



COMPANY PROFILE 2021/22

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INTRODUCTION

Khato Civils (Pty) Ltd is a South African based design and construction company involved in the development of large scale infrastructure. Khato Civils has established itself as one of the leading black emerging construction companies within the African market. The Company has qualified professionals with broad experience in areas of Mass Earthworks, Pipelines, Water Works, Roads and Concrete Works. The Company offers the following services;

PRE-CONSTRUCTION SERVICES

GENERAL CONTRACTING

CONSTRUCTION PROGRAM MANAGEMENT

HUMAN & COMMERCIAL SETTLEMENT DEVELOPMENT

MAJOR PIPE WORKS

MASS EARTH WORKS

PIPE JACKING

ROADS AND TRAFFIC INFRASTRUCTURE DEVELOPMENT & MAINTENANCE

EXISTING CONDITION SURVEYS

RESEARCH & COST ESTIMATION

RENOVATIONS & REMODELLING

PROGRAM & PROJECT MANAGEMENT

SPECIALIST CONCRETE CAPABILITY

OUR BUSINESS

WE COMPLY WITH REGULATORY AND STATUTORY REQUIREMENTS AND HAVE THE FOLLOWING:

■ CIDB RATING OF 9GB 9CE PE 9ME 9EP AND 1EB WITH CRS NUMBER 157464

■ REGISTERED WITH THE NATIONAL HOME BUILDERS REGISTRATION COUNCIL (NHBRC),
REGISTRATION NUMBER 172802620

■ ISO 9001:2015 CERTIFICATION

■ BEE LEVEL 2

KHATO CIVILS HAS DEVELOPED A MANAGEMENT STRATEGY THAT ENABLES THE FOLLOWING:

- IMPROVED PROJECT VALUE THROUGH KNOWLEDGE MANAGEMENT
- CONTINUOUS IMPROVEMENT THROUGH LESSONS LEARNED
- RESOURCE EFFICIENCY OPTIMISATION
- SYSTEMS THINKING

OUR VISION

To expand our current market-share in the infrastructure development industry; by owning and operating vital components of the construction industry supply chain in a profitable, growth oriented manner.

OUR MISSION

To execute strategic infrastructure development projects in order to contribute to the upliftment and development of the communities we serve.

VALUES

Service oriented approach. Providing our clients, colleagues and partners with the necessary support to achieve our collective goals.

Teamwork. Through a combined effort and co-operation we will achieve more than we could as individuals, relying on the combined talents and strengths of the team Respect for our clients, our colleagues and communities we operate in and their diversity as well as the environment.

Integrity in all aspects of our operations demonstrating honesty, transparency and accountability.

Value addition in all activities we undertake in ensuring quality of delivery and performance to the satisfaction of internal and external clients. Excellence will remain the benchmark to which we will measure our performance within each Business Unit, Department and Project.

TRANSFORMATION



OUR PHILOSOPHY

We strive to establish long term relationships with our clients built on trust whilst focusing on enhancing productivity and efficiency. We are committed to our Social Investment program with the main focus on assisting small businesses run by women and the youth. Recognising the fact that we operate in a global village and in an ever changing and dynamic built environment, the Company has adopted a strategy to ensure alliances and partnerships with local companies of excellent reputation. This ensures skills transfer to local communities.



PARTNERSHIPS

On-going changes in the growth and development of the Company are geared to ensure that we take maximum advantage of opportunities in the market place. We have seen a definite shift in industry trends with a move away from traditional public sector work towards Private Public Partnerships (PPPs). This comes about as a realization that governments worldwide can no longer be expected to carry the burden of infrastructure development alone given the many competing socio-political priorities. As a Company we have realised this and we are in a position to participate in PPP opportunities.



JOINT VENTURE WITH SOUTH ZAMBEZI(Pty) Ltd

This business Joint Venture was established in 2010. It is our pride and marks a huge milestone for both parties – South Zambezi Engineering Services (Pty) Ltd and Khato Civils. This Joint Venture improves the efficiency and the effectiveness of both companies and serves as a great boost of business operations for both companies in question. Khato Civils has a CIDB level 9 rating. This qualifies them to execute Mega Capital projects.

The relationship between the two companies gives South Zambezi Engineering Services exposure to Mega Capital projects, an experience that we will not trade for anything else. The joint venture permits South Zambezi Engineering Services (Pty) Ltd to play an instrumental role in Engineer, Procure and Construct projects (EPC). Our main responsibility is to deliver the Engineering aspect of the project and be involved in the procurement process. South Zambezi Engineering Services (Pty) Ltd also oversees various aspects of the project's implementation, as supervising engineers, quality control managers and monitoring consultants.

We are in this Joint Venture for the long haul. We will serve it with pride and dignity adding value all the way. We will use this initiative to further develop our already existing legacy of being a leader in the engineering and project management space. We are a true success contributor to Khato Civils in this regard. By producing engineering designs, often in, half the required time, South Zambezi Engineering Services (Pty) Ltd plays a significant role in Khato Civils' ability to complete projects within schedule.

OUT TEAM

Our most valuable asset at Khato Civils is our staff. They form the life blood and backbone of our operations. As a truly South African Company, we support and drive transformation. We are proud of our staff, which 60% of are historically disadvantaged individuals.

