

maisha located at
makao Tilisi, Limuru

MAGAZINE

PROJECTS

DECEMBER JANUARY 2022

*Cool down relax and
unwind in the comfort of
Makao's swimming pool*

2 & 3 bedroom

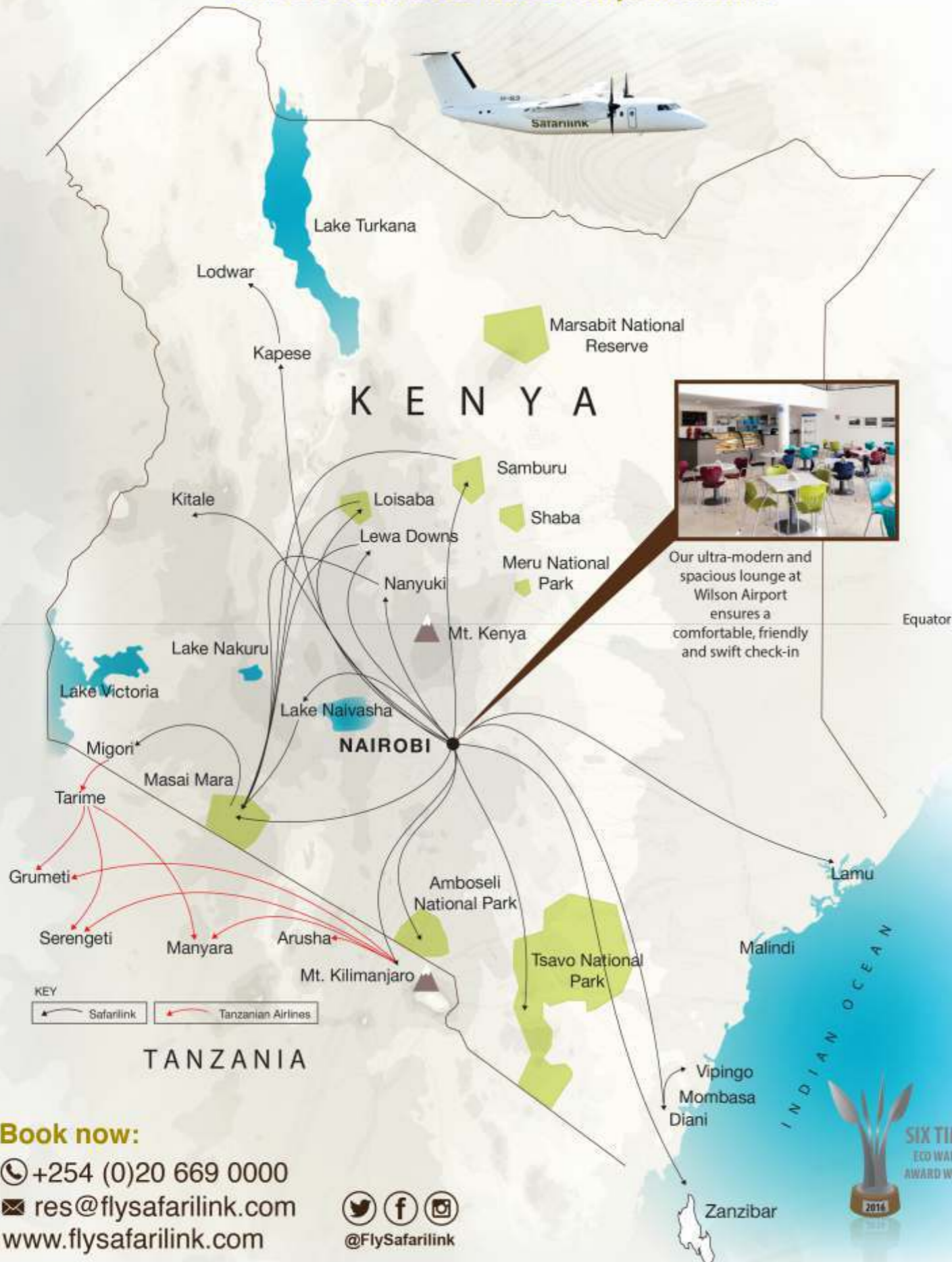
Starting from

KES 6.9m

Live the Good Life

Safarilink

Flying you to all your favourite holiday and business destinations across Kenya & Tanzania



Our ultra-modern and spacious lounge at Wilson Airport ensures a comfortable, friendly and swift check-in

Book now:
 ☎ +254 (0)20 669 0000
 ✉ res@flysafarilink.com
 www.flysafarilink.com



Bamburi Profit Rises 416% as Market Recovers From Covid-19

Half year profit skyrocketed to Sh1.1bn from 213m last year.

Bamburi Cement Plc's profit rose 416% in the first half of 2021, with turnover rising by nearly a quarter as domestic and export markets recovered from the adverse effects of Covid-19.

The company said on Thursday that its revenue grew 21% in the six months ending June 30 while profit before tax skyrocketed to Sh1.1 billion, up from Sh213 million in 2020. Bamburi, a member of cement giant Holcim, said recovery of cement market in both domestic and export markets against a difficult first half of 2020 and an increasing demand for premium cement products grew its turnover to Sh19.6 billion from Sh16.2 billion last year.

The company's topline received a major boost from the infrastructure spending by the government even as construction recovers from the Covid-19 pandemic effect. Besides income growth, Bamburi managing director Seddiq Hassani attributed the H1 2021 pre-tax profit growth to "carry-over cost savings following the implementation of our 'Health, Cost & Cash' (HCC) action plan, that was adopted at the onset of the Covid-19 pandemic".

The HCC action plan also enabled the firm to offset significant cost inflation on imported clinker and coal that was absorbed in H1 compared to the same period last year.

Financing costs also reduced by nearly 50%.

Bamburi now says it has renewed its commitment to operate sustainably in line with Holcim's agenda of Building Progress for People and Planet, which seeks to improve living standards around the world by facilitating the creation of greener cities and smarter

infrastructure.

"To achieve this, Bamburi has lined up carbon emission control and circular economy initiatives that will safeguard the environment and also deliver cost-efficiencies and add greater value to the stakeholders," Mr Hassani said in a press statement on Thursday.

