

**NOTES FOR GUIDANCE OF**  
**PROFESSIONAL LAND SURVEYORS IN TRAINING**

1. These notes which have been approved by the South African Council for Professional and Technical Surveyors, have been compiled with a view to assisting students in surveying at South African Universities and others who intend qualifying for registration as professional land surveyors in terms of Section 7(4)(a) of the Professional and Technical Surveyors' Act, 1984 as amended. Candidates must note that the said Act and the Rules framed thereunder make provision for the registration in different divisions of the register according to their post-graduate training. Adherence to the requirements as set out below, will assist materially in avoiding unnecessary delays.
2. **Statutory Requirements**
  - 2.1 In the first instance a candidate who wishes to register as a professional land surveyor, in the register provided for in Section 7(4)(a) of the Act, must first register in terms of Section 21(1) as a professional surveyor in training after obtaining the degree in surveying at a South African university, or it's equivalent as certified by the South African Council for Professional and Technical Surveyors.
  - 2.2 A candidate who wishes to qualify for registration as a professional land surveyor and who will be entitled to undertake topographical, engineering and related surveys shall undergo such post-graduate practical training as set out in paragraph 6 and pass a law examination and practical test set by the Council within such period as it may determine.
  - 2.3 Section 20(1) of the Professional and Technical Surveyor's Act, 1984 sets out the requirements for registration as a professional surveyor. A candidate must therefore submit certified copies of his or her birth and degree certificates to the Council as soon as possible. "Certified" means "certified to be a true copy" by a Commissioner of Oaths or a Justice of the Peace.
3. **Period of Training**
  - 3.1 The period of practical training is a minimum of 300 working days and the nature of such training shall be approved and controlled by the Council. All experience must be obtained after the date of completion of the requirements for the academic qualification, provided that the candidate applies for registration as a professional surveyor in training within two months of such date, failing which his or her period of training will be deemed to commence as from his or her actual date of application for registration as professional surveyor in training.

Provided further that if the candidate was registered with the Council as a survey technician or a surveyor prior to obtaining the academic qualifications necessary for the professional category and can produce a diary and employers' certificates to substantiate this claim, exemption for part of his or her practical training may be granted.

- 3.2 Training must be continuous and only in exceptional cases will a break in training be condoned. The normal acceptable minimum period of training with a single surveyor or firm of surveyors is 45 working days although lesser periods may be accepted in order to obtain specialised training in the case of categories of work given under paragraph 6.2.
- 3.3 A break in training will not be condoned unless a candidate makes timely application to the Council for such a break.
- 3.4 The requirements laid down for training in this memorandum must be strictly adhered to and the required training must be obtained working under the personal supervision of a practising professional land surveyor or other suitably qualified person approved by the council.
- 3.5 The candidate is required to notify the Council as soon as possible after registering as a professional surveyor in training and starting his or her practical training, of the name of the professional land surveyor, firm or organisation with whom he or she is working. Any change in address or a change to another professional land surveyor, firm or organisation must be reported to the Registrar.

#### 4. **Training for registration as a professional land surveyor**

- 4.1 Training in all categories of work must be varied and be undertaken under the personal supervision of a professional land surveyor or other suitably qualified person, approved by the Council, who has been practising as such for at least five years after registration.
- 4.2 It is permissible to train under a professional surveyor in salaried employment, but taking into consideration the requirements specified in paragraph 6, it is sometimes difficult to obtain the full range of training in such circumstances. In case of doubt the candidate should refer the matter to the Council.
- 4.3 It is important that the supervisor should be a person who can instruct and provide the required experience. The supervisor must also be capable of providing guidance in professionalism, professional ethics and professional practice. In case of doubt the candidate should refer the matter to the Council. In such a case the name, qualifications and experience of the supervisor, other than a professional land surveyor, must be supplied to the Council so that it can assess the suitability of such a person.

## 5. Requirements of a Supervisor

- 5.1 A supervisor must be a practising professional land surveyor who has been practising as such for a minimum period of five years. Provided that the Council may, on written application by the supervisor, relax the requirement of the five years experience. Provided further that where the experience to be gained is in a field of expertise that could not normally be obtained under the guidance of a professional land surveyor or professional surveyor then, with the consent of the Council, such experience may be obtained under the personal supervision of a suitably qualified person.
- 5.2 **Every supervisor** must provide, **directly to the Council**, a confidential written assessment on the competency of the candidate which assessment must include, *inter alia*, the type of experience gained by the candidate while in his or her employ, with emphasis on the non technical aspects such as dealings with clients, attitude to senior and subordinate co-workers and assistants, punctuality and reliability and management skills acquired.
- 5.3 A person who has been found guilty of improper conduct or is practising under threat of a suspended sentence may not act as a supervisor.

