REPORT OF COMPLETED WORKS - SEACOAST FORTIFICATIONS.
(Gun and Mortar Batteries)

COAST DEFENSES OF Sandy Hook
FORT Hancock, N.J.
BATTERY McCook (Mortar Battery) Dismantled
No. of guns - Caliber - Carriage -

Form 1 Corrected to July 1, 1921

Battery commenced	1891	Sources of electric current	C.P.P. Bloomfield #1;25 KW. and Alexander, 25 KW. sets
Battery Completed	1894		
Date of transfer	March 22,1898	Max. kw. required for lights	3-1/10 K.W.
Material of construction	Concrete	Max. kw. required for motors	-
Portland or Rosendale cement	Rosendale		
Cost to date of transfer	$138,371.50		
Connected to water supply	Yes	Present condition battery	Good
Connected to sewer	-	Rooms wet or dry	Damp
Type of latrine	-		
Type of data transmission	Telephone	How ventilated	Through doorways and passages
Trunnion elevation in battery	Dismantled	Remarks:-	Telephone booths installed. Batteries "modernized"-galleries widened.
Datum plane	M.L.W.		

ARMAMENT

Emplacement or mortar No.	Guns or Mortars						Carriages				
	Cal.	Length	Model	Serial No.	Manufacturer	Mounted	Type	Model	Serial No.	Manufacturer	Motor
1											
2											
3											
4				Dismantled.							
5											
6											
7											
8											

HOISTS

Emplacement Number	Type	Delivery	Motor						Date of transfer	Remodeled for long points
			Serial No.	Maker	H.P.	Volts	RPM	Type of control		
1										
2										
3										

REPORT OF COMPLETED WORKS - SEACOAST FORTIFICATIONS.
(Gun and Mortar Batteries)

COAST DEFENSES OF Sandy Hook
FORT Hancock, N.J.
BATTERY Reynolds (Mortar Battery)

Form 1 Corrected to July 1, 1921

No. of guns Dismantled Caliber Carriage

Battery commenced	1891	Sources of electric current	C.P.P.Bloomfield #1; 25 K.W. and Alexander 25 K.W. sets
Battery Completed	1894		
Date of transfer	March 22,1898	Max. kw. required for lights	3 K.W.
Material of construction	Concrete	Max. kw. required for motors	-
Portland or Rosendale cement	Rosendale		
Cost to date of transfer	$138,371.50		
Connected to water supply	Yes	Present condition battery	Good
Connected to sewer	-	Rooms wet or dry	Damp
Type of latrine	-		
Type of data transmission	Telephone	How ventilated	Through doorways and passages
Trunnion elevation in battery	Dismantled	Remarks:-	Telephone booths installed.Batteries "modernized" - galleries widened.
Datum plane	M.L.W.		

ARMAMENT

Emplacement or mortar No.	Guns or Mortars						Carriages				
	Cal.	Length	Model	Serial No.	Manufacturer	Mounted	Type	Model	Serial No.	Manufacturer	Motor
1											
2											
3											
4				Dismantled.							
5											
6											
7											
8											

HOISTS None

Emplacement Number	Type	Delivery	Motor						Date of transfer	Remodeled for long points
			Serial No.	Maker	H.P.	Volts	RPM	Type of control		
1										
2										
3										

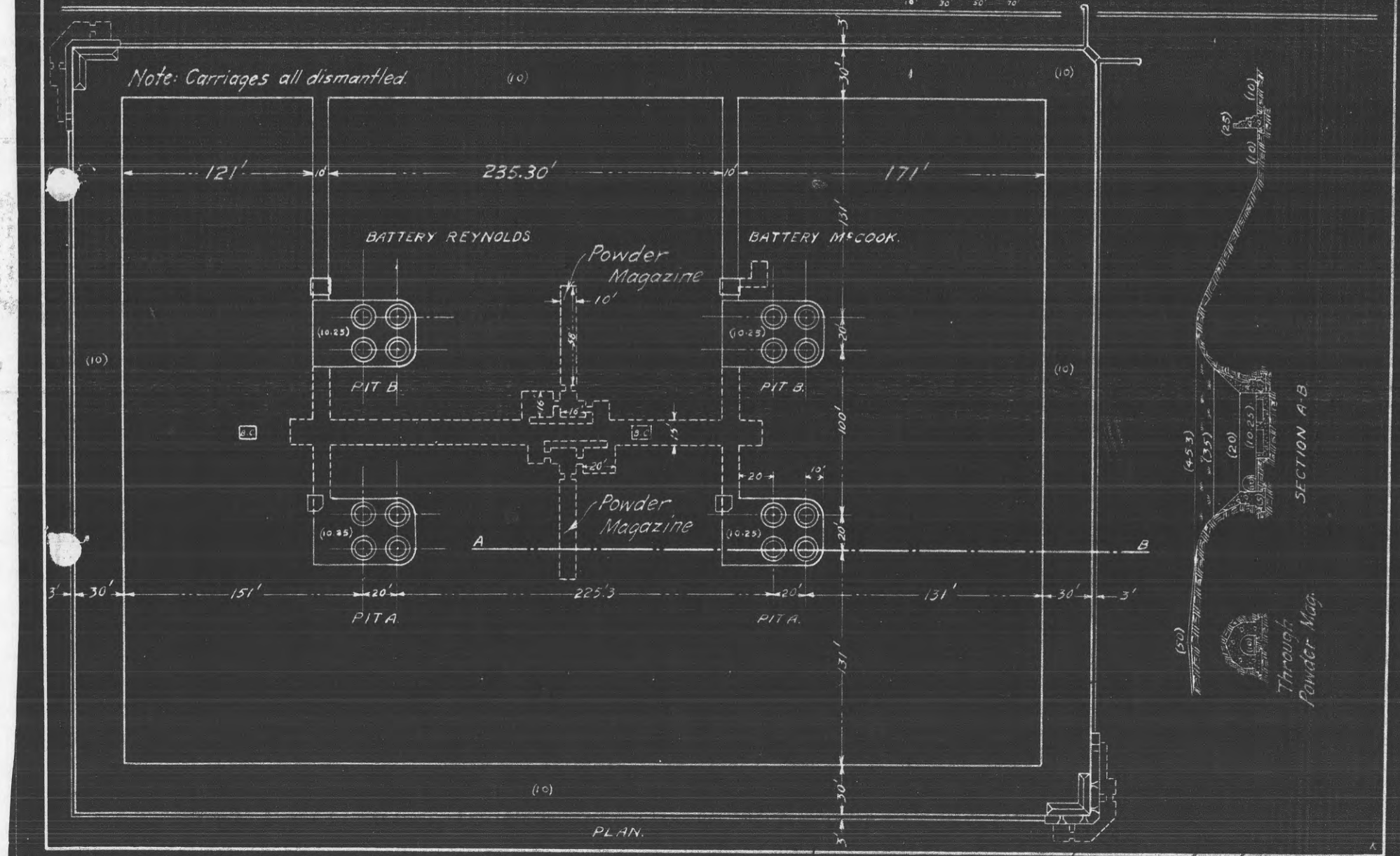
REPORT OF COMPLETED WORKS - SEACOAST FORTIFICATIONS.

