1972/264



THE SURVEY REGULATIONS 1972

DENIS BLUNDELL, Governor-General

ORDER IN COUNCIL

At the Government House at Wellington this 27th day of November 1972

Present:

HIS EXCELLENCY THE GOVERNOR-GENERAL IN COUNCIL

PURSUANT to the Surveyors Act 1966, His Excellency the Governor-General, acting by and with the advice and consent of the Executive Council, and on the advice of the Minister of Lands given on the recommendation of the Survey Board, hereby makes the following regulations.

ANALYSIS

- 1. Title and commencement
- 2. Interpretation
- 3. Surveys
- 4. Duty of surveyor
- 5. Surveyor to comply with good survey practice
- 6. Surveyor to comply with requisition by Chief Surveyor
- 7. Inquiries by Surveyor-General 8. Information to be obtained
- 9. Field notes
- 10. Distances
- 11. Bearings
- 12. Origin of co-ordinates and bearings 13. Check bearings
- 14. Angular and linear errors
- 15. Traverse computations and closures
- 16. Elimination of close 17. Traverse sheets
- 18. Boundaries to be marked
- 19. Measurements to natural boundaries
- 20. Irregular boundaries
- 21. Boundary marks

- 22. Traverse and witness marks
- 23. Curved boundaries
- 24. Permanent reference marks
- 25. Hanging traverses
- 26. Computation of triangles and azimuths
- 27. Computation of areas
- 28. Plan forms and scales
- 29. Plan drawings
- 30. Plotting
- 31. Symbols for survey marks or stations
- 32. Topographical features
- 33. Plan details
- 34. Measurements
- 35. Plans the property of the Crown
- 36. Plans to be lodged
- 37. Legalisation plans
- 38. Maori land plans 39. Land transfer plans
- 40. Mining plans
- 41. Unit plans
- 42. Redefinition surveys
- 43. Revocation and savings

REGULATIONS

1. Title and commencement—(1) These regulations may be cited as the Survey Regulations 1972.

(2) These regulations shall come into force on the 1st day of January 1973.

2. Interpretation—In these regulations, unless the context otherwise requires,—

- "Board" means the Survey Board constituted under the Surveyors Act 1966:
- "Chief Surveyor" means the Chief Surveyor appointed under the Land Act 1948 for the land district containing the land to which a survey relates; and includes his deputy:
- "Class C survey" means any survey, other than a survey of Class A or of Class B, for which by reason of the terrain, the availability of survey data, the value of the land, the type of tenure, or such other factors as the Chief Surveyor in any case considers relevant, the expense of a Class B survey is in the opinion of the Chief Surveyor not warranted:
- "Easy to hilly country" means country which is level or which has an average surface slope of not more than 15 degrees:
- "Plan" includes all plans resulting from any survey made in accordance with these regulations:
- "Rough country" means country which has an average surface slope of more than 15 degrees:
- "Rural survey" or "Class B survey" means any survey, other than a Class C survey, that is not a town survey:
- "Survey" means any survey required or made under any Act relating to or affecting title to land, whether the title is in fee simple or any lesser interest:
- "Surveyor" means a person registered as a surveyor under the Surveyors Act 1966:
- "Surveyor-General" means the Surveyor-General appointed under the Land Act 1948; and includes his deputy:
- "Survey plan" means the plan prepared to record the evidence found, the marks placed, and the measurements made to effect the survey:
- "Title plan" is the plan prepared from the survey plan to support the issue of title, and for the purposes of any other Act shall be deemed to be the survey plan of subdivision:
- "Town survey" or "Class A survey" means any survey for residential, commercial, or industrial purposes, and includes any survey within any residential, commercial, or industrial area.

3. Surveys—(1) All surveys shall be executed by a surveyor holding an annual practising certificate as required by the Surveyors Act 1966, or shall be executed under the direction of a surveyor holding an annual practising certificate as so required by the Surveyors Act 1966, and plans shall bear the signature of the surveyor executing the survey or under whose direction the survey is executed.

(2) Responsibility for a survey shall rest with the surveyor whose signature appears on the plan.

(3) No plan shall be accepted as an official record of survey unless approved by the Chief Surveyor.

(4) Surveys shall be carried out with such equipment and by such methods as will readily attain the standards of accuracy prescribed by these regulations; and it shall be the duty of every surveyor at all times to apply such checks and tests to his work as may be necessary to obtain those standards. 4. Duty of surveyor—(1) Every surveyor shall, when making a survey to which these regulations apply, keep in mind the responsibilities of the Crown which may arise as a consequence of any wrongful or inaccurate survey. In particular, each surveyor shall search for all old marks necessary to prove the accuracy of his survey, and, having found those marks, shall connect his survey to them. Each surveyor shall supply to the District Land Registrar and the Chief Surveyor all information obtained by him relating to the survey.

(2) Surveyors shall report to the Chief Surveyor any disturbance or the likelihood of any disturbance to trigonometrical stations or other control survey marks; and surveyors engaged on Government work shall renew or repair any such stations and marks, or report their inability to do so.

5. Surveyor to comply with good survey practice—To the extent that no express provision is made by these regulations, every surveyor shall comply with accepted good survey practice.

6. Surveyor to comply with requisition by Chief Surveyor—On receipt of a requisition from the Chief Surveyor to amend a survey plan or to supply information concerning it which is not contained in the field notes or shown on the plan, and which in the opinion of the Chief Surveyor is necessary to complete the plan or survey in terms of these regulations, the surveyor shall comply promptly with the requisition.

