

LAND SURVEY REGULATIONS

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LAND SURVEY REGULATIONS – SECTION 28

(S.R.O. 23/1979, G. 3/1987, S.R.O. 18/1988 and Act 8 of 1999)

Commencement

[8 June 1979]

PART I

PRELIMINARY

Short title

1. These Regulations may be cited as the Land Survey Regulations.

Interpretation

2. In these Regulations, except where the subject otherwise requires—
“**approximate**” in relation to any boundary has the meaning ascribed to it in section 17 of the Registered Land Act;
“**fixed**” in relation to any boundary has the meaning ascribed to it in section 18 of the Registered Land Act;
“**Principal Act**” means the Land Survey Act;
“**registration section**” has the meaning ascribed to it in the Registered Land Act;
“**Registry Map**” has the meaning ascribed to it in the Registered Land Act.

PART II

REGULATIONS AFFECTING ALL SURVEYS
MADE UNDER SECTION 14 OF THE LAND SURVEY ACT

Disputes

3. If a dispute arises between a licensed surveyor and the Chief Surveyor over the application of the regulations, either party may refer the matter to the Board. The Board shall hear and determine such dispute, and its decision shall be final.

Units of Measurement

4. (1) All distances shown on plans shall be in English feet and decimals of an English foot, or international metres or decimals of an international metre.
(2) All angular measurements shall be in degrees, minutes and seconds of arc.

(3) For purposes of conversion from international metres to English feet, the relationship to be used shall be one international metre = 3.280840 English feet or one English foot = 0.3048 international metres.

Systems of Co-ordinate and Projections

5. (1) The figure of the earth and the projection to be used in the computation of co-ordinates of any survey shall be the Transverse Mercator Projection for the West Indies using the Clark 1880 figure having elements; semi-major axis 6378249 international metres flattening 1/293.5.

(2) Where Transverse Mercator co-ordinates are given in metres they shall be converted to English feet using the relationship in regulation 4(3).

Maintenance of Measuring Instruments

6. (1) Every licensed surveyor shall maintain his theodolite, measuring bands and all other equipment in good order, and the Chief Surveyor may refuse to authenticate any survey which has been made with defective equipment.

(2) Every measuring band, tape, thermometer and spring balance shall be submitted to the Chief Surveyor before use and thereafter not less than once in every twelve months for comparison with the official standard in the custody of the Chief Surveyor.

(3) The Chief Surveyor may at any time require any licensed surveyor to submit any measuring equipment for his inspection.

Presentation of Surveys

7. (1) Every licensed surveyor shall be personally responsible for the accuracy, fidelity, and completeness of every survey presented by him for the approval of the Chief Surveyor.

(2) It shall be the duty of every surveyor making any survey under these Regulations to record all the relevant information that may aid in securing the accuracy and completeness of every such survey.

(3) Every surveyor shall perform sufficient work to enable him to apply a thorough check to every part of his survey.

(4) Every surveyor shall present his plan, computations and connected documents of every survey in such a manner as the Chief Surveyor may require, and if any surveyor forwards to the Chief Surveyor any plan, computation or connected document which does not conform substantially with the appropriate requirements, the Chief Surveyor may, at his discretion, return the plan, computation and connected documents to the surveyor and may refuse to authenticate such plan, computation or connected document until it has been made to conform with the appropriate requirements.

(5) All surveys returned to a surveyor shall be resubmitted to the Chief Surveyor without undue delay.

Permissible errors of Measurement

8. All measurements must be made in accordance with regulations 33, 34 and 37 and the Chief Surveyor may refuse to authenticate any survey which contains errors in excess of those that can be expected from measurements properly carried out in the manner specified.

Checking of Surveys

9. The Chief Surveyor may at any time depute any surveyor to check in the field any survey made under the Law by any other surveyor, and such check may include the verification of any information recorded in connection with such survey mark established under the Law or any regulations made thereunder.

Information prior to Survey

10. (1) Before carrying out any survey, every licensed surveyor shall be provided, or shall provide himself with all available information in respect of any previous survey of the parcel of land to be surveyed and of any adjoining parcel.

(2) Applications to the Chief Surveyor for this information shall be in writing and shall, whenever applicable, make reference to the approval for sub-division, or other transaction.

(3) The Chief Surveyor shall make available to any licensed surveyor all technical information in his possession. Where the licensed surveyor extracts the information himself by personal search, no fee will be payable, but where the information is extracted on his behalf by the Chief Surveyor, the fee prescribed in the Fourth Schedule shall be paid.