COAST DEFENSES OF SANDY HOOK.
FORT HANCOCK.
BATTERY McCOOK, BATTERY REYNOLDS.

Corrected to July 1, 1921.

No. of guns None Caliber 12" Carriage Barbette

Scale: 1" = 80'



REPORT OF COMPLETED WORKS - SEACOAST FORTIFICATIONS.

Corrected to July 1, 1921.

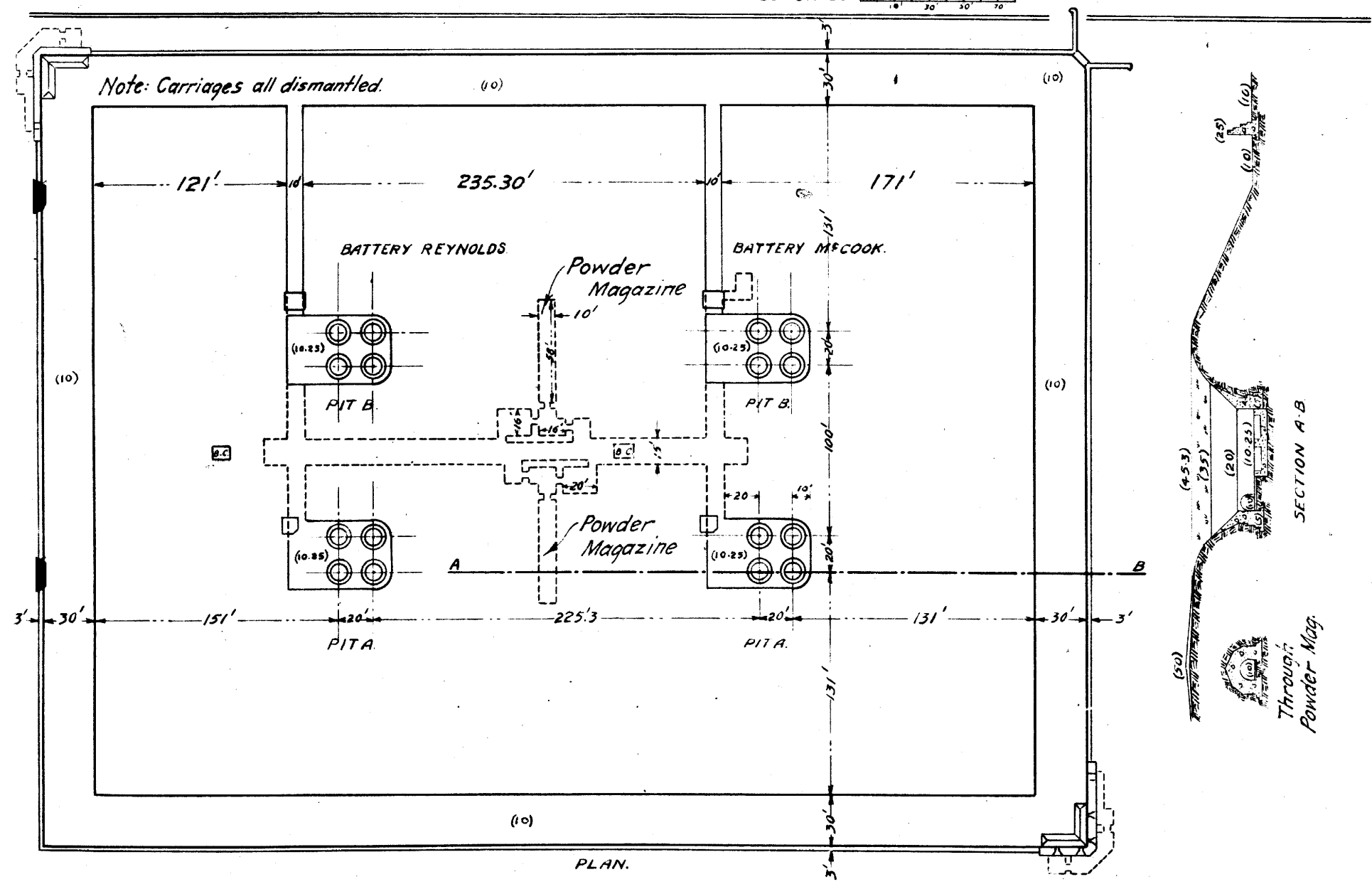
COAST DEFENSES OF SANDY HOOK.

FORT HANCOCK.

BATTERY McCOOK, BATTERY REYNOLDS.

No. of guns None Caliber 12" Carriage Barbette.

Scale: 1" = 80'



