

Primary Battery File

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Record Group 77

Correspondence of the Chief of Engineers

Entry 103

File, Fort, Battery:

29415

Ft. Standish

Btty Terrill

UNITED STATES ENGINEER OFFICE,
Room 917 Winthrop Building,
P. O. BOX 5346, ROOM-124 P. O. BUILDING,

BOSTON, MASS.

May 16, 1899.

Brig. Gen. John M. Wilson,
Chief of Engineers, U. S. Army,
Washington, D. C.

General:

I have the honor to submit herewith plan and estimate for a battery of 3 - 6" R. F. guns on disappearing carriages model of 1898. Your instructions were to locate this battery at Grover's Cliff, but this having proved impracticable owing to the space taken up by the 12" gun battery, I have finally decided to recommend its location on Lovell's Island as explained in my letter of May 4, 1899. The sketch accompanying that letter shows the proposed location and the field of fire, while the plan herewith gives the details of construction. I have arranged the work so as to cover as wide a field as possible on Broad Sound and the proposed Broad Sound Channel and incidentally the flank guns have a good fire over the approaches to the Narrows and Nantasket Roads and also on the inner channel and President Roads. Both ends of Lovell's Island are low, the only high ground being in the centre and near the Narrows. For this and the further reason that the island lies between the two main channels, it has been thought advisable to build a parapet to serve as a screen at least. It is kept as high as the tops of the traverses and so masks the guns from view. More than that seems hardly necessary. The floors of the magazines are kept slightly above the highest known tide and the other dimensions follow from

this. No difficulty is anticipated in draining the battery. The two right hand guns have one large magazine and shot room for their common use, the left gun has a separate service. Provision is made for 400 rounds per gun. The ammunition service is made as direct as possible. The cartridges are expected to be brought up by hand, the head of the stairs being close to the point of delivery on the terreplein. The shot trolleys lead to the same point, and will deliver the projectiles on the terreplein. All this ammunition being comparatively light will, it is supposed, be taken to the gun by hand. Lookouts are provided on each traverse, together with relocators and guard rooms. The electric plant will be run by an oil engine.

The parapets and parados will be of sand and all concrete surfaces exposed to fire are so arranged as to deflect impinging projectiles as much as possible. As high angles of fall are not likely to occur the whole work is deemed amply safe.

I have endeavored to keep down the cost as much as possible and the price per gun, on a rather liberal estimate, amounts to \$15,000. The cost is brought up however by the cost of wharf, quarters, plant, &c., all of which will be available for further work and hence not all chargeable to this small battery.

The total estimate is \$65,000. as follows:

ESTIMATE OF COST of 6" gun battery for Lovell's Island, Boston Harbor, Mass.

Excavation, 1,077 cu. yds. @ 50 cts.	\$538.50	
Fill, 11,753 cu. yds. @ 50 cts.	5,876.50	
Concrete, 4,000 cu. yds. @ \$8.00.	32,000.00	
Doors, 22 @ \$40.00.	\$880.00	
Steel beams.	1,000.00	
Trolleys.	250.00	
Electric lighting plant.	4,000.00	
Drains.	400.00	
	<u>44,945.00</u>	44,945.00
Wharf.	4,500.00	
Railroad.	3,000.00	
Cars, 6 @ \$45.00.	270.00	
Locomotive.	2,000.00	
Hoisting engines, 2 @ \$1,000.00.	2,000.00	
Derrick.	300.00	
Miscellaneous plant.	1,000.00	
Boarding house.	<u>1,000.00</u>	14,070.00
		<u>59,015.00</u>
Engineering and contingencies.		<u>5,901.00</u>
Total.		\$64,916.00
Say.		\$65,000.00

Very respectfully,

Your obedient servant,

Chas. R. Lister

Colonel, Corps of Engineers.

1 inclo.
tracing in sep. roll.

