

INFRASTRUCTURE



NAKO
ILISO

ABOUT US

ILISO Consulting (Pty) Ltd now trading as NAKO ILISO is an African Consulting Engineering and Project Management firm that specialises in engineering, environmental and project management services.

Established in 1995, NAKO ILISO is widely recognised as one of the most professionally managed consulting engineering firms in Africa today, with a team of directors and senior executives who are experts in their chosen fields. Each member of this formidable team offers a range of combined experience in their areas of specialty. In addition, NAKO ILISO has over 250 highly competent technical and support staff, all working together to deliver sustainable high quality assets that not only meet but also exceed client expectations.

With an enviable portfolio of award-winning contracts, NAKO ILISO is fully established in South Africa (all the major centres), Namibia (Windhoek), Uganda (Kampala) and Zambia (Lusaka). Furthermore, it undertakes projects beyond these borders in collaboration with strategic partners located in various countries, including Botswana, Nigeria, Lesotho and Mauritius.

With its strategically located offices and with the practical application of science and engineering principles that include the appropriate use of technology, NAKO ILISO continues to advance on its successes by building value for its clients through the successful planning, implementation and management of landmark and community based projects.

Thanks to a clear vision, a commitment to living its values and above all, its outstanding people, the reputation associated with the NAKO ILISO name is that of integrity, innovation, quality and service excellence.

INFRASTRUCTURE DISCIPLINE GROUP

NAKO ILISO's core purpose and mission is to provide a full range of high-quality, innovative, appropriate, cost effective and sustainable engineering solutions, which satisfy its clients' requirements, as well as the communities it serves. The NAKO ILISO Infrastructure Discipline Group focuses on the following core competencies: Water Services, Human Settlement and Urban Planning, Rural Development and Building Services.



PROJECT PORTFOLIO

Some notable projects are highlighted within each of the core competencies.

1. WATER SERVICES
2. HUMAN SETTLEMENT AND URBAN PLANNING
3. RURAL DEVELOPMENT
4. BUILDING SERVICES

1. WATER SERVICES

UMSWATI WATER TRANSFER SCHEME

In a joint venture NAKO ILISO provided a secure water supply to the Southern Ilembe region of KwaZulu-Natal. The project components included 46 lcm ND 700 steel pipeline; 12ML RC reservoir. NAKO ILISO rendered the following services: concept and viability; design development; procurement; construction and close-out.



CHOBE ZAMBEZI WATER TRANSFER SCHEME

NAKO ILISO was appointed by the Botswana Government: Ministry of Minerals, Energy and Water resources to provide a secure supply of water for 20 000 ha irrigation development and major towns and capital city for Botswana. The project components included 580km ND2100 - ND3500 steel pipeline, 100 - 200ML reservoirs pump stations, river abstraction facility with a total capacity of 500 MCM per annum. Concept and Viability, Partial Design Development were some of the services rendered by NAKO ILISO.



CITY OF LIVINGSTONE WATER TRANSFER SCHEME

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In preparation for a United Nations World Tourism Conference held in 2013, funding was set aside for the design and construction of upgrades to the Livingstone Water Supply. This included the raw water abstraction at the Zambezi River, a ND600 ductile iron raw water pipeline to the 46 ML/ day water treatment works near Livingstone CBD, various upgrades to the water conditioning chemical dosing upgrades, sedimentation, filtration units and high lift pumping, and upgrades to the Livingstone distribution system, and two new 2 ML reservoirs. This project was implemented under an Integrated Construction Unit form of contract, which teams NAKO ILISO with China Henan International Corporation as the contractor.

NSEZI WATER TREATMENT PLANT

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NAKO ILISO was involved with the full project life cycle which included the extension of the water treatment works capacity from 100 ML to 150 ML. Specific elements included the upgrading of the raw water pumps, extension of a ND1200 raw water pipeline by 3.5 km, development of a new inlet distribution tower, clarifier, rapid gravity filters, a 500 KI reservoir and upgrading the dissolved air flotation plant, chemical dosing and telemetry facilities.



NORTHERN WASTE WATER TREATMENT PLANT

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This project entailed the extension of the existing waste water treatment facility by 50 ML. NAKO ILISO participated in a multi-disciplinary team for the feasibility study, design, documentation, contract administration, construction monitoring, commissioning and close-out of the entire civil engineering infrastructure.



2. HUMAN SETTLEMENT AND URBAN PLANNING

JOE SLOVO HOUSING DEVELOPMENT

This project included the provision of civil engineering infrastructure, in the form of water reticulation, waterborne sewerage reticulation, roads and stormwater services, for 4 000 low income residential erven, to full municipal standards. The appointment included bulk and connector services and co-ordination with surrounding developments and municipal authorities to ensure a holistic approach. NAKO ILISO conducted the feasibility study, preliminary designs, detailed designs, tender documentation, contract administration, construction monitoring, close-out of the entire civil engineering infrastructure as well as the co-ordination of the Environmental and Health and Safety services.