Prior Approval of Statutory Authorities

11. Before submitting any survey to the Chief Surveyor, a licensed surveyor shall ensure that approval has been obtained for a subdivision or other transaction of any parcel of land in any case where such approval is required by any law and that the survey submitted conforms with such approval.

Authority for entry upon Land

12. (1) In pursuance of sections 16 and 18 of the Principal Act the Chief Surveyor shall furnish to every surveyor an official letter of authority in Form A in the First Schedule to these Regulations.

(2) Every surveyor shall present his letter of authority to any owner or occupier of land who demands proof that such surveyor is duly authorised to enter upon his land.

Employment of Unqualified Assistants

13. (1) No licensed surveyor shall employ an unqualified assistant without the written approval of the Board:

Provided that the Chief Surveyor may give provisional approval pending decision by the Board.

(2) When such approval is given it shall be for a period of not more than two years in the first instance and may thereafter be renewed for further periods at the discretion of the Board.

(3) The work done by any such assistant shall be under the direct personal control of the licensed surveyor, who shall himself carry out a sufficient check to ensure that the work done by such assistant is correct. The licensed surveyor shall accept full personal responsibility for all work performed by his unqualified assistant.

(4) The licensed surveyor shall supply a certificate which shall be drawn up in Form B in the First Schedule to these Regulations.

(5) If the Chief Surveyor finds that an unqualified assistant has performed any work which has not been supervised and checked by the licensed surveyor he may suspend approval for the employment of the unqualified assistant, and the case shall be referred to the Board whose decision on the matter shall be final.

Fees Chargeable by Chief Surveyor

14. (1) The Chief Surveyor shall charge fees for all surveys carried out by the Survey Department in accordance with the charges prescribed in the Second Schedule to these Regulations.

(2) The Chief Surveyor shall charge fees in accordance with the charges prescribed in the Third Schedule to these Regulations for the authentication under section 25 of the Principal Act of a plan submitted by a licensed surveyor.

(3) The Chief Surveyor shall charge fees in respect of all documents issued or services rendered by the Survey Department in accordance with the charges prescribed in the Fourth Schedule to these Regulations.

Fees for Licensed Surveyors

15. (1) The fees prescribed in the Fifth Schedule to these Regulations shall be charged by a licensed surveyor in respect of work done by him.

(2) The fees chargeable for the granting of a licence to practice as a Surveyor in Montserrat shall be \$250. (*Inserted by S.R.O. 18/1988*)

PART III

SURVEY MARKS, BOUNDARY BEACONS AND BOUNDARIES

Design and Specification of Survey Marks

16. (1) The design of survey marks shall be as specified by the Chief Surveyor, except in special circumstances which must be set out in the report on the survey.

(2) Every new triangulation or trilateration station other than a purely auxiliary station shall be permanently marked.

(3) In third order traverses as defined in regulation 37 all traverse stations shall whenever possible be permanent points.

Placement of Survey Marks

17. (1) Where the boundaries of a parcel are required to be fixed in accordance with section 18 of the Registered Land Act, any beacons required to be placed to define accurately the boundaries of the parcel shall be of such type as the Chief Surveyor may require and shall normally be surmounted by a cairn of stones or a mound of earth.

(2) Where a boundary is inadequately defined and it is necessary to place a beacon to define the approximate position of the boundary such beacons shall conform to the requirements of paragraph (1) of this regulation.

(3) With a view to facilitating the location of isolated boundary beacons, such beacons shall be referenced to any nearby telephone pole, suitable tree or other prominent physical feature.

Line Beacons and River Beacons

18. (1) (a) Where a rectilinear boundary intersects a curvilinear boundary and a beacon, required by regulation 17 cannot be placed at the intersection, a beacon shall be placed on the rectilinear boundary, as near as possible to the intersection. Such beacon shall be known as a line beacon.

(b) Where the rectilinear boundary continues on both sides of the curvilinear boundary, line beacons shall be placed on both sections of the rectilinear boundary.

(c) Where the curvilinear boundary falls within a river or swamp the line beacon shall be placed above flood level and shall be known as a river beacon.

(2) When a line or river beacon has been placed in accordance with regulation 17(1) the distance from the line or river beacon to the actual boundary shall be measured to the precision required by regulation 66(2).

(3) All subdivisions of a parcel, the boundaries of which have been fixed, which is situated across a road reserve shall be fully beacons as self contained units.

