Primary Battery File

National Archives, Washington D.C.

Record Group 77

Correspondence of the Chief of Engineers

Entry 103

File, Fort, Battery:

20274
67865
Ft Columbia
Bty Heavy (Ord no.3)

SUBJECT: Defenses, mouth of Columbia River.

Office of the Chief of Engineers,
United States Army,

Washington, D. C., April 3, 1897.

Capt. W. L. Fisk,
Corps of Engineers,
Portland, Oreg.

Captain:

With funds appropriated by the Act of March 3, 1897, it is proposed to undertake the following work upon the defenses at the Mouth of the Columbia River, under the approved project:

At Point Adams, eight emplacements for 12-inch mortars on carriages, model 1896.

At Chinook Point, one 8-inch gun on experimental disappearing carriage, model 1894.

You are accordingly requested to submit detailed plans and estimates for the above works with a view to making the necessary allotments.

In considering the location of the eight mortar emplacements, provision should be made for the remaining eight emplacements of the battery either on the same line or directly in rear of the eight emplacements now authorized as may be found desirable upon future consideration.

The experimental 8-inch disappearing carriage, model 1894, referred to above, is the carriage which has been used at Sandy Hook for testing purposes.

In general appearance it is the same as the standard

carriage, model 1894, now being issued, but differs slightly in some of its details and will require a platform slightly different from the standard carriage.

The platform sheet for this experimental carriage is now being prepared by the Ordnance Department and will be forwarded as soon as received.

It is the desire of the Chief of Ordnance that this experimental carriage be mounted in an isolated emplacement if possible.

Emplacement No. 4 of the four-gun battery at Chinook Point approximately fulfills the condition of an isolated emplacement, and has, therefore, been selected to receive this experimental carriage.

In submitting your plans, you are requested to recommend whether either or both of the above works can be done most advantageously by hired labor or by contract, and your reasons therefor.

It is desired that plans and estimates be submitted without unnecessary delay in order that as much work as possible may be accomplished during the present working season.

By command of Brig. Gen. Wilson:

Very respectfully,

Your obedient servant,

Joseph E. Kuhn

Captain, Corps of Engineers.

20274

U. S. ENGINEER OFFICE
PACIFIC DIVISION
Received MAY 28 1897

OFFICE, CHIEF OF ENGINEERS.
JUN 3 1897
20274
WAR DEPARTMENT.

Portland, Oregon,
May [illegible], 1897.

[illegible], Captain W.L. [illegible]
Corps of Engineers.

Plans & estimate for emplacement [illegible] 12-inch rifled
Mortars, on [illegible] carriages at
POINT ADAMS, Oregon [illegible]

C. of E. [illegible]

Total est. cost $80,651.94
or practically $80,000.

E. D.
(Blue prints)
Inclos. 2 & 3 in Map Files, Dr. 92, Sh. 94.

Forwd by Div Engr.

File
K

RECD. BACK OFFICE CHIEF OF ENGRS. JUL 20 1897
incs 2 & 3 accomp.

RECD. BACK OFFICE CHIEF OF ENGRS. JUL 2, 1897
incs 2 and 3 accomp
[illegible] July 14 1897

1st. Endorsement.

U.S.ENGINEER Office,
Pacific Division,
San Francisco, Cal.,
May 28, 1897.

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

The choice of location and general design of the Mortar battery, appear to be good. Some of the details, however, seem to me susceptible of judicious modification. The magazines and shot rooms are arranged in the parapet in front of the pits, a satisfactory arrangement, but the actual capacity shown does not conform to the requirements of circular of July 24th, [illegible] seems to have been over[illegible]. As I understand the matter, this battery is to receive all [illegible] mortars, which use a charge of [illegible] weight, viz. 110 lbs., so that 200 [illegible] per mortar must be provided. Captain Fisk's magazine [illegible] the one proposed by the Board. This latter dimension [illegible] would give a sufficient increase of capacity. In the same way [illegible] are rather [illegible] for this purpose Captain [illegible] are rather [illegible] greatly facilitate [illegible] 11' instead of 10'. The gallery leading in [illegible] practically in line [illegible] direction in which [illegible] mortars will be fired, [illegible] the effect of the blast there will probably be exceptionally [illegible] that the [illegible]