7. Inquiries by Surveyor-General—In the event of any dispute arising between the Chief Surveyor and a surveyor relating to any survey to which these regulations apply, the matter may be referred to the Surveyor-General, who shall inquire into it, and his finding shall be communicated to the Chief Surveyor and the surveyor.

8. Information to be obtained—(1) Before commencing any survey, a surveyor shall obtain all requisite information relating to the land to be surveyed and all land adjacent to the land to be surveyed, from the offices of the District Land Registrar and the Chief Surveyor of the district in which the land is situated.

(2) For the purposes of subclause (1) of this regulation, official survey records shall be available to surveyors or staff in their employment, without fee, during normal office hours and under the supervision of the officer having charge of those records.

(3) No information so obtained shall be used in any way that infringes the copyright of the Crown or of any other person.

9. Field notes—(1) The field notes of a survey shall contain a record of all observations and measurements made by the surveyor and of the marks found or placed by the surveyor for the purposes of these regulations.

(2) The field notes shall record the type of equipment including the number of the measuring band used for the survey, and in the case of electronic distance measuring equipment the make, model, and number of the equipment.

(3) Field notes shall be neatly and clearly recorded in black pencil in such a way that any surveyor or competent draughtsman may draw a correct plan of the survey. (4) Field notes shall be recorded on approved loose leaves or in an official field book and shall accompany the plan when lodged with the Chief Surveyor. Official field books which are not filled will be returned to the surveyor on completion of the plan examination for use on other surveys. Filled field books will be retained as official records.

(5) The original pencil notes shall not be obliterated or inked over or erased. Every alteration made by the surveyor shall be clearly written and erroneous entries shall be clearly crossed out.

(6) The first page of the field notes of each survey shall show the title of the survey, with particulars of the district, block, town, or such other reference as shall sufficiently identify the land surveyed, the date of commencing the survey, and the signature of the surveyor. Each page of the field note shall be initialled by the surveyor and dated.

10. Distances—(1) All distances shall be expressed in metres and decimal fractions of a metre.

(2) The surveyor shall ensure that all distances shown in his field notes are in terms of the official standard of length, and on request shall supply to the Chief Surveyor a certificate of comparison of the measuring band or other measuring equipment used on the survey, with the official standard.

(3) The necessary corrections for temperature, sag, slope, and height above sea level, shall be applied to the measured distances and the final horizontal distance at sea level shown in the field notes.

11. Bearings—(1) Bearings shall be measured in degrees, minutes, and seconds of arc in sexagesimal measurement, commencing at 0° , the north point of the true meridian of the initial station of the circuit, and thence through east, south and west, in that order, returning to the north point at 360° .

(2) Bearings for Class A and Class B surveys shall be measured with a theodolite. Bearings for Class C surveys may be measured with a magnetic compass.

(3) Corrections for origin and closure, and where necessary, magnetic declination, are to be applied, and the deduced bearing shown in the field notes.
 (4) For the purposes of computation and recording on plans the

| deduced bearings may | be rounded off as foll | on plans | uic |
|----------------------|------------------------|----------|-----|
| | T .1 CT. | | |

| Class of Survey | Length of Line | May be rounded off to nearest | | |
|-----------------|----------------|-------------------------------|--|--|
| Α | Up to 100 m | 0° 01′ 00″ | | |
| " | Over 100 m | 0° 00′ 30″ | | |
| Ë | Up to 200 m | 0° 01' 00'' | | |
| " | Over 200 m | 0° 00′ 30″ | | |
| Ő | Up to 100 m | 0° 30' 00" | | |
| >> | Over 100 m | 0° 15′ 00″ | | |

12. Origin of co-ordinates and bearings—(1) Subject to subclause (2) of this regulation, the origin of co-ordinates and bearings shall be obtained from—

(a) The triangulation or control survey system; or

- (b) Surveys approved under these or former regulations; or
- (c) Any other surveys executed by registered surveyors which the Chief Surveyor at his discretion accepts as suitable for the purposes of these regulations.

(2) If it is impracticable to carry out the methods mentioned in subclause (1) of this regulation, the origin of bearings may be obtained from at least 2 independent stellar or solar observations.

(3) The reliability of any 2 marks for the purposes of this regulation shall be proved by testing their agreement with a third approved mark.

(4) Subject to subclauses (1) to (3) of this regulation, the following methods of survey shall be acceptable for the purposes of this regulation:

- (a) By direct traverse; or
- (b) By well-conditioned connecting triangle; or
- (c) By resection from at least 4 favourably situated control survey stations that are part of a reliable triangulation system.

13. Check bearings—(1) Where a traverse through dense bush consists of more than 20 lines, check bearings shall be observed to stations of the traverse from some well established point. The number of stations between those check bearings shall depend upon the nature of the country and length of the traverse lines, but check bearings shall be observed at approximately every twentieth station where lines are short, that is, where the lines are on the average not more than 100 metres in length. Where lines are on the average, more than 100 metres in length, or where due to the nature of the country difficulty is experienced in obtaining accurate angular observations of the traverse lines, check bearings shall be observed at approximately every tenth station. Stellar or solar azimuths may be used for checking purposes when other means are impracticable.

(2) Where lines exceed 2,000 metres in length, check bearings shall be applied to the stations at both ends of the lines.

