

Primary Battery File

National Archives, Washington D.C.

Record Group 77

Correspondence of the Chief of Engineers

Entry 103

File, Fort, Battery:

46258

46259

Ft. Strong

Btty Smyth

UNITED STATES ENGINEER OFFICE

P. O. BOX 6346, ROOM 917 WINTHROP BUILDING

BOSTON, MASS.

June 2, 1903.

Brig. Gen. G. L. Gillespie,
Chief of Engineers, U. S. Army,
Washington, D. C.

General:

1. In compliance with instructions contained in your letter of March 6, 1903 (46258), I have the honor to submit herewith plans and estimates for two emplacements for 3-inch rapid-fire guns on pedestal mounts at Fort Strong, Mass. Two different locations are shown for these emplacements.

2. Location No. 1, which is made in accordance with the adopted project, is such that the field of fire covers the Nubble Channel, the water to the south of Fort Strong and part of the torpedo field between Fort Strong and Deer Island, while one of the guns completely covers the torpedo field. The type plans have been generally followed, but owing to the limitations of the site certain modifications have been made in the addition of retaining walls in front and rear, which are shown in the plans forwarded. The site is a difficult one for the location of the battery, the construction will necessarily be expensive and even with the greatest precautions it is probable that there will be more or less trouble experienced with the drainage. Plans and estimates of the battery located on this site were prepared and forwarded under date of May 14, 1903, but for the reasons stated, the plans were

returned to me by the Division Engineer with the suggestion that a new site be selected on the low ground back of the Head where the guns could be so located as to cover the Nubble and the east shore of Long Island south of the battery.

3. In accordance with this suggestion location No. 2 was selected after an examination of the ground and an estimate prepared of the cost of the construction upon this location; and under date of May 29, 1903, the Division Engineer informs me that he has shown my tracing with the proposed location to the Board of Engineers, which agrees with him as to the desirability of the change. As the ground is practically level the type battery can be constructed without difficulty, but on account of the necessity of avoiding the existing water main to Gallops Island, which forms the main supply of Fort Warren and Fort Standish, the choice of site is quite limited.

4. It is absolutely essential to the preservation of the battery, if built at location No. 1, that the slopes of the battery and the slope of the hill in rear be sodded. As there is no sod at the site of the battery and it is doubtful if enough sod for covering the slopes can be obtained on the island without robbing other places which would leave unsightly marks the unit cost of the sod has been made high. On the other hand the unit cost of the concrete has been made lower on this site than on site of No. 2 for the reason that the retaining walls which contain a large proportion of the concrete will require very little form work and the concrete can be put in rapidly and comparatively

economically; also the larger yardage in this battery will reduce the unit cost of the preliminary expenses of preparation. If the battery is built on site No. 1 the retaining wall in front should be painted a grass green, otherwise it will form a very conspicuous target.

5. No new wharves, roads or railroads will be needed in connection with the construction of the battery upon either site except a temporary railroad, which will require but little work, from the wharf around to the site of the battery.

Estimate.

Location No. 1.

Concrete, 1650 cu. yds., at \$9.50 per cu. yd.,	\$15,675.00
Excavation, 3400 cu. yds., at 75¢ per cu. yd.,	2,550.00
Sodding, 1700 sq. yds., at \$1.50 per sq. yd.,	2,550.00
Drainage,	200.00
Waterproofing,	800.00
Doors, 3, at \$75 each,	225.00
Steel rods, etc.,	200.00
Electric system,	200.00
	<hr/>
	\$22,400.00
Superintendence and contingencies,	2,100.00
	<hr/>
	\$24,500.00

Estimate.

Location No. 2.

