

FOURTH
SEMI-ANNUAL REPORT
OF THE
Water Commissioners
FOR THE
CITY OF HAMILTON.

Transmitted to the City Council, 17th January, 1859.

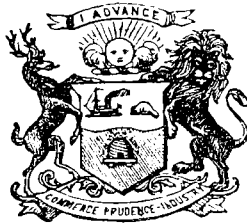


HAMILTON :
PRINTED BY GILLESPIE & ROBERTSON, COURT HOUSE SQUARE.

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has been overflowed during the last summer, in consequence of the unusual height of water in Lake Ontario. This work was awarded upon the 12th August to Messrs. Jones and Harley.

In consequence of the Branch Pipes and Valves being manufactured in Montreal, and being subjected to risk of damage in transitu, after they are proved by the manufacturer, it became necessary to provide a Hydraulic Press, where such castings could be proved here, before they were placed in the ground. This Press was ordered to be submitted to tender from Messrs. Gunn, (of this city,) and Gartshore, (of Dundas,) upon 12th August, and upon 9th September, was let to Mr. Gunn.

The late Chairman, Mr. Magill, and the Engineer, were requested, in the latter part of August, to proceed to Toronto, to see the Hon. the Commissioner of Crown Lands in person, with respect to a grant of the Beach land occupied by the Filtering Basin and Conduit. Mr. Vankoughnet expressed a desire to further the objects of the Commission, as far as in his power, and promised to have the matter submitted to Council at an early day. The absence of so many Members of the Cabinet, subsequent to that date, has probably been the cause why nothing further has been communicated to the Commissioners upon this subject. The Deputation, however, had the satisfaction of ascertaining, by reference to original patents, maps, &c., that the whole of this Beach is public property, and that there is no foundation in the claims set up by proprietors of opposite lots upon the main land.

Upon the 7th October tenders were authorized for the Lead Pipe required for the house services; the time for receiving which tenders was extended until the middle of December to enable the agents of European manufacturers to communicate with their principals.

Upon the 22nd October, tenders for a lot, for a pipe yard, were received, and one upon John Street, between Henry and Lind Streets, 66 feet by 157 feet deep, was purchased for £300, about \$18 per foot, as on the whole, the best investment, as well as the most eligible location of all the properties offered.

On the 28th October, Tenders were authorized for the erection of a Press House and Shop on the lot in question, and on the 2nd November this work was allotted to John Addison.

In view of the employment of the laboring classes, during the winter months by carrying on the laying of the distributing pipe it became necessary to lay in a supply of lead, and accordingly 30 tons were ordered to be advertised for, on 13th November, and upon the 2nd December this Contract was let to the Canada Lead Pipe Works, which Company had previously, as the lowest tenderers, supplied an equal quantity for the Pumping Main. The whole of this quantity of 60 tons is paid for in Debentures.

Upon the 16th November, the late Chairman, Charles Magill resigned the Chair, and Adam Brown was unanimously elected in his place.

On the 16th December, the Engineer was requested to proceed to Montreal in order to press forward the delivery of the Valves and Branch Pipes, without which it would be impossible to lay any distribution pipe, and thus afford the desired employment during the winter. When this Contract was let, the time of delivery was fixed for 1st March next. It is now shortened to first of February, and it is expected that the greater part will be delivered before the middle of January.

Upon the 18th December, Messrs. Magill and M. W. Browne resigned their seats, and upon the 20th December, the City Council elected Alderman Wm. Davidson, in the room of Mr. Magill.—Mr. Davidson took his seat at the Board on the 23rd instant.

The Commissioners cannot close their Report without acknowledging their indebtedness to the Bank of Montreal, through the Cashier, Alex. Davidson, Esq., for the assistance rendered them in the negotiation of their Debentures, whereby they have been enabled to prosecute the work with vigour and efficiency.

ADAM BROWN, *Chairman*,
PETER BALFOUR,
W. DAVIDSON,
D. B. GALBREATH.

WATER COMMISSIONERS' OFFICE, 1
Hamilton, 31st Dec., 1858. }

HAMILTON WATER WORKS.

ENGINEER'S OFFICE, HAMILTON, 31st Dec. 1858.

JAMES E. DAY, Esq.,

*Secretary Board of Water Commissioners,
Hamilton.*

SIR.—The progress of the work during the last half-year has been very satisfactory, inasmuch as all that it was necessary to do has been accomplished. The work is now in such position, that there is no reason to fear any part of it will be delayed beyond the time fixed for the completion of the whole.

THE FILTERING BASIN.

The excavation of this basin has been completed, and the formation has proved all that could have been desired. No obstructions of rock, hard material or driftwood, have been met with in

dredging to a depth of ten feet below average level of Lake Ontario, and no tendency to slips or silting up has appeared; on the contrary, a free gravel, increasing in coarseness with the depth, has been found over the whole extent. This basin was located in a gravel pit, cut into Burlington Beach by the Great Western Railway Company. The dimensions of the Basin itself are two hundred and ninety feet long by one hundred and thirty-five feet broad water surface; but the gravel pit extended nine hundred feet beyond the basin, parallel with the lake shore, and at an average distance of one hundred and thirty feet from water's edge. This pit was excavated to average level of Lake (about two feet below the level of last summer) for a width of one hundred feet. It was, therefore, a shallow basin with two feet depth of water supplied by filtration from the Lake, and advantage has been taken of the presence of the dredge to deepen it to the same bottom level as the basin. This gives now a filtering extent of frontage parallel with the Lake Shore of one thousand one hundred feet, and a Reservoir capable of containing, at the average level of the Lake, two and a quarter million of gallons, of which over one million is available above our lowest feeding level. This additional capacity of Filtering Basin will not be required for many years; but when needed, it would have involved the cutting of a canal of sufficient depth to float a dredge from the Bay into the Filtering Basin. It was therefore more economical to excavate it now while the dredge is in this Basin, and before the canal (which she has cut from the Bay to the Basin for the reception of the conduit pipe) is filled up.

