



AFRIKAN SPATIAL GRID

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MAP • EMPOWER • SUSTAIN • TRANSFORM

GEOSPATIAL INTELLIGENCE FOR INFRASTRUCTURE, LAND TENURE & RESILIENT DEVELOPMENT ACROSS AFRICA

Corporate & Capability Profile — 2026

Prepared for Government Agencies, Development Partners & Private Developers

Nairobi, Kenya • A Pan-African Geospatial Partner

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01 EXECUTIVE SUMMARY

Afrikan Spatial Grid Ltd turns raw terrain into decision-ready intelligence — giving the institutions that build, govern, and invest in Africa the ground truth they need to move faster and with less risk.

Founded in Kenya and already operating across East and the Horn of Africa, Afrikan Spatial Grid has become a trusted geospatial partner to national road authorities, county governments, ministries, developers, and land-sector programmes. Our teams have surveyed more than 40,000 acres, supported 306+ informal settlements under Kenya's national land tenure programme, and delivered engineering-grade topographical data for highway corridors, water infrastructure, power transmission routes, and continent-scale smart-city developments.

Kenya and Somalia are our proving ground, not our ceiling. We are built, staffed, and equipped to mobilise anywhere on the continent and globally — and we are actively growing our footprint into new countries and regions as a pan-African geospatial partner of choice.

What sets us apart is the combination of survey-grade technical rigour — licensed drone operations, RTK/PPK GNSS, LiDAR, and full GIS/CAD processing — with genuine community engagement. We do not simply capture data; we translate it into maps, models, and reports that hold up under legal, engineering, and public scrutiny.

For organisations evaluating a geospatial partner for their next tender or programme, this profile sets out our track record, capabilities, credentials, and the value we bring to government, development, and private-sector projects alike.

02 WHO WE ARE

A Kenyan-founded geospatial technology company, built for Africa's ground truth.

Afrikan Spatial Grid Ltd delivers Land surveying, GIS, drone/LiDAR, and satellite-based mapping solutions for Africa — built in Kenya, proven in Somalia, and structured from day one to scale continent-wide. We combine survey-grade precision with engineering standards and community-centred planning to help governments, developers, and infrastructure programmes turn raw terrain into reliable data — and reliable data into better decisions.

Our portfolio spans some of the continent's most consequential development work: informal settlement upgrading and land tenure security, highway and road-reserve corridors, water supply networks, power transmission routes, and smart-city masterplans. We believe accurate spatial data is a foundation for equity — it protects land rights, de-risks infrastructure investment, and empowers communities to plan their own futures, in every country we serve.

03 WHY PARTNER WITH AFRIKAN SPATIAL GRID

We work as an extension of our clients' teams — bringing licensed field capability, defensible data standards, and a genuine stake in the communities where we operate.

For Government Agencies & Public Programmes

Standards-compliant survey practice, KeNHA-tendered experience, and direct delivery under national programmes such as KISIP. We produce cadastral files, RIMs/PIDs, beacon data, and engineering road profiles that meet the documentation bar for public procurement and audit.

For NGOs & Development Partners

A community-first field methodology: engagement sessions before survey work, participatory settlement mapping, and outputs designed to secure land tenure for underserved and informal communities — proven across 300+ settlements in six counties.

For Private Developers & Contractors

Fast, accurate turnaround on beacon and boundary establishment, orthomosaics, DEMs/DSMs, contour and drainage models, and volumetric analysis — the engineering-grade base data that feeds directly into design, EIA, and construction planning, with a track record across farmland, coastal property, and multi-thousand-acre smart-city sites.

For Pan-African & Multi-Country Programmes

A mobile, licensed field team and a leadership bench that has already delivered across two countries in under two years. We are actively structured to stand up new-country operations, partner with local survey firms, and support multi-country donor or corporate programmes anywhere on the continent.

04 IMPACT AT A GLANCE

A track record built acre by acre, settlement by settlement — and a footprint we are actively expanding across the continent.

40,000+ ACRES MAPPED	300+ SETTLEMENTS SURVEYED	15+ COUNTIES & REGIONS	2 COUNTRIES SERVED — GROWING
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Kenya and Somalia are today's footprint. Our vision, mandate, and mobilisation capability are Africa-wide.

05 MISSION & VISION

Our Mission

To map, empower, sustain, and transform African communities and infrastructure through accurate, accessible, and actionable geospatial intelligence.

Our Vision

A future where every parcel, settlement, and corridor of infrastructure across Africa is backed by trustworthy spatial data — enabling secure land tenure, resilient cities, and inclusive growth.

