

List of revised sheets, Report of Completed Works, Harbor
Defenses of Puget Sound, submitted with letter of December 31, 1932.

660B (Puget Sound) - 53/1

-----ooOoo-----

1.--

FORT WORDEN

Forms 1 :- (Corrected to April, 1932.)

Batteries	Ash	Quarles	Randol
	Tolles	Stoddard	Walker
	Putnam	Vicars	Anti-aircraft (not named).

Forms 2 :- (Corrected to September, 1932, except as noted.)

Designations in brackets indicate assignment of corresponding stations prior to recent revision of Fire Control System, Harbor Defenses of Puget Sound.

✓ ClF1	✓ B'1, etc	✓ G3, B'3
✓ B'5	✓ B'4	✓ B"15 etc
✓ B"14	✓ B"15, etc. (South Secondaries)	✓ B"14
✓ B.C.Ash	✓ B.C.Benson - Nov., 1932	✓ B.C.Quarles
✓ B.C.Randol	✓ P.Brannan	✓ P.Powell
✓ Switchboard House	✓ Submarine Cable Terminal	✓ Signal Station - Dec. 1932
✓ Central Qrs. Bldg.	✓ Cen.Qrs.Bldg.Latrine	✓ Watchmans Qrs. West
✓ Watchmans Qrs. South	✓ Latrine & Septic Tank	✓ Datum Simms.
✓ Datum Caine	✓ Datum Wilson	✓ Datum Morgan
✓ Mine Casemate & Power Pl.	✓ E'15-1 Bran. (G'1R1)	✓ E'1-1 Powell (B'1R1)
✓ E'14 Kinzie (B'14R1)	✓ E'15-2 Bran. (G'1R2)	✓ E'2 Ash (B'2R1)
✓ E'1-2 Powell (B'1R2)	✓ E'3 Benson (B'3R1)	✓ E'4 Tolles (B'4R1)
✓ E"15-2 Bran. (G"1R2)	✓ E"1-2 Powell (B"1R2)	✓ E"3 Benson (B"3R1)
✓ E"4 Tolles (B"4R1)	✓ E"2 Ash (B"2R1)	✓ E"14 Kinzie (B"14R1)
✓ E"15-1 Bran. (G"1R1)	✓ E"1-1 Powell (B"1R1)	✓ E"15-3 Bran. (G"1R3)
✓ E"15-4 Bran. (G"1R4)		

Form 3 :- (Corrected to December, 1932).

✓ Wharf and Tramway, Fort Worden.

Forms 4 :- (Corrected to December, 1932).

S.L. #2, fixed ✓	S.L. #3, fixed ✓	S.L. #4, fixed ✓
S.L. #5, fixed ✓	S.L. #6, fixed ✓	S.L. Mobile, Cad. #254 ✓
S.L. Mobile, Mack, #21935 ✓	B.P. Mobile SL Shelter ✓	S.L. Mobile, Mack #21953 ✓
S.L. Mobile, Cad. #286 ✓	S.L. Mobile, Cad. #16 ✓	S.L. Mobile, #266, Cad. ✓
S.L. Mobile, Mack #21948 ✓	S.L. #1 (not installed)	

Forms 5 :- (Corrected to December, 1932).

✓ Power for S.L. #2 & 3 ✓	✓ Power for S.L. #4 ✓	✓ Power for S.L. #5 ✓
✓ Power for S.L. #6 ✓	✓ Def. Works & Post Lt. (2 sh)	✓ B.P. Def. Works, etc.,
✓ Power Bat. Ash, etc. ✓	✓ B.P. Power for Bat. Ash	✓ Power Bat. Kinzie (2 sh).
✓ Power for Bat. Bran. & Pow.	✓ B.P. Power Bat. B. & P.	✓ B.P. Bat. Kinzie
✓ Power for S.L. #1 (25 KW set not installed)		
✓ 25 KW set in storage (formerly battery power at Fort Ward),		

Form 6:- (Corrected to October, 1932).
Engineer Department Structures, (2 sheets).

Forms 7 :- (Corrected to April 1932).

Batteries	Brannan	Powell	Kinzie
	Ash	Benson	Quarles
	Randol	Stoddard	Walker
	Putnam	Vicars	Anti-aircraft (no name)

-----ooOoo-----

FORT CASEY

Form 6 :- (Corrected to October, 1932).