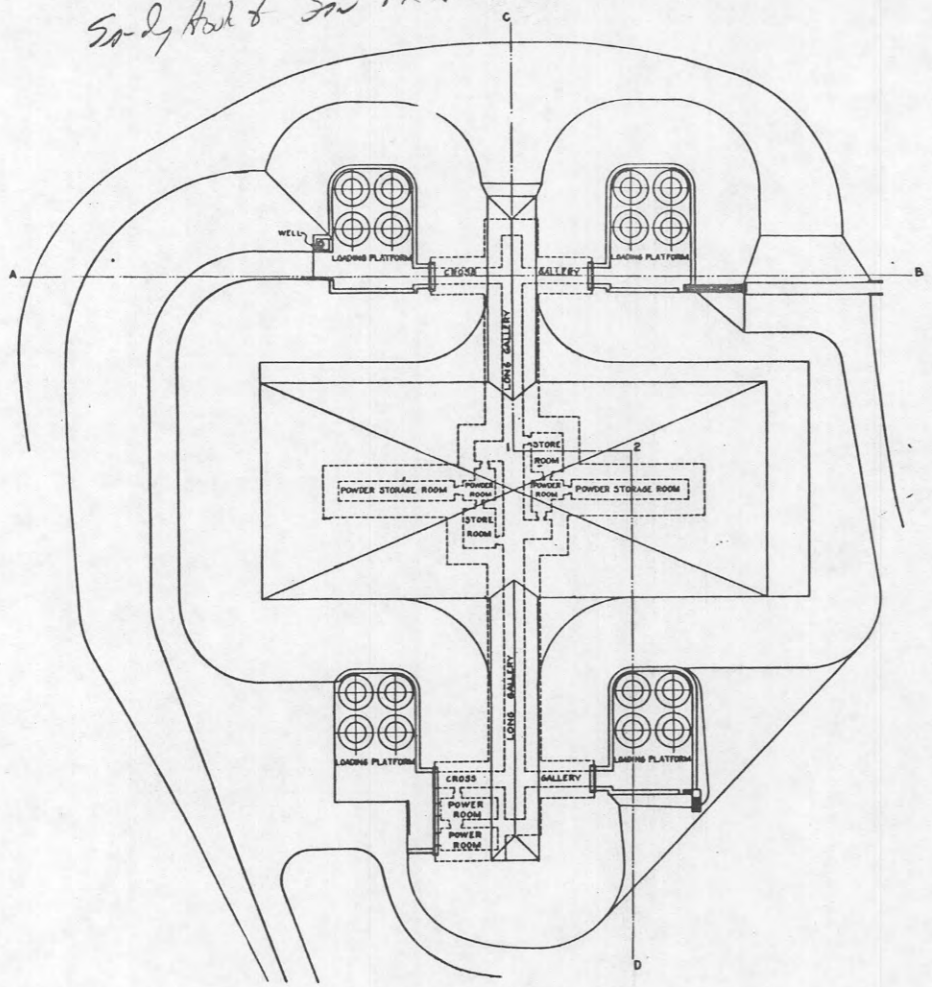
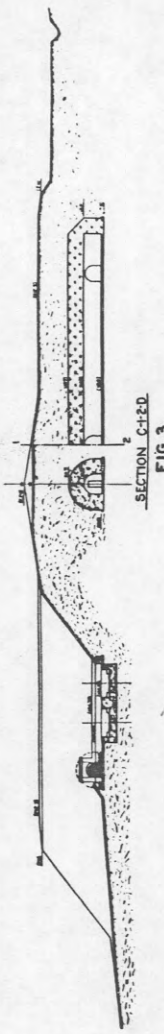
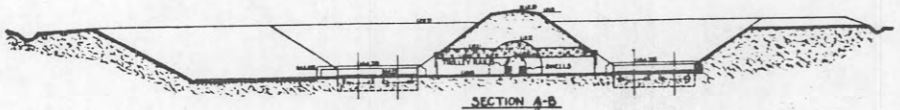


FIG. 1.



SECTION C-C-D
FIG. 3.



SECTION A-B
FIG. 2.

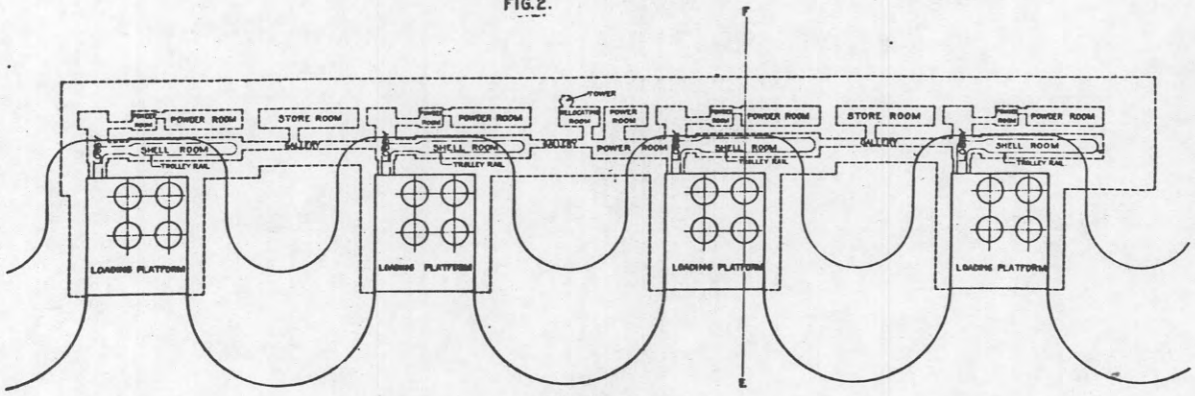
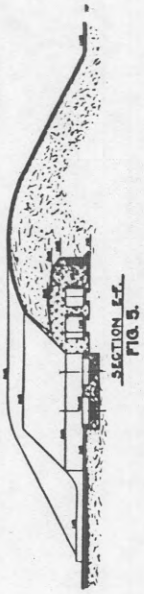


FIG. 4.



SECTION E-F
FIG. 5.

SCALE OF FEET.

