

in the township. He would require a topographical map, barometer and prismatic compass, and such assistants and transport as would enable him to move rapidly about in unsettled districts. The first duty of the engineer would be to make himself fully acquainted with the main topographical features. It would be necessary to be fully informed also with regard to the conditions in the townships immediately adjoining, the nearest improved roads and main trails. He would then be in a position to prepare a draft plan of the settlement.

Plan of Settlement

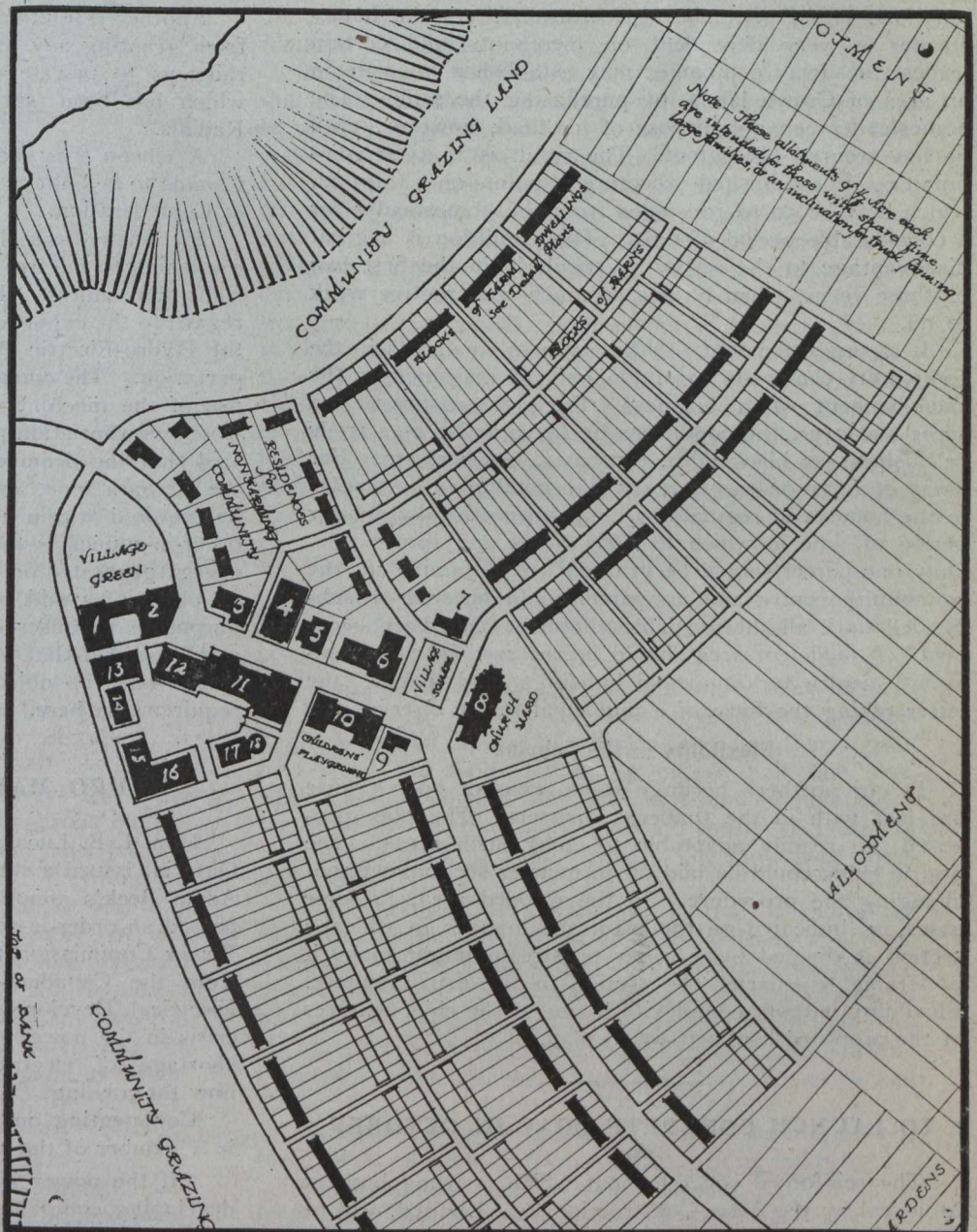
The selection of a suitable site for a community centre would be the first step. The requisites of the location would be dry ground, a satisfactory water supply and a central position on two or more main routes through the township. The engineer would then locate on the plan the approximate positions of the main roads and a sufficient number of laterals to provide access to every lot. By examining the plan accompanying the text it will be noticed that, in order to devise a suitable road system, it will be necessary to depart from the lot boundaries in some instances. It will be possible, however, by having four lots rather than quarter sections, to have more choice in the location of the roads without dividing any lot.

The division of the sections into lots or quarters will require to be considered in connection with the location of the main roads and laterals. It will be possible, as is shown upon the plan, to divide the sections so as to place the wet or broken land at the rear of the lots, and have as many as eight homesteads fronting on one mile of road.

Taking into consideration economy in road construction, safety from fire in having continuous clearings and the possible improvement in social life, it must be admitted that the foregoing has great advantages over the present system. The possible reduction in road mileage would be about one-third of the mileage of the road allowances in the townships under the third system of survey.

After preparing the draft plan of the roads and lots, the engineer would probably require to make further detailed examinations of the proposed road locations and make revisions. Before leaving the ground, however, his plan should be complete. It would not be necessary for him to actually survey and post the roads and lot boundaries. He would probably show certain locations, knowing that the direct line could not be followed and

that a winding side-hill road would be required. The survey of these roads and the lot corners could be proceeded with at a later date when settlement had proceeded and the construction of the road had become necessary. The present system requires the survey of a large number of new roads and diversions from the road allowances on account of the useless location of the latter. The scheme of prior investigation before establishing the location



Plan of a Village Community Centre by H. B. and L. A. Dunnington-Grubb

REFERENCE:—1, Concert hall; 2, young men's club; 3, bank; 4, moving picture theatre; 5, inn; 6, town hall; 7, vicarage; 8, church; 9, teacher's residence; 10, school; 11, department store; 12, post office; 13, creamery; 14, bakery; 15, blacksmith and carpenter shop; 16, garage; 17, granary and storage; 18, elevator and chopping mill; 19, saw and rossing mill; 20, central heating plant; 21, greenhouse.

would obviate the need of very many road surveys.

The act of recording the plan prepared by the engineer could be made to automatically reserve the approximate area of the proposed roads from the lots affected, and define the same as public roads. The title to the road could be transferred to the Crown in the right of the province when the position of the road had been definitely decided upon by the municipal authorities.