Engineer Department structures.

-----ooOoo-----

FORT FLAGLER

Form 6 :- (Corrected to October, 1932).

Engineer Department Structures.

-----ooOoo-----

2.- Checking list. Remaining sheets in the Fort Worden file, not replaced by revision herewith, should be as follows:

Forms 1: - (Sept. 1927) Batteries Brannan, Powell, Kinzie, Benson,
(Nov. 1931) Anti-aircraft - Trailer Mounts.

Forms 2: - (Apr. 1927) Tide station.
(Oct. 1931) B'14, Radio Station.,
(Nov. 1931) Datum Partridge.

Form 4: - (Aug. 1917) Blue prints of shelters for fixed searchlights
Nos. 2&3, 4, 5, and 6.

Form 5: - (Aug. 1917) Blue prints of Power House for Searchlights
Nos. 2&3, 4, 5 and 6.

Form 7: - (Aug. 1925) Battery Tolles
(Nov. 1931) Anti-aircraft (trailer mounts).

3.- The following structures have been recommended for abandonment, with resulting elimination from the Report of Completed works:

✓ E"15-3 Brannan formerly (G' LR3)	Cor. Nov. 1927
✓ E"15-5 Brannan formerly (G' LR5)	Cor. Nov. 1927
✓ Datum Dallas	Cor. Nov. 1931
✓ Datum Woodman	Cor. Nov. 1925

C. of E. 665/Pages 54/90
Dec. 31, 1932.

4.- Reference changes shown by revised sheets, Forms 6, herewith, the following structures, listed on previous reports, have been transferred to the Quartermaster Corps in accordance with official instructions:-

For either sale or salvage:

Fort Worden: ✓ Warehouse "E"
Fort Casey: ✓ Quarters "A" and "B"
 ✓ Warehouse "A" and "B"
 ✓ Toolhouse
 ✓ Blacksmith shop
Fort Flagler: ✓ Quarters "A" and "B",

For use:

Fort Worden: ✓ Warehouse "D"

The names of the following structures have been changed to conform to their present use:

Fort Worden: ✓ "Paint shop and Blueprint" to "Toolhouse".
Fort Casey: ✓ "Office" to "Storehouse".
 ✓ "Paint shop and Toolhouse" to "Toolhouse".
Fort Flagler: ✓ "Office" to "Storehouse".

REPORT OF COMPLETED WORKSHARBOR DEFENSES OF PUGET SOUND.

This is a complete list of all sheets and blueprints of the completed works report for Harbor Defenses of Puget Sound with date of correction and former designation of structure if its name has been materially changed.

PORT JORDAN.

Form 1 & 7: Bat. Brannan.	Form 1 corrected to Sept. 1927.	Form 7 to Apr. 1932.
" Powell	" " "	" " " " " "
" Kinzie	" " "	" " " " " "
" Ash	" " "	" Apr. 1932. " " " " "
" Benson	" " "	" Sept. 1927. " " " " "
" Quarles	" " "	" Apr. 1932. " " " " "
" Randol	" " "	" " " " " " "
" Tolles	" " "	" " " " " Aug. 1925
" Stoddard	" " "	" " " " " Apr. 1932
" Walker	" " "	" " " " " " "
" Putnam	" " "	" " " " " " "
" Vicars	" " "	" " " " " " "
Third Aerial	" " "	" June 1, 1933. " " June 1933
3" A.A. Platforms	" " "	" Nov. 1931. " " Nov. 1931

Form 2:	C1 F1	Corrected to Sept. 1932
	B'1, G2, G1	" " " "
	G3, B'3	" " " "
	B'5, (G&B'6 vacant)	" " " "
	B'4	" " " "
	B'14	" Oct. 1931
	B'15, B'1, B'3, B'4, B'2	" Sept. 1932
	B'14	" " " "
on sheet - {	B'15, B'1, B'6, B'2,	
	B'5,	" " " "
	B'14	" " " "
	B.C.P. Ash	" " " "
	B.C.P. Benson	" Nov. "
	B.C.P. Quarles	" Sept. "
	B.C.P. Randol	" " " "
	C.R.L. Walker	" June 1933 (New sheet)
	P Brannan	" Sept. 1932
	P Powell	" " " "
	Switchboard House	" " " "
	Radio Station	" Oct. 1931
	Submarine Cable Terminal	" Sept. 1932
	Signal Station	" Dec. 1932 (New sheet)
	Tide Station	" Apr. 1927