THEEWATERSKLOOF HOUSING DEVELOPMENT

Theewaterskloof Housing Development originally began as an Emergency Housing Project with 1000 low income residential erven to minimum standards. However, the project was converted into an Upgrading of Informal Settlement Project (UISP), comprised of 1169 low income residential erven to the Department of Human Settlements Guidelines for A-grade services. NAKO ILISO was appointed to conduct the preliminary designs, detailed designs, contract administration, construction monitoring and close-out.



VAN STADENSRUS HOUSING DEVELOPMENT

The Free State Department of Human Settlement appointed Forefront Engineering Solutions to implement a pilot project using Vacuum Sewer Technology. NAKO ILISO is the only recognised expert in the design of vacuum sewers in Southern Africa, and assisted Forefront Engineering Solutions with the design of the vacuum sewer network and vacuum station for 500 housing units.

The services provided by NAKO ILISO included: design, documentation, contract administration and construction monitoring for the provision of civil engineering services for 500 erven. The civil engineering elements included: a water network with house connections, a vacuum sewer network with sewer house connections, a vacuum station with vacuum pumps, vacuum vessel, control panel, discharge pumps and bulk sewer outfall line.



3. RURAL DEVELOPMENT

RURAL WATER SCHEMES

NAKO ILISO has successfully completed several Rural Water Schemes which were part of an appointment by the Alfred Nzo District Municipality. The project included a feasibility study of the entire Umzimkhulu Municipal area, clustering villages to form regional water schemes, as well as design and construction of the schemes. The works entails multiple reservoirs with water supplied to the villages through a network of pipes, with boreholes as the main source of water.

RURAL HOUSING

NAKO ILISO has successfully implemented a number of rural housing developments. One such project included the Amathole District Municipality where the scope of work entailed the provision of gravel roads, a stormwater system, water supply and sanitation services for rural housing schemes. Feasibility studies, design development, construction process and close-out of this and other similar projects were also done.

GRAVEL ACCESS ROADS

NAKO ILISO completed many rural gravel access roads projects primarily funded through the Municipal Infrastructure Grant. NAKO ILISO prepared the funding applications, compiled the business plans, designs and executed the contract administration and close-out for all these projects.



4. BUILDING SERVICES

METROPOLITAN SCHOOLS

This project included all design and building services to schools in the Western Cape. The schools had different geotechnical challenges with different topographical layouts. NAKO ILISO had to assist in the rezoning by submitting applications, service reports and stormwater management plans for council approval. NAKO ILISO had to accommodate the relocation of the bulk sewer and bulk stormwater infrastructure and was involved in the full life cycle for the implementation of the engineering services of the schools.

CAPE TOWN STADIUM

The project entails construction of the Green Point Stadium for the 2010 FIFA World Cup. NAKO ILISO was involved with the stadium structures, access roads into the stadium, traffic impact assessments, Green Point Park tracks, Civil engineering services including bulk sewer, bulk water and sub-surface drainage.

NAKO ILISO was responsible for preliminary and detailed design, tender documentation for the roads and bulk civil engineering services and partial administration of the Contracts.



LIBERTY PROMENADE SERVICES

NAKO ILISO assisted with the R450 million, 24 000m² upgrade for the Liberty Promenade Mall (Cape Town). NAKO ILISO provided all field investigations, urban design concept, planning approvals, design, preparation of tender and contract documents, tender evaluation, contract management and construction supervision, quality assurance and overall project management. NAKO ILISO was responsible for all aspects of the civil works including all external services design and quality control such as roads and parking, bulk earthworks, bulk services such as water, sewer, electrical and stormwater reticulation.



MOSES MABHIDA STADIUM SERVICES

NAKO ILISO undertook the design and construction monitoring of all civil engineering services for the Moses Mabhida Stadium for the 2010 FIFA World Cup. NAKO ILISO was the lead Civil Consultant and Client liaison of the Consortium. In addition to undertaking the Traffic Impact Assessment, NAKO ILISO successfully completed the design, draughting and site monitoring of the realignment of 1.8m stormwater culverts, bulk earthworks, all sewer, water and stormwater reticulation, roadworks, polished concrete hardened walkways, minor structural elements for sewer and irrigation, pitch and future athletics track installations.

NAKO ILISO was also involved in the Precinct Project adjacent to Moses Mabhida Stadium, which included two fields, an access road, sewer pumps station, services and a variety of hardened areas.





A further list of projects is available on request.

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