## 6. Nature of Training

The nature and periods of training are as follows:

### 6.1 **Compulsory**

- |   |                               |
|---|-------------------------------|
| <p>(a) <b>Cadastral Surveys (New Townships)</b><br/>This includes township design and the calculation of all the data necessary to carry out the physical survey and to prepare the general plan, as well as the physical survey of the township.</p>   | <p><b>15 working days</b></p> |
| <p>(b) <b>Cadastral Surveys (Existing Properties)</b><br/>This includes the determination of the original boundaries based on the physical and mathematical evidence available, the writing of the reports justifying his or her decision and the physical survey of these properties and must include a reasonable mix of both urban and rural situations.</p> | <p><b>30 working days</b></p> |

- (c) Control Survey Network** **15 working days**
- High order network of control survey points. To include the planning, reconnaissance, specifications, measurement and adjustment. A three dimensional network to be included.
- (d) Town Planning and Conveyancing** **20 working days**
- To include the preparation and drafting of the documents necessary to make application for consent to subdivide or consolidate, to apply to amend a town planning scheme, as well as a reasonable exposure to and an understanding of the registration process.
- (e) Sectional Title Surveys** **15 working days**
- Including the physical survey of the building and the sections (excluding the re-establishment of the site boundaries), the preparation of sheet 1 and the determination of the participation quota schedule
- (f) Engineering Surveys** **25 working days**
- Including topographical, staking, setting out and precise the engineering surveys as well as volume determinations.
- (g) Office of the Surveyor-General** **30 working days**
- To include work in the various departments as the Surveyor-General may deem fit.

Item (g) may only be undertaken after the candidate has completed a minimum of 150 working days as a registered professional land surveyor in training and after items (a), (b), (d) and (e) above have been completed.

## 6.2 Options

The balance being a minimum of 150 Working days to be made up of a combination of the above and at *least* two of the options listed below.

- (a) Photogrammetry** **20 working days**
- General work in a photogrammetric environment including the planning and execution of photo control survey.
- (b) Hydrographic Surveys** **20 working days**
- To include the planning, measurement and reduction of results
- (c) Geospatial Information Management** **20 working days**
- To include the design and specification of the system, including the database, data capture, information maintenance, spatial queries and spatial analysis.
- (d) Mine Surveys** **20 working days**
- To include work in a mine survey office and some underground experience.
- (e)** Or work for a period of not less than 20 working days in a discipline not listed in paragraphs 6.1 and 6.2.a to 6.2.d above, which must be in a recognised field of expertise compatible with the calling of a person registered in the category of Professional Land Surveyor. Any person wishing to take up this option is required to, in good time prior to commencing with this training, first request the consent thereto of the Council. Such a request must be in writing addressed to the registrar and must include details of the type of work and the person under whom the experience is to be gained.

- 6.3 (a) The number of working days given in 6.1 and 6.2 includes both office and field work. The ratio of office to field should be of the order of 2:1.
- (b) Office work should include planning, specification writing, interviews with the client, writing of proposals to the client, calculations and adjustments, analysis of results, and writing of the final report to the client. General office administration such as personnel management, logistics and financial management can also be included.
- (c) A detailed daily diary of all work undertaken during the training period must be kept. This may be called for by the Council in cases of doubt. This diary must give an adequate description of the work done, the dates and the category of work with the number of working days in each category.
- (d) The use of modern technology is highly desirable and the candidate must endeavour to become au fait with this technology.

## 7. Training Schedule

- (a) When applying to the Council for evaluation of his or her training, (see paragraph 8) the candidate shall supply a Training Schedule as an extract from the diary prepared in the form of the attached specimen. This schedule must be compiled in chronological order and totalled. **Each page must be signed by the supervisor (with whom the candidate has trained) and the candidate.**
- (b) The training schedule must contain an adequate description of the work performed to enable the Council to evaluate the type and scope of the work completed.
- (c) The detailed day to day diary from which the training schedule is an extract must be retained by the candidate in the event of the Council requiring more detailed information.

## 8. Application for Law Examinations and Practical Tests

- 8.1 The law examinations and practical tests are scheduled to take place twice annually, usually **in March and November**, at the offices of the Surveyors-General.
- 8.2 When a candidate is of the opinion that he or she has met the requirements of paragraph 6, he or she may apply to the Council to write the examinations and tests. Such application must be submitted **not less than six (6) weeks** before the due date of the examination and a candidate must indicate where he or she wishes to write the examination. The exact date may be ascertained from the Registrar.

- 8.3 The application must be accompanied by:-
- (a) The schedule of training (see paragraph 7)
  - (b) Certificates of training in respect of each supervisor with whom the candidate has served.
  - (c) An examination fee which must reach the Registrar not later than two (2) weeks before the examinations. The fee is determined annually by the Council and the amount is available from the Registrar.
- 8.4 Council will notify the candidate of the acceptance of his or her application and, if successful, will inform him or her where and when to report for the examination.

## 9. **Law Examinations**

The law examination consists of **three** written papers. The first paper is on the PLATO Act and Rules and the second and third papers on the Land Survey and Deeds Registry Acts and Regulations and other applicable legislation respectively, but not exclusively as set out in 9.1 and 9.2 below.

