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KEEPING COST DATA ON MUNICIPAL WORK CARRIED OUT BY DAY LABOR

SOME INTERESTING OBSERVATIONS ON THE BENEFITS RESULTING FROM THE INTRODUCTION OF COST-KEEPING METHODS IN CARRYING OUT MUNICIPAL ENGINEERING WORK.

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IN these days of keen competition it behoves every business man, who wishes to be successful, to keep accurate details of cost, so that he will have a close and continuous check upon every department of his business and be in a position to at once locate and eliminate any losses that may be taking place.

It is obvious that this is still more necessary on municipal work carried out by day labor, where there are many adverse conditions with which the private corporation does not have to contend. This is particularly applicable in the West, where the amount of money spent under this system runs into millions of dollars per annum, and where there appears to be a tendency to increase rather than reduce the quantity of work done by this method.

The writer, during the last four and a half years, has had direct charge of work entailing an expenditure of over five and one-quarter millions of dollars, and by far the greater part of this has been carried out by day labor. The pay rolls alone under this method for the years 1912, 1913 and 1914 averaged over \$700,000 per annum, and practically all the work in 1915 and 1916 was done by city forces.

It was quite apparent to the writer when he took office that there was every opportunity for a large waste of money, not only through lack of system, but through lack of interest and incentive, and that it was necessary to introduce some method whereby the detrimental effects of conditions peculiar to municipal work could be nullified or overcome.

Some of these adverse conditions were:—

1st. There appeared to be a different standard of business ethics for municipal corporations than for private firms. Many of the employees cared little whether or not the city got full value in quality and quantity for material received, or if it was suitable for the purpose intended, and more than that, some merchants did not fail to take advantage of this carelessness, encouraging the laxity of the employee with the argument that he "should not worry as the city paid the bill."

2nd. Influence, political, aldermanic or otherwise, was often more essential in obtaining civic employment than ability, and coupled with this many men who obtained their positions by influence were of the opinion that they did not have to work as hard for the city as for private firms, and when a conscientious foreman attempted to disabuse them of this idea, they threatened to use their influence to make trouble, and, unfortunately, it was not

always a mere threat. The result was that many foremen tolerated these men at the expense of discipline and authority.

3rd. Permanency of employment was to a more or less extent independent of the satisfaction given, and the argument was even used by an alderman that a man who had been given employment by the city for years should be willing to step down and allow the other man a chance—surely poor compensation for faithful service rendered—and a man uncertain of steady employment cannot be expected to take an active interest in his work.

4th. Civic corporations, as a rule, consider one man about as good as another, and pay them accordingly. That is to say, the wage is fixed by the position and not by the ability of the occupant. There was, therefore, no monetary inducement for a foreman to do his best, or accomplish more than his fellow worker. Hence a lack of incentive.

5th. The necessity of giving employment to men who through age or disability became a charge upon the city, and who had to be provided with work. Hence the tendency of lowering the standard of work and output of those with whom these men came in contact.

6th. During prosperous times the civic money chest was an unailing source of supply, and the funds required were always available. Hence no curb, such as a profit and loss account, to keep the cost of work within the estimates or down to a reasonable figure.

Now, the engineer, where possible, must alter the above-mentioned conditions, and he has to inaugurate a system whereby he can offset the lack of interest and incentive due to the others. At the same time this system must be in such form that he can personally check all the details of the work and see that satisfactory results are being obtained.

One of the best methods, in the writer's opinion, is by introducing a detail cost data system. It must be simple, but effective, and the cost of developing and carrying on must be a reasonable percentage of the value received. In connection with this, however, he must impress upon the employees that the corporation business is to be run upon the same basis as a private business, and that they must perform their duties just as conscientiously as they would if their own money were involved. He must also give the foremen full authority to employ and dismiss their men, and he must assure them freedom from all outside influence so long as they produce satisfactory results.