06 OUR SERVICES

A full geospatial value chain — from the field to the decision.

Six connected capabilities, each built on standards-compliant survey practice and applied technology.



GIS & Mapping

Spatial data capture, geodatabase development, and thematic mapping for land, infrastructure, and environmental planning.



Urban Planning

Physical planning support for informal settlements, town plans, and cadastral survey implementation.



Drone & LiDAR

High-precision UAV photogrammetry and LiDAR capture producing orthomosaics, DEMs/DSMs, and 3D terrain models.



Community Impact

Participatory planning and engagement that secures land tenure and centres local voices in development.



Sustainable Futures

Hydrological, drainage, and volumetric analysis that supports resilient, sustainable infrastructure.



Satellite Data

Remote sensing and satellite-based analysis for large-area monitoring, land-use change detection, and resource mapping.

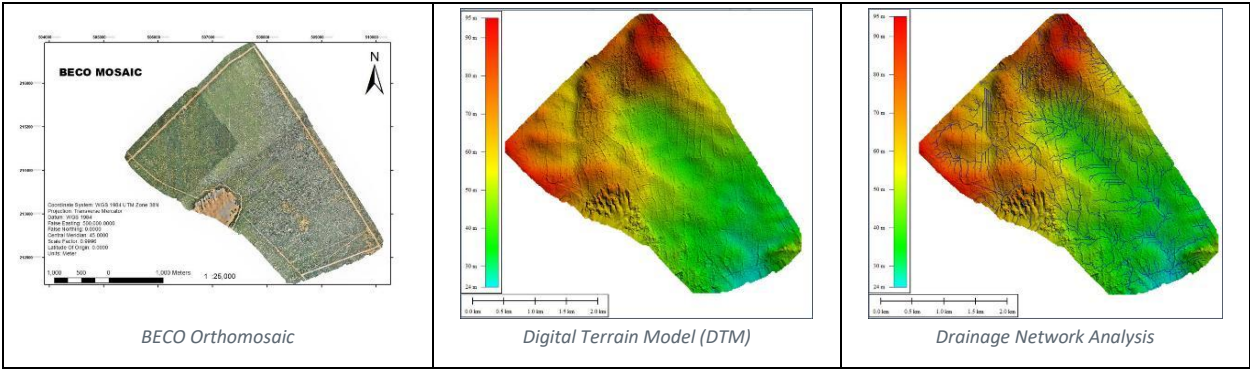
07 FEATURED PROJECTS

From continent-scale smart-city mapping to community-level land tenure security — a closer look at flagship assignments.

MOGADISHU, SOMALIA | AUGUST 2026

Topographical Survey for BECO (Banadir Electric Company) Infrastructure Development

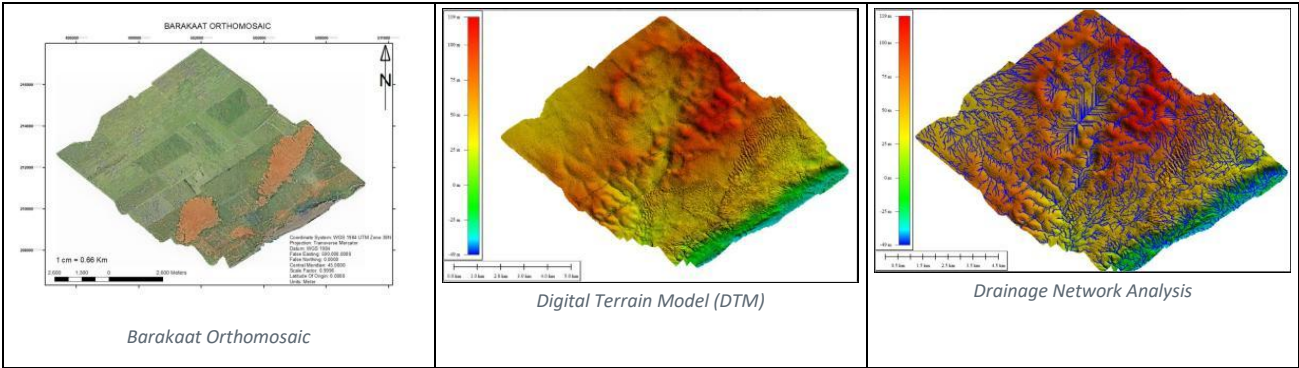
As Project Lead in Topographical Survey & Aerial Mapping, we mapped 2,000 acres set aside for infrastructure development — delivering orthomosaics, digital elevation models (DSM & DTM), contour maps, sand-dune volumetric analysis, and a full hydrological drainage-network study to guide engineering-grade infrastructure decisions.