- 9.1 The first paper (Exam A) of 2 hours duration is based on the Plato Act (Act 40 of 1984) and Rules, and is an open book exam.
- 9.2
- (a) The second paper (Exam B) of 3 hours duration is an open book exam and will be on the Land Survey Act and Deeds Registries Act (including Regulations)
  - (b) The third paper (Exam C) of 3 hours duration is a closed book exam and will be on other acts and court cases as indicated for PLS on the exam Syllabus.

Candidates must obtain not less than 65% in all three papers as a whole. Candidates may be required to undergo an oral examination or interview as well. The Council shall decide whether or not he or she will be awarded a pass or whether he or she will be required to re-write the examination after a further period of training. The candidate will be advised accordingly.

## 10. **Details of Practical Tests**

The practical tests will consist of the following tasks:

### **(a) Cadastral Survey:**

The candidate will be required to prepare all the relevant survey records, reports and diagrams for submission to the Surveyor-General as if he or she was already as registered professional land surveyor. This task must be based on an actual survey in which the candidate was actively involved during his or her period of training and must be of sufficient complexity to show the competency of the candidate. The complexity of this task will be assessed by the Surveyor-General who may make whatever changes he feels necessary to ensure a suitable standard of difficulty. The Surveyor-

General will examine the records, reports and plans presented and report to the examiner on the acceptability or not of the same.

**(b) Boundary Re-determinations**

The candidate will be required to carry out at least four boundary re-determinations and prepare a report setting out both the mathematical and legal reasons for his or her decision in each case. Two of these tasks should be rurally based and two urban based situations. For each task the candidate will be provided with salient information, such as the surveyed values of the found beacons, diagram information, the types of beacons found, the condition of the beacons and any other relevant information that could have a bearing on his or her decision. These tasks may or may not be fictitious cases. The tasks will be issued and the results evaluated by the Surveyor-General who will report on the acceptability or not to the examiner.

**11. General**

A candidate should not normally need more than three weeks to complete the law examinations and practical test. Continuity of the work is essential and a break will only be permitted in exceptional circumstances due to factors beyond the control of the candidate.

Marking will take place as soon as possible after completion of the work and the candidate should remain in close touch with the examiner until his or her requirements have been met. A candidate will be informed at an early stage if he or she is required to take an oral examination or if a practical test needs further attention.

After marking has been completed the examiner will transmit all the results and papers to the Moderator. The Moderator will make a recommendation to the Council accordingly. If the candidate has been unsuccessful in any aspect he or she will be advised by the Registrar that he or she will have to repeat certain parts (or even the whole) of the examination and practical tests after a certain period.

If the candidate has been entirely successful he or she will be advised by the Registrar that he or she complies with the requirements of Act No 40 of 1984 and that he or she may apply to the Registrar for registration in the appropriate division of the register. The Registrar will request him or her to make a professional oath or affirmation in relation to his or her profession. He or she will also be required to apply for registration on the prescribed application form and to pay the registration fees. When these formalities have been completed the candidate will become registered as a professional land surveyor with the South African Council for Professional and Technical Surveyors.

TRAINING SCHEDULE OF (FULL NAME & SURNAME) :

PAGE NO. .... OF .....PAGES

D A T E  Day / Month/ Year	CADASTRAL SURVEYS														OTHER SURVEYS								
	DESCRIPTION OF PROPERTY AND SURVEY	Township				Control		Town Planning & Conveyanc- ing		Sectional Title		Engineering		Farm Work		Photo- grammetry		Hydro- graphic		GIS		Mine Surveyors	
		OLD		NEW		Fld	Off	Fld	Off	Fld	Off	Fld	Off	Off	Fld	Fld	Off	Off	Fld	Off	Fld	Off	
		Fld	Off	Fld	Off																		
	Brought Forward																						
	TOTAL Carried Forward																						

CANDIDATE SIGNATURE; \_\_\_\_\_ FULL NAME & SIGNATURE OF SUPERVISOR; \_\_\_\_\_

Off = Office (which includes administration, computing, draughting etc.)      FLD = Field

(For additional copies required please photostat)

(FINAL PAGE)

TRAINING SCHEDULE OF (FULL NAME & SURNAME) ; \_\_\_\_\_

PAGE NO. .... OF ..... PAGES

DATE Day / Month/ Year	CADASTRAL SURVEYS														OTHER SURVEYS								
	DESCRIPTION OF PROPERTY AND SURVEY	Township				Control		Town Planning & Conveyance- ing		Sectional Title		Engineering		Farm Work		Photo- grammetry		Hydro- graphic		GIS		Mine Surveyors	
		OLD		NEW		Fld	Off	Fld	Off	Fld	Off	Fld	Off	Fld	Off	Fld	Off	Fld	Off	Fld	Off		
		Fld	Off	Fld	Off																		
	Brought Forward																						
	TOTAL																						
	REQUIREMENT																						
	BALANCE																						
ADDITIONAL SURVEY COMPLETED																							

CANDIDATE SIGNATURE; \_\_\_\_\_ FULL NAME & SIGNATURE OF SUPERVISOR; \_\_\_\_\_

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