MUNICIPAL DEPARTMENT

DESERONTO WATERWORKS.

A system of waterworks for the town of Deseronto, Ont., is nearing completion, estimated to cost $36,330.44. Mr. M. J. Butler, C.E., has presented a report to council on the progress of the work, a portion of which will be found below:

When the estimates were submitted along with the Special Committee's report, it will be seen that the system proposed was for fire protection purposes only and the following lengths and sizes of pipe were proposed, viz. 8,360 feet of 6 inch pipe, 2,955 feet of 10 inch pipe, the number of hydrants promised being 28, at a cost of $14,755.66. The pump then proposed and the foundation and building in which it was to be housed was estimated at $2,500. The standpipe proposed would have cost about $6,000. When the figures were brought together for the various works, including the old works purchased from the Rathbun Company, the estimate of cost complete was $35,000.

I now follow with what has actually been constructed, viz: 9,412 feet of 6 inch pipe, 3,071 feet of 10 inch pipe at a cost, including 31 hydrants, gate valves, check valves, etc., all complete of $12,839.35 We supply filtered pure water, guaranteed to give pure water at the rate of 500,000 gallons per day. The cost of the filter in place was $3,000. The underwriters paid a visit to Deseronto in September, and to satisfy them the power house was built as nearly a perfectly fireproof building as I knew how to build. The partition walls are of solid brick and terra cotta, the joists and roof girders of steel, and the roof covering of terra cotta blocks plastered first with cement and over the cement a fireproof gravel roof of tar, sand and gravel. The pump purchased is a compound, duplex, direct acting condensing underwriters' pump of the following dimensions, viz. High pressure steam cylinder 12 inches diameter, low pressure cylinder 20 inches diameter, water plungers 10 inches diameter, stroke 15 inches, cylinders are lagged with mica covering, one independent condenser and one independent boiler feed pump. This pump draws the water through a short 12 inch suction pipe from the suction crib in front of the power house, and as the plant and building together now stand have cost the town the sum of $3,246.62. The standpipe contracted for, and which was to have been completed before Dec 1st is to cost, when erected on foundation, $3,600. The foundation and housing will add about $700 to the cost. The capacity of the tank is 70,000 gallons, all of which is at an elevation of 160 feet above the bay, the top of the tank being 195 feet above the bay. When all the various figures appertaining to the work are brought together, the result is that the waterworks when finished will have cost $36,330.44. The sum includes the water tower complete, but does not include the the service pipe connection, etc. On account of service pipe connection, for material, etc., there has been expended $753.96, for labor $224.60, for Main street sewer, which has been assumed by the waterworks, though not properly appertaining to them, $77.95. From the above sums there should be deducted for labor and material supplied by the waterworks to private persons in putting in service, accounts for which have been left with the treasurer, $145.26, fittings and material on hand at present time now stored at the pump house, $230.69, leaving the net cost of the 35 services now in $672.56. As the long 1¼ inch pipe on Brant street is laid with a connection opposite each house, it will in the end be a very profitable line. The line on Dundas street is also in shape to supply all the places in front of which it runs, so with the 1¼ inch main on Main street, connection tees with plugs being left opposite all the buildings in front of which it passes. All material has been very carefully bought and advantage taken of every way to save a cent on it, the result being that such an addition as the filter has been constructed with a net addition to the estimate of only $1,330.44, not to speak of the additional length to the mains and the three extra hydrants. Lists showing the location of all the hydrants and also of the names of the parties now connected to the supply pipe have been given to the Mayor. The plan which accompanies this report shows location of all mains, hydrants, valves, etc.

In conclusion I beg to draw your attention to the desirability of frequently opening and testing the hydrants and of providing a portable hot water boiler for the purpose of thawing any that may happen to freeze. The mains have been thoroughly tested under a pressure of 130 lbs. to the square inch, and not a leak exists in the town so far as I have been able to determine.

COUNTY WARDENS.

Elections for wardens took place in several of the counties of Ontario on the 27th ultimo, with the following result.

Brant—Mr. Joseph McIntyre.

Bruce—Mr. James Shouldice of Eldersle.