(3) In country other than bush, check bearings shall be observed to approximately every tenth station, except when lines average more than 200 metres in length, when check bearings shall be observed at stations not more than 2,000 metres apart. The nature and location of check bearings shall always depend upon the circumstances of the particular case, and shall be governed by the nature of the country, the length of the lines, and the visibility at the time of observation.

14. Angular and linear errors—(1) The bearing of any line shown on a plan shall not differ from the true bearing expressed in terms of the origin of bearings of the survey by more than the following limits of error:

| Class of Survey | Length of Line | By not more than |
|-----------------|----------------|------------------|
| А | Up to 200 m | 0° 01′ 00″ |
| ,, | Over 200 m | 0° 00′ 30″ |
| B | Up to 200 m | 0° 02′ 00″ |
| >> | Over 200 m | 0° 01′ 00″ |
| Ĉ | Up to 100 m | 0° 30' 00'' |
| " | Over 100 m | 0° 15′ 00″ |

(2) The length of any line shown on the plan shall not differ from its true length in terms of the official standard of length by more than the following limits of error:

Class of Survey

| Α | 0.01 m plus 0.001 m for each 10 m. |
|---|--|
| В | 0.01 m plus 0.001 m for each 10 m. 0.02 m plus 0.002 m for each 10 m. 0.1 m plus 0.01 m for each 10 m. |
| С | 0.1 m plus $0.01 m$ for each $10 m$. |

(3) Measurements shall be rounded off-

- (a) In the case of Class A surveys, normally to 0.01 m; but where in the opinion of the surveyor a higher degree of precision is desirable because of land values or other relevant factors, measurements may be rounded off to 0.005 m:
- (b) Class B surveys, to 0.01 m:

(c) Class C surveys, to 0.1 m.

15. Traverse computations and closures—(1) All traverses shall be computed and co-ordinated in terms of the meridian and perpendicular of the initial station of the meridional circuit, and, where necessary, the co-ordinates shall be adjusted to conform to the projection laid down for that circuit.

(2) Co-ordinates shall be shown to the following accuracy:

(a) Class A and B surveys—to the nearest 0.01 m.

(b) Class C surveys-to the nearest 0.1 m.

(3) The closure of the traverse on to well established marks, or with the original or initial point of the survey after completing the traverse circuit shall not exceed the following limits with a minimum of 0.02 m for Class A and Class B surveys:

| | | 1:5000 |
|-----------|-------|-----------------|
| | | 1:3500 |
| ••••• | ••••• | 1:2500 1:200 |
| | | |

(4) Notwithstanding anything in subclause (3) of this regulation, in cases where the traverse circuit comprises in whole or in part traverse or boundary lines adopted from prior surveys, or comprises a combination of Class B or Class C surveys, the closing limits prescribed in this regulation may be increased at the discretion of the Chief Surveyor.

16. Elimination of close—(1) In new traverses forming a complete surround, or in traverses connecting 2 triangulation or control survey stations, where those traverses have been adjusted to conform with the geodetic triangulation, the closing error shall be eliminated by applying the Bowditch Rule to distribute the closing error in accordance with subclause (2) of this regulation.

(2) As the total length of the traverse is proportional to the length of each line, so the whole error in latitude or departure is directly proportional to the correction of the corresponding latitude or departure, and each correction so ascertained shall be applied so as to diminish the whole error in latitude or departure. 17. Traverse sheets—Traverse co-ordinate values of all main traverse stations and of all boundary angle marks, together with the appropriate references to sources of the initial values used, shall be tabulated on approved sheets, to be lodged with the plan; but where a number of intermediate marks are placed on a line between 2 control survey marks or other well established traverse marks, co-ordinates of those intermediate marks need not be tabulated, unless required for calculation purposes.

18. Boundaries to be marked—(1) Boundaries shall be marked at every angle and, where necessary, at points on the boundary line, in accordance with regulation 21 of these regulations. Straight boundary lines shall be cleared where necessary and distinctly marked at intervals not exceeding 500 metres, which may be varied to suit the conformation of the country. Advantage shall be taken of the most prominent and favourable positions on the line for the markings so that the direction may be seen from mark to mark.

(2) In bush country where complete measurement of the boundary is not necessary, then, subject to the approval of the Chief Surveyor, only such cutting of the line shall be required as will ensure adjoining marks being visible from each other, but the cutting shall be sufficient to enable the distances from such marks along the line to be arrived at to show approximately on the plans the position of the marks. Under all circumstances the lines shall be cut for a distance of at least 100 metres from the boundary corners at each end to such a position that the boundary may be readily ranged and the distance to the mark determined for noting on the plan.

(3) Every survey mark defining an angle in a boundary shall be connected to a traverse mark or a witness mark situated at a distance by traverse of, generally, not more than 50 metres from the traverse mark or witness mark in a town survey, and not more than 100 metres from the traverse mark or witness mark in a rural survey; but those distances may be varied to suit the conformation of the country. No survey mark defining an angle in the boundary shall be itself a witness mark.

19. Measurements to natural boundaries—(1) Offset measurements fixing natural boundaries from traverse lines shall be taken at intervals sufficient to delineate those boundaries accurately and shall be shown on the survey plan; but no such measurements shall exceed 50 metres in length unless the natural boundary is tortuous or is located in rough inaccessible country, in which case the length of this measurement may be varied to suit the physical features.