The Conduit pipe, section one, and cribs are completed, and preparations are being made to sink them. The shore portion of the conduit, (section two) one thousand three hundred and fifty feet in length, is completed within fifty yards of Engine House; and the north well is carried as far as it can be done until it receives the end of the conduit pipe (section one) connecting it with the Filtering Basin.

ENGINE HOUSE.

The Engine House has been carried up to the level of the spring beam floor, at which point the masonry was arrested to allow the Contractor for the machinery to put in the main framing of the engines. The Boiler House shell is completed and roofed in, and only wants the boiler settings and flue. The chimney has been carried about sixteen feet above ground, and nearly to the top of the stone work. It is expected that the brick portion can be commenced early in April.

ENGINES.

The whole of the engine work and machinery, except the cylinders, is completed, and the heavier castings, &c., are delivered on

the ground. The entablature and spring beams are placed, and the main beams are about being raised to their bearings. There will be no difficulty in having the engines and boilers ready as soon as they can be used. The quality of this work is excellent, and highly creditable to the contractor.

PIPE TRACK.

The whole of the eighteen inch pipes for the pumping main, arrived in good season and were promptly laid by the contractor, who has also completed the grading of the pipe track. Over thirty thousand lineal feet of this pipe were laid between 15th June and 15th November.

DISTRIBUTING RESERVOIR.

This work has been completed in a very satisfactory manner, so as to be ready for the reception of the water. The slopes of the inner face above water line, and of the outer face of the embankment, have yet to be sodded and the top gravelled. The pipe has been laid through the bank, and a stop-cock placed on it outside, so that the Reservoir is now slowly gathering surface water, which has been turned into it. This will be used for the purpose of proving the pumping main and distributing pipes, before the engines are ready to pump, and will serve for fire purposes until that time, so far as the hydrants may be extended.

VALVES AND SPECIAL CASTINGS.

The Contract for the Valves and Special Castings is so far advanced that their delivery may be expected next month. As soon as these arrive the laying of the distributed pipe may be commenced, in order to afford the desired employment to labourers, altho' it was not intended that this work should have been done in the winter season.

If the collection of surface water in the Reservoir is sufficient, and nothing occurs requiring this water to be drawn off—it can be introduced into the city as soon as the hydrants are placed in the principal streets. These hydrants cannot be erected until the frost is out of the ground—and they are not yet contracted for—but a sufficient portion of them may be placed in May or June to try the force of the water.

I have the honor to be, Sir,

Your obedient Servant,

THOS. C. KEEFER,

Eng'r Ham. Water Works.

SEMI-ANNUAL STATEMENT

*Of the BOARD of WATER COMMISSIONERS of the City of Hamilton, showing Receipts and Expenditures, from
1st July to 31st December, (both inclusive) 1858, in accordance with the Act Incorporating said Commissioners.*

Dr.

Cr.

To balance in Bank.....	\$ 55870.88	By Debentures paid Engine and Boiler account...	\$ 33200.00
" Debentures from City Council	6000.00	" " " Engine House, &c. account ..	25446.66
" " " "	24333.33	" " " and Cash paid Pipe account, freight,	
" " " "	6000.00	" " " tolls, wharfage, lead	58876.18
" " " "	24333.33	" Cash paid Pipe Track and Pumping Main	
" Cash Loan from Bank.....	19687.68	" " " account	15628.00
" Debentures from City Council.....	7500.00	" " " Distributing Reservoir account.....	11377.00
" " " "	14600.00	" " " Pipe Yard and Press House account,	1605.00
" " " "	2600.00	" " " Hydrostatic Press account	1000.00
" " " "	9733.33	" " " Engineer's Department account	5747.76
" " " "	9100.00	" " " Right of Way account	3794.15
" " " "	7000.00	" " " interest on Sterling Debentures, due	
" " " "	3600.00	" " " 1st January, 1859	6347.30
" " " "	3800.00	" " " General Expense account, as law ex-	
" " " "	5000.00	" " " penses, Postages on Debentures,	
" Cash Loan from Bank.....	9825.48	" " " Bank Agency, supervision of pipes	
" " " "	4910.83	" " " in Glasgow, Printing, Office Ex-	
" Debentures from City Council.....	3800.00	" " " penses, &c.....	2250.00
" " " "	53533.33	" " " Reservoir Land account, taxes.....	5.17
" " " "	486.67	" Debentures deposited in Bank of Montreal	122333.32
" " " "	3800.00	" Cash paid loans from Bank of Montreal	39375.36
" Bank Debenture account, net proceeds of sales		" " " interest on loans	762.64
" of Debentures.....	32873.11		
" Cash Loan from Bank of Montreal.....	19380.57		
	<u>\$ 327768.54</u>		<u>\$ 327768.54</u>

HAMILTON, 31st December, 1858.

JAMES E. DAY, *Secretary.*