MOGADISHU, SOMALIA | JUNE – JULY 2026

Barakaat Smart City Topographical Survey

As Lead Topographical & Aerial Mapping Consultant, we mapped 18,000 acres set aside for a new smart city — delivering orthomosaics, digital elevation models (DSM & DTM), contour maps, sand-dune volumetric analysis, and a full hydrological drainage-network study to guide engineering-grade infrastructure decisions.



LODWAR, TURKANA COUNTY, KENYA | MARCH 2026

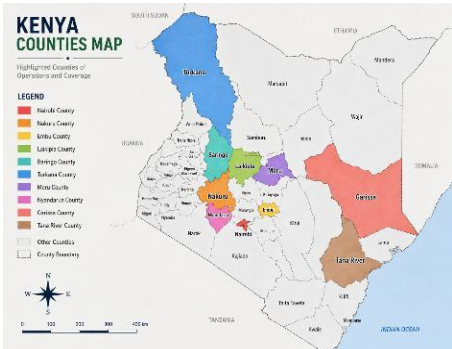
Lodwar Town Water Supply Project

Supporting the feasibility study and detailed design for a new piped water network and dam station, our team mapped approximately 210km of road network within and connecting to Lodwar Town — laying the geospatial groundwork for water infrastructure serving thousands of residents.

NAIROBI & MACHAKOS COUNTIES, KENYA | MARCH – SEPTEMBER 2025

Mapping of Slums & Informal Settlements (KISIP2)

Working with Kenya's Ministry of Lands under the Kenya Informal Settlement Improvement Project, we produced thematic maps — transportation, social amenities, physical infrastructure, environmental, and settlement boundary maps — across 306 settlements, directly supporting land tenure security for underserved urban communities.

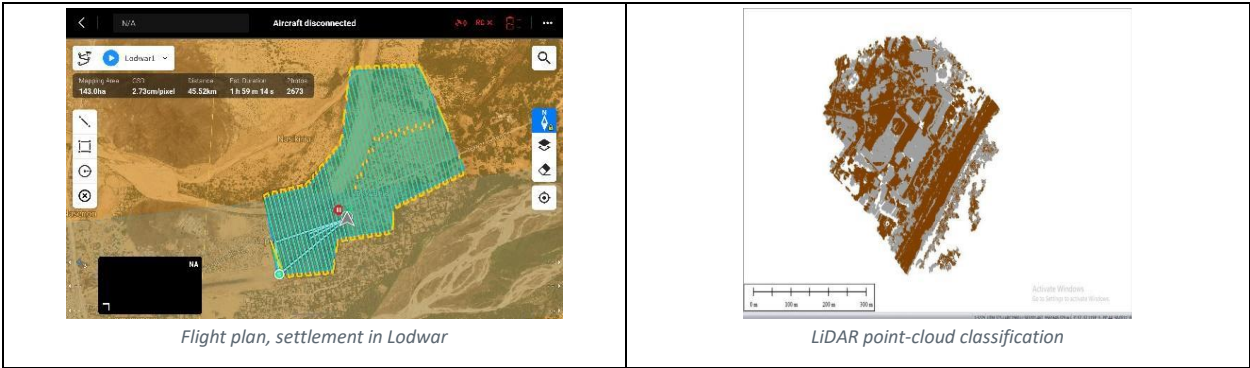


Counties covered under the KISIP2 Programme

BARINGO & TURKANA COUNTIES, KENYA | AUGUST 2025

Physical Planning & Cadastral Survey — 10 Settlements

As Lead Drone Pilot, our team captured high-resolution LiDAR and photogrammetry data across ten informal settlements, classifying point-cloud returns to separate ground, vegetation, and structures — informing physical planning and cadastral survey work under the KISIP programme.



KENYA | JULY 2025

Nairobi–Nakuru–Mau Summit (A8) Highway Survey

Leading the drone survey team, we captured high-resolution LiDAR and photogrammetry data along the 270km A8 highway corridor, generating seamless orthomosaics and digital elevation models to support development planning for this key national route.