entrance might prove objectionable, and even dangerous. It might perhaps be improved by swinging the magazine around parallel to the entrance gallery, and making the direction of approach to the door more indirect. I notice that the shot trolleys are carried clear out of the gallery, and across the pit. This seems an unnecessary expense, and offers objections as well. As these mortars use the regular loading truck, which carries both shell and cartridge, it might as well be loaded in the gallery and save a long trolley transit, which, especially with shell, is not unattended with danger. By doing away with the curves at end of shot galleries, the trucks could receive both cartridge and projectile at the end of the shot files, and then be hauled to their respective pieces. The relocator and firing rooms are badly located. The relocator and telephone rooms especially, should be in a reasonably quiet place. I would suggest the parapet to the right or left of the pit for this purpose. The [illegible] ring instrument is so large, that it and the necessary [illegible] require for their accommodation a room at least 12' x 10', and as much larger as possible. The firing room is unnecessary, the firing should be done in the open, and from a position whence the Mortars are in full view. Voice pipe communication with the relocator room to receive directions, is all that is needed, [illegible] easily be arranged. The [illegible] batteries can be placed [illegible] and

of the implement gallery, and the latrine moved out of doors. An interior location for this necessary nuisance is likely to prove very objectionable.

I cannot see the need of the heavy concrete wall & earthen glacis outside of it, which is carried around two sides of the pit. Fire from this direction is unlikely at best, and must necessarily be at random. The proposed cover would hardly protect the mortars, and the gun detachments have shelter provided in the gallery. At any rate, it seems to me that a short traverse running back from the V of the parapet for the right pit, and from the flank of the left one, would answer all possible purposes, and could be constructed entirely of sand. The estimate for the battery seems large, and fully half is for concrete. As sand seems to be abundant, and cheaply moved, it would seem possible to cut off some of the masonry, and replace it by increased thickness of the cheaper material. With the latter at .1?, and the former at $8.00 a yard, there would seem ample opportunity for saving in cost, with no sacrifice of efficiency.

Chas. R. Suter
Colonel of Engineers, U.S.A.,
Division Engineer.

United States Engineer Office
321 CUSTOM HOUSE
P. O. DRAWER 762 PORTLAND, OREGON

July 25, 1908.

The Chief of Engineers, U. S. A.,

Washington, D. C.

General:

1. In compliance with wrapper indorsement on E. D. file No. 67865, I have the honor to submit the following estimate of cost of making the changes ~~necessary~~ in emplacement No. 3, Battery Jules Ord, Fort Columbia, Washington, necessary to mount the model 1896 carriage, as suggested by the Chief of Ordnance, and to remove the model 1894 experimental 8-inch carriage from the battery:

Raising Loading Platform & Gun Pit to new level, 81 cubic yards concrete, @ $20. - - - - - - - - - -	$1620.00
Placing 6 additional stairs and filling behind new parapet, 16 cu.yds. concrete, @ $20. - - - -	320.00
Reinforced concrete roof & roof joint, 16 cu. yds. concrete, @ $30. - - - - - - - - - - - -	480.00
Cutting out gun well, 5 cu. yds. @ $30. - - - - - - - - - - - - - - - - - -	150.00
Cutting out roof joint, 5 cu. yds. @ $30. - - - - - - - - - - - - - - - - - -	150.00
Damp-proofing and oiling, - - - - - - - - - - - - - - -	300.00
Moving & loading for shipment, 8-inch D. C. Model 1894,- - - - - - - - - - - - - - -	500.00
Moving 8-inch D. C. Model 1896 to battery,- - - - - -	400.00
Carried forward, - - - - - - - -	$3920.00

Brought forward, - - - - - - - - - - - - -	$3920.00
Mounting 8-inch D. C. Model 1896 (if this work is done by Engineer Department labor), - - - - - - - -	300.00
	$4220.00
Contingencies and superintendence, 20%, - - - - - - -	844.00
Total estimated cost, - - - - - - - - - - - - -	$5064.00

2. Inclosed herewith is a blue print showing the work that will be necessary, in accordance with the sketch furnished by the Chief of Ordnance.

Very respectfully,

J. T. McIndoe

Major, Corps of Engineers, U. S. A.

Def. 758/8
Inclo. 7 herewith.

WAR DEPARTMENT.

Portland, Ore.
July 25, 1908.

M C I N D O E,
MAJ. J. F.

Submitting estimate of cost of making the changes in emplacement No.3, Battery Jules Ord, Ft.Columbia, Wash., necessary to mount model 1896 carriage, etc.

"File A"

Mar. 13/09 Letter to Major McIndoe.

A