enable drain water to the Constructed outfalls
- > Rehabilitation and installation of streetlights in the affected areas.

The project area covers the entire Mombasa County. Utmost Engineering Consultants have been retained by the Project Contractors M/s Njuca Consolidated Ltd., as their Technical Consultants. The firm has therefore provided all the Technical Consultancy and Supervision team for the Contractor including the Project Engineer, Materials Engineers as well as the Site Agent. The project with a estimated construction cost of Kshs. 1.9 Billion is now nearing completion.





Excavation and setting of pneumatic forms:





Formwork, reinforcement and concrete works:





Concrete casting using premix



Fixing of manhole reinforcement and formwork



Placing, vibration and curing of concrete in drains

#### 1.6 **Company Referees**

The Firm gives the following as their referees and from whom details regarding the level of service can be obtained.

(i) The Technical Manager,

Kenya Ports Authority,

P.O. Box 95246,

#### **MOMBASA**

Attn: Eng. A.S. Samatar

(ii) The General Manager,

Kenya Petroleum Refineries Ltd.,

P.O. Box 90401,

## **MOMBASA**

Attn: Eng. J. Mruttu

(iii) The Country Manager,

Tiomin (K) Ltd.,

P.O. Box 1214,

#### **KWALE**

Attn: Mr. Collins Forbes

(iv) The General Manager,

Grain Bulk Handlers Ltd.,

P.O. Box 80469,

#### **MOMBASA**