These initiatives include the Houses of Tomorrow project – an initiative on green building solutions, a portfolio of green cements, quarry rehabilitation, water and biodiversity management, and waste management through partnerships with waste producers.

Bamburi's financial results are a true reflection of the current ongoings in the local cement market, which recorded a demand increase of 27% in the first five months of 2021.

According to the Kenya National Bureau of Statistics, local cement consumption stood at 3.35 million tonnes in the January to May window compared to 2.64 million tonnes last year.

Private developers and individual households, who have been building houses even during the toughest months of the Covid-19 pandemic, have also boosted the cement market.

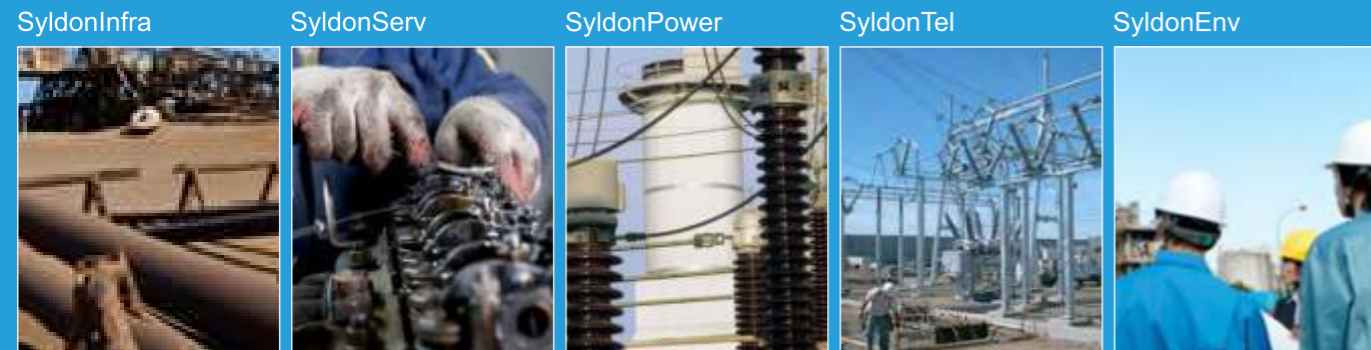


A truck leaves the Bamburi Cement factory.

S&P SYLDON & PARTNERS

P.O. Box 664 - 00606 Sarit Centre,
Nairobi, Kenya.
Tel: +254 020-44 51 422/44 53 089
Telefax :44 51 423
Mobile: +254 722 861 473 / +254 733 850 848
Wireless: +254-020-528 77 29
Email: info@sandpconsult.co.ke, sylдон@sandpconsult.co.ke

S&P Departments:



Syldon and Partners is a wholly Kenya owned limited liability firm established in May, 2000 in Kenya to undertake consultancy services in design, installation and maintenance of Electrical, Mechanical Services and Management Information Systems (MIS), Civil and Structural works.

There are two directors, Eng. G.N. Olando – Managing Director in charge of all Electrical Services and general management of the firm. Eng. Calleb Olali is Director in-charge of mechanical services. Other core staff members include Assistant Electrical Engineer John Ruddy Munda and Assistant Mechanical Engineer Felix Ollando.

Eng. H.S Roopra, Eng. Peter Chege are associates of the firm and backstops Eng. Olando and Eng. Olali in all electrical and mechanical assignments respectively.

Eng. Victor Ongewa and Eng. Cyrus Njungu are associates in-charge of power sub-stations and transmission/distribution lines respectively.

Off Upper Hill Road,
Upper Hill, Near Citi Bank
Opposite Church of Jesus Christ Of Later Day
Saints, Mount Meru Court, Suite No. 4.



Chinese Firm Begins Work on Sh3bn Kinango-Kwale Road

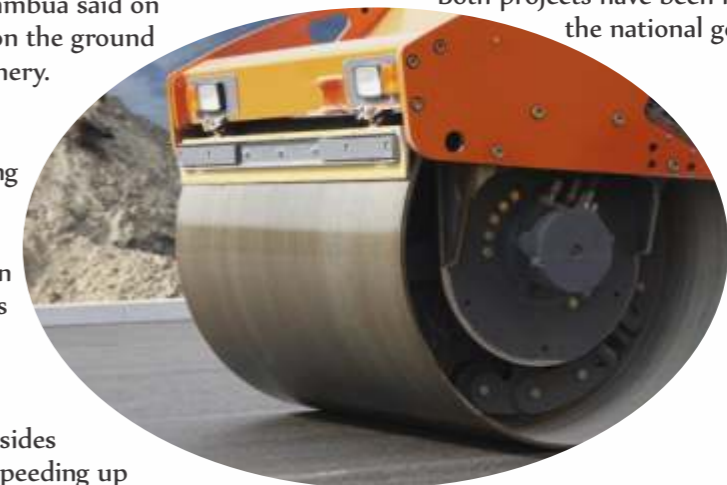
The crews are on the ground mobilising resources and machinery.

China Civil Engineering Construction Corporation has launched works for the 29km Kinango-Kwale Road in Kwale County, which is expected to be completed in 36 months. The Kenya National Highways Authority (KeNHA) Coast Regional Director Eric Wambua said on Friday that crews were already on the ground mobilising resources and machinery. Speaking during the Regional Development Implementation Coordination Committee meeting at Kenya School of Government Auditorium, Mr Wambua said expansion of the road network in Kwale and other coastal counties would greatly boost economic activities in the region. "The project will bring transformation in the county besides opening up the hinterland and speeding up rural development," Mr Wambua said.

The Kinango-Kwale Road links Kinango sub-county to the Kwale County headquarters.

It will connect the county to the Mombasa-Nairobi highway at Samburu and the Likoni-Lunga Lunga road at Kombani. The new road comes shortly after the completion of the 50km stretch of the Kinango-Samburu road at a cost of Sh2 billion.

Both projects have been financed by the national government.



Ongoing road construction project.

Publisher:

WOOTA PUBLISHERS t/a PROJECTS MAGAZINE

KENYA OFFICE

Tel: +254 70 155 2963 P.O.Box 178-20114, Kabazi, Nakuru, Kenya.

