

Primary Battery File

National Archives, Washington D.C.

Record Group 77

Correspondence of the Chief of Engineers

Entry 103

File, Fort, Battery:

24955

28650

Ft. Strong

Btly Basinger

Subject: Rapid Fire Gun Empl. Long Isld Hd.
UNITED STATES ENGINEER OFFICE,

P. O. BOX 5346, ROOM 124 P. O. BUILDING,
BOSTON, MASS.

April 23, 1898.

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

General:

I have the honor to forward herewith preliminary plan
for construction of two emplacements for rapid fire guns at Long
Island Head, Boston Harbor, Mass.

By direction, and in the absence, of Lt. Col. S. M. Mansfield,
Corps of Engineers,

Very respectfully,

Your obedient servant,

John Stephen Sewell,
1st Lt., Corps of Engineers.

(1 inclo. Plan in sep. roll.)

OFFICE, CHIEF OF ENGINEERS
24955
APR 23 3 36 PM '98
WAR DEPARTMENT.

Badon, Casey
April 23/98.

Manfredia
Lt. Col. J. C. M.
By Order J. O. Dwyer.

Grade problem, given for
construction of 2 emplacements for m.f.
guns at Long Island City,
Boston Harbor, Mass.

Inclo. 8 A. (receiving)

U. S. Engineer Office,
Boston, Mass.

45 Received APR 27 1998

Order. 4 in days Order, Co. 23, 24, 19.

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RECD, OFFICE CHIEF OF ENGRS. APR 30 1898

1st indorsement.

Office Chief of Engineers,
U. S. ARMY.

April 26, 1898.
Respectfully returned approved,
with the exception of thickness
of concrete in front of magazine,
which can be reduced to 10 feet.
It is suggested that the terre-
plein shown at a uniform grade of
(98.0) be sloped to the rear with
a view principally to affording
more cover to ammunition bearers.

By command of Brig. Gen. Wilson

Joseph E. Smith
Captain, Corps of Engineers.

24955
3
Inclo. 4 in sep. roll.

2nd indorsement.
U. S. Engineer Office,
Boston, Mass.,
April 28, 1898.

Respectfully returned to the
Chief of Engineers, U.S. Army.
By direction, and in the
absence, of Lt. Col. S. M. Mans-
field, Corps of Engineers.

John Stephen Dwell.
1st Lieut. Corps of Engrs.
N. D. 45.

RECD, OFFICE CHIEF OF ENGRS. APR 30 1898

UNITED STATES ENGINEER OFFICE,

Room 917 Winthrop Building,
P. O. BOX 5348, ~~ROOM 124 P. O. BUILDING,~~

BOSTON, MASS.

July 15, 1899.

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

General:

I have the honor to forward herewith plans and estimates for emplacements for two 15-pdr. R. F. guns on balanced pillar mounts at Long Island Head, Boston Harbor.

The accompanying sketches show the location of the battery with reference to the main armament of the position, and also to the mine field which it is intended to cover. It will, I think, be apparent from the small sketch of the Head that it is impossible to locate these guns on the high ground and at the same time cover the mine field, unless they are placed in front of the main armament. This would be out of the question for open batteries, and even for casemated ones the position is not favorable.

After careful study of the question, I have finally decided that the only practicable location is in rear of the sea-wall and at the foot of the main bluff on which the heavy guns are mounted. There are, of course, objections to such a location, but I see no alternative, as the armament is necessary to protect this particular mine field and no other available point affords the proper facilities. The bluff itself is composed mainly of clay; no rock in place is visible or believed to exist, so that projectiles striking it will probably

bury themselves and explode harmlessly.

The type of emplacement chosen is best suited to the site; and the restricted field of fire to be covered, and the masonry, is concentrated in two compact masses to lessen the chance of a slip on the hillside, and to render the drainage less difficult. The guns are protected from enfilade fire by earthen traverses which will also fairly shelter the gun detachments. The guns are mounted on the roof of the magazine, the counterpoise well being over a large pier carried down to the foundations. This will give very great stability; and I do not anticipate that the roof will be injured by the shock of firing.

I have allowed the natural hill slope to come down to the rear of the gun platform, as I did not dare risk a retaining wall behind the guns. The magazines and bombproofs are well protected, while the covered passages through the traverses also give fairly good cover.