TO ACCOMPANY
NOTES ON SEACOAST FORTIFICATION CONSTRUCTION

PLATE XXVII

BATTERIES FOR SIXTEEN 12-INCH MORTARS

FIGURES 1, 2 AND 3 ORIGINAL OR 1897 TYPE
FIGURES 4 AND 5 1894 TYPE

DRAWINGS BASED ON BATTERIES ACTUALLY CONSTRUCTED

COAST DEFENSES OF SANDY HOOK

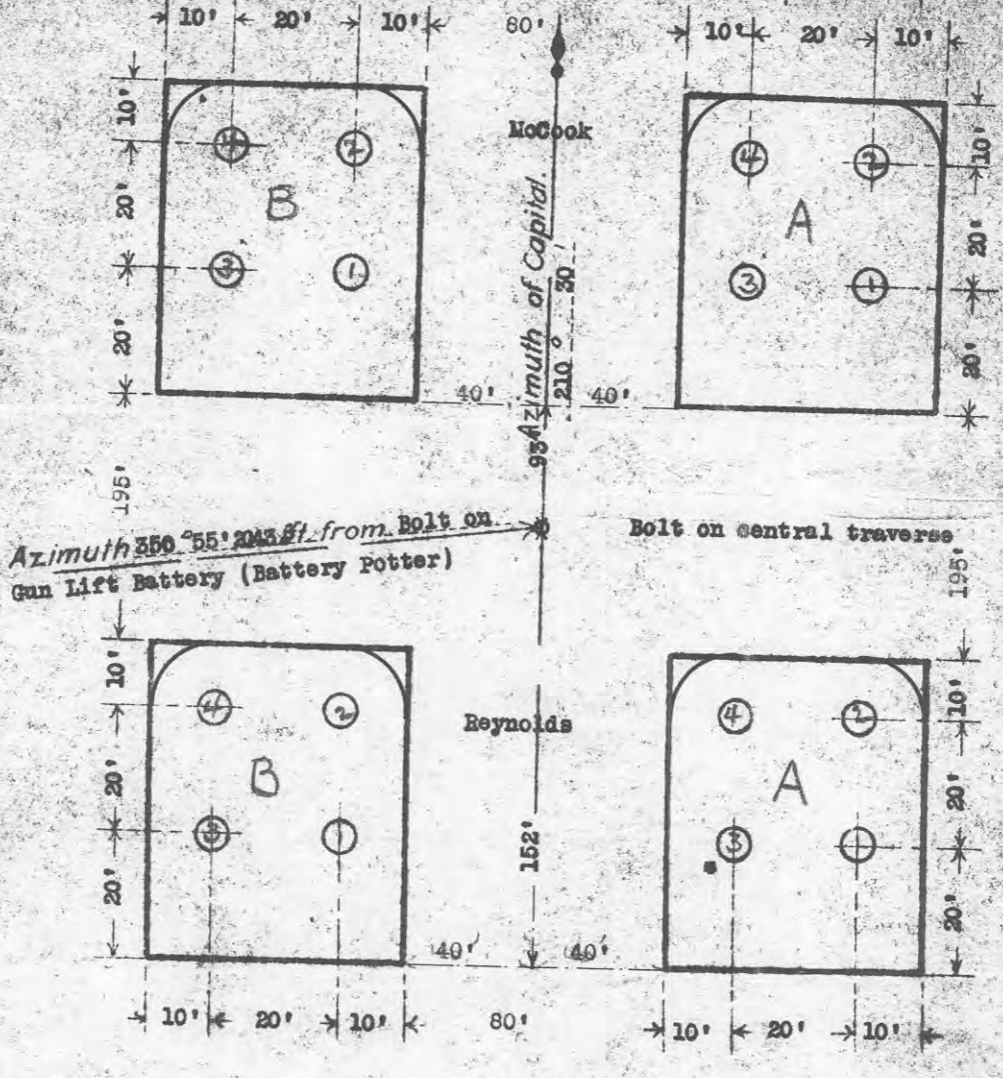
FORT Hancock BATTERIES McCook & Reynolds 16-12" MORTARS.

ARMAMENT BATTERY McCook

MODELS OF	MORTARS	CARRIAGES
PIT A No. 1	1886 #14	1891 #13
" 2	1886 #15	1891 # 8
" 3	1886 #18	1891 #12
" 4	1886 #30	1891 #11
PIT B No. 1	1886 #58	1891 # 9
" 2	1886 #67	1891 #10
" 3	1886 #65	1891 # 2
" 4	1886 #66	1891 # 3

ARMAMENT BATTERY Reynolds

MODELS OF	MORTARS	CARRIAGES
PIT A No. 1	1886 #15	1891 #15
" 2	1886 #19	1891 #16
" 3	1886 #20	1891 # 4
" 4	1886 #64	1891 #14
PIT B No. 1	1886 #21	1891 #25
" 2	1886 #22	1891 # 7
" 3	1886 #17	1891 # 6
" 4	1886 #70	1891 # 1



ELEVATION OF FLOORS OF PITS 10 Ft. ABOVE PLANE OF M.L.W.

REC'D OFFICE DIV. ENG.
N. E. DIVISION NEW YORK OCT 30 1924

REPORT OF COMPLETED WORKS -SEACOAST FORTIFICATIONS
(Fire Control and torpedo structures).

COAST DEFENSES OF SANDY HOOK, N. J.
FORT HANCOCK
STRUCTURE PROTECTED F.C. SWITCHBOARD ROOM

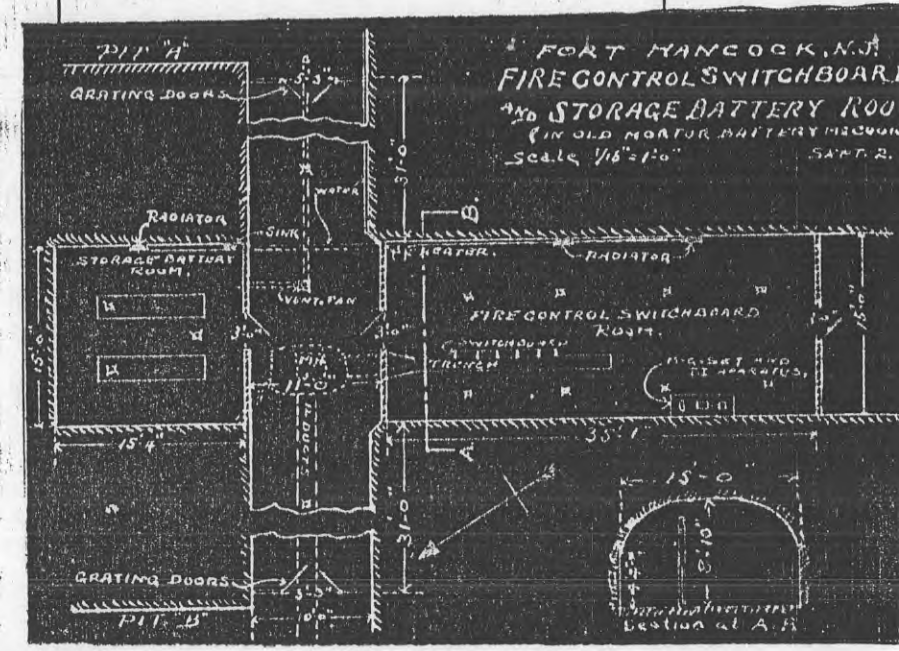
Form 2 Corrected to Oct. 24, 1924.

Location	In corridor of old Mortar Battery McCook.
Date of transfer	Sept. 2, 1922.
Cost to date	Modifications & installation of equipment, $3890. (See note)
Type of construction	Concrete
(a) Roof	Concrete, sand cover
(b) Remainder of building	
How concealed	Emplacement construction.
How protected	Concrete & sand cover.
Height above concealment	
Height above protection	Concealed.
Conspicuous at -- yards	
Source of electric current	Fort Power plants.
Kilowatts required	1.3 K.W. lighting 1.KW Motor gen. set
Type of lighting fixtures	Standard U.S.E.D.
How heated	Hot water, Boiler & Radiators.
Connected to water mains	Yes.
Connected to sewer	(Drains).
Type of latrine	None
Permanent installation	
Present condition	Good
Reference of site	
Reference of instrumental axis	
Type of observing instrument	
Type of plotting board	
Type and capacity of crane	
Max. dimensions of reel handled.	