(4) Where a curvilinear feature is adopted as a subdivisional boundary of a parcel, the boundaries of which have been fixed, the several subdivisions and any remainder shall be fully beacons as self-contained units.

Placing Beacon on Boundary Line

19. Where a beacon is placed on a boundary line that has been fixed, it shall be proved to be on line by establishing either directly or indirectly its relationship with the terminal beacons of the line.

Beacons Placed from Computed Data

20. Where a beacon is placed from computed data, its position shall be proved by an independent field check and calculation.

When Beacons cannot be Placed

21. When the corner of a parcel, the boundaries of which are required to be fixed, falls within inaccessible ground where a beacon cannot be placed, the position of such corner shall be permanently referenced by at least one indicative beacon placed on a boundary line as near as possible to the corner. The details of the situation shall be indicated on the plan.

Damaged Beacons to be Repaired

22. Where an old beacon of the parcel under survey is found to be damaged, the surveyor shall repair or renew the beacon and shall make a record of the repairs in his field notes.

Trigonometrical Station to be required

23. (1) Every surveyor engaged on a public survey who discovers any trigonometrical or traverse station to be damaged and in need of repair shall carry out such repair as may be necessary.

(2) A licensed surveyor not engaged on a public survey is not required to repair any damaged trigonometrical or traverse station, but he shall report in writing to the Chief Surveyor the name, number and position of any such station and the nature of the damage he has observed.

Missing Beacons

24. Missing beacons shall be noted in the surveyors' report (regulation 63 refers) and in order to demonstrate that he has searched in the right place the surveyor shall furnish such measurement and observations as may be necessary.

Re-establishment of missing Beacons

25. If a surveyor is required to re-establish a missing beacon, he shall submit his field notes, computations and report to the Chief Surveyor.

Redundant Beacons

26. Where the existence of a visible redundant beacon is likely to lead to confusion, it shall be removed and replaced by an underground witness mark.

Surveys and re-establishment of Boundaries

27. (1) In every survey of land where the position of a feature or beacon defining the boundary of a parcel is found to differ materially from that indicated by the relevant previous surveys, the surveyor shall exercise the greatest care—

- (a) in establishing that the discrepancy actually does exist;
- (b) in collecting all evidence which may have a bearing on the eventual action to be taken.

(2) A careful search shall be made in the position indicated by the previous survey to ascertain whether or not any evidence of the old boundary feature or beacon

still exists and the position of any building or other development in the immediate vicinity of the boundary shall be recorded.

(3) The surveyor, before taking further action shall provide the Chief Surveyor with a full report and shall request instructions.

PART IV

SURVEYS PERFORMED BY TRIANGULATION, TRILATERATION, TRAVERSE AND AIR SURVEYS

Guiding Principle

28. All licensed surveyors shall assist, as far as is consonant with efficient and economical survey, in the establishment and increase of permanent control marks of all types throughout Montserrat.

Triangulation and Trilateration

Geodetic and Secondary Triangulation

29. All geodetic and secondary triangulation and trilateration shall be carried out under the control of the Chief Surveyor, and shall normally be performed by Government surveyors.

Lower Order Triangulation

30. (1) All new triangulation and trilateration of a lower order than geodetic or secondary required to provide general control for cadastral surveys shall be brought into harmony with existing control by methods conforming with current survey practice.

(2) When issuing survey data for such work to a licensed surveyor, the Chief Surveyor may recommend either a particular sequence in the computation of new work or any special computations which the circumstances may require, and it shall be the duty of a licensed surveyor so informed not to depart from the Chief Surveyor's recommendation without reasonable cause.

Tertiary and Minor Triangulation

31. For the purpose of regulations 32 and 33, tertiary triangulation or trilateration means triangulation or trilateration established to an accuracy which makes it suitable for use as a basis of further triangulation or trilateration; minor triangulation or trilateration means triangulation or trilateration established to a lower accuracy and suitable only as a basis for fixing local traverses and beacons.

Instruments used for Triangulation and Trilateration

32. (1) A micrometer theodolite of an approved pattern reading directly to one second of arc, or better, shall be used for tertiary triangulation.

(2) A micrometer theodolite of an approved pattern reading directly to twenty seconds of arc, or better, shall be used for minor triangulation.

(3) Electronic distance measuring equipment of an approved pattern shall be used for trilateration distance measurement.