Form 2:	Central Qrs. Bldg.	Corrected to Sept. 1932	
	Latrine	"	
	Watchmans Qrs. West	"	
	Watchmans Qrs. South	"	
	Latrine & Septic Tank	"	
	Datum Simms	"	
	Datum Caine	"	
	Datum Wilson	"	
	Datum Morgan	"	
	Mine Casemate & Power Plant	"	
	E'15-1 Brannan	"	(Formerly G'1R1)
	E'1-1 Powell	"	(" B'1R1)
	E'14 Kinzie	"	(" D'14R1)
	E'15-2 Brannan	"	(" G'1R2)
	E'2 Ash	"	(" D'2R1)
	E'1-2 Powell	"	(" B'1R2)
	E'3 Benson	"	(" B'3R1)
	E'4 Tolles	"	(" B'4R1)
	E'15-2 Brannan	"	(" G'1R2)
	E'1-2 Powell	"	(" B'1R2)
	E'3 Benson	"	(" B'3R1)
	E'4 Tolles	"	(" B'4R1)
	E'2 Ash	"	(" D'2R1)
	E'14 Kinzie	"	(" D'14R1)
	E'15-1 Brannan	"	(" G'1R1)
	E'1-1 Powell	"	(" B'1R1)
	E'15-3 Brannan	"	(" G'1R3)
	E'15-4 Brannan	"	(" G'1R4) ✓
Form 3:	Wharf & Tramway	Corrected to Dec. 1932	
Form 4:	Searchlight No. 1	Corrected to Dec. 1932. (Sup. Report)	
	" 2	"	(L.P. Aug. 1917
	" 3	"	(" " "
	" 4	"	" " 1917
	" 5	"	" " "
	" 6	"	" " "
	S.L. Mobile Cadillac, Eng. #57-Y-818	"	
	" Mack " #563-31	"	
	Blueprint shelter for Mobile S.L.	"	
	S.L. Mobile Cadillac, Eng. #58-A-433	"	
	" " " #58-L9	"	
	" " " #57-Z-850	"	
	" Mack " #574-48	"	
	" " " #01-914-10	"	
Form 5:	Power for S.L. No. 1	Corrected to Dec. 1932 (Sup. Report)	
	" 2 & 3	"	L.P. Aug. 1917
	" 4	"	"
	" 5	"	"
	" 6	"	"
	Central Power plant & B.P.	"	
	Power for Ash, Tolles, Walker, etc	"	

Form 5: Power for Kinzie & B.P. Corrected to Dec. 1932
 " " Brannan & Powell & B.P. " " "
 " " (Surplus 25 Kw Set) " " "
 Form 6: Eng. Department Structures Corrected to June 1933

FORT CASSY.

Corrected to March 1933.

Form 1 and 7: Battery Seymour
 Schenck
 Worth
 Moore
 Kingsbury
 Valleau
 Parker
 Trevor
 Van Horne
 Turnman
 First Aerial
 Second Aerial

Corrected to March 1933.

Form 2: G4, B'7, F2, G5 B'7, F'5,

Corrected to April 1933.

Form 2: G6
 B'8
 B'9
 B'10
 B''16, B''7 Formerly F''4, B''7
 B''8, B''9
 B''16, B''10, B''17 Formerly F''4, B''7, B''10.
 B.C.P. Worth
 B.C.P. Moore
 B.C.P. Kingsbury
 C.R.F. Trevor
 C.R.F. Van Horne
 P Seymour
 P Schenck
 P Worth
 P Moore
 Switchboard House
 Radio Station (Formerly old switchboard house)
 Submarine Cable Terminal
 Formerly Meteorological Station
 Picket Guard House
 Latrine at Battery Worth
 Latrine at Battery Van Horne