NOTE: Total cost, including 1924 rearranging cabling system $14,189.07. lin. ft. duct line & to Switchboard Room,

Type of data transmission	Telephone
Date of transfer	Sept. 2, 1922
Cost of data transmission equipment	
For tide stations give description of tide gage	
For datum points give Forts from which visable	
For dormitories given stations served	
For cable hut give S. C. type	

Superseded :- See Form 2, corrected to Oct. 29, 1930



FORT HANCOCK, N.J.
FIRE CONTROL SWITCHBOARD
AND STORAGE BATTERY ROOM
(IN OLD MORTAR BATTERY McCOOK)
Scale 1/8"=1'-0" SEPT. 2.

NOTE: The total cost of the original installation, including laying 1924 lin. ft. of duct line and installing cables to switchboard room, $14189.07.

Modifications completed in July, 1936.

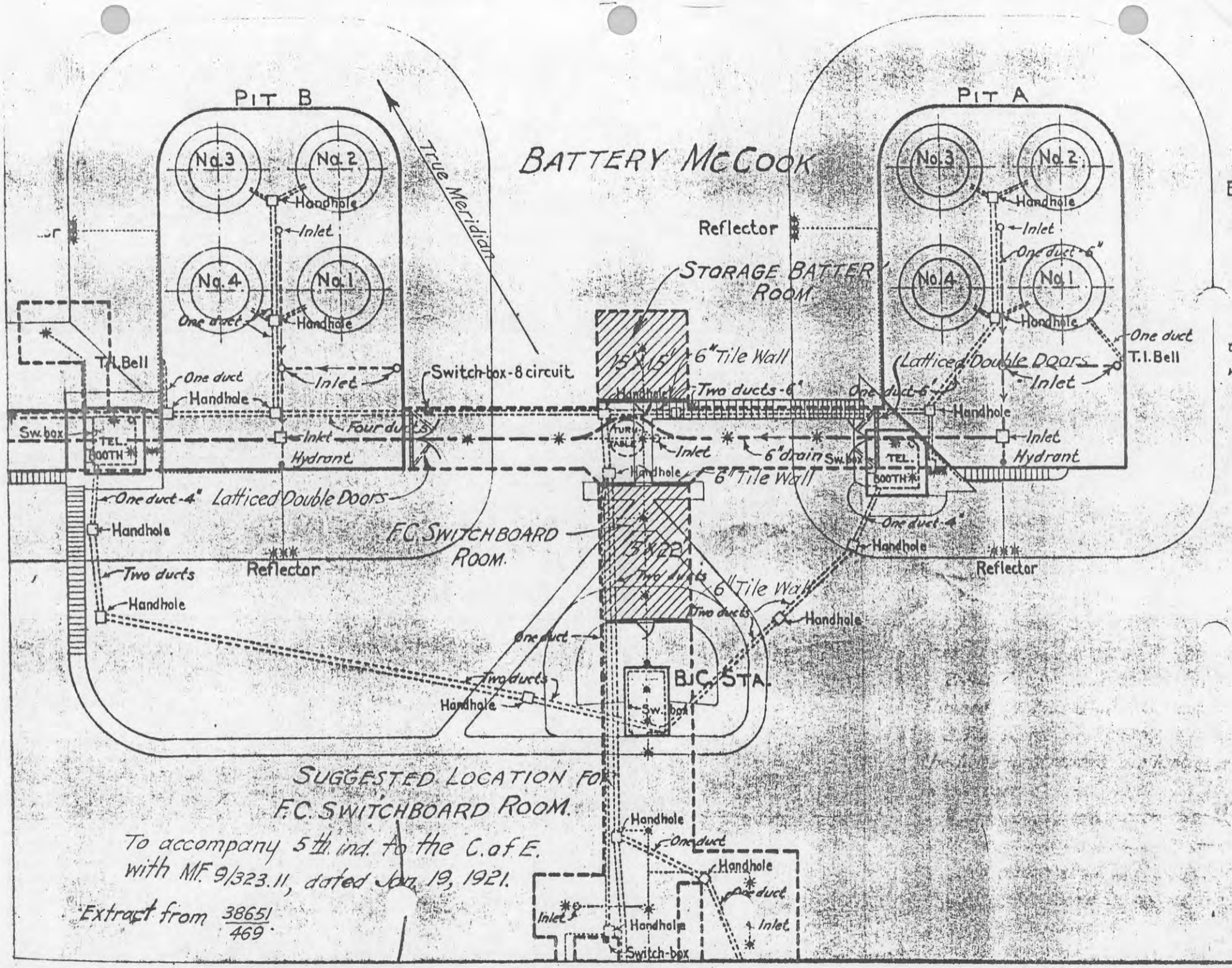
Installing Ventilating (exhaust) Fan and Radiators.

Labor.		
Installing fan and connecting up	$14.34	
Installing radiators	18.34	$32.68
Material.		
1 Fan, ventilating, mounted on square steel panel, approx. 22" square, electric motor, 110 volt, 60 cycle, single phase, with 1/8 h.p., 2 speed, totally inclosed, American Blower Co's Ventura #17, or equal, complete with speed control capacities approx. 1585 CFM at 1140 RPM - 2300 at 1650 RPM.	$57.75	
1 Radiator, 12 section, 36" high, for hot water, and three (3) pcs. pipe, 1" steel, 20' long,	20.89	78.64
Total labor and material		$111.32

Rebuilding Partition Wall.

(Tile wall removed and rebuilt 26' in rear of original wall)

Removing former partition wall	$124.27
Replacing concrete in floor	36.98
Constructing new partition wall	36.97
Installing new lights and cabling	41.05
	$239.27


BATTERY McCOOK
PIT B
PIT A
No. 3
No. 2
No. 4
No. 1
Handhole
Inlet
One duct
True Meridian
Reflector
STORAGE BATTERY ROOM
15'x15'
6" Tile Wall
Two ducts-6"
Latticed Double Doors
T.I. Bell
Switch-box-8 circuit
Four ducts
Sw. box
TEL. BOOTH
Hydrant
6" drain
One duct-4"
F.C. SWITCHBOARD ROOM.
15'x22'
Two ducts
B.C. STA.
Sw. box
SUGGESTED LOCATION FOR
F.C. SWITCHBOARD ROOM.
To accompany 5th ind. to the C. of E.
with MF. 9/323.11, dated Jan. 19, 1921.
Extract from 38651/469.
Switch-box
MF 9/323.20