Email: info@projectsmagazine.co.ke Website: www.projectsmagazine.co.ke

Contributions

The editors welcome news items, press releases, articles and photographs relating to the Construction Industry. These will be considered and, if accepted, published. No responsibility will be accepted should contributions be lost, damaged or incorrectly printed.

© All rights reserved

Kenya Bets on Old Technology to Cut Road Building Costs

LVSR technology cuts road construction costs by more than 60%.

Reeling under rising costs of road construction, Kenya has adopted a controversial technology that promises to lower the cost of building roads by more than 60%.

Dubbed low volume seal roads (LVSR) technology, this method of road construction uses bitumen-based seals to economically pave roads with a low volume of vehicular traffic.

The Kenya Rural Roads Authority is upgrading roads under the R2000 programme, which involves gravelling roads by use of low-volume-sealed roads technology with cobblestone.

High speed roads

Normally, conventional road construction methods focus on creating high speed roads – which calls for horizontal and vertical realignment of the road surface leading to high costs.

In some instances, additional land is acquired for the road, which leads to relocation of utilities and resettlement of people.

However, the LVSR technology focuses on upgrading roads without making any changes to the existing alignment. This lowers the cost of roads construction due to a reduction in the cost of earthworks, zero land acquisition costs, and reduced relocation of utilities.

4,400 kilometres

According to the Economic Survey 2021, there are 4,400 kilometres of low volume seal roads in Kenya – with major works underway to raise this figure to 7,000 kilometres by 2022.

The 4,400 kilometres of roads have been completed at a cost of Sh316 billion.

KeRRA, says the LVSR technology enables

upgrading of low volume roads to paved standard to raise the pavement life to at least 15 years thus lowering the life cycle cost of the roads.

However, while LVSR technology has been adopted in South Africa, Botswana, and other African countries, it remains a controversial topic with its share of supporters and critics.

The supporters argue that it is the best approach to build and maintain rural roads while the detractors believe the technology can only be used for roads with extremely low traffic levels.

40 vehicles per day

Indeed, past studies by the Transport Research Laboratory (TRL) a UK-based independent transport consultancy have suggested that the optimum traffic level for upgrading a road through the LVSR technology is about 40 vehicles per day. This is way less than the previously recommended threshold values for Sub-Saharan Africa – in excess of 200 vehicles per day, which still persists in the minds of many practitioners.

At higher traffic levels, seals deteriorate much faster necessitating shorter periodic re-sealing (every 3-5 years) depending on the traffic loading, which can be costly to poor economies.

Kenya is, nevertheless, betting on the low volume seal roads technology to upgrade about 10,000 kilometres of rural roads in a bid to improve the country's road network.



A road construction site.

Planned Dualling of Eastern, Northern Bypass in Top Gear

The project aims to ease traffic jam on the two roads.

The planned expansion of Eastern and Northern Bypass roads in Nairobi has moved closer to reality, after the Kenyan government obtained a Sh2 billion loan for the project.

Treasury documents tabled in the National Assembly this week have revealed that Kenya has secured Sh2 billion for the project from an undisclosed financier.

The loan, signed on September 28, 2021, is yet to be released to the government.

The 52km-road, which is under by the Kenya Urban Roads Authority, starts at City Cabanas through Ruai towards Ruiru passing over Thika Road to Ruaka where it joins Northern Bypass. The project aims to ease perennial traffic jam on the two roads.

Dualling of Northern and Eastern Bypass appeared imminent in September 2017 when Transport secretary James Macharia said his ministry was preparing MOUs that would be shared with shortlisted contractors to help unlock financing for the project.

“Dualling should have been done from day one. They should not have done that road without dualling it,” Mr Macharia said. “We want to accelerate the dualling and have it done as soon as we arrange financing and that’s why we’re processing these memoranda of understanding.”

The documents, he said, would provide the roadmap for the design and costing of the multi-billion-shilling project that has a two-year construction timeline.

Not much has happened since.

Belt and Road Forum

The Eastern Bypass dualling project was among 11 major infrastructure projects that Kenya showcased to international investors during the Belt and Road forum that was held in Beijing, China, in May 2017. The bypass was designed and built by the Kibaki-government as part of Kenya’s Vision 2030 infrastructure projects. Its costs, together with that of the Northern Bypass, overshot the initial Sh8.5 billion budget due to land acquisition costs.

In January 2018, Sinohydro Limited of China signed a commercial agreement with Kenya to undertake the dualling of the Northern Bypass, setting the stage for a new round of fundraising for the 31-kilometre road project.

“We are looking forward to getting funds from prospective financiers. We hope the project together with the Eastern Bypass construction will cost between Sh30 billion and Sh40 billion. This should be sorted out in the next three months,” Mr Macharia said.

The Northern Bypass, which was completed a few years ago, is one the government’s key projects aimed at transforming Nairobi into a regional business hub.

It starts from Ruaka on Limuru Road, overpasses Banana Road through Runda and Thome estates. It then proceeds to Kahawa West and finally to Ruiru, through Kamae, where it joins the Eastern Bypass. China Road and Bridge Corporation (CRBC) undertook phase one of the project.



Heavy machinery at a construction site.

Oxygen generators PSA technology

OGP⁺ 3-30



On-site oxygen generation with best-in-class benefits

Generating your own oxygen instead of buying it, is a smart idea. Choosing an Atlas Copco OGP⁺ is even smarter. Thanks to its revolutionary engineering, the OGP⁺ delivers oxygen generation performance and efficiency unrivalled on the market. The plug-and-play OGP⁺ allows you to choose the correct purity level for your application with the touch of a button. As a result, you enjoy the freedom, continuity and reliability of on-site generation at a much lower cost per unit of O₂.



Cost savings

- 30% less feed air required than a traditional gas generator.
- Variable Cycle Saver ensures up to 70% additional energy savings during low demand.
- Thanks to its feed air efficiency and best-in-class ZMS utilization, the OGP⁺ delivers double-digit reductions in the total cost per unit of oxygen.



Hands-off performance

- Easy oxygen purity selection via the controller for maximum operational savings.
- 24/7 monitoring and automatic adjustment of the O₂ purity protect your application.
- Continuous monitoring and automatic adjustment of the feed air safeguard the integrity of the adsorbent media.



Reliability

- Continuous supply of oxygen at guaranteed purity.
- Every component in contact with oxygen is cleaned for O₂ service.
- Can be combined with a cylinder or bulk gas supply system.