Method of Triangulation Observations

33. (1) The minimum requirement for tertiary and minor triangulation shall be two arcs observed on different zeros:

Provided that two rounds observed on different faces and different zeros may be sufficient for observations to points situated less than 6,000 feet distant.

(2) An arc of angular observations for triangulation shall consist of two rounds observed in opposite directions on the same zero, one round being on face left and the other on face right.

(3) For each arc a suitable reference station shall be selected and both rounds of the arc shall be closed on to it, and the misclosure of each round shall be appropriate to the class of theodolite used.

(4) The difference between measurements of any angle on different arcs shall be appropriate to the class of theodolite used.

(5) Where electronic distance measuring equipment is used sufficient observations shall be taken to eliminate any ambiguities and achieve the accuracy required by regulation 8.

Fixing of Beacons

34. (1) Triangulation, trilateration, or a combination of these techniques for determining the position of beacons shall be carried out in accordance with the procedure laid down in regulations 30 to 33 and the method of computation shall conform with current survey practice.

(2) Beacons may also be fixed by—

- (a) intersection, provided at least three suitable rays are observed on to the point to be fixed;
- (b) resection, provided at least four points in favourable positions for such fixing are observed;
- (c) any other method which is capable of fixing a point with no less accuracy than that of the methods of intersection resection;

Provided that no point fixed by any of the methods specified in paragraphs (a), (b) and (c) of this subregulation shall be used to form the basis of further triangulation or trilateration.

Isolated Surveys

35. In areas where no triangulation exists a licensed surveyor shall request instructions from the Chief Surveyor as to the datum and method of survey to be used.

Traverse Surveys

Geodetic and Secondary Traverses

36. All geodetic and secondary traverses shall be carried out under the control of the Chief Surveyor and shall normally be performed by Government Surveyors.

Lower Order Traverses

- 37. (1)** (a) All main control traverses shall be observed to third order standard.
- (b) Where such lines are measured by means of a measuring band all such lines shall be double-chained.
 - (c) Where such lines are measured by means of electronic distance measuring equipment sufficient observations shall be taken to eliminate any ambiguities.
 - (d) All such field operations shall be appropriate to a standard of accuracy of not less than 1:15,000.
- (2)** (a) All other control traverses for the survey of rectilinear boundaries shall be observed to fourth order standard.
- (b) Field operations for such surveys shall be appropriate to a standard of accuracy of 1:10,000, but computational misclosures shall be allowed to the same degree of accuracy as the datum supplied by the Chief Surveyor.
 - (c) A surveyor shall not use a loop traverse closing on his starting point if it is practicable to traverse between two previously fixed stations.
 - (d) When a surveyor is unable to close his work within the limits prescribed by the Chief Surveyor, the Chief Surveyor may at his discretion authorise or instruct the surveyor, to accept a lower order of misclosure, otherwise the surveyor shall close his new work by a loop traverse, orientation being confirmed in a satisfactory manner.
- (3)** (a) The survey of curvilinear boundaries such as roads, rivers, high water marks, etc., shall be made by subsidiary traverse or by air-survey methods:
- Provided that this regulation shall not preclude any more accurate method.
 - (b) Such surveys of curvilinear boundaries shall be carried out to a standard of accuracy appropriate to the plotting scale of the plan of the survey.
- (4)** Where traverses are very short, a reasonable misclosure shall be allowed irrespective of the minimum requirements under these regulations.

Angular Measurement of Traverses

38. (1) A theodolite permitted by regulation 32(1) shall be used for all third order traverses where the distances are measured with electronic distance measuring equipment.

(2) A theodolite permitted by regulation 32(2) shall be used for all other third and fourth order traverses.

(3) At every traverse station of third and fourth order traverses not less than two rounds of angular measurements on different faces and different zeros shall be observed.

(4) Angular measurements for subsidiary traverses, may be made either with a theodolite or a compass of approved pattern, subject to the necessity to achieve the standard of accuracy required by regulation 37(3)(b). If a compass is used, both forward and back observations must be observed at each station.

(5) For all angular measurements the first round at each station shall be set, when possible, to the general orientation which is to be used throughout the survey.

(6) It is not necessary to close rounds of traverse observations on to a reference station.

Linear Measurement of Traverses

39. (1) (a) All linear measurements of third and fourth order traverses shall be measured using equipment and methods appropriate to the standards of accuracy specified in regulation 37(1) and (2).

(b) Slopes shall be determined by a theodolite, with a degree of precision appropriate to the standards specified in regulation 37(1) and (2), and where the slope is in excess of 10° the theodolite shall be read on both faces.