(2) Notwithstanding anything in subclause (1) of this regulation, fixation may be determined by tacheometric, photogrammetric, plane table, or compass surveys. Field notes and data required for these alternative methods shall accompany the survey plan.

20. Irregular boundaries—(1) Swamps, irregular fences, terraces, ridge lines, or similar natural physical features are inadmissible as boundaries unless they are reduced to right lines.

(2) Notwithstanding anything in subclause (1) of this regulation, any of the features therein mentioned may, in exceptional circumstances, or with the prior consent of the Chief Surveyor, be accepted as boundaries for Class C surveys, in which case they may be defined by tacheometric, plane table, photogrammetric, or compass survey methods.

21. Boundary marks—(1) Boundary marks shall be—

- (a) Suitably reinforced concrete pegs not less than 50 cm long with a minimum cross section of 55 square cm, and driven or set to finish not more than 50 mm above ground level; or
- (b) Wooden pegs of durable or treated timber of a kind approved by the Chief Surveyor, not less than 50 cm long, with a minimum cross section of 35 square cm square pointed and chamfered, and driven to finish not more than 75 mm above ground level. In bush country, wooden pegs shall have an iron rod or tube, not less than 50 cm long driven alongside the northern face of the peg; or
- (c) Plastic or other suitable permanent material that has the prior approval of the Chief Surveyor and has dimensions similar to that of a wooden peg; or
- (d) A sound fence post.

(2) Where the presence of rock, stone, concrete, or other permanent material or structure makes it impossible to use any of the boundary marks specified in subclause (1) of this regulation,—

- (a) A metal rod not less than 50 cm long and of at least 1 cm in diameter shall be used and driven or set to finish not more than 5 cm above ground level; or
- (b) Metal or plastic marks, of a type approved by the Chief Surveyor, shall be used, grouted if necessary into the base material to ensure stability. The height of the mark above ground level shall be shown on the plan.

(3) Notwithstanding anything in subclause (1) or subclause (2) of this regulation, in rural surveys where the boundaries are unfenced, trenches or lockspits 1.5 m long, 0.2 m wide and 0.15 m deep, commencing 0.5 m from the boundary mark and indicating the direction of the boundaries, shall be dug at all boundary corners, or if the country comprises rock or rubble formation, the boundary mark shall be surrounded by a circle of stones, with lines of stones indicating the direction of the boundaries.

(4) Notwithstanding anything in subclauses (1) to (3) of this regulation, if a boundary corner or boundary line falls on a permanent structure or other obstacle in such a manner that it is not possible to use any of the marks prescribed in this regulation, the exact position of the structure or obstacle shall be defined by survey. The relationship between the structure or obstacle and the boundary corner or boundary line shall be clearly shown on the plan of the survey, together with its age and description.

(5) Notwithstanding anything in subclauses (1) to (4) of this regulation, permanence and stability shall be the main considerations in the marking of any boundary, and where necessary the length of any driven mark shall be increased accordingly.

(6) Wherever possible boundary marks shall be branded or carved with a broad arrow, the number of the parcel or parcels, the letter R facing the road frontage, and the letters RW facing a right of way, where applicable.

22. Traverse and witness marks—(1) Subject to subclause (2) of this regulation, traverse and witness marks required for the purposes of regulation 18 (3) of these regulations shall in all but exceptional circumstances be 1 of the types specified in paragraphs (a) to (c) of subclause (1) or in paragraph (a) of subclause (2) of regulation 21 of these regulations, but may be shortened if necessary by 15 cm.

(2) Wooden pegs shall be used only when it is impracticable to use concrete or metal marks, and shall have the traverse point marked by a substantial tack.

(3) All witness and traverse marks shall be placed in positions that are as safe as possible from foreseeable disturbance and shall normally be driven below ground level. Where there is any risk of disturbance or destruction by cultivation, by road formation, by road maintenance, by malicious interference, or by fire, marks shall be driven as deep as is considered necessary for reasonable preservation. The depth of any mark driven deeper than 25 cm shall be shown in the field notes and on the plan. Traverse and witness marks shall be so located and driven that they cannot be mistaken for boundary marks.

(4) Where there is any danger of striking underground services, the length of the mark may be reduced. In paved footways, streets, or roads a metal or plastic mark in accordance with paragraph (b) of subclause (2) of regulation 21 of these regulations may be used.

(5) Notwithstanding anything in subclauses (1) to (4) of this regulation, permanence and stability shall be the main considerations in the marking of traverse and witness stations, and where necessary the length of any driven marks shall be increased accordingly.

23. Curved boundaries—Boundaries defined by curves shall be marked on the ground by pegs or other accepted marks on the curve in such a manner that the offset from the middle of the chord between adjacent ground marks shall not exceed 0.4 metres, nor shall those ground marks be at greater intervals than 20 metres apart, but in every case a curve shall be marked by at least 1 peg or mark in addition to the pegs or marks at the tangent points.

24. Permanent reference marks—(1) All surveys shall be connected to at least 3 permanent reference marks.

(2) For the purposes of these regulations the expression "permanent reference mark" means—

- (a) A trigonometrical station; or
- (b) A standard survey block or other control survey mark; or
- (c) A metal tube of not less than 1 cm internal diameter and 50 cm long, driven at least 50 cm into the ground, and of sufficient stability to guarantee permanence, and where possible set in concrete.
- (d) A metal or plastic mark of a type approved by the Chief Surveyor, securely set or grouted into rock or into a permanent structure; or
- (e) Such other mark as the Chief Surveyor, having regard to the permanence and definiteness, accepts.