Plans Underway for Erection of Museums on Mau Mau Road

The four museums will be used to preserve Mau Mau artefacts.

The government is planning to build four museums on the upcoming Mau Mau road, which links four central Kenya counties, in honour of independence war veterans.

The Kenya National Highways Authority (KeNHA), which is supervising the 540km road project, has written to stakeholders asking them to identify suitable sites for the museums.

KeNHA in partnership with the National Museums of Kenya and the Gikuyu Council of Elders is expected to erect a museum in each of the four counties where Mau Mau Road passes.

The roads agency has formed committees from the respective counties – Murang'a, Nyeri, Kiambu, and Nyandarua – to conduct public participation about the project.

The committees are expected to identify suitable locations for the museum based on availability of adequate land and status of ownership of the property.

They are also tasked with coming up with appropriate names for the museums taking into consideration names of prominent Mau Mau war veterans from the respective counties.

On completion, the museums will showcase Mau Mau artefacts as part of efforts to

enlighten the current and future generations about the independence struggle.

The Sh30bn Mau Mau road, which is set for completion in May next year, starts at Gataka in Limuru, and then traverses through Kamahindu and Kibicho in Kiambu County before negotiating its way through Kinyona in Kigumo and Ichichi in Kangema, Murang'a County.

The road then passes through tens of market centres in Murang'a and Nyeri before ending at Njengu in Nyeri County where it joins the Nyeri-Nyahururu road.

The road seeks to honour Mau Mau fighters who used the route as they went in and out of the forest to fight colonialists, according to Transport Cabinet Secretary James Macharia.

"The Mau Mau road traces the routes that were used for transport and logistics by the Mau Mau freedom fighters," Mr Macharia said during a tour of the project on December 20.

"(The road) will be done in honour of the freedom fighters who made huge sacrifices for the liberation of this country," he added.



Ongoing road construction project.

Solar Financier GridX Injects Sh775m Into Two Rivers Power

Loan will help Centum RE to set up solar energy plants for its projects.

Pan-African solar energy financier GridX Duara Holdings has injected Sh770 million into Two Rivers Power Company (TPRC) to expand solar energy projects for Centum Real Estate.

TPRC, which is wholly owned by Two Rivers Development Limited – which is in turn 58% owned by Centum Investment Company, was founded to supply power to the Two Rivers Mall in Nairobi, but the funding will extend its scope to real estate projects by Centum RE.

The company holds a power generation and distribution license and operates a high voltage line from Ruaraka to its substation at the Two Rivers Mall. The electricity from the substation is complemented by a 1.2MW solar power plant located at the parking area of the mall.

GridX Duara has injected the funds in the form of a convertible loan. This means TPRC can repay the loan or allow GridX to turn it into a stake in the company at a future date.

According to Centum Investment Company CEO James Mworira, the funding will assist Centum RE in rolling out reliable solar energy infrastructure in its projects.



A solar power plant.

“Energy infrastructure is a key component of our mixed-use developments, and this partnership will boost in a big way Centum RE’s commitment to installing clean, affordable, and reliable power in our developments,” Mr Mworira said.

The alliance leverages on Centum RE’s track record of mixed-use projects and GridX Duara’s experience in financing renewable and distributed energy infrastructure across Africa.

GridX Duara, which is executing a Sh2.5 billion pipeline of solar projects, has developed over 1.9 MWp of solar power and 3.4 MWh of energy storage in Kenya, Tanzania and Mozambique.

The partnership comes at a time when a growing number of large power customers in Kenya are shifting to own-generated solar power to beat high cost of electricity.

Local domestic consumers are also embracing solar power installation with the 2019 census report putting solar lighting uptake in Kenya homes at 19.3%, about 2.3 million homes.

Kenya is endowed with yearlong supply of ample sunshine which makes it easy to operate both small-scale and large-scale solar power systems within the country.

Advanced features, superior benefits

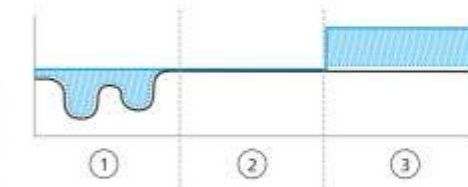
- Complete machine with O₂ sensor, digital flow meter, and pressure regulator included as standard.
- Small footprint thanks to:
 - Best-in-class usage of zeolite molecular sieve (ZMS) adsorbent material.
 - Intelligent design and approval-friendly aluminum extrusions.
- Advanced controller with large HD color touchscreen offers easy gas purity selection, purity alerts, and connectivity options.
- Automatic start-up allows for plug-and-play installation.
- Feed air monitoring and interception.
- Oxygen purity monitoring and interception. The zirconia oxygen sensor’s long lifetime reduces service intervention needs and costs.



Enjoy 70% extra energy savings

Variable Cycle Saver

Most users don’t need to utilize the maximum capacity of their oxygen generator all the time. Our in-house developed Variable Cycle Saver (VCS) eliminates energy waste during lower demand and in colder temperatures, giving you up to 70% additional energy savings.



- Generator capacity
- Feed air & energy savings
- VCS-optimized generator capacity
- Oxygen demand

- 1 Low load: When there is less demand for O₂, VCS optimizes the PSA cycle to reduce the generator capacity and thus the feed air consumption to what is needed to generate the lower volume.
- 2 Full load: The generator is sized for reliable production at full load in hot temperatures (if applicable). In these conditions, VCS is not needed.
- 3 Seasonal efficiency: At full load in cold conditions, an oxygen generator works more efficiently, increasing its capacity. Here, the VCS of the OGP will also kick in to reduce feed air and energy costs.