HEALTH, SAFETY & ENVIRONMENTAL

Emphasis is placed on health and safety processes to ensure a safer workplace for our staff.

TRAINING & EDUCATION

Khato Civils has set-up a special education fund for employees. The fund will finance previously disadvantaged individuals working for the company to embark on further training to up skill and enhance their productivity.

EXPERTISE

PIPE JACKING

A specialist tunneling method for installing underground pipelines with the minimum surface disruption. Primarily used for new sewer construction it is also used for sewer replacement and relining, water mains and pipelines installations,

MASS EARTH WORKS

Khato Civils has the expertise and capacity to provide clients with all the necessary services needed to prepare a site before actual construction. Our demolition and excavation division use heavy equipment to perform earth moving and land improvement projects. We are equipped to do site grading, ditching, drainage, land clearing, add top soil and fill dirt, wrecking and demolition for residential, commercial, and industrial projects.

EXISTING CONDITION SURVEYS

We have qualified personnel who will assist the consulting engineers and clients to survey the conditions of the site and recommend measures which must be taken into consideration before actual construction. This service is intended to assist clients avoid complicated pitfalls which have the potential of delaying the project and causing financial losses for clients.

BUILDING

Khato Civils has CIDB rating of 9CE 9GB which has been achieved through delivery of major projects built by an experienced professional team that adheres to the highest building standards.

The complexity of the modern building process demands qualified professionals with special abilities to analyse, clearly identify challenges and provide solutions as the project develops. Khato Civils has the capacity to build;





Bulk Sewer Lines and Water Reticulation Systems

Large Scale Residential and Commercial Developments

Bridges, Waste Water Treatment Plants and Dams

High Rise and Multi Storey Buildings

SPECIALIST CONCRETE CAPABILITY

Khato Civils has extensive experience in specialised placing of structural concrete for intricate and sophisticated designs. This is a key aspect in the successful construction of any major structure of which concrete is a crucial design element. In many major projects where concrete is the major structural element, safety and quality are paramount for the long term use of that structure.

RENOVATIONS & REMODELLING

Khato Civils understands the complexities that accompany the renovation or remodelling of major infrastructure. Our team of professionals has the necessary skills to guide and assist clients on any major renovation requiring services of a general contractor. This also extends to any maintenance works that may be required.



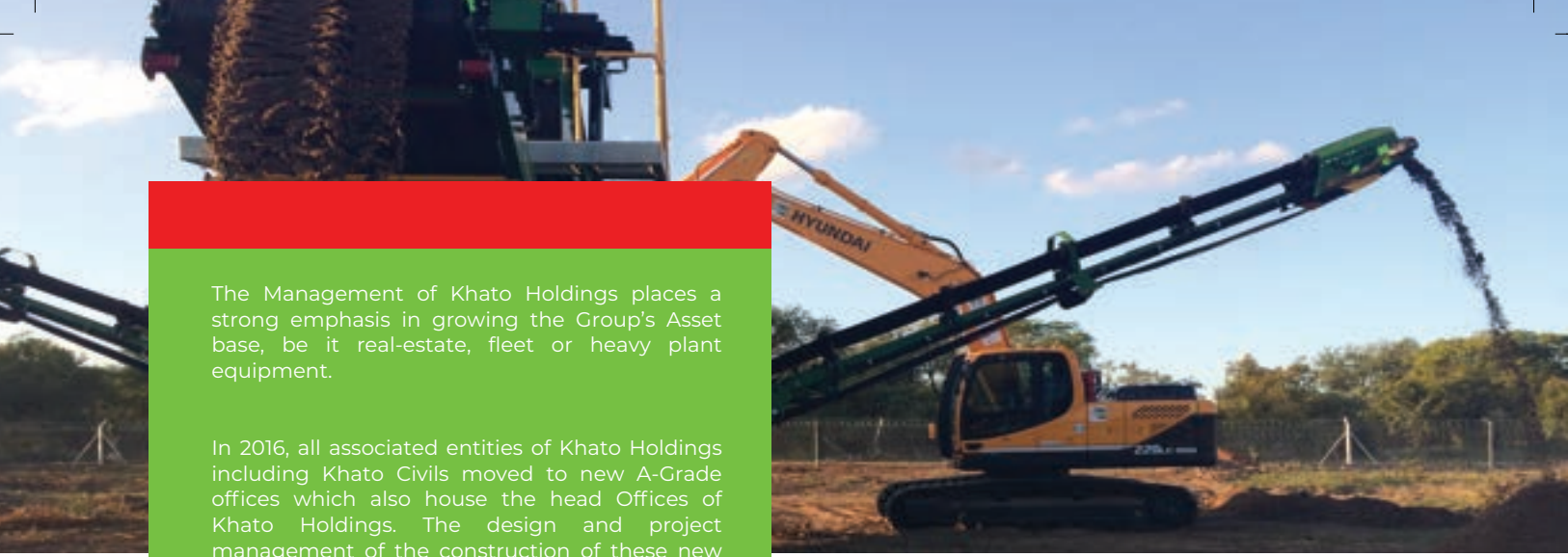
RESEARCH & ESTIMATION

Khato Civils provides research and estimation services through a platform that delivers accurate estimating, import and question-based estimating tools. Khato Civils research and estimation services provides Clients with a realistic guide on project cost.