(3) Permanent reference marks shall be placed wherever practicable on traverse lines not more than 250 m apart on Class A surveys, or not more than 500 m apart on Class B surveys, in positions free from disturbance. A permanent reference mark may serve as a traverse mark or witness mark but not as a boundary mark. Wherever practicable permanent reference marks shall be so sited that adjoining marks are permanently intervisible.

(4) Notwithstanding anything in subclause (3) of this regulation, the interval between permanent reference marks may be varied to suit the conformation of the country; but no boundary angle mark shall be distant from a permanent reference mark by more than 125 m on Class A surveys, or by more than 250 m on Class B surveys.

(5) Notwithstanding anything in subclause (3) or subclause (4) of this regulation, the density of permanent reference marks required in Class C surveys shall be as agreed with the Chief Surveyor.

(6) Notwithstanding anything in subclauses (1) to (5) of this regulation, permanent reference marks shall be sited and established to ensure the greatest stability, permanence, and convenience for future reference. Generally, where the conformation of the country will permit, they shall be located on the line between a traverse station and a triangulation station or other permanent reference mark. Unless freedom from disturbance or destruction cannot be reasonably inferred, permanent reference marks shall not be located on any road formation, including footpaths, unless investigation shows that such positions are clear of underground services. They may be located at any offset to a traverse where it is not possible to comply with the foregoing requirements.

25. Hanging traverses—A hanging traverse shall not consist of more than 1 line. The line shall not exceed 40 metres in length and independent measurements to check bearing and distance shall be recorded in the field notes.

26. Computation of triangles and azimuths—Where connecting triangles or resections have been observed, or where azimuths have been determined astronomically, the necessary computations shall accompany the plan.

27. Computation of areas—(1) Areas of parcels shall in all but exceptional circumstances be entirely mathematically computed; but where the area is bounded by irregular lines or a large number of sides, a planimeter may be used to obtain the areas of small parts if at least 80 percent of the total area of a parcel is computed mathematically.

(2) Notwithstanding anything in subclause (1) of this regulation, the areas of parcels in Class C surveys may, at the discretion of the Chief Surveyor, be determined entirely by planimeter.

- (3) Areas of parcels-
- (a) Less than 1 hectare (10 000 m²) shall be shown in square metres (m²). The decimal fractions of a square metre resulting from the computation of an area shall not be shown. In all cases areas shall be rounded down:
- (b) One hectare (10 000 m²) and larger shall be shown in hectares (ha), normally to 4 decimal places of a hectare, although for computation purposes a tolerance of ± 1 part in 1000 will be acceptable, and areas may be rounded down within this tolerance.

28. Plan forms and scales—(1) All plans shall be drawn in black on an approved form, and on drawing material approved by the Surveyor-General.

(2) The size of the form shall be International Standards Organisation size A2 measuring 420 mm x 594 mm.

(3) Plans shall be plotted on appropriate metric representative fraction scales that will suitably and clearly illustrate the details of the work. The scale shall be shown in the appropriate panel on the plan. Where necessary intricate detail shall be shown by diagram.

(4) Plans shall be drawn to a standard acceptable to the Chief Surveyor and shall be drawn so as to be suitable for reproduction on to 35 mm microfilm.

29. Plan drawings—(1) Unless otherwise provided by these regulations, 2 plans shall be prepared of surveys to which these regulations apply.

(2) One of the 2 plans mentioned in subclause (1) of this regulation shall be the survey plan which shall show all survey traverses and adopted information that was used for the purposes of boundary definition, and boundary dimensions may be shown if detail permits.

(3) The other plan mentioned in subclause (1) of this regulation shall be the title plan which shall show all areas and boundary dimensions and all such other information and appellations that are necessary for the issue of title.

30. Plotting—(1) A north point shall be shown on all plans.

(2) All plans shall be accurately plotted with the meridian parallel with the side of the plan form and the north point upwards; but in exceptional cases where it is necessary to make the best use of the form on account of the shape or layout of the survey, the plan may be plotted with the meridian at an angle to the side of the form. In such cases this angle is not to exceed 90° , and the north pointing shall not be below a line parallel with the bottom edge of the form.

(3) Full plotting lines are not required; but grid cuts shall be shown towards the edge of the plan form together with their co-ordinate values for at least 2 meridians and 2 perpendiculars, suitably spaced.

31. Symbols for survey marks or stations—(1) Survey marks or stations shall be represented on all plans as follows:

| | New | Adopted | Found |
|--|------------|------------|-------|
| (a) Peg or other mark | 0 | 0 | • |
| (b) Post | | | |
| (c) Iron rod, iron tube, or metal or plastic mark | 0 | 0 | • |
| (d) Permanent reference mark | \bigcirc | \bigcirc | |
| (e) Bench mark, standard block, or other control survey station | 0 | \bigcirc | ۲ |

Old Mark

- (2) All plans shall contain the following information:
- (a) Where necessary all old marks shall be annotated with mark and plan number:
- (b) All adopted marks or traverses shall be annotated with the expression "Adpt"—and shall show the plan number:
- (c) Marks, other than pegs, shall show the type of mark placed:
- (d) The type and number of control survey station shall be noted against the symbol, i.e., B.M. DA 37 or S.S. XX:
- (e) The expression "Conc" shall be shown alongside a concrete peg:
- (f) An old mark found and renewed shall be shown by the symbol of the new mark, and the mark it replaced shall be indicated in the notation:
- (g) Traverse stations shall have their distinguishing number shown.