Technical specifications

Type		Oxygen FOD			Dimensions (W x D x H)		Weight	
		90%	93%	95%	mm	in	kg	lbs
OGP 3*	FOD Nm ³ /h	3.3	3.0	2.5	796 x 840 x 2015	31 x 33 x 79	318	701
	FOD Scfm	1.9	1.8	1.5				
OGP 6*	FOD Nm ³ /h	6.6	6.0	5.1	796 x 840 x 2015	31 x 33 x 79	400	882
	FOD Scfm	3.9	3.6	3.0				
OGP 9*	FOD Nm ³ /h	10.0	9.4	8.3	1421 x 840 x 2015	56 x 33 x 79	624	1376
	FOD Scfm	5.9	5.5	4.9				
OGP 12*	FOD Nm ³ /h	13.3	12.5	11.1	1421 x 840 x 2015	56 x 33 x 79	706	1556
	FOD Scfm	7.8	7.4	6.5				
OGP 15*	FOD Nm ³ /h	16.6	15.7	13.9	1421 x 840 x 2015	56 x 33 x 79	788	1737
	FOD Scfm	9.8	9.2	8.2				
OGP 18*	FOD Nm ³ /h	19.7	18.1	15.2	1421 x 970 x 2015	56 x 38 x 79	970	2138
	FOD Scfm	11.6	10.7	8.9				
OGP 24*	FOD Nm ³ /h	26.3	24.1	20.3	1421 x 970 x 2015	56 x 38 x 79	1134	2500
	FOD Scfm	15.5	14.2	11.9				
OGP 30*	FOD Nm ³ /h	32.9	30.2	25.3	1421 x 970 x 2015	56 x 38 x 79	1298	2862
	FOD Scfm	19.3	17.8	14.9				

FOD: Free Oxygen Delivery

Reference conditions:

- Compressed air effective inlet pressure: 6 bar(g)/87 psi(g)
- Ambient air temperature: 20°C/68°F
- Inlet air quality [1:4:1] according to ISO 8573-1:2010
- Outlet oxygen quality [1:2:1] according to ISO 8573-1:2010

Options

- Low ambient temperature settings (-10°C/14°F)
- Oxygen quality (PDP) monitoring
- Room oxygen alarm (wall mount)



www.atlascopco.com

State Bets on KDF Company to Speedup Mega Projects

Military to build roads and other key projects across the country.



NYS recruits display heavy machinery during a pass-out parade on April 23, 2015.

The State has approved the formation of a military construction company that will be tasked with construction of roads and other infrastructure developments across the country.

In a move that will give the Kenya Defence Forces substantial control over Kenya's infrastructure programme, the National Security Council has endorsed the creation of Ulinzi Construction Company, which is now preparing to begin operations.

"With the company, it will be cheaper for the government to undertake some certain construction tasks," KDF Chief of Defence Forces Robert Kibochi said in an interview.

The top soldier said the army had the skills and capacity to build, for example, the ongoing security wall from Mandera to Kiunga much faster and at a lower budget.

"We can do it ourselves at a cheaper cost, much faster, and we will also be providing security in the areas," he said.

The approval comes in the wake of KDF's growing involvement in key infrastructure projects such as

the rehabilitation of the Nairobi-Nanyuki and Nakuru-Kisumu railways.

Reduce cost of projects

Proponents of the Ulinzi Construction Company have hailed its formation as revolutionary, saying it would reduce building costs while minimising the risk of misuse of public funds.

The development highlights the growing influence of the KDF in the country's economic affairs after President Uhuru Kenyatta appointed military personnel to run various State agencies in a move aimed at stopping theft of public resources among civilian officials.

Some of the key appointments include that of Lt-Gen Mohammed Badi to head the Nairobi Metropolitan Services and Col. Alice Mate as director of Assets Recovery.

Operations of the Kenya Meat Commission have also been handed over to KDF.

"The military has very proficient engineers. They rehabilitated the railways at a fraction of what was quoted by the Chinese," a State official, who did not wish to be named, told CK.

National Construction Company

It awaits to be seen whether Ulinzi Construction Company will see the light of the day, or will suffer the same fate as the National Construction Company, which was proposed in 2015 as a subsidiary of the National Youth Service (NYS) to undertake infrastructure projects.

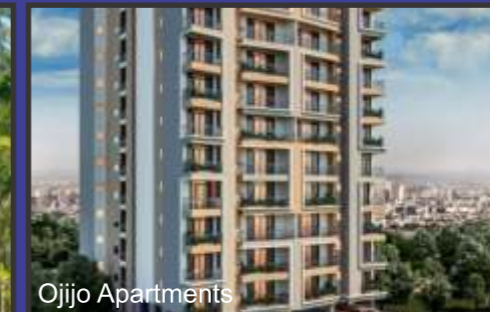
The company, which was expected to cut construction costs by up to 50% due to reduced labour and machinery costs, failed to materialise after the exposé of a multi-billion financial scandal at the NYS, which led to the resignation of a Cabinet Secretary.



NCA1

RADIANT POWER SYSTEM

Registered Electrical Contractors



Specialist in:

- Commercial Developments
- Industrial Developments
- Warehouses and Business parks
- Hospitals and Clinics
- Apartment Blocks
- Residential estates
- Educational Institutes
- Hotels, Restaurants and Lodges
- Refurbishment and fit out projects

Installation Of:

- Power and Lighting
- LV Switchgear and Standby
- Generators
- Fire Alarms Systems
- AVR & Surge Protection
- Data/Telephone Cabling



13- Office Suits,
P O Box - 39130 - 00623.
Parklands, Nairobi, Kenya.
+254 772 762 743
+254 738 948 707
info@rpskenya.co.ke
www.rpskenya.co.ke

Thwake Dam Contractor Wins Rare Praise From AfDB

China Ghezouba Company is set to complete work in June 2022.

The multi-billion-shilling Thwake Dam project on the border of Kitui and Makueni has won a rare public compliment from its co-financier who is quite impressed with the progress.

The African Development Bank (AfDB), which is partly financing the project, described the progress as tremendous – promising to inject more funds into the development.

“As a bank we are impressed with the ongoing work at the dam,” AfDB East Africa executive director Amos Cheptoo said on Monday during a tour of the project.

“Once the dam construction is completed in June 2022, the bank will work with (the

government) to ensure faster acceleration of the remaining three phases,” he added.

The contractor, China Ghezouba Company, has undertaken major works on site, including establishing two giant tunnels to divert Athi River flow for excavation works at the river bed.

The company earlier said the project, which is now 60% complete, would be way ahead were it not for the reduction of workers on site to 700 from 1,200 due to the pandemic.

“We will compensate on time lost during this period of the pandemic...By the end of this year, we will have completed the tunnels,” Apopo Lentana, a CGC official said in an interview.