PROGRAM MANAGEMENT

At Khato Civils, we always aim to create a close partnership with the client during the early development stage of their project, so we can fully understand the scope of the project beyond the construction phase. This type of project delivery method, generally results in expeditious schedules, lower costs of design and construction, and less contractor-initiated change requests due to document design errors and omissions. Through a rich success history, Khato Civils has provided construction management services and demonstrated an understanding of client's goals and needs. We have clear policies on program management service which guide:

- Responsible project team management
- Prudent selection of qualified subcontractors and suppliers
- Mechanism for owner / architect approval of materials, colours, and systems
- Communications liaison linking client, designers, lenders, and inspectors
- Cost and schedule controls
- Quality control
- Safety management
- Site inspections
- Record keeping
- Post-construction services:



The Management of Khato Holdings places a strong emphasis in growing the Group's Asset base, be it real-estate, fleet or heavy plant equipment.

In 2016, all associated entities of Khato Holdings including Khato Civils moved to new A-Grade offices which also house the head Offices of Khato Holdings. The design and project management of the construction of these new offices was carried out by South Zambezi (PTY) Ltd. South Zambezi is the Engineering arm and one of the associated entities of Khato Holdings. The construction was entrusted to Khato Civils

Also housed in the Khato Holdings office park is fully fledged warehouses. The warehouses are used to store machinery, building supplies and a fully equipped workshop. The workshop has all the necessary tools and skilled personnel to perform major repairs on the Company's fleet and heavy plant equipment. Khato Civils has a professional mobile team to support different teams in various geographic locations to ensure that downtime is minimised.

ROADS INFRASTRUCTURE:

Khato Civils has the skills and capacity to undertake any road construction or repair projects fit for a CIDB level 9 construction company. Our expertise include:

- Structures & Road Design
- Road & Highway Construction
- Surface Dressing
- Asphalt and concrete paving
- Pothole Patching
- General Road and Highway Maintenance
- Road Marking & Signs

EXPERTISE: MINING

SLIME DAM

Slime or tailing dams usually make headline News only when they fail or result in the loss of life and catastrophic environmental damage. Subsequently, the proper design, management, construction and monitoring thereof are vital. Khato Civils designs and constructs stable, cost effective and legislation compliant surface facilities. Our design and construction philosophy aims to provide clients peace of mind and freedom from costly surprises resulting from instability, fluid discharges or dust emissions.

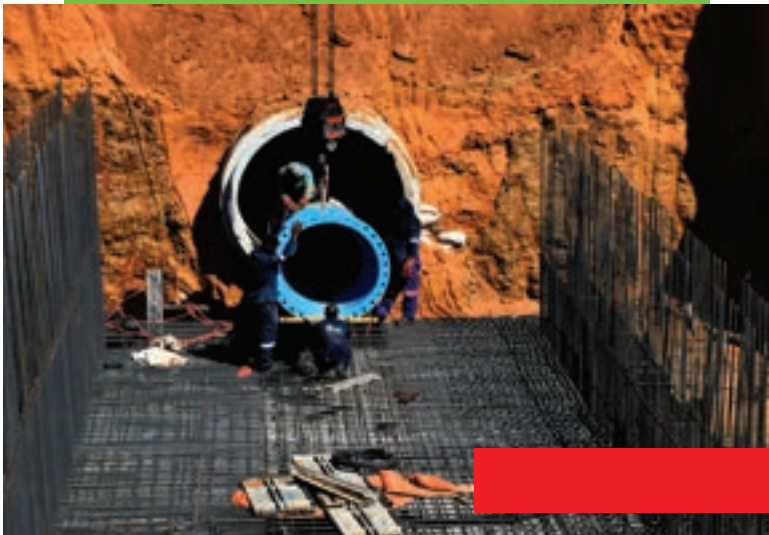
Legislation requires that mine residue deposits, tailings storage facilities, tailing deposits or slimes dams be managed over their entire life cycle by appropriately qualified people, so that it does not pose an unreasonable risk to the public and environment. This includes the controlled seepage from the tailings facilities and containing hazardous materials, such as cyanide, from entering the water system.

SOIL COMPACTION

When it comes to soil compaction, the extent to which one can achieve settlement of the ground surface determines the extent to which one can improve the soil strength and increase the bearing capacity. Traditional approaches have relied on static weight, kneading action or vibratory rolling of the soil to achieve the desired improvement in strength and bearing capacity. Khato Civils breaks away from tradition by utilising a non-circular impact compactor- the impact compactor. This is a mobile dynamic compactor which derives compaction effort from the energy of the drum falling from a corner to a flat as the shaped drum is towed along the ground.

Due to the high energy delivered by each blow, the impact compactor is capable of producing effective compaction in thicknesses considerably greater than previously possible.

The distinguishing feature of this compactor is its non-circular compacting drums, which have a series of points altering with flat compacting faces. During the compaction process, its drums are towed along the ground by a wheeled tractor at a speed of 10 to 12 km/h, compared to typical conventional roller speeds of 2 to 3 km/h. The compaction force is applied over a large area, with a dynamic force applied with high amplitude and low frequency.



DEPOSITION

The design and operation of a tailing storage facility depend on the mode of the deposition selected. The modes vary from conventional deposition of relatively low density tailings, to paste deposition of high density tailings. Khato Civils is capable and has capacity to execute both modes.