REPORT OF COMPLETED WORKS - SEACOAST FORTIFICATIONS
(Fire Control or Submarine Mine Structure)

HARBOR DEFENSES OF NEW YORK
FORT HANCOCK, NEW JERSEY
STRUCTURE Protected F.C. Switchboard Room (Now Harbor Defense Command Post)

SPEKM-1

Part II Corrected to 20 MAY 1944

STRUCTURE:
x Not applicable
Location (by coordinates) y --
Location (by site description) *
Date of transfer 2 September 1922
Cost to that date $14,189.07 Project 270 funds
Type (for observing stat.-tower, dug-in, cottage, etc.)
Type of construction
(a) Roof Concrete & Sand Cover
(b) Remainder of bldg. Concrete
How concealed Sand fill & Vegetation
How protected Sand fill & Concrete
Height above concealment None
Height above protection None
Conspicuous at 500 yards

UTILITIES:
Electric Power
Source of Fortification Power Plants
Characteristics: Voltage Ac or DC Phase **
Kilowatts required 1.3 Lighting- 1 KW Motor Gen. Set
Type of lighting fixtures Standard U.S.E.D.
Heat
How heated Hot water boiler & radiators
Water Sewer
Connected to water mains Yes
Connected to sewer (Drains)
Type latrine None

REFERENCE:
Reference of site Mean Low Water
Reference of instrument axis --
(Where applicable)
(Type and Capacity of Crane --
(Max. dia. of rock handled --

INSTRUMENTS & EQUIPMENT
Type of observing inst. None
Type of plotting board --

DATA TRANSMISSION:
Type Telephones
Date of transfer 2 September 1922

TIDE STATION:
Give description of tide gauge

DATUM POINTS:
Give Forts from which visible

QUARTERS:
Give stations served

CABLE HUT:
Give S.C. Type

* Location: In corridors & pits of former Mortar Batteries McCook & Reynolds.

Now used for Harbor Defense Command Post. See attached sheets.

** Electrical Characteristics: Lighting & gasproofing, 60 cycle, 1ø, 115/230 volts. Dehumidifying System, 3ø, 60 cycle, 120/208 volts.

FS-383 Sandy Hook Proj Card #70

SECRET

Nature & Cost of Additional Repairs & Modifications

1943

Structure altered and used for Harbor Defense Command Post.
Concealed by camouflage netting and paint.
Lighting Fixtures - Commercial Standard C. S. F.
Elect. Power - Power Permits & 1-25 KW Gen. Set.
Latrines - Flush Type
Concrete Bombproof Structure
Heated by oil fired steam boiler
Connected to 10"Ø sewer line
Data transmission - Telephone & Radio

Alterations.....$	7,999.90
Housing 25 KW set.....	6,229.62
Soundproofing.....	2,552.53
Gasproofing.....	9,998.52
Dehumidifying.....	14,844.70
Total....$	41,625.27

1944 - Generator Room Ventilating System
This project consists of installation of ductwork between radiator of engine to window and closure above window; providing sheet metal hood over intake and increasing size of exhaust opening.....$ 200.00

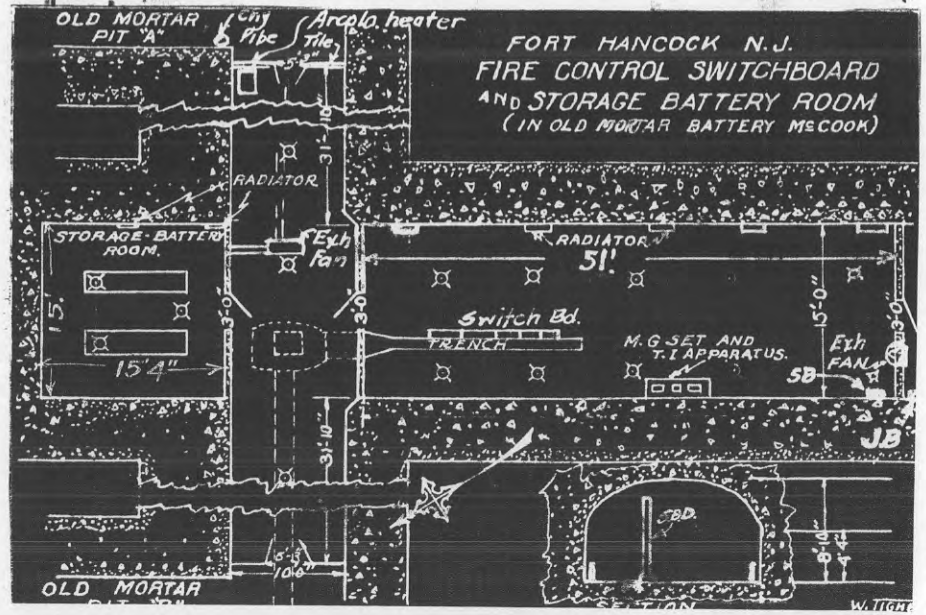
REPORT OF COMPLETED WORKS - SEACOAST FORTIFICATIONS
(Fire Control and torpedo structures)

HARBOR DEFENSES OF SANDY HOOK, N. J.
FORT HANCOCK
STRUCTURE PROTECTED F.C. SWITCHBOARD ROOM

Form 2 Corrected to Oct. 29, 1936.

Location	In gallery of former Mortar Battery McCook. (Gallery leading to old powder magazine)
Date of transfer	Sept. 2, 1922 (See reverse side for modifications)
Cost to date	Installation of equipment and structural work, $3890. (See note also on reverse side)
Type of construction	Concrete
(a) Roof	Concrete sand cover
(b) Remainder of building	
How concealed	Emplacement construction (for protection of mortar battery)
How protected	Concrete & sand cover
Height above concealment	In bombproof gallery of battery.
Height above protection	
Conspicuous at -- yards	Old Battery conspicuous at 1000 yds.
Source of electric current	Fort power plants (25 K.W. sets)
Kilowatts required	1.3 K.W. lighting (1 KW meter gen. set
Type of lighting fixtures	Standard U.S.E.D.
How heated	Hot water, Boiler & radiators
Connected to water mains	Yes.
Connected to sewer	(Drains).
Type of latrine	None
Permanent installation	
Present condition	Good
Reference of site	
Reference of instrumental axis	
Type of observing instrument	
Type of plotting board	
Type and capacity of crane	
Max. dimensions of reel handled	

Type of data transmission	Telephone
Date of transfer	Sept. 2, 1922.
Cost of data transmission equipment	
For tire stations give description of tide gauge	
For datum points give Forts from which visable	
For dormitories given stations served	
For cable hut give S. C. type	



