#### **Land Boundaries**

Cap. 228B.

#### LAND BOUNDARIES (LAND SURVEY) REGULATIONS, 1993

1993/55.

Authority:

These regulations were made on 18th May, 1993 by the Chief Surveyor under section 18 of the Land Boundaries Act, and approved by the Land Surveyors Board.

Commencement: 24th June, 1993.

- 1. These Regulations may be cited as the Land Boundaries (Land Short title. Survey) Regulations, 1993.
  - 2. In these regulations

Interpretation.

- "Barbados Grid" means the Transverse Mercator Projection adopted by the Land Surveyors Board;
- "Board" means the Land Surveyors Board established pursuant to section 3 of the Land Surveyors Act;

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a land

surveyor.

- "control station" means a permanent station of known position which has been accepted by the Department;
- "DLS control" means the system of control stations.
- 3. (1) A land surveyor who makes a survey in accordance with Duties of these regulations shall
  - (a) comply with any supplementary instructions issued by the Chief Surveyor with the approval of the Board; and
  - (b) conform to accepted good survey practice where the procedure is not specified in these regulations nor in a code of practice approved by the Association.
- (2) A land surveyor shall, before making a survey, make every reasonable effort to obtain, from the Department or from any other acceptable source, any information with respect to

- (a) the boundaries of the land to be surveyed;
- (b) land adjacent to the land being surveyed; and
- (c) any control data relevant to the parcel of land being surveyed.
- (3) A land surveyor shall inform the Chief Surveyor of any disturbance to a control station.
- (4) A land surveyor shall provide the Department with a description and the co-ordinates of all permanent control stations which are established by the land surveyor in the course of a survey and the information regarding the accuracy of the observations shall also be supplied.
- (5) A land surveyor shall when carrying out a survey, use such equipment and methods as will readily attain the prescribed standards of accuracy as are set out in these regulations.

# Orientation of survey.

- 4. (1) A survey plan drawn by a land surveyor shall be oriented on the Barbados Grid.
- (2) The source of orientation of a survey plan referred to in subparagraph (1) shall be
  - (i) stellar or solar observation for azimuth;
  - (ii) control stations;
  - (iii) a nearby survey; or
  - (iv) any other method which gives equivalent accuracy.

# Control stations.

- 5. (1) The Chief Surveyor shall, with the approval of the Board, define areas in which there is a sufficient density of control stations.
- (2) Where a land surveyor carries out a survey in an area defined in sub-paragraph (l) the land surveyor shall relate the survey to the control stations and shall show on the plan the co-ordinates of at least one point.
- (3) The procedure set out in sub-paragraph (2) is mandatory in all areas which have been declared as Registration Districts by the Minister responsible for Land Registration.

6. (1) Where a parcel of land to be surveyed has a Registered Adjudicated Title, any survey made of that parcel shall conform to the adjudicated boundaries shown on the map kept by the Registrar of Titles, in the regulations known as the Registry Map unless the survey is for the purpose of altering the boundaries.

boundaries.

- (2) Permission to alter or vary adjudicated boundaries of registered land shall only be granted by
  - the Registrar of Titles; or (a)
  - an order of the Supreme Court of Barbados.
- 7. (1) Where a land surveyor surveys a parcel of land he may use Boundary any of the following boundary marks
  - (a) iron stakes of not less than 15 mm in diameter and which are fixed firmly in the ground;
  - (b) crosses cut in rocks, stones, concrete pavements and curbs;
  - (c) corners of buildings, or walls;
  - (d) any other type of mark specified by the Chief Surveyor with the approval of the Board.
- (2) An approved boundary mark shall be placed at every corner of the land being surveyed except in a case where to do so is physically inappropriate, in which case every effort shall be made by the land surveyor to adequately define the boundary.
- (3) Where the boundary of a parcel of land passes through a significant obstacle, the land surveyor shall place boundary marks on either side of the obstacle in order to define the boundary.
- (4) Except as provided in sub-paragraph (3), adjacent boundary marks on the land being surveyed shall be intervisible.
- (5) A land surveyor shall where necessary place intermediate marks as long lines at such a distance that no interval shall exceed 150 metres.

regs.8-9

Presentation of plans.

- 8. (1) A survey plan shall be drawn on standard ISO-A series size sheets of good quality paper or plastic film.
- (2) The largest size sheet of paper or plastic film on which a survey plan may be drawn shall be AO size (1189mm x 841mm).
- (3) The smallest size sheet of paper or plastic film on which a survey plan may be drawn shall be A4 size (297mm x 210mm).

Information.