Our key success factors are; our quest to understand the properties of the slurry, notably the clay mineral content and process water quality and the dewatering and rheological behaviour of the tailings. The outcome of our tests provides input upon which the geotechnical engineers are able to provide secure construction and operational design.

MAINTENANCE

Khato Civils maintenance plan for slimes dams includes keeping the storage facility's pipes and water reclamation systems in repair, monitoring water levels in the embankment's fill and foundation, to ensure it meets safety requirements, and monitoring for demolitions within the structure itself. Movement within the structure itself is monitored by survey pins and instruments. Annually, the dam capacity is raised to keep up with mine production.

Our designs often include diversion channels to keep surface run-off water out, preventing any water that could potentially go in from being contaminated by metal, sulphides, or other deleterious minerals and elements as well as processing chemicals. Khato Civils is always mindful of industry failures in tailings facilities which occur due to rotational sliding, foundation failure, overtopping, erosion, piping and liquefaction. The prevention of these failures are top of mind in our design and construction processes.

MONITORING

Khato Civils uses drones, to monitor slimes dams remotely. Ground monitoring methods include Contractometers and Extensometers to monitor the dam wall behaviour and slopes. Hydrology sensors are used to measure fluid levels.

PROJECT PORTFOLIO

ROADS

M1 Double Decker Bridge

On the M1 project, existing asphalt wearing course was replaced with new asphalt surfacing on an urban section of a major national highway. The work included the replacement of existing bridge joints with new Thorma joints. Due to extremely high traffic volumes during daytime, the majority of the work had to be executed at night. The scope also included upgrading of the road/bridge drainage system, as well as replacement of existing steel handrails on the bridge with concrete parapet sections. Road-markings were reinstated and the safety of the road was upgraded through the addition of cat eyes and refurbishment of crash barriers.

M1 Double Decker Bridge rehabilitation and upgrade

Khato Civils has been awarded a contract for the challenging repair and upgrading project concerned with both Carriage ways of the double decker bridge between Carr Street and the Crown interchange on the M1 motorway in Johannesburg.

After an unsuccessful attempt by a previous contractor, The Johannesburg Roads Agency, appointed Khato Civils (Pty) Ltd. to undertake the works. The project scope includes:





The repair to all concrete works, including structural and maintenance works

Maintenance refurbishment of all bridge bearings

Removal and replacement of Parapet rails with pre-cast concrete elements

The reinstatement and upgrading of the existing storm water drainage system

Reinstatement and upgrading of the storm water inlet system

Replacement of the Asphalt works

Replacement of all Bridge joints.

Challenge - The motorway has heavy traffic daily. Traffic disruptions should be kept low during contract execution. This is a 22 months project, which commenced with site establishment in December 2017. This is a landmark milestone in Khato Civils' business development strategy of building and expanding its roads and bridge division as part of its broad capability.

WATER

Botswana Water Utilities Corporation
Khato Civils / NTR Technology Holdings JV (KCNTJ) was appointed on an EPC basis by the Water Utilities Corporation (WUC) of Botswana on 16 February 2018 for the refurbishment of Pump Stations PS1.1 and PS2.1 located on the North-South Carrier 1 pipeline. The Contracts are running simultaneous and must be completed within 15 months ending on 12th August 2019.

The objectives are to upgrade and refurbish the Pump stations so that they provide required water outputs to BPT1A1 and BPT2A1, respectively.

Pump station PS1.1 is situated at Letsibogo dam, while Pump Station PS2.1 is situated approximately 32.6km downstream from Letsibogo dam, at Moralane, together with Break Pressure Tank 1 (BPT1A1). Both pump stations are currently running with Constant Speed Drive Pumps.

The scope of works covers general requirements for assessment, supply, delivery and installation of Mechanical, Civil, Electrical, Control Equipment, Instrumentation Equipment, Actuators, Associated Accessories, and documentation (drawings and manuals).

This project covers all equipment in the Pump Stations, including modification of the suction and delivery pipe work and construction of a building to house Variable Speed drive units.

The second requirement is for the Scheme SCADA upgrade, engineering and configuration to cater for all changes which have been effected at the pump station to allow for monitoring, control, data acquisition and automation in order to enhance operational efficiency of the scheme.

POLOKWANE WASTE WATER TREATMENT PLANT

Construction of outfall sewers to the Polokwane regional waste water treatment works

Population expansion in Polokwane has resulted in a need to construct outfall sewers to the regional treatment works. This is a construction of outfall sewer pipelines from the existing Seshego and Polokwane Wastewater Treatment Works (WWTW) to the site of the new Polokwane Regional WWTW to the north-east of Polokwane.

The works will facilitate an increase in the treatment capacity of the Polokwane Municipality and also allow for further developments in the area. The project has been divided into three contracts, with the last section from the confluence of the pipeline from Seshego and Polokwane west with the Polokwane east pipeline up to the site of the planned regional WWTW being awarded to Khato Civils.

In February 2018 Khato Civils was awarded part of the works. The scope involves the laying of 3.2 km of class 100D concrete pipes with a diameter of 1.5 m, including various drop structures and manholes. The concrete pipes will be lined with a HDPE liner. The scope also includes the re-alignment of a section of gravel farm road and construction of a box culvert structure. Part of the pipeline crosses private agricultural land under irrigation, with the majority of it being on undeveloped municipal land.