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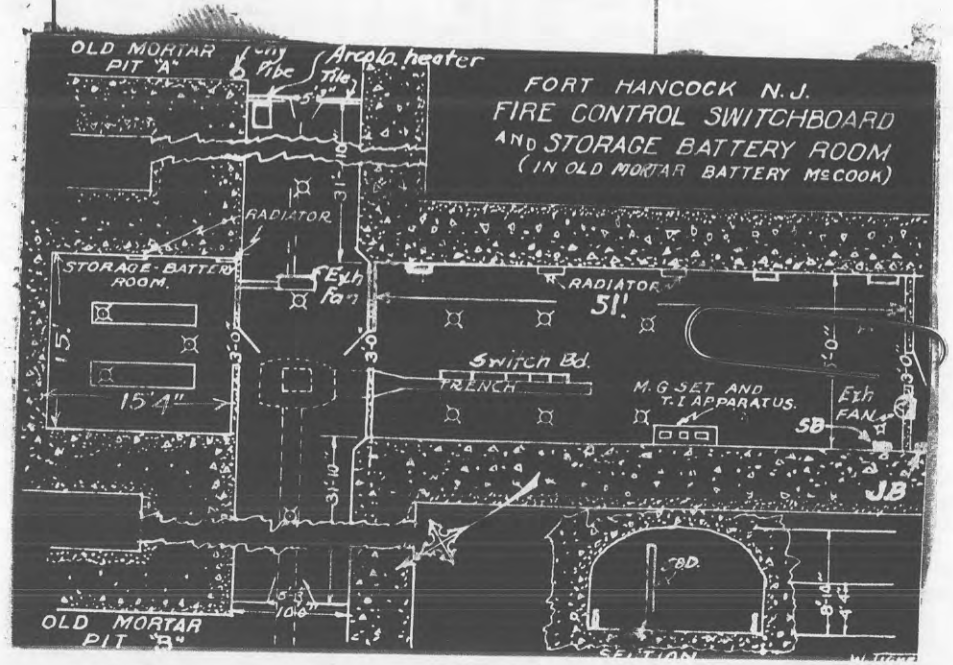
REPORT OF COMPLETED WORKS - SEACOAST FORTIFICATIONS
(Fire Control and torpedo structures)

HARBOR DEFENSES OF SANDY HOOK, N. J.
FORT HANCOCK
STRUCTURE PROTECTED F.C. SWITCHBOARD ROOM

Form 2 Corrected to Oct. 29, 1936.

Location	In gallery of former Mortar Battery McCook. (Gallery leading to old powder magazine)
Date of transfer	Sept. 2, 1922 (See reverse side for modifications)
Cost to date	Installation of equipment and structural work, $3890. (See note also on reverse side)
Type of construction	Concrete
(a) Roof	Concrete sand cover
(b) Remainder of building	
How concealed	Emplacement construction (for protection of mortar battery)
How protected	Concrete & sand cover
Height above concealment	In bombproof gallery
Height above protection	of battery.
Conspicuous at -- yards	Old Battery conspicuous at 1000 yds.
Source of electric current	Fort power plants (25 K.W. sets)
Kilowatts required	1.3 K.W. lighting (1 KW meter gen. set
Type of lighting fixtures	Standard U.S.E.D.
How heated	Hot water, Boiler & radiators
Connected to water mains	Yes.
Connected to sewer	(Drains).
Type of latrine	None
Permanent installation	
Present condition	Good
Reference of site	
Reference of instrumental axis	
Type of observing instrument	
Type of plotting board	
Type and capacity of crane	
Max. dimensions of reel handled	

Type of data transmission	Telephone
Date of transfer	Sept. 2, 1922.
Cost of data transmission equipment	
For tire stations give description of tide gauge	
For datum points give Forts from which visable	
For dormitories given stations served	
For cable hut give S. C. type	



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NOTE: The total cost of the original installation, including laying 1924 lin. ft. of duct line and installing cables to switchboard room, $14189.07.

Modifications completed in July, 1936.

Installing Ventilating (exhaust) Fan and Radiators.

Labor.

Installing fan and connecting up	$14.34	
Installing radiators	18.34	$32.68

Material.

1 Fan, ventilating, mounted on square steel panel, approx. 22" square, electric motor, 110 volt, 60 cycle, single phase, with 1/8 h.p., 2 speed, totally inclosed, American Blower Co's Ventura #17, or equal, complete with speed control capacities approx. 1585 CFM at 1140 RPM - 2300 at 1650 RPM.	$57.75	
1 Radiator, 12 section, 36" high, for hot water, and three (3) pcs. pipe, 1" steel, 20' long,	20.89	78.64
Total labor and material.		$111.32

Rebuilding Partition Wall.

(Tile wall removed and rebuilt 26' in rear of original wall)

Removing former partition wall	$124.27
Replacing concrete in floor.	
Constructing new partition wall.	
Installing new lights and cabling.	
	$239.27

REPORT OF COMPLETED WORKS - SEACOAST FORTIFICATIONS
(Fire Control or Submarine Mine Structure)

HARBOR DEFENSES OF NEW YORK
FORT HANCOCK, NEW JERSEY
STRUCTURE Protected F.C. Switchboard Room (Now Harbor Defense Command Post)

SPEKM-1

Part II Corrected to 10 MAY 1944

STRUCTURE:
x ....Not applicable....
Location (by coordinates) y .....--.....
Location (by site description) * .....
Date of transfer ...2 September 1922.....
Cost to that date ..$14,189.07.....
Type (for observing stat.-tower, dug-in, cottage, etc.) .....
Type of construction .....
(a) Roof Concrete & Sand Cover.....
(b) Remainder of bldg. Concrete.....
How concealed Sand fill & Vegetation.....
How protected Sand fill & Concrete.....
Height above concealment ...None.....
Height above protection .....None.....
Conspicuous at 500.. yards .....

UTILITIES:
Electric Power.....
Source of ...Fortification Power Plants.....
Characteristics: Voltage .. Ac or DC...Phase **
Kilowatts required 1.3 Lighting- 1 KW Motor Gen. Set
Type of lighting fixtures Standard U.S.E.D.
Heat
How heated .Hot water boiler & radiators.....
Water Sewer
Connected to water mains .....Yes.....
Connected to sewer... .....(Drains).....
Type latrine .....None.....

REFERENCE:
Reference of site .....Mean Low Water.....
Reference of instrument axis .....--.....
where (Type and Capacity of Crane --.....
applicable (Max. dia. of rock handled --.....