Concrete, 800 cu. yds., at \$10.50 per cu. yd.,	\$ 8,400.00
Embankment, 3700 cu. yds.; at 75¢ per cu. yd.,	2,775.00
Sodding, 600 sq. yds., at \$1.50 per sq. yd.,	900.00
Drainage,	400.00
Waterproofing,	800.00
Doors, 3, at \$75 each,	225.00
Steel rods, etc.,	200.00
Electric system,	200.00
Superintendence and contingencies,	\$13,900.00
	2,100.00
	\$16,000.00

6. The estimate for neither location contains any item for conduit system from the power house to the battery, the item of

electric system in the estimates including only the installation in the battery. The estimate for the conduit will be included in an estimate which will be submitted in a short time for a new electric plant at Fort Strong.

Very respectfully,

Your obedient servant,

Harry Taylor
Captain, Corps of Engineers.

Office of Engineer
Sg. Ingersoll

June 2, 1903

Through Col. Chap. Super, Corps of Engineers,

5th indorsement.
NORTHEAST DIVISION
ENGINEER OFFICE.

New York, June 15, 1903.

Respectfully forwarded to the
Chief of Engineers, U. S. Army.
I concur in the view of the
District Officer that a separate
latrine will not be necessary.

Chas. R. Suter
Colonel, Corps of Engineers,
Division Engineer.

41, 1903.

Incls. 2 & 3 in sep. roll.

RECD. OFFICE CHIEF OF ENGRS. JUN 16 1903

6th indorsement.
Office Chief of Engineers,

U. S. ARMY.

June 19, 1903.

1. Respectfully returned to
Captain Taylor; approved.
2. These papers to be returned.
By command of Brig. Gen. Gillespie:

Frederic V. Allen
Major, Corps of Engineers.

46258
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Incls. 2 & 3 in sep. roll.

Through Col. CHAS. R. SUTER,
Corps of Engineers,
Division Engineer, Northeast Division.

Recd NY June 22, 1903.

7th indorsement.
NORTHEAST DIVISION
ENGINEER OFFICE.

New York, June 22, 1903.

Respectfully forwarded to
Captain Taylor, inviting atten-
tion to the preceding indorse-
ment.

Chas. R. Suter
Colonel, Corps of Engineers,
Division Engineer.

41, 1903.

Incls. 2&3 in sep. roll.
RECD. U. S. ENGR. OFFICE, BOSTON JUN 24 1903

8th indorsement.

U. S. Engineer Office,
Boston, Mass.
June 25, 1903.

Respectfully returned to the
Chief of Engineers.

Harry Taylor
Captain, Corps of Engineers.

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7

Forts. B.

Incls. 8 and 9 in sep. roll.
RECD. OFFICE CHIEF OF ENGRS. JUN 28 1903

UNITED STATES ENGINEER OFFICE

P. O. BOX 5346, ROOM 917 WINTHROP BUILDING

BOSTON, MASS.

August 15, 1903.

Brig. Gen. G. L. Gillespie,
Chief of Engineers, U. S. Army,
Washington, D. C.

General:

1. I have the honor to submit the following recommendations in reference to finishing the interior of certain batteries in this district for which allotments have been made.

2. Under date of April 10, 1903, I forwarded plans and estimates for two 15-pounder rapid fire emplacements at Fort Andrews in compliance with instructions contained in your letter of March 6, 1903 (46259). In reference to the plans I stated that it was my intention to line this battery throughout with a wooden lining for the purpose of preventing condensation.

3. Under date of June 2, 1903, I submitted plans for two 15-pounder emplacements at Fort Strong, under date of June 24, 1903, I submitted plans for four 15-pounder emplacements at Fort Strong and two 6-inch emplacements at Fort Revere, and under date of May 9, 1903, I submitted plans for two 15-pdr. emplacements at Fort Constitution, N. H. In each case it was the intention to line the emplacements throughout in the same manner as proposed for the two 15-pounder emplacements at Fort Andrews.

4. Observations during the present summer of the linings placed in the magazines of the different emplacements in this district indicate that the wooden lining is not as effective for pre-

venting condensation as the lining of porous brick. The magazines which have been lined are in each case only one room in the emplacements and as the bare concrete is exposed in all of the adjacent rooms and passages the conditions are considerably different from those which would exist in a battery lined throughout. In proposing a wooden lining for the emplacements above referred to it was my intention to line them throughout with wood with the idea that the warm moist air would be kept from coming in contact with the cold concrete and condensation thus prevented.

