

S.G. CIRCULAR NO.1/1963

Verification Surveys

The purpose of verification surveys is to ensure that previously surveyed boundary marks are not materially out of position so that p.o. bearings and distances may be adopted without rigid resurvey. Since needs and conditions differ widely from State to State, no hard and fast rules can be laid down for the conduct of such surveys, and the method in any particular case should be adapted to the conditions on the ground and the value and nature of the property. The following methods and procedures are recommended as a general guide:-

- (i) Chainage only. Suitable in flat open country with short line boundaries in close patchwork alienation and where are adequate cross-ties to check against lateral displacement.
- (ii) Prismatic compass and chain for flat or gently undulating country land where every lines has to be cleared to be identified.
- (iii) Leap-frog method by theodolite and chain. Suitable in open cleared country where marks are easily located and where a higher degree of accuracy is required then under (ii).
- (iv) Third class survey . Necessary in steep and difficult country where location of marks may depend on calculating slope corrections and traversing along non-intervisible lines. Methods (iii) and (iv) may also be used for verification in town and village land.

2. Field Procedure

- (a) Under methods (i), (ii) and (iii) above, chainages and bearings (where observed) will be recorded on the diagram page on the field book issued for the job, together with such offsets to occupation and topographical features as may be necessary. Third class work under method (iv) will follow accepted Departmental procedure apart from such relaxations as covered in (c) below. The description of all marks will be shown on the diagram , which will be headed "Verification Survey", and the surveyor will add a signed certificate at the foot of the diagram page "All marks found intact and in good position". If more that one diagram is necessary, every diagram page will carry the certificate.
- (b) The use of accurately centred plumbobs should not be necessary under normal conditions of rural work for any of the methods suggested; panchangs held vertically on the top of marks are deemed adequate. Chainages should be recorded to the nearest link and corrections for slope should be ignored for slopes of less than 5° . There is no objection to ground taping or step chaining

if these are convenient. Theodolite bearings should be read to the nearest minute on one face of the instrument.

- (c) When a mark proves to be materially out of position or is missing it will be refixed or replaced according to accepted Departmental practice, and separate observations and diagrams will be made in the field book. The surveyor should notify his District Surveyor early if he finds that a high percentage of marks require refixing or replacing so that fresh instructions may be given to meet this contingency.
- (d) The Chief Surveyor or the District Surveyor, should indicate, where necessary, and able the order of verification required.

3. Office Procedure

- (a) Verification work will be checked against previous surveys and all refixations or replacements investigated by the Computing Branch. Additional computations, if any, should follow existing practice.
- (b) Where the lot verified already appears as a surveyed lot on a certified plan, a note should be added in red:- "Boundaries of lot verified vide F.B." The excessive use of notes is not recommended, and provided the title to be issued is based on existing plan values, there should be no need to indicate marks refixed or replaced. However, if there is a change in marks, or there are so many refixations to warrant it, the drawing of a new plan as under (c) below is recommended.
- (c) Where the land to be alienated consists of State land, or if the redrawing of an old lot is considered necessary, a new plan will be drawn incorporating new survey, if any, and all relevant data compiled from previous surveys. References to verification will be incorporated in the standard plan references. Beneath the statement of the class of survey will appear the note "p.o. boundaries verified" and the relevant field book will be quoted, together with any others, in the usual place. The statement " Survey completed on" will read " Verification completed on", if there was no actual survey. The compilation of lots in red on old plans must stop.

4. S.G.Circular No. 9/1960 is cancelled.

P. GARNHAM

b.p. Juru Ukur Negara,
Persekutuan Tanah Melayu.

Dated: 41th. February, 1963.