GIYANI WATER & SANITATION REVITALIZATION PROGRAMME

Khato Civils with South Zambezi and LTE Consulting were appointed by Lepelle Northern Water on an engineering, procurement, and construction (EPC) basis for the Mopani District Municipality Water and Sanitation Revitalization Programme. The Programme was required to address the short term water and sanitation challenges in the Greater Giyani Local Municipality as well as provide medium and long term solutions to the water and sanitation challenges within the Mopani District Municipality. Mopani District Municipality is a Category C municipality located in the north-eastern portion of the Limpopo Province and consists of the following local municipalities:

- BA-PHALABORWA LOCAL MUNICIPALITY

- MARULENG LOCAL MUNICIPALITY

- GREATER TZANEEN MUNICIPALITY

- GREATER GIYANI MUNICIPALITY

- GREATER LETABA MUNICIPALITY

The main towns within the district are the Tzaneen, Giyani, Modjadjiskloof, Hoedspruit and Pharaborwa. The Mopani District municipality is situated in the North-eastern part of the Limpopo Province, 70 km from Polokwane (main City of the Limpopo Province).

GIYANI WATER & SANITATION REVITALIZATION PROGRAMME

It is bordered in the east by Mozambique, in the north, by Zimbabwe and Vhembe District Municipality, in the south, by Mpumalanga province through Ehlanzeni District Municipality and, to the west, by Capricorn District Municipality and, in the south-west, by Sekhukhune District Municipality. The district has been named Mopani because of abundance of nutritional Mopani worm found in the area. The district spans a total area of 2 242 183 ha (22 421.83km²), with 15 urban areas (towns and townships), 325 villages (rural settlements) and a total of 106 wards.



The Mopani District, by virtue of the Kruger National Park as a District Management Area, is part of the Great Limpopo Transfrontier Park, the park that combines South Africa, Mozambique and Zimbabwe. The Mopani District Municipality Water & Sanitation Revitalization Programme will initially consist of the following projects:

Giyani Groundwater Augmentation

Giyani Water Treatment Works Expansion & Refurbishment

Giyani Wastewater Treatment Works Revitalization

Nandoni Dam – Nsami Dam Raw Water Bulk Pipeline

Middle Letaba Dam – Nsami Dam Canal

Mametja Sekororo Water Treatment Works

Bambanana Raw Water Bulk Pipeline

Scope of Emergency works in Giyani

In the first phase of the Giyani project, Khato Civils has been appointed to revitalize existing services in and around the greater Giyani area through the repair of all leaking bulk pipelines and replacing all faulty ATR valves. An estimated 345 kilometres of bulk pipelines has been laid. The Company will overhaul existing Booster Pump-stations and Sewer Pump-stations on the pipeline.

Khato Civils have revitalize all the old plumbing at the Nkhensani Hospital as well as install a new Water Conditioning Plant to purify the hospital borehole water. The Company will rejuvenate the old non-operational waste water treatment plant by;

Installing a new head of works

Repairing the pump-station

Repairing the BIO Filter

Fixing the Primary and Secondary primary clarifiers

Installing a 1500 mega-litre packaged plant

Revitalising old drying beds as there is a need for new beds and chlorination ponds.



LAKE MALAWI SUPPLY PROJECT

As one of the region's leading Construction Company, Khato Civils, in conjunction with South Zambezi (Consulting Engineers) has been appointed to undertake one of Malawi's mega water supply projects, namely the Lake Malawi Water Supply Project also known as Project Rhino.

The project will pump and deliver 100 million litres per day of potable water from Lake Malawi to Lilongwe City through a 1200 mm diameter Ductile Iron Cement Mortar ; Lined (DICL) pipe, alleviating problems that have affected the lifestyle and livelihoods of the city's 2 million plus residents and its surroundings. Valued at about \$500 million, it is billed as Africa's largest water transfer project under construction and is expected to be completed by 2019.

The primary design and construction components that will be included in the potable water supply system will comprise of:

INTAKE OF RAW WATER ABSTRACTION FROM LAKE MALAWI, THE INTAKE STRUCTURE WILL BE AT LEAST 500M.

INTAKE PUMPS FOR RAW WATER CAPACITY OF 100 000 M3/D WITH TWO 800MM, 2KM TRANSMISSION PIPELINES.

PRESSURE SAND FILTRATION AND CLEARWATER TANK OF 4000M3

CHLORINATION SYSTEM FOR DISINFECTION

CLEAR WATER RESERVOIR OF 8000 M3/D AND BOOSTER PUMP STATION AT LIFUWU

CLEAR WATER TRANSMISSION PIPELINE OF 1200MM DIAMETER DUCTILE IRON PIPELINE OF 50KMS FROM LIFUWU TO KANYENYEVA

CLEAR WATER RESERVOIR 5000 M3/D AND BOOSTER PUMP STATION AT KANYENYEVA

■ BREAK PRESSURE TANKS OF 8 000 M3 AND BOOSTER PUMP STATION AT KATENGEZA

■ CLERA WATER TRANSMISSION PIPELINE OF 1200 MM DIAMETER DUCTILE IRON PIPELINE OF 14 KN FROM KATENGEZA TO MVERA

■ BREAK PRESSURE TANKS OF 8 000 M3 AND BOOSTER PUMP STATION AT MVERA

■ CLEAR WATER TRANSMISSION PIPELINE OF 1200MM DIAMETER DUCTILE IRON PIPELINE OF 12KMS FROM MVERA TO DOWA TURN OFF.