Form 2: ✓ E'9 Moore (Formerly B'9R1)
 ✓ E'8 Worth (" B'8R1)
 ✓ E'16 Seymour (" G'4R1)
 ✓ E'7 Schenck (" B'7R1)
 ✓ E''7 Schenck (" ✓ B''7R1)
 ✓ E (Vacant) (" B'7R2 Schenck
 ✓ E " (" G'4R2 "
 ✓ E''16 Seymour (" G''4R1)
 Datum Perigo
 Datum Shields

Form 4: * Searchlight No. 7 Corrected to Apr. 1933 (Sup. Report)
 " 8 " " (B.P. Aug. 1917
 " 9 " " (" "
 " 10 " " (" 191'
 " 11 " " (" "
 " 12 " " (" 1917)

Form 5: * Power for S.L. No. 7 Corrected to Apr. 1933 (Sup. Report)
 " 8 & 9 " (B.P. Aug. 1917)
 " 10 & 11 " "
 " 12 " "
 * Power for Bat. Seymour & Schenck " B.P. Mar. 1933
 " " North, Moore, Kingsbury" B.P. Apr. 1933
 * Central Power Plant " " "

Form 6: Engineer Dept. Structures Corrected to Oct. 1933

POINT FLAGLER.

Corrected to May 1933.

Form 1 and 7: Battery Bankhead
 ✓ Wilhelm
 Revere
 Rawlins
 Celwell
 Grattan
 Downes
 Mansboro
 Lee
 ✓ Fourth Aerial

Form 2: F5, G7 Formerly ?
 ✓ G8 (Formerly G9)
 ✓ Vacant (" C'7E)
 ✓ Vacant (" G'7E Tel. Room)
 ✓ B'11

✓ Form 5: Power for Bat. Harrison & Blueprint. Corrected to May 1, 1933 (B.P. May, 1933)
✓ " " 30" S.L. " " " " (" Aug. 1917)

FONT WARD.

ALL STRUCTURES HAVE BEEN WITHDRAWN.

Copy for Mr. Hayden

Address reply to
CHIEF OF ENGINEERS, U. S. ARMY
Washington, D. C.

WAR DEPARTMENT.
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON AHA:CKW

Refer to File No. C. of E. 061.2B(PSd)F

October 27, 1919.

From: The Chief of Engineers.
To: The District Engineer, SEATTLE, WASH.
(THRU THE DIVISION ENGINEER, NORTHERN PACIFIC DIVISION).
Subject: Fortification Index Plat Corrections.

1. There are sent you herewith blueprints of the Fortification Index plats for -

Puget Sound	Double Bluffs
Entrances to Puget Sound	Foulweather Bluff
Skagit Bay	Tala Point
Fort Whitman	Fort Lawton
Admiralty Inlet	Agate Passage
Fort Worden	Rich Passage
Fort Flagler	Fort Ward
Fort Casey	Middle Point and Orchard Point
Admiralty Inlet, Inner Line	

2. You are requested to have these blueprints corrected and to return them, with sketches of any additions to existing reservations, new reservations or temporary sites, occupied by seacoast or anti-aircraft armament or its appurtenances.

3. Included with the plats are four sheets of symbols, abbreviations, etc., as used on the Index Plats. These sheets are to be retained in your office. Attention is invited to the system of numbering shown on Sheet 4. The nine digits are definitely assigned to certain buildings. It is desired that these buildings be indicated, if they exist, and that if nonexistent, the corresponding digits be not used. Of the numbers of two or three figures, those beginning with 1 will be used for buildings under the control of the Post Commander; those beginning with 2 are assigned to buildings controlled by the Quartermaster Department, etc., as indicated. The numbers 20, 30, 40 and 50 will only be used for Q. M., Ord., Eng'r. and Signal Corps offices, and 70 will be used only for churches or chapels, so that the absence of these significant numbers will indicate the absence of these buildings without further search.

4. The symbols on Sheet 1 are those used by the Coast Artillery on Fire-Control Diagrams, and should be used only to indicate structures that are part of the permanent or improvised Artillery project. For

instance, the symbol for a Tide Station should never be used for any other tide-gage. Attention is also invited to the fact that a Radio station is not a Signal Station and the correct symbol should be used in each case. The half-symbols indicate stations not permanently roofed; initiated in connection with the Artillery Diagrams, in order to indicate the kind of instruments to be furnished, the indication of the character of the station on the Index Plat will be convenient for other purposes.

