

# SURVEYING PROFESSION

The profession caters for both Quantity Surveying and Land Surveying. Below is a summary of each profession and the benefits of using professionals in this discipline.

## QUANTITY SURVEYING

### Why Use a Registered Professional Quantity Surveyor?

The definition of 'Registered Professional Surveyor' is a surveyor who has gained, and consistently demonstrates, a high level of skill or competence in their field of work, recognised by the award of formal accreditation from AESAP.

Registered Professional Surveyors are locally recognised as professionals who can provide the highest level of advice within their sector – and with 22 different specialisms, known as sector pathways, there's a community of AESAP experts specialising in many of these disciplines.

But what does a Registered Professional Surveyor do day to day and why should you use one? Registered Professional Surveyors are involved in a range of projects, from planning high-tech housing and creating vibrant workplaces to playing a key role in sustainable developments and improving public health through new transport systems.

### What is the difference between a surveyor and a registered professional surveyor?

Registered Professional Surveyors are regulated by AESAP and must hold the recognised qualifications and experience before passing the Registration Criteria. Once surveyors have obtained locally renowned professional status, they are required to undertake continued professional development (CPD) to ensure they are working to the highest standards and levels of trust and accountability.

Only members of AESAP are allowed to call themselves 'Registered Professional Surveyors'.

On the other hand, while qualified surveyors without registered status (i.e., those with a degree relevant to surveying) do have the knowledge of their respective sectors to complete tasks for which they have been trained, their level of expertise is not the same as registered professional surveyors.

### What does a Registered Professional Surveyor do?

With so many different types of surveying, there isn't a single job description for all surveyors with registered professional status. Defining what professional registered surveyors do on a daily basis depends on the area they specialise in within land, property and construction.

Some common duties across key specialisms such as building, environmental, valuation and quantity surveying could include:

- a) examining buildings for structural defects
- b) providing valuations for property and other asset types
- c) offering expert advice on environmental issues and construction
- d) measuring and collecting data on specific areas of land, including information about boundaries, buildings and features, both natural and man-made
- e) providing an accurate report of the potential impact of any development or engineering works
- f) making sure that the financial position of construction projects is accurately reported and controlled effectively, and
- g) managing the contractual relationships between the various parties involved in any building project.

### **Why use a Registered Professional Surveyor?**

A Registered Professional Surveyor status is a mark of quality, assurance and professionalism worldwide. You can trust that you are dealing with a highly trained and experienced professional who can provide expert guidance relating to property, land and construction – all while being unbiased, fair and transparent.

Professional Surveyors maintain a high level of technical property and market knowledge, meaning they can share trusted, independent advice on which to base your property decisions. For example, getting a Financial report from a regulated and insured Professional Surveyor before the start of a construction project could save you thousands of Emalangeni on cost over runs, delays and poor financial control during the period of construction.

To make sure that Professional Surveyors offer the quality of advice and level of integrity required, AESAP registered status is only awarded to individuals who meet the most rigorous requirements for both qualifications and experience, as well as those who are prepared to maintain these high standards in the public interest. To uphold these high professional standards of conduct, there are mandatory rules (CPD) outlined by AESAP that mean its members must keep up to date with legislation, best practice and industry news.

## LAND SURVEYING

The profession of surveying is essential to land development, infrastructure planning, property rights, and environmental management. Surveyors use specialised techniques and instruments to measure and map the physical world, ensuring legal and technical accuracy across a range of applications.

### Main Categories of Land Surveyors

1. Professional Land Surveyors (PLS)
2. Professional Engineering Surveyors (PES)
3. Other Specialised Surveyors:
  - a) Photogrammetry Surveyors
  - b) Hydrographic Surveyors
  - c) Mining Surveyors
  - d) Remote Sensing and Geospatial Analysts

### Professional Land Surveyor (PLS)

A Professional Land Surveyor is a highly qualified specialist trained in all forms of surveying, with particular legal competency in cadastral work. They are the only category of surveyors authorised to perform surveys that determine land ownership and boundaries.

Core Functions:

- a) Subdivision of land and preparation of diagrams
- b) Boundary identification and verification
- c) Compilation and registration of cadastral survey records
- d) Consultation on legal property disputes and land tenure
- e) Preparation of sectional title plans (if registered in terms of Sectional Title Act)
- f) Compliance with legislation such as the Land Survey Act No. 46 of 1961 (Eswatini)

Skills & Qualifications:

- a) Trained in geodetic, engineering, topographic, and cadastral surveying
- b) Must register under national legislation and often undergo articles and board examinations
- c) Skilled in land law, survey computations, and use of high-precision instruments (e.g. total stations, GPS/RTK, drones, 3D Scanning etc.)

### Professional Engineering Surveyor (PES)

A Professional Engineering Surveyor focuses primarily on infrastructure-related projects such as roads, bridges, dams, pipelines, and large construction works. While they are highly skilled in technical surveying methods, they are not licensed to conduct cadastral work such as boundary demarcation or land subdivision.

Core Functions:

- a) Setting out construction works
- b) Monitoring of infrastructure movement or settlement

- c) Volumetric calculations for earthworks
- d) Topographic surveys for design purposes
- e) As-built surveys and QA documentation for engineers
- f) Skills & Qualifications:
- g) Proficient in construction-level accuracy
- h) Familiar with civil engineering plans, construction tolerances, and deformation monitoring

## Other Specialized Surveyors

Type	Area of Specialization
Photogrammetry Surveyors	Aerial mapping using drones or aircraft imagery
Hydrographic Surveyors	Water depth mapping, ports, and bathymetric models
Mining Surveyors	Underground and open-cast mine measurements
Remote Sensing Experts	Satellite imagery interpretation, land cover classification
GIS Specialists	Spatial data analysis and map production

## Legal Status & Registration

In Eswatini, Professional Land Surveyors are regulated under the Land Survey Act No. 46 of 1961. This Act defines who may legally conduct cadastral surveys and submit diagrams for registration. PLSs are bound by ethical and technical codes and are responsible for maintaining the integrity of the cadastre. In addition, they are registered with AESAP, being the governing body for Professional Consultants.

No other category of surveyor, including Professional Engineering Surveyors, is legally permitted to prepare or sign off on cadastral work or land subdivision plans.

## Conclusion

Surveying is a diverse and highly specialised profession with far-reaching importance across sectors. The Professional Land Surveyor is the apex of the profession with full rights of cadastral and technical execution, while Professional Engineering Surveyors offer vital support to infrastructure development. Together with other niche specialists, they ensure that our physical world is measured, mapped, and managed with accuracy, legality, and precision.