The ammunition service could of course be done by hand, using the stairs leading from the magazine to the gun platform; but, fearing that this might be too slow, I have also arranged for a lift direct between the points named. This, as shown, is for a simple chain lift to deliver a continuous stream of projectiles; but if the ammunition comes in boxes it might be better to use a platform lift calculated to take up a box at a time. These boxes could be placed close to the parapet and would be quite safe there. On this point, I should like to know the Department's wishes: the cost would prob-

ably be the same by either method.

The covered passages between the emplacements, and from the outside to #2, seem necessary for proper communication and to serve incidentally as cover for guards and other purposes.

No lookout station has been provided as the battery is too low for a depression range finder. One could be located on the bluff in rear, to the left of the 4.7" R. F. battery, at an additional cost of about \$300.: or, orders could be sent from the main station shown on the map. In any case, one of the rooms will be arranged for relocating purposes.

The drainage problem will require some careful study when the excavation is made, and cannot be properly shown at present. I hope to cut off most of the hill drainage by intercepting drains on top of the hill and on the slope itself. The remainder will be looked after by blind drains and similar devices. The estimate will cover all contingencies, I think.

The estimate for the whole work is \$9,000.00: or \$9,300.00, if the lookout is thought advisable. This estimate seems large, and may be reduced in construction; but I should not feel safe in making it less at present as there are some uncertain elements to be looked out for.

The estimate in detail is as follows, viz.:

Concrete:	600 cubic yards @ \$8.-----	\$4,800.00
Excavation:	1500 cubic yards @ 50¢.-----	750.00
	Carried forward-----	<u>\$5,550.00</u>

Brought forward-----	\$5,550.00
Fill: 1900 cubic yards @ 50¢.-----	950.00
Forms:-----	175.00
Drains: -----	400.00
Beams: -----	225.00
Doors: 10 @ \$40.-----	400.00
Lifts: -----	400.00
Electric Lights:-----	200.00
Contingencies:-----	700.00
<hr/>	
TOTAL-----	\$9,000.00
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With observation station added:----\$9,300.

Very respectfully,

Your obedient servant,

Chas. R. Luten
Colonel, Corps of Engineers.

(2 tracings in sep. roll.)

OFFICE, CHIEF OF ENGINEERS
27 JUL 1899
28650
8
WAR DEPARTMENT.

Boston,
July 15, 1899

Letter,
Col C R
Hays

2161 I would please and
to for emplacements for two
-pdr R. 5 guns on
advanced fielder mounts
Long Island Head,
Mass. The wishes of
Dept are desired on
point concerning am-
munition service.

Estimate cost of
work at \$9000.

With above station
needed, \$300 additional

2 inclos.

(Inclosings)

100 ft 9 in Chain Cable
100 ft 9 in 97 cables

RECD. BAC, OFFICE CHIEF OF ENGRS. JUL 24 1899
inclos. 9 & 10 accy

1st indorsement.

Office Chief of Engineers,
U. S. ARMY.

July 19, 1899.

Respectfully returned approved.
The ammunition for 15-pdr. rapid-
fire guns is stored in packing
boxes having dimensions of 11 1/2"
x 11 1/8" x 3', each box holding
four charges. Under this condi-
tion an ordinary platform lift
capable of raising one packing
box at a time is deemed preferable
to a chain lift. The width of the
lift well should be made slightly
larger than shown on the drawings
to allow ample clearance for the
packing box, which is provided
with rope handles.

A special observation station
station for this type of battery
is not necessary.

The sum of \$9,000 is hereby al-
lotted from the appropriation for
"Gun and Mortar Batteries", for
construction of gun and mortar
batteries, Act of July 7, 1898,
to be applied to the construction
of emplacements for two 15-pdr.
rapid-fire guns at Long Island
Head, Mass.

These papers to be returned.
By command of Brig. Gen. Wilson:

28650
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Inclos. 9 & 10 in sep. roll.
Capt. C. R. Hays
Captain, Corps of Engineers.

2d indorsement.

U. S. Engineer Office,
Boston, Mass.,

July 22, 1899.

Respectfully returned to the
Chief of Engineers, U. S. Army.

Chas. R. Hays

Colonel, Corps of Engrs.
Fort 2161.

2 inclos. accomp. in sep. roll.

RECD. OFFICE CHIEF OF ENGRS. JUL 24 1899