■ CLEAR WATER 1200MM DIAMETER DUCTILE IRON GRAVITY PIPELINE FROM DOWA TURN OFF TO EXISTING KANENGO RESERVOIRS OF 36KMS

■ MISCELLANEOUS INFRASTRUCTURE FOR THE ABOVE E.G. FENCES, GUARD ROOMS, ACCESS ROADS, STORM WATER, PUMP HOUSES.

The Lake Malawi Water supply Project was first conceptualized as a long-term and sustainable intervention to water problems that have been affecting the ever growing population of Lilongwe for over a decade now. Lilongwe, which is Malawi's largest City requires a stable water supply. The local Water utility company, Lilongwe Water Board (LWB), has currently been forced to ration water supply to residences and public places on a continuous basis.

Primary components of the project include an intake tower with pumps and water treatment facilities right from the abstraction point in SengaBay- Salima to Lilongwe, a distance of 125 km. Water treatment will be done through pressure filters with an overall plant capacity of 4166 cubic metres per hour. The filters will be twenty-two (22) horizontal air scoured pressure filters each with a capacity of 200 cubic metres per hour. Disinfection will be by means of gas chlorination. Khato Civils will also build clear water tanks and pumping stations along the 125 km stretch, the first one at Lifuwu in Salima with a capacity of 2500 cubic metres.

The treated water will then be conveyed from Lifuwu to Kanyenyeva, which is located 51 kilometres in the same district. At Kanyenyeva the water will be pumped to Dowa turnoff clear water tank, a distance of 21 km. From there the water will gravitate 37 km to Kanengo water tanks. It is from this stage that water will now be distributed through the existing Lilongwe Water Board's systems to the city's residents.

The residents in Salima and Dowa will also equally benefit from access to potable water as they fall within the stretch of the project's catchment area.

From another perspective the project will create in excess of 4000 jobs and a lot more spin-off opportunities for small and medium enterprises.

The Khato Civils (Pty)-South Zambezi (Pty) Limited joint venture, was awarded the contract after the Office of the Director of Public Procurement (ODPP), used the restricted tendering procurement method under International Competitive Bidding. The consortium came ahead of six other reputable global companies from China, Portugal, South Africa, Italy and United Kingdom.



HAMMANSKRAAL WATER & SEWER EXTENSION 10

RAPID POPULATION GROWTH IN TSHWANE, HAS DRIVEN THE NEED FOR THE INSTALLATION OF INTERNAL WATER AND SEWER RETICULATION. IN JUNE 2018, KHATO CIVILS WAS APPOINTED TO DO THE WORKS. THE PROJECT CONSIST OF THE INSTALLATION OF A DN800 WELDED STEEL BULK WATER PIPELINE APPROXIMATELY 5,25KM LONG INCLUDING CATHODIC PROTECTION, AND A 600MM DIAMETER CLASS 75D SPIGOT AND SOCKET CONCRETE PIPE WITH SACRIFICIAL LAYER OUTFALL SEWER, APPROXIMATELY 3.41KM LONG WITH 45 MANHOLES TO SERVE HAMMANSKRAAL EXTENSION 10. ALSO INCLUDED IS THE INSTALLATION OF DIFFERENT WATER AND SEWER RETICULATION PIPELINES AND TOILET STRUCTURES FOR APPROXIMATELY 2767 STANDS IN HAMMANSKRAAL WEST EXTENSION 10 TO MEET THE DEMANDS OF RESIDENTS

HAMMANSKRAAL WEST RESERVOIR

BULK WATER DELIVERY PIPELINE FROM THE HAMMANSKRAAL WEST RESERVOIR TO THE WATER RETICULATION OF HAMMANSKRAAL EXT 10. IT WILL ALSO SERVE SEVERAL OTHER FUTURE DEVELOPMENTS (HAMMANSKRAAL WEST EXT 10, INDERMINNE, TEMBA CBD) EXCAVATION, LAYING, BUTT-WELDING AND BACKFILLING OF 800MM DIAMETER STEEL PIPES OVER A DISTANCE OF 5,25KM, WITH VARIOUS ANCILLARY ITEMS.

OUTFALL SEWER MAINLINE

OUTFALL SEWER CONNECTING THE RETICULATION OF EXT 10, AS WELL AS OTHER FUTURE DEVELOPMENTS, WITH AN EXISTING 1200 DIA. OUTFALL SEWER TO THE TEMBA WASTE WATER TREATMENT WORKS. EXCAVATION, LAYING AND BACKFILLING OF 600MM DIAMETER CLASS 75D SPIGOT AND SOCKET CONCRETE PIPE WITH SACRIFICIAL LAYER OVER A DISTANCE OF 3,41KM. CONSTRUCTION OF 45 MANHOLES FOR THE NEW SEWER OUTFALL. THIS WORK WILL ALSO INCLUDE THREE ROAD CROSSINGS BY MEANS OF PIPE JACKING.