(c) All measurements shall be reduced to the horizontal at mean sea level. In addition measurements made with a measuring band shall be corrected for temperature and, where appropriate, sag.

(2) (a) All linear measurements of subsidiary traverses shall be measured using equipment and methods appropriate to the standards of accuracy specified in regulation 37(3).

(b) Slopes shall be determined by a theodolite or abney level with a degree of precision appropriate to the standards specified in regulation 37(3).

(c) All measurements shall be reduced to the horizontal.

Surveys of Curvilinear Boundaries

40. (1) In a survey of curvilinear boundaries by the tacheometric method, distances determined by staff readings shall not normally exceed 500 feet and all three stadia readings on the staff shall be read.

(2) Offsets to curvilinear boundaries from a traverse line which substantially exceed 150 feet shall be set out instrumentally or geometrically and the method shall be recorded in the field notes.

Swinging or Hanging Traverses

41. Swinging or hanging traverses unsupported by independent checks shall not be used.

Verification of Terminals of Traverse

42. Where the means exist, every point of departure of a new traverse and every terminating point shall be verified by observations and or measurements, which shall be recorded in the field notes.

Verification of Datum

43. Where a previously co-ordinated traverse station is converted for use as a boundary beacon or where such traverse station is used to place or fix a boundary beacon the surveyor shall verify the station by observations and/or measurements which shall be recorded in the field notes.

Air Surveys

Air Surveys

44. Air survey methods may be employed in special cases with prior written approval of the Chief Surveyor.

PART V

FIELD NOTES

Field notes to be on special forms

45. (1) Field notes shall be made on such forms or books as the Chief Surveyor may require.

(2) Licensed surveyors shall pay to the Chief Surveyor the cost price of any blank forms or books supplied to them by the Chief Surveyor.

Recording of Triangulation Observations

46. (1) At each triangulation and trilateration station every surveyor shall, when taking observations, record in his field notes the date, the time, the weather conditions and degree of visibility.

(2) When it is necessary, for any reason, for a surveyor to divide his observations at any station into two sets, the second set shall incorporate at least two stations which have been observed in the first set.

Recording of Traverse Observations

47. All traverse observations and measurements shall be recorded in the field notes in the sequence in which they are observed or measured.

Description of Beacons

48. A full description of every beacon and other mark used in the course of the survey, whether placed, found and used or adopted shall be recorded in the field notes.

Method of entering field notes

49. (1) All observations and measurements made in the field shall be recorded clearly and legibly in hard pencil or ink, and shall be in such manner as the Chief Surveyor may require.

(2) All entries in field notes, which are not made in the field shall be written in blue or black ink.

(3) All entries in field notes shall be indexed and referenced in such a way that any competent person may be able to prepare a true plan therefrom and the entries shall be in such form that they have only one reasonable and correct interpretation.

Erasures and Corrections

50. (1) In no circumstances shall any erasure be made in field notes.

(2) Corrections shall be made by drawing a thin line through the erroneous entry so as to have the original entry legible; the correct entry shall be written outside the erroneous entry and not across it.

(3) Corrections to field notes shall be made in the field and shall be a true record of actual measurements or reobservations and shall be initialled by the surveyor.

Nomenclature

51. (1) The letters, names and numerals, by which any beacon or survey mark is described in field notes shall be written in roman script.

(2) In choosing suitable descriptions, surveyors shall take care to avoid nomenclature which is likely to lead to confusion and the letters I, O, S and Z shall not be used except in pronounceable words.

Cover Page and Index

52. (1) The cover page of field note forms or the cover of field note books shall contain such information as the Chief Surveyor may require.

(2) This information shall include the standard temperature and tension for the measuring band used in the survey and where measurements have been made in catenary the weight per 100 ft. of the measuring band.

(3) The pages of field notes shall be numbered and an index in alphabetical and numerical order of all observations and measurements in the field notes shall be given on the reverse of the cover or cover page.

Unorthodox Methods

53. When any surveyor is compelled to use unorthodox methods of survey owing to obstructions or difficulties in the field, he shall give explanatory notes and, where necessary, diagrams in the field notes to explain clearly the method he has used and recorded.

Topographical features

54. (1) Sketched topographical features in vicinity of a beacon shall be recorded, where possible, to facilitate its location.

(2) All developments on any plot such as buildings, wells and bore-holes shall be surveyed. Any other development such as pipelines, which in the surveyor's opinion may involve a question of easement, right of way or any prescriptive rights shall also be surveyed.