32. Topographical features—Main topographical features, including Maori sites or earthworks that could be of historical or archaeological significance, shall be shown on the survey plan where appropriate. Where features have been named, the names shall be shown. The conventional signs used on survey plans shall be in accordance with accepted survey practice; and care shall be taken to see that their use does not obliterate or confuse more essential detail of the plan.

33. Plan details—(1) Lines on plans shall be shown as follows:

| | Line Weight Specification |
|--|------------------------------|
| (a) All new survey traverse lines shall be shown by a pecked line, i.e., (b) All boundary lines of parcels on the plan shall be | 0.25 mm |
| shown by a heavy line, i.e., | 0.7 mm |
| (c) Lines that have been calculated or adopted and that are not boundary lines described in paragraph (b) of this subclause shall be shown as a fine line, | 0.05 |
| and shall be annotated with the expression "Calc" or "Adpt.". | 0.25 mm |

(2) Boundary measurements added to survey plans in accordance with regulation 29 of these regulations shall be annotated with the expression "calc" or "adpt".

(3) The letters EM shall be noted after distances obtained by electronic means.

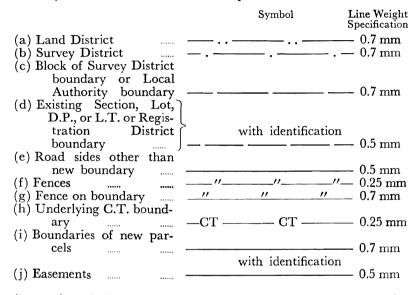
(4) If boundary lines are adopted from prior surveys, it shall not be necessary to show the traverse detail upon which those lines depend, but a reference to the plan from which the lines are adopted shall be shown.

(5) As far as practicable distances and bearings shall be written close to the line with a minimum height of 2.5 mm.

(6) Traverse information shall not be shown on the plans; but boundary and other information shall be shown in accordance with paragraph (b) of subclause (1) and subclause (2) of this regulation.

(7) The description of the survey shall state the correct appellation of the area being surveyed and shall be clearly printed in the title panel on the plan. Reference to the certificate of title shall be shown in the title panel and also on the face of the plan if more than 1 certificate is involved. Closed road or street that has not been assigned a section number shall be shown as "closed road" or "closed street" provided it has not been included as a Lot on a Deposited Plan. The names of the land district, local authority, survey block, and survey districts shall be shown in the title panel.

(8) The boundaries of districts, sections, lots, certificate of title, easements, and fences shall be shown on plans as follows:



A notation shall be shown against any boundary that cannot be readily identified.

(9) All plan numbers shall be shown on the face of the plan in their correct relation to the lots or sections affected, and shall be prefixed by the appropriate letters as follows:

(a) Crown and Statutory S.O.:

(b) Maori M.L.:

(c) Land Transfer (Deposited) D.P.:

(d) Land Transfer (Undeposited) L.T.:

(e) Mining M.

(10) The title plan shall bear all consents and endorsements required under the provisions of any statute applicable to the survey, and all plans shall be verified by the surveyor by a certificate to the effect that the surveys are correct and that these regulations have been complied with, and such other particulars as are set out in the form of verification in the Schedule to these regulations. Where applicable, consents may be shown on a copy of the title plan and forwarded to the Chief Surveyor as a separate document.

(11) The title plan shall show an area for each separate parcel of land shown on the plan. Each separate parcel shall be identified by the appellation of its lot or section number as required. A total area of the land being dealt with shall be shown in the space provided on the plan form. (12) The title plan shall show the position of all existing easements to which the land is subject. The purpose and position of all proposed easements are also to be shown. In order to identify clearly an easement or the parts of an easement a letter or letters may be assigned to the easement or the parts of an easement.

(13) Buildings with their eaves or projecting portions abutting on, overlapping, or closely approaching boundaries shall be accurately fixed, and their position in relation to the boundary clearly specified and delineated on the survey plan. When the wall of a building or structure is erected on or adjoining a boundary, and that wall is used as a party wall or where party wall rights thereto have been created, the wall shall be described as a party wall on the title plan, and the position of the boundary in relation to the wall shall be shown by diagrams illustrating the height and width or any changes in the thickness of the wall. Fixes of the party wall shall be shown on the survey plan. The position of the title boundary relative to the occupation shall be accurately shown, and the nature, description, and age of the feature or occupation shall be stated.

(14) The legality of all roads and streets adjoining or within any area under survey shall be determined, and the names of those roads and streets, together with their nominal and occupied widths, shall be shown on the survey plan. All streets shall be recorded on the title plan.

(15) Notes may be added to a plan for the purpose of clarification, and to reduce repetitive use of annotations.

34. Measurements—(1) The reduced measurements determined in accordance with regulation 10 shall be shown on plans, notwithstanding that those measurements may not agree with those previously recorded.

(2) Where the definite location of a boundary is indeterminate owing to the absence of evidence supplied by approved surveys or undisputed occupation of the requisite age, sufficient measurements shall be made of the adjoining properties to establish the fact that no encroachment is made upon the land of the adjoining titles.