WATER RETICULATION

WATER RETICULATION FOR 2 767 STANDS INCLUDING HOUSE CONNECTIONS, METERS AND METER CHAMBERS, STANDPIPES, FIRE HYDRANTS AND ISOLATING VALVES. EXCAVATION, LAYING AND BACKFILLING OF WATER PIPES FOR NEW RETICULATION SYSTEMS.

SEWER RETICULATION

SEWER RETICULATION FOR 2 767 STANDS INCLUDING MANHOLES, LAMPHOLES AND HOUSE CONNECTIONS. EXCAVATION, LAYING AND BACKFILLING OF SEWER PIPES FOR NEW RETICULATION.

TOILET STRUCTURES

CONSTRUCTION OF 2 767 TOP STRUCTURES AND THE INSTALLATION OF TOILETS AND APPURTENANT FITTINGS.

HAMMANSKRAAL BULK SEWER PIPELINE PHASE 1

Khato Civils was appointed by the Department of Local Government & Housing to construct a new Bulk Sewer Pipe Line. The Construction of this bulk sewer line was intended to complement the existing sewer lines but mainly to service the new Western Phases of Hammanskraal. These phases included Hammanskraal Extension 2 to Extension 4. Khato Civils was also engaged on another project by the department to construct a sewer outfall for Hammanskraal Extension 2.

The 5 km pipeline starts on the boundary of Hammanskraal Extension 2 and discharges into the municipality's wastewater treatment works at Temba Babalegi. The pipeline has been designed to handle a peak flow rate of more than 600 litres per second, the diameter of the pipeline varies from 50 cm to almost 1.5 meters. The trenches were dug to a depth of 4 metres which required careful engineering ingenuity and strategically designed manhole structures. The pipeline trench excavation was done in accordance to the specifications as per SABS 1200 whilst the pipes were protected with suitable gabions/rheno mattress elements.

HAMMANSKRAAL WATER & SEWER RETICULATION

Khato Civils was appointed in September 2012 by the Tshwane Metropolitan Municipality to construct a water and sewer reticulation system for 2903 households in Hammanskraal Extension 2. The project was implemented through 3 phases. The project was envisaged to run until 2014. Khato Civils started work on the first phase which was completed by the end of March 2013. The project has been completed on time and within budget.

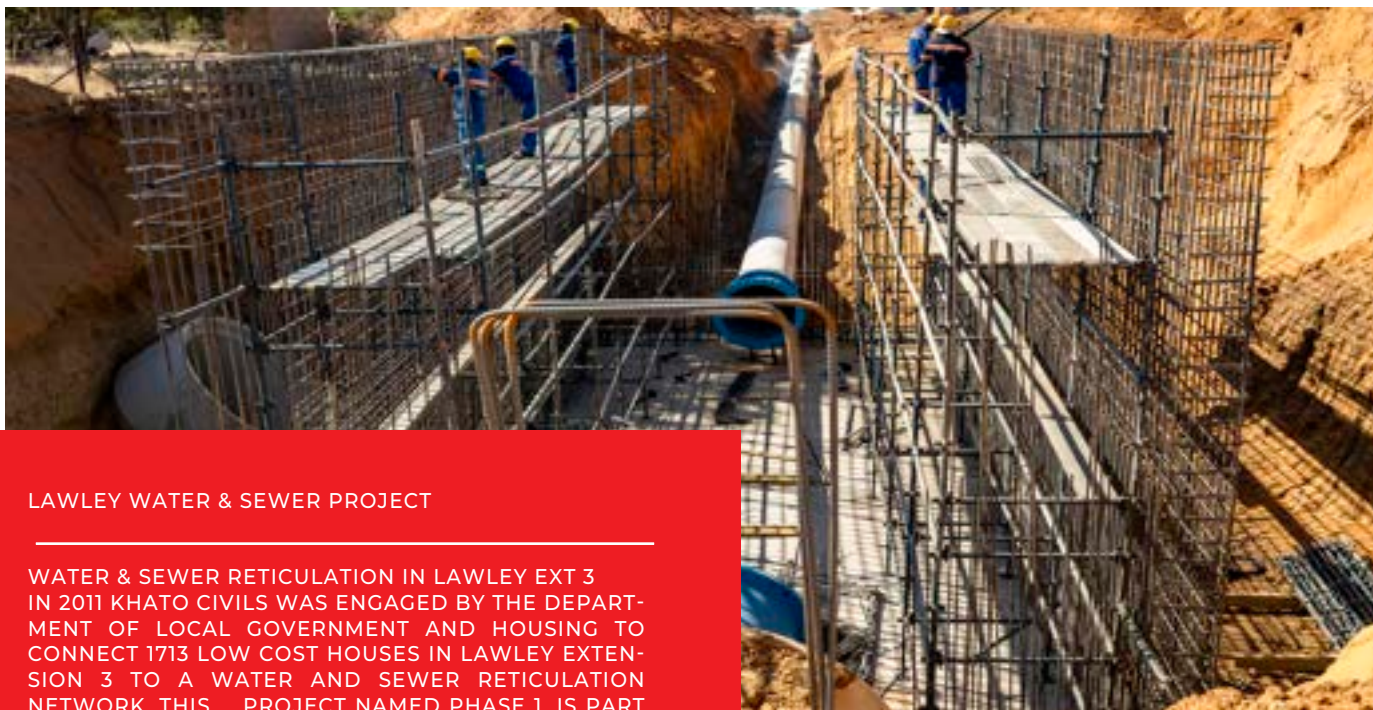


SWEETWATERS WATER & SEWER RETICULATION PROJECT

KHATO CIVILS HAS BEEN ENGAGED TO PROVIDE WATER AND SEWER RETICULATION IN SWEETWATER'S KANANA PARK EXTENSION 6.