KENYA | JUNE – JULY 2025

Gilgil – Nyahururu (A4) Road Project

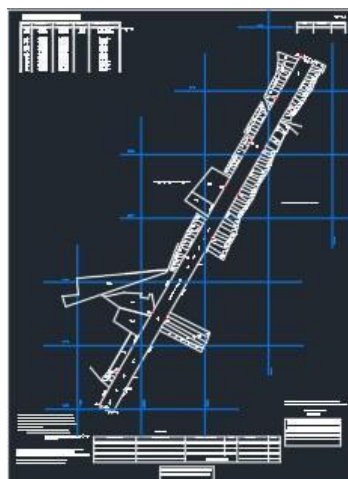
Contracted under KeNHA/HDS/4316/2022, we delivered high-resolution LiDAR and photogrammetry data collection for the feasibility study, environmental and social impact assessment, and detailed engineering design of the 30km A4 road corridor.



70KM CORRIDOR, ISIOLO COUNTY, KENYA | JANUARY – JUNE 2025

Isiolo – Archers Post – Ololokwe (A2) Road Reserve Survey

As GIS Expert on this KeNHA-tendered road reserve and title survey, we georeferenced existing RIMs and PIDs, digitized abutting parcels, generated beacon-placing data, and compiled cadastral files across the full 70km corridor — culminating in engineering road profile drawings and submitted survey plans.



Engineering road profile, A2 corridor

KENYA | JANUARY 2025

Aerial Mapping of Galana Kulalu Farm

Contracted by Mombasa Cement, we captured aerial LiDAR and high-resolution photogrammetry data across 20,000 acres of farmland, producing a high-resolution orthomosaic to support large-scale agricultural land management.

KISAUNI, MOMBASA, KENYA | FEBRUARY 2024

Sahnzu Beach Property — Topographical & 3D Mapping

Combining aerial LiDAR with 3D oblique data capture, we modelled this beachfront property in full three dimensions — extracting features and producing both a high-resolution orthomosaic and a walkable 3D model to support topographical property assessment.



3D model, Orthomosaic and LiDAR Sahnzu Beach property

TURKANA COUNTY, KENYA | JUNE – AUGUST 2024

Turkana Cluster 3 — Six Informal Settlements

Beyond the technical survey work, this KISIP assignment centred on community trust: we held engagement sessions with residents in Lokichar to explain the project before carrying out cadastral survey, parcel beaconing, and topographical mapping of social, environmental, and physical features across six settlements (Nginoka Kim, Soweto, Napetet, Nabute, Ngiitakiti & Lopiding).



Community engagement session, Lokichar



Lopiding settlement base map

VIPINGO, KILIFI COUNTY, KENYA

Vipingo Ridge Dam — Topographical & Engineering Survey

This survey mapped the full dam catchment area — motorable tracks, embankments, spillway structures, manholes, and inspection chambers — at 2.5m contour intervals, to engineering-grade accuracy for the Vipingo Ridge development.



Vipingo Ridge Dam topographical survey

08 PROJECT PORTFOLIO SUMMARY

Also delivered.

Beyond our flagship assignments, our project book spans power infrastructure, irrigation, town planning, and multi-county land tenure programmes.

Assignment	Scope of Work	Location
KETRACO Konza–Malaa–Thika–Gilgil Powerline Route Mapping	Aerial LiDAR & orthomosaic production	Kenya
Dadaab Town Plan Implementation	Cadastral survey & beaconing	Garissa County, Kenya
Kisima Farm Irrigation Scheme	Canal mapping — 2,500 acres	Taita Taveta County, Kenya
KPLC Kasarani Substation Expansion	Aerial LiDAR mapping	Nairobi, Kenya
Multiple KISIP Clusters	Settlement mapping & land tenure support	Laikipia, Meru, Tana River & Nakuru Counties
Tudor Town	Topographical aerial survey	Mombasa County, Kenya
VOI Town	Town Aerial Map	Voi, Kenya

09 OUR TEAM & TECHNICAL CAPABILITY

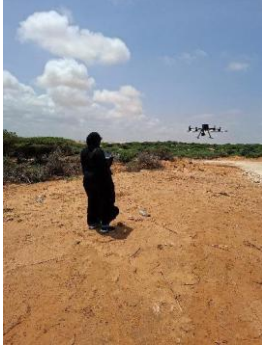
The team behind the terrain.

	Kiinge Nancy Muthoni Founder & Lead Geospatial Consultant Nancy is a Registered Land Surveyor and Licensed Drone Pilot with extensive experience in drone mapping, GIS, and remote sensing, with a particular focus on informal settlements, rural development, and infrastructure projects.
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Nancy leads our aerial initiatives, bridging traditional cadastral surveying with advanced UAV workflows. She specializes in delivering the evidence-driven “ground truth” required for complex development, ensuring aerial insights are both technically precise and legally compliant. With an operational footprint stretching from Turkana to Mombasa in Kenya, and into Mogadishu, Somalia, Nancy excels at delivering reliable spatial data in remote and underserved environments.