35. Plans the property of Crown—(1) All plans received by the Chief Surveyor from a surveyor or other person for examination shall be deemed to be held on behalf of the surveyor responsible for the plan until approved by the Chief Surveyor. The surveyor may notify the Chief Surveyor that the approval is to be withheld until further notice.

(2) After approval by the Chief Surveyor all plans become the property of the Crown.

36. Plans to be lodged—(1) Plans shall be lodged with the Chief Surveyor for examination. The Chief Surveyor may refuse to receive any plan which has been damaged in any way which impairs its legibility or renders it unsuitable for processing on to microfilm.

(2) Survey plans may be lodged before title plans so as to enable release of the survey information.

37. Legalisation plans—(1) In the case of any survey of land required for public purposes, including land to be taken for road and railway purposes, the provisions of this regulation, in addition to the foregoing provisions of these regulations, shall apply.

(2) The surveyor shall mark the intersection of the boundaries of the land to be taken, with all existing title, section, or subdivisional boundaries, irrespective of ownership, in such a manner that a separate title for each portion taken can issue.

(3) Where the intersection mark is likely to be disturbed or to be inaccessible during construction, when the land survey is carried out before construction, reference marks or witness marks shall be placed on the extension of the intersection lines.

(4) All plans shall show the title references of the land being surveyed and shall also show the title references to all abutting land, and, in particular—

- (a) All plans to which this regulation refers shall show certificate of title references together with names of the owner or occupiers of the area being surveyed; but the names of owners of Maori land need not be shown, the words "Maori Land" being sufficient:
- (b) Crown land applied for any public purpose shall be described as "Crown Land":
- (c) A schedule of areas defined on the plan shall be shown in addition to the total area. Areas shall be grouped as land to be taken, severances, and road to be closed.

(5) Areas of land to be taken shall be identified in the following ways-

- (a) Areas taken from each ownership may be identified by a letter of the alphabet such as "A", "B", "C", etc.:
 (b) Severed areas to which section 31 of the Public Works Act 1928
- (b) Severed areas to which section 31 of the Public Works Act 1928 applies may be also identified by a letter of the alphabet or a combination of letters and numbers:
- (c) The title description and area of each portion taken and each severance shall be shown on the plan in such a manner that if necessary the District Land Registrar can issue a separate title to the portion or severance:
- (d) All land taken shall be described in accordance with the appellation of the land at the time of survey.

(6) The following provisions shall relate to the representation of road, railway, and stream crossings on survey plans:

- (a) All roads crossing railways that are to be left open to the public shall be noted as public road:
- (b) If any part of a road crossed by a railway is to be closed to the use of the public and occupied exclusively by the railway, the portion to be closed shall be defined on the plan and identified with a letter of the alphabet:
- (c) No private crossings on railways shall be shown:
- (d) Where a road or railway crosses a stream, the stream bed crossed shall be shown and identified as land to be taken.

(7) Portions of roads or streets to be closed or stopped may be assigned a letter of the alphabet and when contiguous land fronting more than 1 property is held in the name of the same owner the land shall be shown to be subdivided so as to allow for the inclusion of the separate portions in the adjoining properties.

(8) Notwithstanding anything in subclauses (1) to (7) of this regulation-

(a) Proclamation copies of the plan shall be prepared after the plan has been approved:

- (b) No reference shall be made on the plans to the Act under which the land is to be taken:
- (c) In drawing up the area schedules of land to be taken, or road or street, to be closed or stopped, all portions in or adjoining 1 title shall be grouped together and all portions in 1 ownership shown consecutively.

38. Maori land plans—(1) In the case of plans for the purposes of the Maori Affairs Act 1953, the provisions of this regulation, in addition to the provisions of regulations 1 to 37 of these regulations, shall apply.

(2) Public roads intersecting or abutting the area to be surveyed are to be noted as "Legal Road" and unsurveyed roads are to be surveyed and shown. Roadways constituted by the Maori Land Court are to be shown and labelled "Roadway".

(3) The position of all remarkable hills, ridges, pas, eelweirs, graves, cultivations, tracks, battlefields, villages, rahuis, and boundary marks within the areas shall be shown on the plan in correct relation to the boundaries, and the Maori names of these features shall also be given as far as possible. The courses of rivers and streams, margins of swamps, lakes, coastlines, bush, and other natural or artifical features shall be delineated upon the plan.

(4) When an original area is found on partition to be either more or less than as stated, whether on account of a defective prior survey or otherwise, the areas of the new partitions shall be adjusted proportionally in every case unless the Court otherwise directs.

39. Land transfer plans—(1) In the case of plans for the purposes of the Land Transfer Act 1952, the provisions of this regulation, in addition to the provisions of regulations 1 to 36 of these regulations, shall apply.

(2) The title plan shall be signed by the registered proprietor or other person affected, as the case may require, or by his lawfully authorised attorney or agent.

(3) The plans shall be lodged with the Chief Surveyor and following approval the title plan shall be forwarded to the District Land Registrar for deposit.

(4) References to certificates of title shall be shown for areas forming the subject of the survey, and references to adjoining land shall be shown in the following cases:

- (a) Where land is being brought under the Land Transfer Act:
- (b) Where land is being claimed as accretion:
- (c) Where a condition of the approval of the subdivision requires amalgamation of the parcel with an adjoining title:
- (d) Where the land under survey is limited as to parcels:
- (e) Where there is an application for a title based on possession and the District Land Registrar has required deposit of a survey plan under section 14 of the Land Transfer Amendment Act 1963.