PART VI

COMPUTATIONS

Computations to be on special forms

55. (1) Computations shall be made on such forms as the Chief Surveyor may require.

(2) Licensed surveyors shall pay to the Chief Surveyor the cost price of any blank forms supplied to them by the Chief Surveyor.

Method of entering computations

56. Computations shall be clearly and legibly set out in ink, and the entry of numbers or words to indicate checks on the computations shall be made in pencil or a different coloured ink:

Provided that red ink shall be reserved for the use of the Chief Surveyor.

Triangulation and trilateration

57. Surveys carried out by triangulation or trilateration shall normally be set out and computed by the Direction Method, or in conformity with any other current standard survey method.

Traverses

58. (1) In surveys carried out by traverse methods, each separate traverse shall normally be set out in suitable form so as to demonstrate the initial datum bearing or bearings, the bearing misclosure and the consequent adjustment of bearings.

(2) The positional misclosure, its distribution through the traverse, and the finally adjusted values of all traverse points shall be demonstrated in conformity with current standard survey practice.

Independent checks to be made

59. Before any surveyor forwards any computations to the Chief Surveyor for authentication he shall make an independent and complete check of all his calculations, and such checks shall accompany the computations and be clearly demonstrated.

Method of computing areas

60. (1) The rectilinear areas of parcels, the boundaries of which have been fixed, shall be computed mathematically.

(2) When a portion of the boundary of a parcel, the boundaries of which have been fixed, is a curvilinear boundary, the area of the parcel shall be determined partly by computing from co-ordinates and partly by planimeter determination from a drawing of the curvilinear boundary which has been drawn in conformity with regulation 66.

(3) If necessary, the co-ordinates of accurately scaled points on the drawing of the curvilinear boundary shall be used in the computation, in order to reduce to a minimum the area to be determined by the planimeter.

Method of measuring areas

61. The areas of parcels, the boundaries of which are approximate only, shall be determined by planimeter measurement.

Degree of accuracy of calculating areas

62. Areas shall normally be calculated to the degree of accuracy specified in the following table—

	Decimal places of an Acre	
	<i>Fixed boundaries</i>	<i>Approximate boundaries</i>
Parcels not more than 1 acre	4	2
Over 1 acre and not more than 5	3	2
Over 5 acres and not more than 25	2	1
Over 25 acres and not more than 100	1	nearest acre
Over 100 acres	nearest acre	nearest acre

Presentation of computation

63. The computation of every survey submitted for authentication shall be preceded by—

- (a) a report; and
- (b) a general index to the computation; and
- (c) a complete list of final co-ordinates of every point adopted or calculated in the survey; this list shall be arranged in groups comprising datum points, new triangulation, trilateration, and traverse stations, old or re-established boundary beacons and new boundary beacons, arranged in alphabetical and numerical order; and on this co-ordinate list a description of every point shall be given, and reference shall be made to the source of co-ordinates including datum plans or pages of computations.

PART VII

PLANS

Plans to be drawn on special forms

64. (1) All plans shall be drawn in waterproof inks on such plan forms as the Chief Surveyor may require.

(2) Licensed surveyors shall pay to the Chief Surveyor the cost price of any plan forms supplied to them by the Chief Surveyor.

Scales to be used

65. Plans shall be plotted at the same scale as the Registry Map of the registration section in which the parcel is situated:

Provided that in special circumstances plans shall be plotted at such scale as the Chief Surveyor may require.

Plotting of curvilinear boundaries

66. (1) Where the consent of the Chief Surveyor has been obtained for the adoption of an existing survey of a curvilinear boundary, the surveyor shall—

- (a) make an accurate reduction of the larger scale plan for use at a smaller scale or;
- (b) make an accurate transfer for use at the same scale; or
- (c) replot from the original field notes and computations for use at a larger scale.

(2) Where a rectilinear boundary intersects a curvilinear boundary and the provision of regulation 18(1) is applicable, the distance from each line or river beacon to the intersection shall be shown to the nearest foot, but the distances between successive beacons along the rectilinear boundary shall be shown to the degree of precision required by regulation 70(3).

(3) Where a curvilinear boundary of a parcel has been fixed, such curvilinear boundary shall be distinctively described.

Plotting by co-ordinates

67. (1) All plans shall be plotted by rectangular co-ordinates.

(2) A plotting grid of squares covering the surveyed areas shall be drawn in blue such that grid line values shall be at intervals of 500 feet or even multiples of 500 feet.

