

Engineering Department

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ROAD IMPROVEMENT AND MAINTENANCE ON A BUSINESS BASIS.

In considering the question of commutation or abolition of statute labor, the greatest difficulty is in reference to the plan of road improvement and maintenance to be substituted therefor.

The abolition of statute labor is an improvement only when accompanied by a well considered plan for future work adapted to the requirements of the municipality.

The statute labor system with all its faults, has been in force for many years, it is a relic of the pioneer days, when co-operative labor was both a private and public necessity. The introduction of labor-saving machinery has placed the farmer in an independent position. He is able to do most of his own work and pay for assistance.

The present day system of agriculture requires his constant attention if the best results are to be attained.

To appreciate the advantages of modern methods, it is only necessary to compare them with those in operation years ago in every department of private work.

A comparison of the present statute labor system with that inaugurated by our pioneer fathers, will show that it remains practically unchanged, and that year by year it becomes less adapted to present requirements. Land owners have not the time or assistance necessary to do effective work when it should be done.

Statute labor is reported to be inefficient. This however, should not be the cause of the wasteful expenditures complained of in many townships.

The adoption of a businesslike system of road improvement and maintenance will result in better work and decreased taxation. The commutation or regulation of statute labor may be considered in connection therewith.

In endeavoring to outline such a system, it is only possible to offer suggestions that may assist councils in dealing with defective conditions.

Those who have considered the question favor the appointment of an official to relieve the members of councils of the greater part of the work they now perform in looking after roads and bridges. This official would become experienced and more valuable each year, he would carry out directions and consult and advise the council in all matters connected with his office.

Township Commissioner.

The direction and oversight of municipal improvements should be placed in the hands of one commissioner, who should be specially adapted to the work; and whose tenure of office should be as secure as that of the average clerk or treasurer. He should have charge of all road and bridge improvement, and should be required to report to the council at each meeting.

No work of importance should be undertaken until it has been reported upon by him and approved by the council. He would not necessarily be actively engaged during the whole year. He should have charge of all township machinery and material required for work connected with this department. The many economies that would result will readily suggest themselves to councillors of experience.

In large townships it may be thought that one commissioner is not sufficient. In such cases the townships should be divided into not more than four divisions and the commissioner authorized to employ a working foreman for each.

Duties of Commissioner.

1. The commissioner should prepare a plan of his township, showing all roads, and the location of them, of all culverts, bridges and watercourses, classifying roads according to their requirements.

2. He should prepare a list of all culverts and bridges, showing dimensions, material used in construction, their condition, and the direction of the watercourses passing through them, with memoranda as to the source of the water and the location of the outlet.

3. The plans and records should show, as to roads, whether they are of gravel, stone or earth, graded or ungraded, the system of drainage, and nature and extent of traffic upon them. He should carefully study the present and future requirements of traffic on all roads, the class of roads best suited to such traffic, the width and depth of metal, width of graded portion, amount of crown and other details of construction.

4. He should possess full information as to location, extent and quality of material suitable for road construction and amount of plank and timber obtainable from ratepayers in the township or district suitable for repairs.

5. He should report to the council as early as possible in each year, showing the number and location of culverts and small bridges to be rebuilt or repaired, with a detailed statement of all material required for this work, and an estimate of the cost. It would also be advantageous to have a probable estimate of material required during the following year, presented each fall so that, if thought advisable, it may be purchased and delivered on the ground during winter months, or other most convenient season, so as to utilize as much as possible the labor of ratepayers during the slack season.

6. His report should specify the condition of all bridges, indicating those which require repairs or reconstruction, together with an estimate of cost and a statement dealing with such special protection work on streams as he may deem worth the council's consideration. There should also be a reference to any needed re-location or deviation of existing roads, with a view to doing away with bridges, culverts, expensive grades, cuts or other features which tend to prevent permanent work and economic maintenance.

7. He should take stock annually, and report to council on all machinery and implements, showing their condition and where kept.

8. He should carefully examine all parts of the township where gravel and stone exist, and should by borings and tests, determine the quality and extent, and report thereon to the council. All material, stone, plank, gravel, etc., should be purchased by the commissioner in large quantities, and under instructions from the council, the required amount to be determined by his estimates referred to above. As far as possible the material should be purchased by tender, and due consideration should be given to any ratepayer having material for sale. When