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Problems In City Surveying

Absence of Original Posts in Older Parts of Cities Leaves Proper Location of Lot Lines to Good Judgment of Surveyors and Results in Differences of Opinion—Paper Read at Annual Meeting of Association of Ontario Land Surveyors

By WILLIAM W. PERRIE
Hamilton, Ontario

IN the city, the work of the land surveyor is naturally divided into two general classes—original surveys and resurveys. In an original survey the boundaries of the property are generally in evidence on the ground and the surveyor is required to obtain the necessary data for drawing up plans or writing descriptions of the property, or to lay out on the ground from a plan already drawn, certain parcels of land. These are mostly subdivision surveys and present no great difficulty.

By far the greater part of the city surveyor's work consists of resurveys. In making a resurvey it is necessary to retrace on the ground from a plan or description, all or part of an original survey. The resurveys which a surveyor in the city is required to make may be divided into the following classes:—

Three Classes of Surveys

1—Surveys in the newer parts of the city where a considerable number of the original posts or monuments are to be found, as evidence of the location of the boundary lines. Surveys of this kind are, with few exceptions, a very simple matter.

2—The second class consists of work of an engineering nature, such as the taking of levels, staking out of buildings, roadways, etc. Almost every surveyor is familiar with work of this kind and it requires only the exercising of ordinary care in the performance thereof.

3—This third class is made up of all those surveys in the older or improved part of the city. Here, as a rule, there are none of the original posts or monuments remaining and the proper location of the street or lot lines rests largely on the good judgment of the surveyor. As it does not seem probable that any two surveyors would agree on a location that depended on their individual judgment, it appeared to me that interesting discussion would follow the presenting of a few such problems. It is with the hope that such discussion would be beneficial to the profession as a whole, and particularly to the younger members like myself, that I have gathered together the data on some such surveys.

The first case may probably not be considered to present much of a problem to the surveyor, and yet it is one which will no doubt cause trouble at some future time. It is required to stake out Lot 27 on the west side of Avondale Street in Avondale Survey, laid out by Surveyor B. (See Fig. No. 1.) Before this subdivision, which is a comparatively recent one, was laid out, the land to the

south and east, known as Orchard Hill Survey, was laid out by Surveyor A and monuments were planted along the southern limit of the Beach Road and along Gertrude Street. On the plans of both surveys the width of the Beach Road is shown to be 60 feet, measured on the line of the streets crossing it.

In making the survey of Lot 27, old stakes were found in the positions shown in Fig. No. 1. These check up

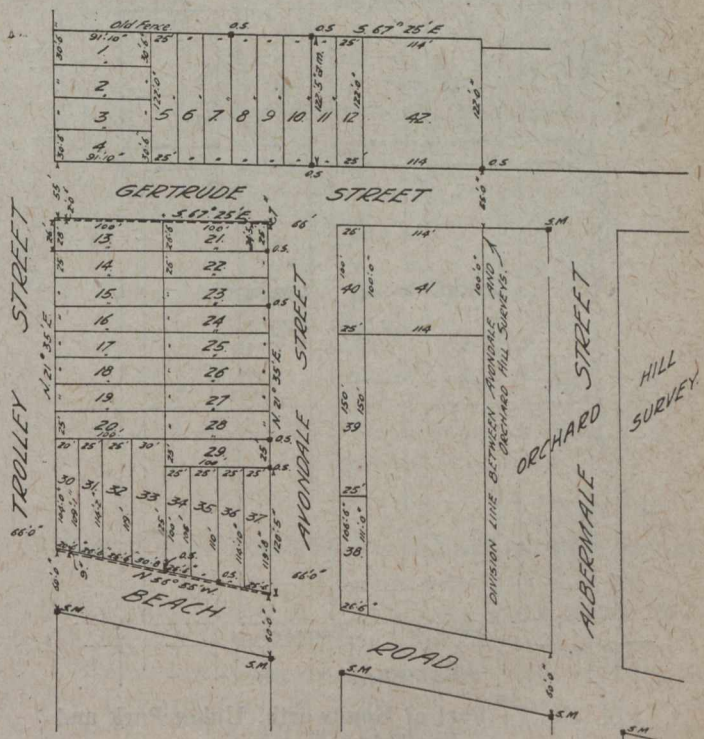


Fig. No. 1—Avondale Survey

Letters O S denote original stake; S M, stone monument.

fairly well for the line of Avondale Street and the distances between the stakes south of Gertrude Street measure up correctly according to the plan. Using the stone monuments in Orchard Hill Survey to obtain the line for the north side of the Beach Road, the old stakes were found to be 9 inches too far north. That is, the depth of Lot 37 becomes 120 feet 5 inches, not 119 feet 8 inches, as shown on the plan. The old stakes found on the north side of Gertrude Street and the stones in Orchard Hill