5. While I am not fully satisfied that the method of lining the emplacements throughout with wood would not be a success, the results which have been obtained with the porous lining brick are so favorable, there having been no condensation even under the most aggravated conditions, that it would seem to me preferable to line the new emplacements with the porous brick instead of the wooden lining, and I have therefore the honor to recommend that authority for this change in the plans be given. The porous brick lining will cost more than the wooden lining, but the difference in cost is not great enough to make it necessary to recommend any additional allotment at the present time.

6. The various methods of lining tried and the results noticed were fully described in my report forwarded the 13th instant. ^{16/17} 9

7. The 15-pdr. emplacements at Fort Andrews, for which the wooden lining was first recommended, and for two 6" emplacements at Fort Stark, are now well advanced toward completion and the arrangements for fastening the wooden lining have all been made. It will therefore be necessary to complete these emplacements as origi-

usually planned and an opportunity for observing the effect of the wooden lining where there is no cold concrete to cause condensation will be had.

Very respectfully,

Your obedient servant,

Henry Taylor

Captain, Corps of Engineers.

Through Col. Chas. R. Suter,
Corps of Engineers,
Division Engineer of the Northeast Division.

Office.
Letter will be returned to this
address.

151	NORTHEAST DIVISION ENGINEER OFFICE.	1903
REC'D, N.Y., Aug. 17, 1903.		

OFFICE CHIEF OF ENGINEERS

46259
3

WAR DEPARTMENT

Boston, Mass.,
Aug. 15, 1903.

Taylor,
Capt. Harry.

Submits recommendations for finishing interiors of certain batteries in his district, for which allotments have been made.

It was his intention to line these batteries throughout with wooden linings. As follows:

Ft. Andrews, two 3" empls.
Ft. Strong, four 3" "
Ft. Revere, two 6" "
Ft. Constitution, two 3" "
Remarks on the wood lining.

147	FORTIFICATION, U.S. ENGINEER OFFICE, BOSTON, MASS.	AUG 22 1903
6		

1st. indorsement.

NORTHEAST DIVISION
ENGINEER OFFICE.

New York, August 17, 1903.

1. Respectfully forwarded to the Chief of Engineers, U.S. Army.

2. I am not yet entirely satisfied that the wooden lining alluded to may not prove sufficient, especially in the case of small emplacements with rooms near the outer air, but as a large number have been built already, with results not entirely satisfactory, it does not seem advisable to increase this number at present, except as recommended by Capt. Taylor for works already begun. There seems to be no possible doubt as to the success of the porous brick wherever they have been used, and the additional cost is not sufficient to be prohibitory.

Chas. R. Suter
Colonel, Corps of Engineers,
Division Engineer.

151, 1903.

2d indorsement.

Office Chief of Engineers,

U. S. ARMY.

August 20, 1903.

1. Respectfully returned to Captain Taylor, approved.
2. When such record as may be

necessary has been made, this paper will be returned to this office.

Thos. V. Allen
Acting Chief of Engineers.

46259
3

Through Col. CHAS. R. SUTER,

Corps of Engineers,

Division Engineer, Northeast Division.

Rec'd back, N.Y. Aug. 21, 1903.

3d. indorsement.

NORTHEAST DIVISION
ENGINEER OFFICE.

New York, August 21, 1903.

Respectfully forwarded to Captain Harry Taylor, Corps of Engineers.

Chas. R. Suter
Colonel, Corps of Engineers,
Division Engineer.

151, 1903.

4th indorsement.

U. S. Engineer Office,
Boston, Mass.

August 22, 1903.

Respectfully returned to the Chief of Engineers.

Harry Taylor
Captain, Corps of Engineers.
REC'D OFFICE CHIEF OF ENGRS. AUG 24 1903
147/6 Forts. B.