40. Mining plans—(1) In the case of surveys required under the Coal Mines Act 1925 or the Mining Act 1971, the provisions of this regulation, in addition to those specified in regulations 1 to 36 of these regulations, shall apply.

(2) All previously surveyed current mining privileges that may adjoin or be within 100 metres of the land under survey shall be shown on the plan together with any necessary survey connection.

(3) Intersections of existing mining privileges with boundaries on the plan shall be fixed and shown on the plan so as to allow the definition of an area to be excluded from that mining privilege.

(4) The plan shall also show the boundaries of the area as marked out by the applicant and also the position of pegs or other marks used in the marking out. Existing land appellation shall be shown on these plans.

(5) All boundary pegs defining the area shall be distinctly marked with the applicant's distinguishing mark and also with the initial letters of the mining privilege.

41. Unit plans—(1) This regulation shall apply to unit plans. Unit plans shall be prepared by a registered surveyor on the approved plan form. Notwithstanding anything in any other regulation of these regulations, a survey plan shall not be required except in cases where it is necessary to define any boundary or buildings adjacent thereto.

(2) The title of the plan shall show the legal description of the land and where applicable the name of the building.

- (3) Where applicable a schedule on the plan shall show:
- (a) The address of any body corporate owning land:
- (b) A unit description and approximate floor area of each unit:
- (c) The unit entitlement for each unit and the total entitlement for all units.
- (d) Provision for the certificate of title reference to be shown for each principal unit.

(4) Unless otherwise stated on the plan, the common boundary or part of the common boundary of a unit with another unit or with the common property shall, where that boundary or part thereof lies within a wall, fence, floor, or ceiling, be the median of that wall, fence, floor, or ceiling, as the case may be.

- (5) The following provisions shall relate to unit plans—
- (a) A site diagram will be drawn on the plan showing title boundaries of the site together with bearings and distances, abuttals, subject easements, and building lines:
- (b) The main and any ancillary buildings should be accurately plotted on the site diagram. The site boundaries shall be drawn in a distinctive manner so that they are clearly apparent in relation to other detail:
- (c) Where any of the buildings are on or within 1 metre of the boundaries, or the relationship of any building to the boundary is obscure, the correct relationship shall be shown on the plan by offsets derived from field measurements. In such cases the surveyor's field notes shall be lodged with the plan:
- (d) The dimensions and positions relative to the boundary of the overlapping portions of buildings shall be shown on the plan and are to be excluded from any lease or licence to be registered:
- (e) A floor diagram shall be drawn on the plan showing the extent and shape of each principal and accessory unit. Each unit shall be clearly labelled and allocated a separate number or letter:

- (f) Only the external perimeter walls shall be shown. Internal room walls and details of furniture and fittings shall not be shown. Dimensions of the perimeter walls are not required; but dimensions of areas which are not physically partitioned may be shown:
- (h) The floor diagram shall have the same orientation as the site diagram.

(6) An elevation of all multi-storey buildings showing all floors, basements, and roof areas shall be plotted.

(7) All external and internal areas which are common property shall be clearly labelled.

(8) All accessory units shall be accurately drawn on the appropriate diagram, clearly labelled AU and allocated a separate number. In identical floor diagrams accessory units must attach to principal units on that floor or be further described by their floor number.

(9) Principal units in buildings shall be labelled by a letter of the alphabet. In the case of multi-storey buildings the principal unit letter shall be prefixed by the floor number.

42. Redefinition surveys—(1) Where a surveyor carries out a land title survey that does not require a plan of subdivision, the field notes of that survey, together with a survey plan defining the boundary being resurveyed, shall be forwarded to the Chief Surveyor for approval as to survey.

(2) No resurvey of the boundary of any land for which a limited title is issued, nor resurvey of any land for which the original survey is not capable, in the opinion of the surveyor, of being defined without the production of a title plan, shall be undertaken.

(3) Field notes and survey plans shall be made in all cases except where the reinstatement of pegs of an approved plan of survey does not involve the placing of additional new marks.

43. Revocation and savings—(1) The Survey Regulations 1959* and the Survey Regulations 1959, Amendment No. 1⁺, are hereby revoked.

(2) All surveys, matters, and proceedings commenced under the regulations revoked by subclause (1) of this regulation, and that are pending or in progress at the commencement of these regulations, may be completed, continued, and enforced under these regulations in every way as if the regulations revoked by subclause (1) of this regulation were not so revoked but remained in full force and effect for the purposes of this subclause.

***S.R.** 1959/34 **†S.R.** 1965/15

SCHEDULE

CERTIFICATE BY SURVEYOR

Reg. 33 (10)

I,, registered surveyor and holder of an annual practising certificate, hereby certify that this plan has been made from surveys executed by me or under my directions, and that both plan and survey are correct and have been made in accordance with the Survey Regulations 1972.

Dated at this day of 19

Signature

P. J. BROOKS, Clerk of the Executive Council.

EXPLANATORY NOTE

This note is not part of the regulations, but is intended to indicate their general effect.

These regulations consolidate and amend the Survey Regulations 1959 which are now revoked.

Issued under the authority of the Regulations Act 1936. Date of notification in *Gazette*: 30 November 1972. These regulations are administered in the Department of Lands and Survey.