5. The Commanding Officers quarters are not shown at Morden, Flagler, Casey or Ward, and at Whitman no post buildings are shown. As Whitman is a sub-post a statement of the status and building program is requested if it is known to your office. You are also requested to verify the positions and outlines of the reservations at Mitchell Bluff and Middle Point, as shown on the plat "Entrances to Puget Sound." All of the prominent lights should be shown on the general maps and all the lights should be shown on the post plats. The positions should be sufficiently accurate for the scale of the plat, as these points are frequently the most convenient means of connecting these plats with other maps.

By command of the Chief of Engineers:

D. C. SHERIDAN
Colonel of Engineers.
Chief, Military Construction Division.

21 unskd. incls.
accompg.

061.213 (PLA) F

Carbon for Mr. Harlan.

From the C. of E.

To the D. E., Seattle, Washington.

Subject;- Fortification Index Plat Corrections.

1. There are sent you herewith blueprints of the Fortification Index plats for -

Puget Sound

Entrances to Puget Sound

Skagit Bay

Fort Whitman

Admiralty Inlet

Fort Worden

Fort Flagler

Fort Casey

Admiralty Inlet, Inner Line

Double Bluffs

Foulweather Bluff

Tala Point

Fort Lawton

Agate Passage

Rich Passage

Fort Ward

Middle Point and Orchard Point.

2. You are requested to have these blueprints corrected and to return them, with sketches of any additions to existing reservations, new reservations or temporary sites, occupied by seacoast or antiaircraft armament or its appurtenances. ~~In this connection you are requested to furnish sketches showing any reservations, proposed sites or fortifications projected for Willapa Bay and Grays Harbor, and the amount of construction (if any) at these harbors.~~

3. Included with the plats are four sheets of symbols, abbreviations, etc., as used on the Index Plats. These sheets are to be retained in your office. ~~Any other topographical signs necessary will be taken from the Field Manual (Professional Papers, Corps of Engineers, No. 29).~~ Attention is invited to the system of numbering shown on Sheet 4. The nine digits are definitely assigned to certain buildings. It is desired that these buildings be indicated, if they exist, and that if nonexistent, the corresponding digits be not used. ~~Of the numbers greater than the digits, those beginning with 1 will be used for buildings under the control of the Post Commander; those beginning with 2 are assigned to buildings controlled by the Quartermaster Department, etc., as indicated. The numbers 20, 30, 40 and 50 will only be used for Q.M., Ord., Eng'r and Signal Corps offices, and 70 will be used only for churches or chapels, so that the absence of these significant numbers will indicate the absence of these buildings without further search.~~

4. The symbols on Sheet 1 are those used by the Coast Artillery on Fire-Control Diagrams, and should be used only to indicate structures that are part of the permanent or improvised Artillery project. For instance, the symbol for a Tide Station should never be used for any other tide-gage. Attention is also invited to the fact that a Radio station is not a Signal Station and the correct symbol should be used in each case. The half-symbols indicate stations not permanently roofed; initiated in connection with the Artillery Diagrams, in order to indicate the kind of instruments to be furnished, the indication of the character of the station on the Index Plat will be convenient for other purposes.

5. The Commanding Officers quarters are not shown at Worden, Flagler, Casey or Ward, and at Whitman no post buildings are shown. As Whitman is a sub-post a statement of the status and building program is requested

if it is known to your office. You are also requested to verify the positions and outlines of the reservations at Mitchell Bluff and Middle Point, as shown on the plat "Entrances to Puget Sound." All of the prominent lights should be shown on the general maps and all the lights should be shown on the post plats. The positions should be sufficiently accurate for the scale of the plat, as these points are frequently the most convenient means of connecting these plats with other maps.

21-21-21

A. J. J. J.

660.2-PS

3rd Ind.

Eng. Off. Hq. 9th C. Area, Pres. of San Francisco, Calif., December 18, 1931.

To: The Chief of Engineers.

1. The forms inclosed with basic letter are returned herewith, data pertaining to the two 25 KW sets and switchboards having been added.