The two tunnels will be used as substitute water ways where Athi River will change course before later joining the original path to the Indian Ocean.



Past works at Thwake Dam.

“Once the river is diverted, there will be building of rock field dam wall that will be 87 meters high then making of main and minor spillways for excess water flow.” Lentana said.

Jointly funded by the Government of Kenya and the African Development Bank (AfDB), the project will be implemented in four phases at a cost of Sh81.89 billion.

Phase one involves building an 87m high dam wall with 688 million cubic metre storage capacity, and preliminary works for the implementation of the subsequent phases.

This segment will cost Sh42.4 billion.

Phase two will involve installation of a hydropower generation plant while phase three comprises the installation of water supply, sanitation, and waste water infrastructure.

Phase four of Thwake Dam project will involve setting up the irrigation component.

Through budgetary allocations to the respective ministry, the government will invest Sh59.95 billion into the project while AfDB will fork out Sh21.94 billion.

Thwake Dam will provide water for domestic, irrigation, hydropower as well as industrial activities in the beneficiary counties.

It will mainly serve Makueni County as well as certain parts of Kitui County.

In March 2019, then Auditor-General Edward Ouko warned that the project could stall as the State was yet to secure funding for the last three phases of the project.

He said that although the AfDB and the government had approved Sh42 billion funding for phase one, the remaining phases with a budget of Sh40 billion were yet to be planned for.

Since 2013, Kenya has either signed or planned to sign deals valued at more than Sh700 billion for construction of mega dams in various parts of the country.

The government is building at least five mega dams at a cost of more than Sh156bn in deals that were signed after the Jubilee administration took over leadership in 2013.

These include Thwake Dam; Itare Dam in Nakuru – at Sh28bn; Karimenu Dam in Gatundu – at Sh24bn; Thiba Dam in Kirinyaga – at Sh16bn; and Siyoi Dam in West Pokot – at Sh5bn.

The government has also signed deals for construction of Sh20bn Bosto Dam in Bomet, Sh17bn Ruiru II dam in Kiambu, and Sh20bn Mwache Dam in Kwale County.



TRIDENT PLUMBERS LTD.

Registered Plumbers, Sanitary Engineers, General Contractors,
Installation of Boilers, Compressed Air & Fire Fighting Systems,
Heating Ventilation & Air Conditioning System.



Head Office: Old Mombasa Road, along Kyang'ombe Road,
P.O. Box 7335 - 00300 Nairobi, Kenya
Tel: 020-2081501 | Email: info@tridentplumbers.com
www.tridentplumbers.com



We are proud to be associated with Centum Real Estates Ltd in their Loft Residences Project

Work Underway for Cote d'Ivoire's Tallest Tower

F Tower is expected to become the tallest building in Africa.

The government of Cote d'Ivoire (Ivory Coast) has teamed up with Belgian construction firm Besix Group to build a multi-storey tower that stands among the tallest buildings in Africa.

The F Tower's developer, PFO Africa, recently contracted Besix for project management and civil engineering works for the building that is coming up in Abidjan's central plateau district.

The F Tower, which was planned on the initiative of the Ivory Coast's Ministry of Construction, is designed to be a 373.2m-high concrete structure with its highest point set at 385.8m high.

It hopes to clinch the title of the tallest building in Africa from Leonardo – a 227-meter-tall, 56-floor mixed use development that recently opened in Sandton, South Africa. Construction of Leonardo began on 17

November 2015, and the tower topped out in April 2019 – officially becoming the tallest building in Africa.

Iconic Tower

This title is, however, set to be clinched soon by 'Iconic Tower' that is under construction in Egypt's New Administrative Capital, whose concrete structure was completed in June.

The F Tower, which was designed by Pierre Fakhoury, has been in the urban development plans since 1970. It will be the sixth tower of Abidjan's Administrative City.

"Besix is extremely proud to participate in the construction of the F Tower... In PFO Africa, the leading construction company in Ivory Coast, we have found a high-quality partner," said Pierre Sironval, deputy chief executive of Besix Group.

"We look forward to strengthening this alliance by participating in the construction of a building as iconic as the F Tower."



Illustration of the F Tower in Abidjan.

Sheria Sacco to Build Sh2bn Twin Tower in Upper Hill

The Sacco expects to begin work by December 31.

Sheria Savings and Credit Cooperative Society (Sacco) is seeking regulatory approval to build a twin tower in Upper Hill, Nairobi, as it seeks to boost returns for its members.

The Sacco, whose members are mainly pooled from the Judiciary, expects to obtain the approvals from the Sacco Regulatory Authority to allow works to begin by end of next month.

The project that will be located at Matumbato Close in Upper Hill is estimated to cost Sh2 billion. It will involve construction of commercial residentials, shopping centres, and offices on a one-acre parcel of land where Sheria Sacco offices are located.

The Sacco chairman Justice Patrick Kiage said the society was sitting on prime property and there was need to convert the land into an income-generating asset.

"There is also need to modernise the Sacco's offices which come under this project," he said.

In the past two decades, Upper Hill has cemented its position as Kenya's most expensive zone, with an acre of land going for more than Sh530 million.

This has been the case due the high demand for offices among local companies and multinationals seeking space outside the city centre.

High profile exits

However, the influx of institutions has congested the area, making it undesirable for people who value offices with ambient environment.

Little expansion of roads has also led to traffic congestion.

These factors have in recent years compelled high profile organisations to depart from Upper Hill, with Westlands, Gigiri, Lavington, and Karen being the biggest beneficiaries of the exits.

Some of the notable exits include that of Coca-Cola, European Union Delegation for Kenya and PricewaterhouseCoopers, which relocated to Delta Corner on Waiyaki Way in 2014.

Four years later, in November 2018, Coca-Cola said it was moving its regional offices from Upper Hill to Lavington, a "more open and less formal" environment to afford its staff creativity and innovation.

This came shortly after the European Union Delegation for Kenya signed a long-term lease for the transfer of its headquarters from Upper Hill to Dunhill Towers on Waiyaki Way.



A section of Upper Hill in Nairobi.

