

Much of the time of a municipal engineer is taken up with the acquisition of local knowledge, which, though it has little commercial value for the engineer, is of immense value to the community, and the constant change of administrative heads results in a great waste of public money.

Much discussion takes place at nearly every election as to the value of the engineer's department, and the first so-called economy of a new council is often to reduce the staff or the salaries. How few councillors, however, realize that the difference of an inch in the diameter of a watermain or a trunk sewer may mean more than the annual expenditure of the engineer's department, and that it is local knowledge which enables an engineer to decide whether the inch is necessary or not!

The position of municipal engineers in Canada will be strengthened, and the public will be protected against wasteful and extravagant expenditure, just so soon as engineering schemes dependent upon capital expenditure have to be subjected to review by a competent authority free from political control, and all engineers should co-operate to secure this, and so help to raise the status of the engineering profession as a whole and of municipal engineers in particular.

A. G. DALZELL,

Formerly Assistant City Engineer of
Vancouver.

Vancouver, B.C., October 1st, 1918.

Planning Rural Highways

Sir,—As a highway engineer I was greatly interested in W. M. Stewart's article, "Planning a System of Rural Highways," in your issue of September 5th. I would like, however, to take exception to the statement that "Diagonal roads for rural districts, while possessing many advantages, are usually out of the question owing to the waste of land and inconvenience to farmers."

The first reason, at least, does not hold, because it is a notorious fact that our present road allowance represents a tremendous waste of land. Imagine it! Nearly 300 acres of road allowance to every township. Practically 4 per cent. And of these road allowances probably less than 20 per cent. are improved in any way. The improvements in general occupy about 50 ft. of the right-of-way and the remaining 49 ft. remains a breeding place for weeds and a direct loss. The saving which could be effected by cutting down our road allowance would provide many miles of diagonal roads.

As to the second reason, "Inconvenience to farmers," it is a certainty that cross-country roads will many times repay the individual farmer who is lucky enough to be contiguous to one. A diagonal road can scarcely be anything else than a main road, so why not locate them along the railways? They cause no further inconvenience than the railroad has already caused; they will become a connecting link and reduce mileage between towns and villages; and lastly, material for surfacing in districts where such is not to be found locally becomes available at every point because of the fact that it may be brought in by rail and deposited where needed. Would not such a highway along the main line of the C.P.R. from Portage la Prairie to Brandon, through the sand hills, appeal to any highway engineer?

It is a fact that up to the present the idea of diagonal roads has not occurred to the average rural council.

Where title has been secured to old diagonal trails and where natural conditions demand them, the diagonal road is looked upon with extreme favor.

There are a number in Manitoba, but I am familiar with only a few, such as that running southwest from Winnipeg to Sperling, the Oak Point Highway, the Brandon Valley Road, the Portage Highway and the Colonization Road. The Colonization Road and the Oak Point Highway both form an important part of the highway system of the district in which I am interested. They have proved their value, and it appears to me that now is the time for further additions of such roads. I would like to see further discussion on the subject.

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Municipal Engineer,
Rural Municipality of
Rockwood, Manitoba.

Stonewall, Man., September 28th, 1918.

PRINCE RUPERT TONNAGE

IN last week's issue appeared an article on Western Ports of Canada by S. McClay, harbor commissioner at Vancouver. The paper as published was complete just as it was read at the Boston convention of the American Association of Port Authorities, with the exception of some statistics regarding the tonnage of Prince Rupert, which statistics were not available last week. By courtesy of the author we are now able to publish these as follows:—

Year 1916-1917

<i>Coastwise.</i>	
ARRIVED.	DEPARTED.
465,479 tons	504,361 tons

<i>Foreign.</i>	
ARRIVED.	DEPARTED.
535,170 tons	309,789 tons

Year 1917-1918

<i>Coastwise.</i>	
ARRIVED.	DEPARTED.
471,550 tons	565,507 tons

<i>Foreign.</i>	
ARRIVED.	DEPARTED.
254,916 tons	124,693 tons

"CEDARS" PLANS AN EXTENSION

APPLICATION has been filed with Sir Henry Drayton, power controller for Canada, by the Cedars Rapids Power Co. for permission to export power to New York State. The company contemplates additional development at its plant near the Soulanges Canal, but claims that the increased output could not all be sold in Canada, though really required in New York State, and it asks permission to export any surplus that there may be after Canadian requirements are satisfied.

The Hamilton, Ont., Board of Health has ordered the installation of a sewerage system, at an estimated cost of \$30,000, in the Brightside Survey.