(3) Every plan shall contain at least one complete grid square and no square shall have sides exceeding 8 inches in length.

General rules

68. (1) All detail shown on the plan shall be distinct and the cramping of figure shall be avoided.

(2) The north point on every plan shall be upwards and parallel to the sides of the plan form.

Abutting boundaries

69. (1) All boundaries abutting on any parcel which has been surveyed shall be shown on the plan.

(2) Where the parcel or parcels adjoin a surveyed road, and where the scale of plotting permits, the boundaries abutting on the other side of the road shall be shown.

Co-ordinates and numerical data

70. (1) In every survey the co-ordinates of permanent control stations shall be tabulated on the plan.

(2) Where boundaries of parcels have been fixed, the following additional information shall be given on the plan—

(a) the co-ordinates of block corners of regular shaped figures and of all beacons of irregular shaped parcels shall be tabulated.

(b) the length and bearing of every boundary shall, when possible, be inscribed along the line to which they refer and such lengths and bearings shall be deduced from the final co-ordinates tabulated on the plan.

(3) Co-ordinates, and lengths when required by paragraph 2 of this regulation, shall be shown to one decimal place of a foot or to two decimal places of an international metre.

(4) (a) The area of every parcel shall be inscribed where possible within the figure to which it refers to the degree of accuracy prescribed by regulation 62 of these Regulations.

(b) Sufficient space shall be left for the parcel number to be inserted by the Chief Surveyor.

(c) No parcel number shall be inserted by any surveyor.

(5) All other data which may serve to clarify or complete any survey plan, shall be shown on the plan.

Triangulation charts

71. When surveys have been made by triangulation or trilateration or a combination of these techniques, a chart drawn on a separate plan form shall be made showing all rays observed or measured or both. Such charts shall show a tabulated list of final co-ordinates of all permanent control points:

Provided that it shall not be necessary to draw a separate plan where the control points have been surveyed by methods permitted in regulation 34(2).

Colours and style of printing

72. Every survey plan shall be drawn in accordance with the requirements of the Chief Surveyor, in respect of colours, style of printing and other details.

Topographical features

73. (1) All topographical features that have been accurately fixed by survey, or have been sketched with reasonable precision, in accordance with regulation 54(1), shall be shown in their correct plotted positions on the plan.

(2) When form lines add nothing of significant value to the plan, they shall not be shown.

(3) Topographical information may be taken from any official map published by the Chief Surveyor or any authority approved by the Chief Surveyor with due caution in regard to the limitations enjoined by the scale of the map.

(4) Where topographical information is taken from aerial photographs, the source shall be shown on the plan.

Erasures or corrections

74. (1) No erasures shall be made after a plan has been drawn in ink.

(2) Necessary correctness shall be made by scoring through the incorrect words, letter, or numeral in ink and writing the correct word, letter, or numeral outside the incorrect word, letter or numeral. Every such correction shall be initialled by the surveyor.

Certificate

75. Every plan shall have on it a certificate in such form as the Chief Surveyor may require and the certificate shall be signed and dated by the surveyor who made the survey.

Authentication by Chief Surveyor

76. The Chief Surveyor may refuse to authenticate any plan submitted by a licensed surveyor which, in his opinion has been drawn carelessly and untidily, or is received by him in a dilapidated or damaged condition.

PART VIII

MISCELLANEOUS

Public access to maps and plans

77. (1) Any person shall have access, free of charge, to every published map and plan in the possession of the Chief Surveyor:

Provided that the Chief Surveyor or his representative may refuse access as he may deem necessary in the public interest.

(2) A search fee of \$1 per plan shall be paid in advance by any person who is not a licensed surveyor or not on Government duty, for access to any unpublished plan. The search fee may be credited against the price of any print of the plan purchased at the time of the search.

FIRST SCHEDULE
PRESCRIBED FORMS

FORM A

(Regulation 12)

LETTER OF AUTHORITY

In exercise of the powers conferred upon him by regulation 12 of the Survey Regulations, the Chief Surveyor hereby authorises
..... (name and designation of person authorised) to enter upon any land to perform any duty which he is required to perform under the Land Survey Act.

Dated, 20
.....
(Chief Surveyor)

Note the relevant sections 16, 18 and 20 of the Land Survey Act are printed for general information, on the back of this Letter of Authority.