Langata Prison to Benefit from MRM's SAFBUILD Technology



(L-R) Manish Mehra, Business Head MRM, Vincent Rapando, Chandaria Foundation Representative, Mr. Wycliffe Ogallo CBS Commissioner General of Prisons, Rina Nzove Director Rina House and Wambui Kahara Regional Focal Point on Youth & Urban Coordinator, UNODC cut a cake during the official ground breaking ceremony of the clothing, textile and bakery workshop unit at the Lang'ata Women's Prison.

The Chandaria Foundation together with Mabati Rolling Mills (MRM), Safal Building Systems (SBS) and other stakeholders, has commissioned the construction of a workshop training unit at the Langata Women's Prison. The new workshop, estimated to cost over Ksh. 8 million will support the prison's newly established Entrepreneurship and Vocational Training that is set to equip the inmates with skills that they can rely on once released. The main training offered is in baking and tailoring.

The workshop unit will be made from MRM's Superior Safbuild Technology, an integrated pre-engineered Steel Building Solutions that cuts the overall site construction time by up to 50%. It is expected to be completed in February 2022. Speaking during the ground breaking ceremony, Mr. Samuel Muhingo, Business Head, Safal Business Systems said: "We are pleased to be part of this event today. This is a very noble cause, that

not only seeks to support and train the women but gives them a head start so that even when they are reformed and released, they can be able to start a life of their own. We believe that the skills they will gain from here will open new opportunities and the benefits will transcend their immediate families."



(L-R) Manish Mehra, Business Head MRM, Vincent Rapando, Chandaria Foundation Representative, Mr. Wycliffe Ogallo CBS Commissioner General of Prisons, Samuel Muhingo, Business Head, Safal Business Systems and Wairimu Thang'ate HSC (SACGP) Director of Prison Enterprise pose for a picture during the official ground breaking ceremony of the clothing, textile and bakery workshop unit at the Lang'ata Women's Prison.

The construction of this workshop will be completed in the next 15 weeks and will then adequately cater for the rising training needs in the prison allowing for more women to take up the trainings offered, added Mr. Muhingo.

The units will be constructed from the Safal Pre-Engineered Steel Building Structures and equipped ready to use. The workshop will have among many others; stainless steel storage cabinets, tailoring machines to make hygiene products, reusable sanitary pads and facemasks, baking ovens and cake mixers, kitchen and tailoring fittings, water

tanks, extractor hood in the kitchen and other key accessories.

"This project is yet another demonstration of our Company's core values; one of them being Care for our communities. Through this workshop we are helping the Women acquire new skills that will further empower them to boost their potential to take up new opportunities once back in the society. This initiative together with other planned sustainability activities will strengthen the Prison's capacity to enhance reintegration and equip the women with alternative skills" said Manish Mehra, MRM Business Head.

The workshop, set to benefit about 43% of the women in prison and will run like a profitable business making it self-sustaining and generate income for the women which can take to start of a new life once they are released.

Speaking during the commissioning ceremony, CBC Commissioner General of Prisons, Wycliffe O. Ogallo thanked the Chandaria Foundation, MRM and other stakeholders for its

contribution towards the prison's project adding that it had come at a time when the prison was experiencing a demand that it could not meet at the time.

"Lang'ata Women's Prison houses the largest number of women prisoners in Kenya and that means our population keeps growing by the day. It is always our hope that women who reform and leave the prison go out there and become better versions of themselves. We continuously work our best to ensure this happens by supporting the women by way of offering trainings and initiatives that build on their skills," said Commissioner Ogallo, adding that this donation is a boost to the prison's efforts in securing the best for the inmates.

MRM has continued to be the market leader in Quality Steel Roofing Solutions for close to sixty (60) years and with SAFBUILD it is continuing to provide Kenya and the region with innovative and quality assured locally made building options.



Steve Kiruhi, Sales and Technical Service Manager, Safal Building Systems illustrates a mock-up display of the workshop to be constructed to Mr. Wycliffe Ogallo CBS Commissioner General of Prisons. Looking on is Manish Mehra, Business Head MRM and Jane Ndung'o, External Affairs Manager, East Africa Safal Group.

Maisha Developments at Tilisi: A Worthwhile Investment



As Live, Work and Play communities gain traction in Kenya, developers have realized that investing in these zones is a sound decision due to the projected good returns. The main attraction of these communities is excellent physical infrastructure coupled with the availability of all kinds of facilities that one needs to make comfortable living. These include good residences, hospitals, schools, shopping and leisure facilities, all in a secure and serene environment.

Kenya currently has a number of grand Live, Work and Play developments at different stages of progress. Tilisi, located off Nairobi-Nakuru highway and close to all the major bypasses, is one of these communities. It is a 400 acre master-planned, mixed use development. With a budget of US\$ 40m just to develop infrastructure, Tilisi has attracted

several investors who have snapped up the fully serviced land parcels to build houses, logistics centres and other developments.

Maisha Developments is one of the investors who have secured land at Tilisi and are putting up high quality residential units of varying configuration. Maisha are not new to property development in Kenya. They have extensive experience in hospitality, residential and commercial projects.

Their past projects include Radisson Blue at Arboretum, Solitaire on General Mathenge Drive, West End Towers, Greenspan Housing and Mall in Eastlands, Capital Centre on Mombasa Road and Warwick Centre in Gigiri. They are also behind Tilisi Views, another exclusive residential development within Tilisi.

Maisha are currently developing two distinct residential developments dubbed Maisha Mapya and Maisha Makao. Set on 11 acres, the developments offer a superb quality standard of living at exceptional value. When complete, there will be a total of 600 units of 2 and 3 bedroom configurations. Maisha Mapya's blocks are Ground plus 4 floors, with a total of 350 apartments while Maisha Makao's blocks consist of Ground plus 5 floors, with approximately 250 apartments in total.

The developer has tried as much as possible to cater for different tastes and pockets. Some ground floor apartments feature a private garden while some other units have master bedroom balconies, lounge balconies, extended master bedroom and extended living rooms.

ARCHITECTURE, CONSTRUCTION AND FINISHES

Maisha Developments are using Aluminium form work as their building technique.

"This is quite different from the traditional method of construction", says Head of Marketing, Viraj Shah. "This technique will increase the speed of construction. In addition, smooth and accurate finishes will be achieved. The structure will be on concrete, which makes it more durable and strong. The reinforced concrete that will be used is more fire resistant", he adds.