Her expertise in terrain analysis and land regularisation has made her a trusted partner for infrastructure projects where precision is a prerequisite for progress. As a strategic advisor to NGOs, government agencies, and private developers, she transforms raw data into actionable, risk-reducing decisions — with every engagement built on a foundation of spatial clarity and inclusive stakeholder engagement.

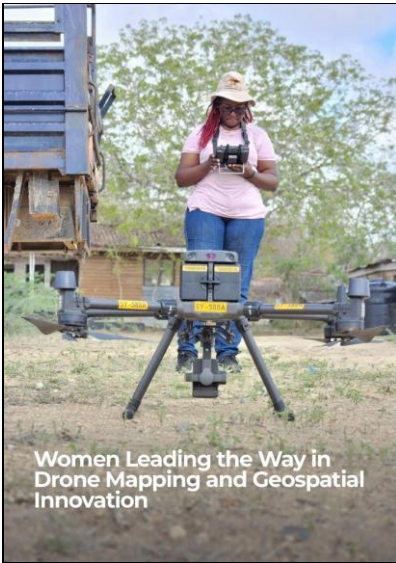
In the Field

		
Setting up an RTK GNSS base station	Road-levelling survey, Membley Road	Piloting a Matrice 350 RTK drone

Core Technical Skills & Equipment

- ▶ Drone survey & mapping — DJI Phantom 4, Matrice 300, Matrice 350, Mavic
- ▶ LiDAR & photogrammetry processing — DJI Terra, Pix4D
- ▶ GIS software — QGIS, ArcGIS, Civil 3D, AutoCAD
- ▶ RTK/PPK GNSS survey, Total Station, static and traverse survey
- ▶ CORS-enabled positioning
- ▶ Cadastral survey, beaconing, subdivisions, and land tenure documentation.

10 IN THE PRESS



Women Leading the Way in Drone Mapping and Geospatial Innovation

As featured in AfroSpatial Magazine

“Women Leading the Way in Drone Mapping and Geospatial Innovation” — June–July 2026 Issue

Our founder Nancy Muthoni sat down with AfroSpatial Magazine to talk about her path from a university drone demonstration to leading aerial mapping operations across Kenya and Somalia — and what land tenure work in Turkana and Laikipia taught her about the human side of geospatial data.

Asked about the field moment that has stayed with her longest, she recalled an elderly man in Kanyoni, Laikipia, standing beside a newly installed boundary beacon — telling her that *“for the first time in his life, he felt at peace”* knowing his children’s inheritance was finally secure.

The feature also covers her early career at Nile Surveys and Geo-Solutions and Geo-Cart Surveys and Engineering, her advice to young women entering the field, and how she built her practice into what is now Afrikan Spatial Grid Ltd.

11 CERTIFICATIONS & STANDARDS

Our field operations and deliverables are backed by recognised professional registration and civil-aviation licensing.

 INSTITUTION OF SURVEYORS OF KENYA ISK Registered Member, Institution of Surveyors of Kenya — the professional body for land surveying practice in Kenya.	 KCAA Kenya Civil Aviation Authority Efficiently Managing Air Safety KCAA Licensed Licensed drone pilot certified for multirotor operations at visual line of sight, 400+ flight hours,	LSB LSB Registered Recognised Approved Assistant by The Land Surveyors Board to Licensed Land Surveyor
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Our scope also covers KCAA-compliant cadastral, topographical, and sectional-title (apartment title) survey work, including land subdivision and title registration within the coastal region and across Kenya.

12 ORGANISATIONS WE'VE WORKED WITH

We welcome partnership enquiries from government agencies, private developers, engineering consultancies, and NGOs working on land, infrastructure, and community development across Africa.

Also engaged: E & G Spatial Consultants and GEOLOC Limited.

13 PARTNER WITH US

Let's map what matters — anywhere on the continent.

Whether the need is a single-site cadastral survey or a multi-country, multi-year mapping programme, our team brings field-proven precision, licensed technical capability, and a genuine commitment to the communities we serve. Kenya and Somalia are where we've built our track record — but our ambition, our team, and our equipment are ready to mobilise across Africa. We are actively seeking new tenders and partnerships with government agencies, NGOs, and private developers continent-wide — and we deliver.

GET IN TOUCH

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