

LAKE ONTARIO.

The north pier in this lake has been extended 600 feet, mostly raised to the height, and partly loaded with stone, 140 feet remains to be carried out to twelve feet water so as to form an entrance of 290 feet, between the pier head and breakwater extremity.

The south pier is at present carried out 331 feet and fifteen feet in width : There remains to be done of this pier 400 feet, more or less, to the same depth of 12 feet water—those piers to be constructed of the best quality of pine timber, properly loaded with stone, with piles upon each face and back alternately at 7½ feet lineal—after the works have regularly subsided, they are to be properly levelled off, decked, and secure hand rails placed upon each outside face ; all the pier divisions to be of the dimensions marked upon the plan of this date, the heads to be secured in the manner shewn or by any other mode that may appear more permanent.

The dredging will be continued to the depth of 12 feet and seventy two feet in width—commencing at the bottom of the canal with this width and forming as regular slopes as possible to the height required.

The breakwater cassuns formerly 308 feet in length may terminate with the additions marked upon the drawings being 408 feet over all—the heads to be properly secured with the internal piles, the backs and ends to be guarded with cribs, filled with brush stone &c. and otherwise secured and protected, as marked in the drawing No. 2, accompanying last monthly report.

After the experience of the heavy seas that passed over the breakwater during ordinary gales, it is evident that either of the pier heads will be a more secure position for the light house than that originally intended—the same to be constructed according to the original specifications.

Contract price for making a canal and harbour at Burlington Beach	-	-	-	-	-	-	-	£7500	0	0	H. Cy.
Monies received by the contractors to this date	-	-	-	-	-	-	-	£5770			
Do. upon security,	-	-	-	-	-	-	-	1000	£6770	0	0
Balance in the hands of the commissioners.	-	-	-	-	-	-	-		£730	0	0

Estimate of damage sustained by the contractors while progressing with the works according to the contract price.

Two cassuns 40 feet each to be replaced by extra work	-	-	-	-	-	-	-	£565	5	0
300 cords of stone washed from the breakwater at various times at 20s. per cord	-	-	-	-	-	-	-	800	0	0
Piers, formerly damaged in Burlington lake	-	-	-	-	-	-	-	7	10	0
Ditto do at present season	-	-	-	-	-	-	-	7	10	0
Ditto do in lake Ontario	-	-	-	-	-	-	-	50	0	0
Excavation blocked up in the beach 2160 yards at 3d	-	-	-	-	-	-	-	27	0	0
								957	5	0
Estimate of work done according to contract price	-	-	-	-	-	-	-	4198	14	4
Total award to the contractors for work done exclusive of boats—machinery &c.	-	-	-	-	-	-	-	£5155	19	4
Estimate of work required to be done by contractors before opening the navigation at contract rate	-	-	-	-	-	-	-	3301	5	6
Total, including damage, that will be required to finish the works	-	-	-	-	-	-	-	£8457	4	10
Estimate of expense of extra work for securing the breakwater wings, not formerly contemplated or required but now indispensable from the damage sustained 100 extra feet beyond the contract agreement by 40 feet in width—3555										
cubicyards of stone at 5s. per yard is	-	-	-	-	-	-	-	£868	15	0
Timber for ditto—ends and head work 12,200 feet at £10 per thousand	-	-	-	-	-	-	-	122	0	0
Laying decking, framing &c.	-	-	-	-	-	-	-	61	0	0
								1071	15	0
Extra work to strengthen pier heads, stone, timber, &c.	-	-	-	-	-	-	-	120	0	0
Add damages already sustained through no deficiency of workmanship	-	-	-	-	-	-	-	957	5	0
Contingencies upon this application in ice breaks &c. &c.	-	-	-	-	-	-	-	200	0	0
Total for contingencies	-	-	-	-	-	-	-	£2349	0	0

I have subjoined an abstract of the expenditure by the contractor from the commencement of the work until this date : from experience of the difficulties they had to encounter it appears to me that the plans are fairly stated, the total outlay being

The construction of the breakwater works have proved hazardous and expensive, beyond all calculation—by addenda to last monthly report and upon data that is uncontrovertable the actual outlay by the contractor upon this work alone has been £3681 or nearly one half of the original contract price—in addition £2009 must yet be expended, so that the sum of £5690 will be required to complete and secure this division of the work.

The reason of this unexpected outlay beyond the original estimate is to be attributed in a great measure to the difficulty of procuring stone near the works as expected ; indeed none of a proper quality can be found nearer than six miles, and that water conveyance—the risque attendant thereupon with open scows and the waste of labour when lake Ontario is not perfectly calm, is incalculable.

On the whole although much labour and expense has unavoidably been lost to the contractor in pursuance of this great work of public utility—a work that has no parallel in America for intricacy of situation, of difficulty in execution.

The reporter has now the satisfaction to observe, that every part thereof has been so severely tested ; that the practicability of the measure and permanence of the works even in their unfinished state are now placed beyond a doubt, and that for the more effectual completion of the same the extra sum only of £1391 15 0 will be required to secure against all future contingencies.

Burlington Beach, 13th April, 1826.

I have the honour to be

Gentlemen,

Your very obedient servant,

(Signed)

FRANCIS HALL.

Observations on Engineer's Report, 13th April, 1826. BURLINGTON LAKE.

He states that the piers have been sunk and dredging in the lake nearly completed.

The first is correct except that the ties instead of being 12 inch of square timber are generally round sticks not that size in diameter, indeed in some instances they are split into two, each half forming a tie or "inside brace."

The covering (where it has been done on the breakwater) is only 2 inch pine instead of 5 inch oak—and the string pieces on which they are laid are too distant to oppose the very heavy pressure of water in a gale of wind.

But as the dredging began at about 6 feet depth of water, to obtain 12 feet, as much more must be done.

THE CUT ACROSS THE BEACH

Is said to be done all except 33 feet upon the south side and 225 feet upon the north one—Of the piling done, a very small proportion is driven to the depth required by the specification—three rows of piles instead of one, were to have been put down, the two interior ones have, as yet, been altogether omitted, and if deemed (upon trial) to be unnecessary, then an abatement, equal to the expense, must be made by the contractors. The direction to have 74 feet left between the two sides of the canal through the beach in piling is with the view that