FORM B

(Regulation 13)

CERTIFICATE FOR UNQUALIFIED ASSISTANTS

I certify that all the work performed in the field and in the office by my assistant, has been carried out under my personal direction, and I take full responsibility for all work so performed.

Dated, 20
.....
(Licensed Surveyor)

SECOND SCHEDULE*(Regulation 14)***FEES PAYABLE FOR SURVEYS
EXECUTED BY THE SURVEY DEPARTMENT**

1. For surveys for alienation and first registration of any Crown land, fees shall be assessed in accordance with the following formula—

Under 5,000 sq. ft.	\$ 175.00
5,000 – 10,000 sq. ft.	200.00
10,000 – 15,000 sq. ft.	225.00
15,000 – 20,000 sq. ft.	250.00

over 20,000 to be assessed by Chief Surveyor.

(Amended by Act 8 of 1999)

2. For surveys for the fixing of boundaries under section 18 of the Registered Land Act, fees shall be assessed in accordance with the Fifth Schedule to these Regulations.
3. For mutation surveys, fees shall be assessed in accordance with the following provisions—
- (a) where the registered owner of a parcel, the boundaries of which have not been fixed, has demarcated the mutation on the ground—
- For each parcel of land to be transferred \$25 A (where “A” is the square root of the area, in acres of the parcel) Provided that the fees shall be computed to the nearest \$5 and the minimum fee shall be \$25;
- (b) where the registered owner of a parcel, the boundaries of which have not been fixed, requires a specific area to be surveyed for transfer and in all cases where the boundaries of the parcel have been fixed, fees shall be assessed in accordance with the Fifth Schedule to these Regulations.
4. In any other case survey fees shall be assessed by the Chief Surveyor.
5. The Chief Surveyor may, at his discretion, remit part or all of any fee.
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THIRD SCHEDULE

(Regulation 14)

**FEES PAYABLE FOR THE AUTHENTICATION OF PLANS
SUBMITTED TO THE CHIEF SURVEYOR FOR APPROVAL**

The following fees will be charged for the authentication of every plan submitted to the Chief Surveyor for approval—

For each parcel shown on the plan \$1A

(where “A” is the square root of the area, in acres, of the parcel)

Provided that—

- (i) fees shall be calculated to the nearest \$1 with a minimum of \$5 and a maximum of \$100;
 - (ii) the fee for each easement shall be \$5;
 - (iii) one-half the above fees shall be charged for authenticating compiled plans;
 - (iv) the Chief Surveyor may, at his discretion remit part or all of any fee;
 - (v) no fee shall be charged for authenticating any triangulation chart, traverse chart, or any survey made for re-establishment of beacons.
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FOURTH SCHEDULE*(Regulation 14)***FEES CHARGEABLE FOR DOCUMENTS ISSUED AND
OTHER SERVICES RENDERED BY THE SURVEY DEPARTMENT**

The following fees shall be charged—

1. Prints of survey plans on dyeline paper A4 size \$1 each larger by arrangements:

Provided that licensed surveyors may be granted a discount of 25%.

2. Photocopying computations, field notes etc. per foolscap sheet \$1
3. Provision of survey data per approved scheme: \$10

Provided that prints of plans up to a maximum of three per scheme shall be included in the fee. Any additional prints in excess of this number shall be charged as in paragraph 1 above.

4. Preparation of special plans, maps or issue of any special documents not listed in this Schedule shall be assessed by the Chief Surveyor.
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FIFTH SCHEDULE

LAND SURVEYORS' FEES

(Inserted by G. 3 of 1987)

Fees chargeable by Licensed Surveyors in accordance with the agreement of the Survey Board.

1. Single Plots – 1 acre and below

(a) Below ¼ acre	300.00
(b) ¼ acre to ½ acre	400.00
(c) ½ acre to 1 acre	500.00

2. Plots above 1 acre

For the 1 st acre	500.00
Next 4 acres	300.00 per acre
Next 10 acres	150.00 per acre
Next 20 acres	100.00 per acre
Next 40 acres	75.00 per acre
Next 25 acres	50.00 per acre
Additional acres	25.00 per acre

3. Town Surveys

Apply 50% of the above minimum charges plus 1% of the market value of the land up to the first \$10,000, plus ½% for the next \$40,000 plus ¼% on the residue or by special arrangement with the client.

4. Old Boundary Surveys

The charge shall be \$200 plus \$50 per 100 feet for transversing or \$75 for boundary mark.

Note: *The above fees do not include the cost of labour, permanent marks and transportation.*