Carleton—Mr. A. P. McDonald of Rideau division.

Dundas, Stormont and Glengarry—Mr. John H. Meikle, of Morrisburg.

Dufferin—Mr. R. Rickey.

Durham—Mr. J. G. Preston, Reeve of Manvers, division No 3, Durham.

Essex—Mr. N. A. Coste, of Malden Township.

Frontenac—Mr. J. M. Taggart, of the Township of Bedford.

Grey—Mr. James Allen.

Hastings—Mr. John L. Dench, of Sidney.

Haldimand—Mr. J. H. Salter, of Hagersville.

Huron—Mr. John Cox, of Goderich Township.

Haliburton—Dr. Giles, of Haliburton, Reeve of Dysart Township.

Kent—Mr. J. Gosnell, of Orford.

Lambton—Mr. Albert Duncan, of Petrolea.

Lennox—Mr. Bowen E. Aylesworth, of Bath.

Leeds and Grenville—Mr. James B. Saunders, of Athens.

Lanark—Mr. A. Carswell, of Pakenham.

Lincoln—Mr. John Jackson.

Middlesex—Mr. Dougald Leitch, of Caradoc.

Norfolk—Mr. Wm. Kelly, of Houghton.

Oxford—Mr. Louis Kaufman, of East Zorra.

Ontario—Mr. Charles King, of Whitby.

Prince Edward—Mr. Parker R. Young, of Picton.

Perth—Mr. Nelson Monteith, of Downie.

Peel—Mr. John Graydon, of Streetsville.

Renfrew—Dr Chanonhouse, of Eganville.

Victoria—Dr. Wood, of Kirkfield.

Waterloo—A. H. Erb, of Elmira.

Welland—Mr. E. Morris, of Morris, Stone & Wellington.

Wentworth—Dr. J. O. McGregor, of Waterdown.

Wellington—Mr. John McNab, of West Luther.

COST OF PAVEMENTS IN TORONTO.

Mr. E. H. Keating, City Engineer of Toronto, has submitted a report to the City Council showing the cost of the various classes of pavements on the basis of five, ten, fifteen and twenty-five years. Following are the figures:

Heavy asphalt, consisting of six inches of concrete and 2½ of asphalt, total cost per foot front, $4.46, annual cost on basis of payment in five years, $1 per foot front; 10 years, 55 cents; 15 years, 40 cents; 25 years, 28½ cents.

Light asphalt, 4 inch concrete and 2 inch asphalt, stone curbs, total cost, $3,90 per foot front; cost per foot for 5 years, 87½ cents; 10 years, 48 cents; 15 years, 35 cents; 25 years, 25 cents per foot front.

Brick on concrete, with stone curbs, total cost, $3.05 per foot front; annual cost per foot front, for 5 years, 68¼ cents; 10 years, 37½ cents; 15 years, 27½ cents; 25 years, 19½ cents.

Brick on gravel with stone curbs, total cost per foot front, $2.55; annual cost per foot front, for 5 years, 27 cents, 10 years, 31½ cents; 15 years, 23 cents; 25 years, 16½ cents.

Cedar block on concrete, stone curbs, total cost per foot front, $2.77; annual cost for 5 years, 62 cents, 10 years, 34 cents; 15 years, 25 cents; 25 years, 17½ cents.

Cedar blocks on gravel, wooden curbs, total cost, $1.19; cost per year for 5 years, 27 cents; 10 years, 14½ cents; 15 years, 10¾ cents; 25 pears, 7¾ cents.

Cedar relaid on present foundation, total cost, 90 cents; cost yer year for five years, 20 cents, 10 years, 11 cents; 15 years, 8 cents, 25 years, 5¾ cents.

Macadam, stone curbs, total cost per foot front, $2.47; cost per foot front for 5 years, 55½ cents; 10 years, 30½ cents; 15 years, 22 cents, 25 years, 16 cents.

Macadam, with wood curbs, total cost, $1.90; cost per year for five years, 42½ cents; 10 years, 23½ cents; 15 years, 17 cents; 25 years, 12 cents.