

In the course of many rides over the plain of Sharon, I came across many small wells, or rather circular holes dug in the depression which marked the water-courses draining the land during the rainy season. These holes were dug by the shepherds for watering their flocks in the mud drinking troughs they made alongside the well openings. They found it necessary, even in November, which is the

end of the dry season, to go to a depth of only 6 or 7 ft., or in all a depth of 12 or 15 ft. from the general ground level, to obtain water. The great number of these water-holes would lead one to believe that water exists all over this plain and at a slight depth from the surface; that pumping for irrigation water for orange groves, etc., should be comparatively cheap; and that this plain could be made rich and fertile.

Development of Saskatchewan's Highway System

Organization and Duties of the Department of Highways—Previous Methods of Provincial Aid—Difficulties in Arousing Interest in Maintenance—Paper Prepared for the Annual Meeting of the Association of Dominion Land Surveyors

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PREVIOUS to the year 1912, the improvement of roads, the building of bridges and the operation of ferries in Saskatchewan were all carried out through the Department of Public Works, under the direction of the assistant commissioner or deputy minister.

The rapid settlement on the land, the great extension of steam railroads and the consequent demands on the province for a more comprehensive road-building scheme, all combined to influence the provincial government, with the result that, in the spring of 1912, the importance of highway improvement work was given recognition, and a commission of three members was appointed to administer the work of the department. This commission took over the control of all roads, bridges, water supply and drainage works, the ferries being left under the Department of Public Works.

At that time the government voted a grant of \$5,000,000 for the building and improvement of roads and the erection of capital bridges, which amount was to be spent in a three-years' program of work on defined road locations approved by the highway commission; and organized rural municipalities were to assist by expending an amount of their own money equal to the government grant for each separate location,—or what was called the "dollar-for-dollar basis." This work was handled by contracts with the interested rural municipalities, who agreed to maintain in good condition all roads improved under this program. In unorganized sections the roads were improved by government road crews under the supervision of district inspectors.

As early as 1910 it was felt that the best method of assisting the rural municipalities was by direct money grants to be expended by them, the selection of the locations to be improved and the disposal of the money grant to remain under the approval and supervision of the Department of Public Works; and, even prior to that time, the department adopted regulations stipulating that grants of provincial funds should be expended chiefly upon main roads, the subordinate roads to be cared for by locally collected funds.

Rural Municipalities Became Interested

It was also noticed, in the older settled districts, that the people were, year by year, becoming more alive to the great advantages to them of better roads which might be travelled with comfort at all seasons of the year. To meet this increasing demand, the government laid out a comprehensive program of highway improvements and organized additional road crews to handle the large amount of work to be done.

In the year 1913 it was found that many more rural municipalities took advantage of the offer of the highway board to reimburse them to the extent of half the amount which they expended upon approved main roads in accordance with the regulations of the board. This had two distinct beneficial effects: First, of stimulating the interest of each interested municipality in its own road-building problems;

and second, in that each municipality organized its own road crews, purchased tools and equipment, and thus became a greater or lesser factor in the efficient organization for road improvement work.

At the close of the 1913 season, it was found that some of the rural municipalities, being anxious to have as large an amount as possible of government moneys expended within their municipality, expended heavily of their local funds to the extent that the burden of taxation was exceedingly great. Many municipalities proceeded with their work without having secured the written authorization of the board, and a great deal of difficulty was experienced with the auditing department because accounts were not submitted in a way that was acceptable to them. All these things combined to cause inconvenience and delays which were irritating, both to the department and the rural municipalities.

Contributions to Municipalities Stopped

It was further considered, that the "dollar-for-dollar" system of assistance had served a useful purpose in providing for board supervision and instruction in connection with the works carried out, and that the rural municipalities should now be prepared to continue the expenditure of their own moneys in an efficient manner. After careful consideration, the highway board at the end of the season resolved that such assistance should cease, and that in future all moneys placed at the disposal of the board should be expended directly by it, either by contract or by day labor.

This new policy was carried out during the season of 1914 and resulted in an increase in the number of road crews employed, and a large amount of work was satisfactorily carried out until the middle of August, when the financial depression caused by the breaking out of the Great War necessitated the closing down of practically all the road and bridge work.

Through the seasons of 1915 and 1916 this same policy was continued, although, on account of financial conditions due to the war, the work program was much restricted.

In the legislative session of 1916-7 the importance of the highway improvement work in the province was given further consideration, with the result that the Highways Act came into force on April 1st, 1917. By this act the board of highway commissioners ceased to exist, and the work has since been carried out by an established Department of Highways as a regular department of public service, presided over by the minister of highways.

The work of the department as now established comprises the building and reconstruction of all roads designated as main roads throughout the province; the erection of all steel, concrete and timber bridges; the building and operation of all ferries; the supervision of surveys and townsites; the drainage works of the province; the reservoir and water supply construction necessary in districts requiring such attention; and the general supervision of all works, under-