- 9. Every survey plan shall contain the following information
- (a) a North Point showing Barbados Grid North, oriented parallel to the upright edge of the paper. This requirement may be relaxed to allow a drawing to fit on a smaller size sheet if the orientation was rotated. In all such cases the direction of the North Point must be generally towards the top of the sheet;
- (b) a description of each boundary mark used in the survey whether the boundary mark is a new mark or an old mark found in the course of the land survey;
- (c) the bearing of each line between adjacent boundary marks expressed in degrees and minutes of arc and measured clockwise from Barbados Grid North;
- (d) where a survey has been tied to grid control the co-ordinates for the end points of long lines should be given so as to improve the accuracy of the cadastral map and the definition of boundaries;
- (e) the distance between adjacent boundary marks expressed in metres to two decimal places;
- (f) the bearing and distance from the boundary marks on the land being surveyed to adjacent boundary marks on adjoining properties where these boundary marks have been surveyed;
- (g) the area of the parcel of land surveyed expressed in square metres or hectares where appropriate;
- (h) where several parcels of land are shown on the same plan, the total area of the land and the number of parcels comprising the area shall also be shown in addition to the area of each parcel of land;

- the area in road as defined by the Town and Country Planning Cap. 240. (i)Act shall be shown:
- the names of the persons who own the parcels of land adjacent to the one being surveyed or the parcel numbers of these adjacent parcels and any other description which helps to describe the parcel of land;
- the information printed on the standard plan forms approved by the Board and the Association;
- where appropriate, plans of sub-divisions shall show tie-lines across roads or additional co-ordinates so as to join separate blocks of parcels of land, and where a "key plan" is not being recorded the individual lot plans shall show tie-lines to the lots on the opposite side of the road, or a co-ordinate on each lot plan; and
- (m) any features which affect the land and are subject to registration such as rights of way.
- 10. (1) The original and 2 copies of every plan prepared by a land Recording of surveyor shall be submitted to the Chief Surveyor for recording.

survey plans and other data.

- (2) Where a plan and copies thereof are submitted to the Chief Surveyor in accordance with subsection (1) the Chief Surveyor shall affix the appropriate stamp on all copies of the plan and shall lodge one copy in the Department for recording.
- (3) The land surveyor may present additional copies of the plans to the Chief Surveyor for the affixing of the official stamp.
- (4) For each additional copy of a plan presented to the Chief Surveyor for the affixing of the official stamp the land surveyor presenting the plan shall pay to the Chief Surveyor a fee of twenty-five dollars.
- (5) The copy of a plan which is lodged in the Department shall satisfy the following requirements
  - it shall be drawn on a durable material; and

- regs.11-12
- (b) the image shall be permanent and legible.
- (6) A survey plan submitted under sub-paragraph (1) shall be the plan of a survey that has been completed.
- (7) A plan of a proposed sub-division of land shall not be certified and shall not be accepted for recording.
- (8) Field notes and other data may be recorded by the land surveyor at the same time as the plan to which they refer or may be presented at a later date.
- (9) The recording of field notes and other data only signifies that an identical copy of the notes and data have been lodged in the Department.

### Refusal to record.

- 11. A plan presented for recording may be refused by the Chief Surveyor on any of the following grounds
  - (a) the absence of
    - (i) the signature of the surveyor who prepared the plan,
    - (ii) the date of certification,
    - (iii) a North Point,
    - (iv) the scale of the plan,
    - (v) the location of the land,
    - (vi) the parish,
    - (vii) the name of the client,
    - (viii) the abuttals,
    - (ix) a description of each boundary mark;
  - (b) inconsistency between the title block and the rest of the plan; and
  - (c) illegibility of information on the plan.
- Survey specifications.
- 12. (1) A land surveyor shall ensure that where he conducts a survey he satisfies the following criteria for accuracy

- (a) an angular misclosure of not more than 1 minute of arc per measured angle or 5 minutes of arc, whichever is the lesser;
- (b) a linear misclosure of better than 1/3000 of the distance traversed or 0.20m whichever is the smaller, except that traverses with a total length of less than 120m may have a misclosure not exceeding 0.040m;
- (c) the angle deduced from the bearings shown on a boundary plan shall be correct to within two minutes of arc or such angle as would be equivalent to a displacement of each of the marks at the ends of the two lines defining the angle by 0.030 metres at right angles to the lines, whichever is the greater;
- (d) the distance between any two marks as shown on a plan shall be correct to within 0.030 metres or 1/2000 of the distance, whichever is the greater;
- (e) orientation derived from
  - (i) astronomical observation,
  - (ii) DLS control.
  - (iii) a previous survey, or
  - (iv) any other method

shall be achieved by such methods as to ensure that any error does not exceed two minutes of arc. Orientation derived from the mean of 3 solar or stellar derivations of azimuth whose spread does not exceed three minutes of arc is deemed to be satisfactory;

- (f) traverses or other survey methods used to obtain the grid co-ordinates of a point on a survey plan shall be carried out using equipment and methods giving no less accuracy than specified in sub-paragraphs (a) to (e);
- (g) traverses made under sub-paragraph (f) need not be closed.
- (2) Where the direct distance from a control station to the site exceeds 500m then the distances used to obtain the grid co-ordinates shall be reduced to Mean Sea Level.