The development has approximately 3500 stands that Khato Civils will have to connect to the water and sewer network. This project became a priority for the City of Johannesburg after an outcry from residents on lack of housing, lack of portable water, sewer systems and electricity, no security or social services, leaving the community feeling completely and utterly dejected. In 2014 Khato Civils was appointed to undertake construction. The Kanana Park housing development project is located on Portion 3 of the Farm Cyferfontein of some 147, 78 hectares owned by the Gauteng Provincial Government. KHATO Civils undertook Phase 1 of the Project which was 1000 stands within the first 6 months. The aim was to complete the installation of all these services within an 18 month period. Khato Civils will construct +/-26000m of sewerlines and +/- 27000m of water supply lines.

On completion of the water and sewer reticulation project, the City of Johannesburg will commence with development of RDP houses. 14000 People are expected to benefit from this development once the RDP houses, Water and Sewer Reticulation have been completed. Khato Civils has extensive experience in the delivery of water and waste water services. We are fully familiar with municipal standards, regulations, expectations and modus operand thereby enabling us to successfully co-ordinate our activities with the municipality and to provide assistance on any aspect within the water services sector. Our activities typically include management, operation and maintenance services for both water and sewage bulk treatment plants, including the main distribution, pumping and storage systems, as well as water reticulation and waste water sewer networks.



LAWLEY WATER & SEWER PROJECT


WATER & SEWER RETICULATION IN LAWLEY EXT 3 IN 2011 KHATO CIVILS WAS ENGAGED BY THE DEPARTMENT OF LOCAL GOVERNMENT AND HOUSING TO CONNECT 1713 LOW COST HOUSES IN LAWLEY EXTENSION 3 TO A WATER AND SEWER RETICULATION NETWORK. THIS PROJECT NAMED PHASE 1, IS PART OF A BROADER PLAN BY THE DEPARTMENT TO PROVIDE RESIDENTS OF LAWLEY WITH DECENT AND PERMANENT ACCOMMODATION AS WELL AS ACCESS TO BASIC SERVICES OF WATER AND SANITATION SYSTEM. PHASE 2 OF THE PROJECT INVOLVED 1017 STANDS WHICH KHATO CIVILS COMPLETED IN RECORD TIME OF 8 MONTHS.


CONSTRUCTION OF THE NETWORK COMMENCED IN MARCH 2011. ALL THE WORKS WERE COMPLETED IN NOVEMBER 2012 AND THE COMPLETED PROJECT OFFICIALLY HANDED TO THE DEPARTMENT ON BEHALF OF THE BENEFICIARIES. AS PART OF THE HOUSING DEVELOPMENT BY THE DEPARTMENT IN THE AREA, KHATO CIVILS WAS ENGAGED TO ALSO IMPLEMENT THE RETICULATION NETWORK TO ENSURE THAT ALL THE HOUSES IN THE PLANNING AREA HAVE ACCESS TO CLEAN RUNNING WATER AND SEWER SYSTEM. KHATO CIVILS WAS WORKING IN CONJUNCTION WITH BAGALE CONSULTING WHO WERE TASKED TO ENSURE THAT THE CONSTRUCTION PROGRAMME WAS ADHERED TO AS WELL AS TO ENSURE THAT THE WATER AND SEWER RETICULATION WAS CONSTRUCTED TO THE HIGHEST STANDARD.


NWAMITWA DAM


KHATO CIVILS AND ITS SISTER COMPANY SOUTH ZAMBEZI WERE AWARDED A CONTRACT TO CONDUCT A FEASIBILITY STUDY, DETAIL DESIGN AND PROCUREMENT DOCUMENTATION FOR THE NEW NWAMITWA DAM ON GROOT LETABA RIVER. CONDUCT A FULL EIA ON THE CONSTRUCTION OF THE DAM. THE DAM WAS RATED AS A LARGE HIGH-RISK DAM. THE R529 AND OTHER ROADS NEEDED TO BE REALIGNED. AN UPGRADE TO THE NKAMBAKO WTW WOULD ALSO BE INVESTIGATED AS WELL AS BULK WATER PIPING TO VILLAGES WITH WATER SHORTAGES.


THE PROJECT INVOLVED THE CONSTRUCTION OF THE NEW NWAMITWA DAM AS WELL AS THE RAISING OF THE TZANEEN DAM FOR THE PURPOSE OF AUGMENTING THE WATER SUPPLY FROM THE GROOT LETABA RIVER. THREE PROVINCIAL ROADS WERE AFFECTED BY THE PROPOSED DAM, HENCE THE NEED FOR REALIGNMENT OF THESE ROADS. THE REALIGNMENT OF THE THREE ROADS, INCLUDED THE CONSTRUCTION OF FOUR NEW BRIDGES. THE VALUE OF THE PROJECT WAS ESTIMATED TO BE R3 350 500 000.


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