Maisha Mapya

The units in Maisha Mapya will feature:

- ✦ Modular aluminium formwork system
- ✦ European style fitted kitchen with laminated countertops
- ✦ Laminate flooring in the lounge and

bedrooms

- ✦ Imported porcelain tiles in wet areas
- ✦ Fitted European style wardrobes and doors
- ✦ Toughened glass shower screens
- ✦ Z Section steel casement windows and doors with 6mm laminated safety glass
- ✦ TV points in certain bedrooms and lounge
- ✦ High quality energy efficient LED light fittings in all apartments and common areas
- ✦ Provision for inverter, washer/ dryer
- ✦ 1 parking space for each apartment with option to purchase additional parking space



Maisha Makao

The units in Maisha Makao will feature:

- ✦ Modular aluminium formwork system
- ✦ Fitted and Europe style kitchen with granite worktop
- ✦ Integrated imported hob, oven and extractor
- ✦ European laminate flooring in the lounge and bedrooms
- ✦ Imported porcelain tiles in wet areas
- ✦ Fitted European style wardrobes and doors
- ✦ Heavy grade stainless steel kitchen sinks and sink mixers with cold water supply
- ✦ Provision for under-sink water heater in the kitchen
- ✦ Toughened glass shower screens
- ✦ RHS steel casement windows and doors with 6mm laminated safety glass
- ✦ Provision for inverter, washer/ dryer
- ✦ 1 parking space for two bed apartment with option to purchase another;
- ✦ 2 parking spaces for three bed apartment

OTHER FEATURES AND COMMON SERVICES

The developer has provided parking for one car for each apartment. However, Maisha Makao 3-bedroom owners get two parking spots.

OTHER FEATURES AND COMMON SERVICES

The developer has provided parking for one car for each apartment. However, Maisha Makao 3-bedroom owners get two parking spots. An additional parking spot is available for purchase if available.

Maisha Makao comes with high speed elevators from KONE. A standby generator for the common areas safeguards against power outage from the utility service provider.

There is ClearVue fencing on the perimeter of both Maisha Mapya and Maisha Makao, a gate house for security as well as adequate water storage.

Amenities include:

- ✦ Area for a gym
- ✦ Convenience stores
- ✦ Club house
- ✦ 25m heated swimming pool in Maisha Makao
- ✦ 15m x 30m multipurpose court in both

PRICING AND BUYER OPTIONS

A buyer is able to purchase the units in cash, instalments or mortgages. "We are able to adjust and adapt to the buyer's instalment schedule",

says Viraaj. "However, the price will change depending on the NPV. Our standard pricing mentioned are the instalment prices."

PROJECT SCHEDULE

Maisha Developments is going to be built in phases. "Since we are using aluminium formwork as our building style, we will have instances when a whole block is up and the next block is still to come up", says Viraaj. "With this in mind, Maisha's blocks are estimated to be completed 18 to 21 months once the construction on that particular block has started." The project broke ground on 20th March 2021.

CHALLENGES

According to Viraaj, a few challenges have been experienced so far. "Approvals were a challenge and they were overcome by perseverance. However, it has delayed us", he reveals. The volatile exchange rate also called for careful homework to avoid losses. The developer is ordering early to lock prices. And like in most other sectors, Covid-19 brought about uncertainties especially after the spending power of potential clients was eroded. However, Viraaj is optimistic, revealing they have overcome this through advertising and at no point have they paused their plans or construction.

Doosan Launches Demolition Excavator

Doosan Infracore Europe has launched the DX380DM-7, its third model in the High Reach Demolition Excavator range, joining the two existing models launched last year.

Operating from the high visibility tiltable cab on the DX380DM-7, the operator has an excellent environment particularly suited to high reach demolition applications, with a 30 degree tilting angle. The maximum pin height of the demolition boom is 23m.

The DX380DM-7 also retains a hydraulically adjustable undercarriage, which extends to a maximum width of 4.37m to provide optimum stability when working on demolition sites. The width of the undercarriage can be retracted hydraulically to 2.97m in the narrow width position, for transporting the machine.

The adjusting mechanism is based on a permanently lubricated, internal cylinder design which minimises resistance during the movement and helps to prevent damage to the components.



GEOMAX CONSULTING ENGINEERS LTD.

Geomax Consulting Engineers Ltd offers the following services;

- Electrical Engineering Services
- Mechanical Engineering Services
- Electronic Engineering Services
- Specialised Building Consultancy Services (Solar Power, Energy Audits, Energy Management etc.)



St. Hellen Lane off
Langata Road, Karen



+254 20 38 73430
/808/816
+254 722 207 236



P.O Box 53748 – 00200
Nairobi – Kenya

Membership, Affiliation and Accreditation

Engineer's Board of Kenya.
Ministry of public works
Ministry of Energy and Petroleum
Energy and Petroleum Regulatory Authority.
Association of Energy Engineers.
ISO 9001:2015

We intend to be the number one destination when anyone needs a quality logo, Graphics, Web, Online marketing services and Cyber Cafe Services. In addition, we help you look professional and savvy.

Our Mission



GRAPHICS

- Logo/Branding Design
- Header/Banner Design
- Brochure Design
- Print Design
- Custom Web Graphics
- Special Custom Requests
- E-Mail Template Design
- Magazine Laying out
- Adverts designing
- Invoice Template
- Address Label
- Restaurant menu
- Illustration & Art Design
- Business Cards, Brochures and more...



WEB

- Custom Designs based on your requirements
- Markup languages (HTML,)
- Custom Web Design
- Business Web Applications
- Enterprise Web Portals
- Content Management
- Unlimited pages of content (i.e. about us, contact, etc)
- Contact page with email form
- Image Gallery
- Google Map of your business location
- Detailed web statistics so you can see who's viewing your site
- Contractors, Magazines, Tourism, Crèches Websites
- Mining, Construction Website and much more...



CYBER

- Online application
- Instant passport application
- Binding
- Kplc token
- Equity agent
- Temporary permit
- DL renewal
- Bulky photocopy
- Ice stick any many more at affordable price.



+254 79 804 1069

MOSEHKIBOI@GMAIL.COM

MWK DESIGN

STAND OUT FROM YOUR COMPETITORS