2. In connection with the removal and storage of the two sets, attention is invited to 2nd and 4th Indorsements on a letter from The Adjutant General, to the Commanding General, Ninth Corps Area, October 14, 1931, (AG 602.1 (6-17-31)(Misc.) D), on the subject "Disposal of Fort Ward". In the 4th Indorsement on that correspondence the Commanding Officer, H.D. of Puget Sound, made the following remarks regarding the 25 KW set formerly installed at Ft. Ward and on Quartermaster property returns:

"2. The 25 KW set formerly in use by the Q.M. Corps at Ft. Ward was originally purchased and installed by the Engineer's in 1911 at Ft. Flagler, Wash. Funds for the purchase and installation were furnished by the Q.M. Corps. This set was removed by the Q.M. Corps and installed at Ft. Ward, Wash., in 1912".

4 Inclosures.

H. A. Finch
Lt. Col., Corps of Engineers,
Acting Engineer.

Copy of C. of E. 663 (Puget Sound) 5

File No. 338.1/130

WAR DEPARTMENT
UNITED STATES ENGINEER OFFICE
SEATTLE, WASHINGTON

Sept. 13, 1915.

From: The District Engineer Officer, Seattle, Wash.

To: The Chief of Engineers, U.S. Army.

Subject: Data as to Seacoast Batteries.

1. In compliance with letter of Chief of Engineers, July 15, 1915, (E.D. 98230), complete lists of the condition of all gun and mortar batteries are forwarded herewith on the tabular forms provided.

2. With reference to extending the field of fire of existing batteries a detailed report is made as follows:

Emplacement No. 1, Battery Kinzie, Fort Worden, 2 12-inch disappearing.

Field of fire to the left is limited by construction of the emplacement to 60° from the capital and to give the gun 10° additional traverse, two plans are suggested and shown by accompanying tracing, viz: (Sketch F-15-7-49) enlarge the existing recoil niche at estimated cost of \$300.00. (Sketch F-15-7-50) reconstruct the right traverse at estimated cost of \$5000.00

It is recommended that this work be done and under the second plan. Proposed field of fire is shown in red on fortification index plat, Entrance to Puget Sound.

Emplacement No. 4, Battery Stoddard, Fort Worden, 4 6-in. dis.

About 10° of the extreme left of the field of fire is sacrificed by an adjacent knoll, easily removable on short notice, and it is recommended that nothing be done at present.

Emplacement No. 4, Battery Calwell, Fort Flagler, 4 6-in. dis.

The range to the left may be increased about 8° by cutting into the bluff, but as the field is secondary and the work can be done on short notice, no action is recommended at this time.

Emplacement No. 1, Battery Worth, Fort Casey, 2 10-in. dis.

This emplacement, constructed in 1898, was built to allow command of Point Partridge on the right and the proposed excavation of the intervening bluff was designed with that in view by giving a range of $77^{\circ}30'$ from the capital with 3° depression. The full contemplated excavation was never made but stops at 68° and to complete the original design requires the removal of 54,500 yds. of earth at an estimated cost of \$13,500.

Since 1898, other guns of 3.5 and 5-inch caliber have been emplaced to the right of Battery Worth, commanding the shore line to Point Partridge, thus relieving the necessity for a 3° depression for the battery.

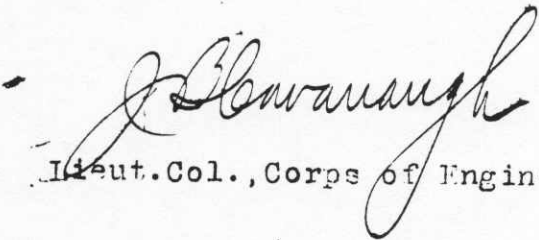
It is therefore recommended that the excavation be made to give a depression of 1° which can be done at an estimated cost of \$2500. The fields of fire are shown in red on fortification index plat, entrance to Puget Sound.

Emplacement No. 1, Battery Harrison, Fort Whitman, 4 6-in. dis.

The field of fire to the right is limited by a rocky knoll adjacent to the battery and to remove this would cost approximately \$9500. As this field consists of tide flats it is not considered of sufficient importance to justify the expenditure. The fields of fire are shown in red on fortification index plat, Skagit Bay.

The above mentioned emplacements are the only ones that deserve comment as to practicability or desirability of enlarging field of fire.

3. The fortification index plats of the fortified harbors are returned herewith.


Lieut. Col., Corps of Engineers.

40 Inclos.
3 index plats.
2 tracings.
35 forms.