(Where applicable)

INSTRUMENTS & EQUIPMENT
Type of observing inst. .....None.....
Type of plotting board .....--.....

DATA TRANSMISSION:
Type .....Telephones.....
Date of transfer .. ..2 September 1922.....

TIDE STATION:
Give description of tide gauge .....

DATUM POINTS:
Give Forts from which visible

QUARTERS:
Give stations served .....

CABLE HUT:
Give S.C. Type .....

*Location: In corridors & pits of former Mortar Batteries McCook & Reynolds.

Now used for Harbor Defense Command Post. See attached sheets.

** Electrical Characteristics: Lighting & gasproofing, 60 cycle, 1ø, 115/230 volts. Dehumidifying System, 3ø, 60 cycle, 120/208 volts

SECRET
Superseded

Nature & Cost of Additional Repairs & Modifications

1943

Structure altered and used for Harbor Defense Command Post.
Concealed by camouflage netting and paint.
Lighting Fixtures - Commercial Standard C. S. F.
Elect. Power - Power Permits & 1-25 KW Gen. Set.
Latrines - Flush Type
Concrete Bombproof Structure
Heated by oil fired steam boiler
Connected to 10"Ø sewer line
Data transmission - Telephone & Radio

Alterations.....$	7,999.90
Housing 25 KW set.....	6,229.62
Soundproofing.....	2,552.53
Gasproofing.....	9,998.52
Dehumidifying.....	14,844.70
Total....$	41,625.27

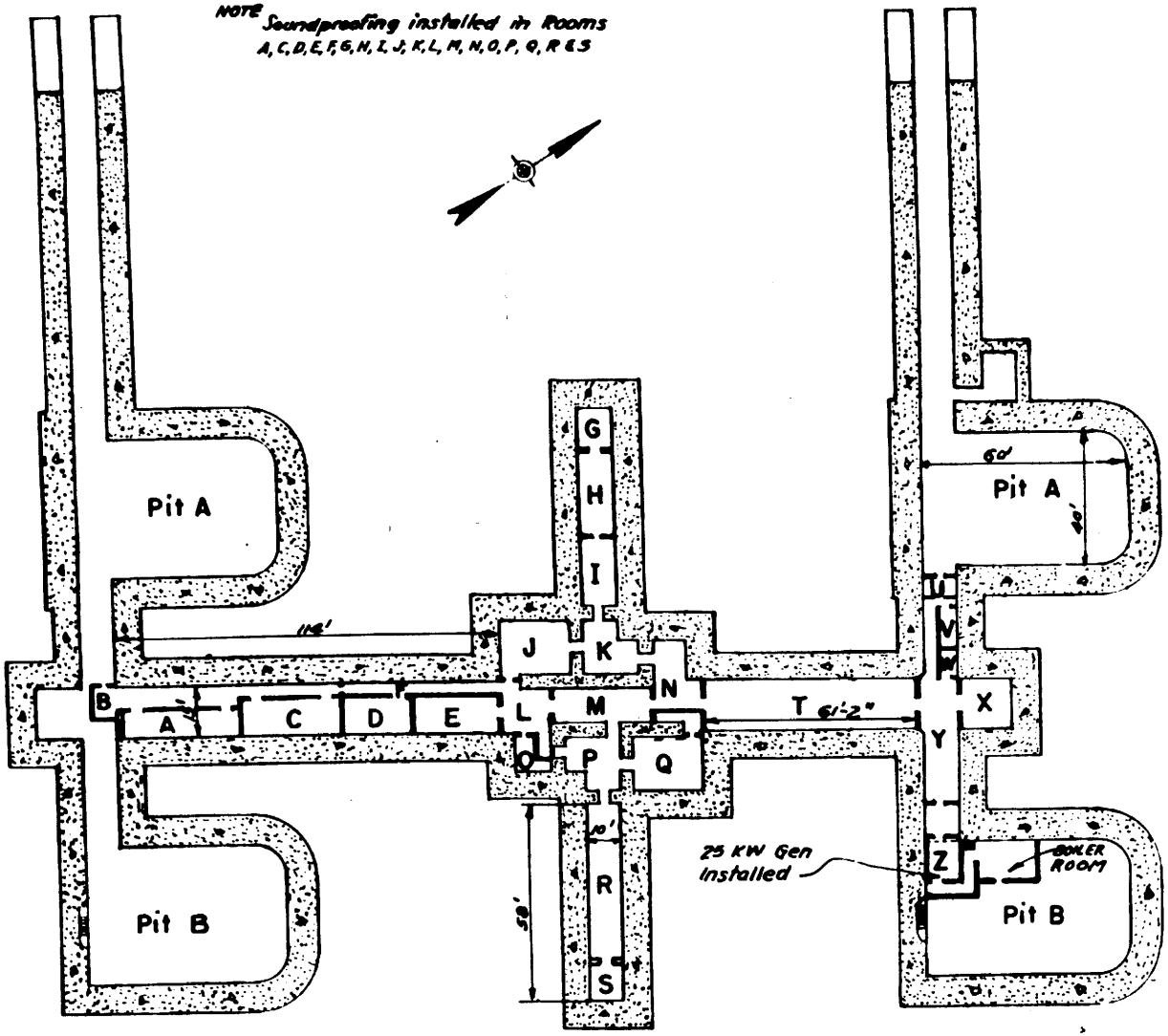
1944 - Generator Room Ventilating System
This project consists of installation of ductwork between radiator of engine to window and closure above window; providing sheet metal hood over intake and increasing size of exhaust opening.....$ 200.00

WAR DEPARTMENT

CORPS OF ENGINEERS, U.S. ARMY

NND 735006
By G4312 NARS, Date 022497
DECLASSIFIED

NOTE Soundproofing installed in Rooms
A, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R & S



GENERAL LAYOUT

ROOM SCHEDULE

A	ENLISTED MEN'S ROOM	
B	SOUTH AIR LOCK	
C	MESSAGE CENTER	20'x10'-6"
D	P & D NAVY LIAISON	20'x10'-6"
E	S-4	
F	CORRIDOR	
G	COMMANDING GENERALS' ROOM	
H	COMMANDING GENERALS' OFFICE	
I	EXECUTIVE OFFICER	
J	SGT. MAJOR'S OFFICE	20'x16'-0"
K	S-1	
L	CORRIDOR	
M	CLASSIFICATION SECTION	
N	S-1 FILE	
O	RADIO ROOM	
P	S-2	
Q	S-3	20'x16'
R	CHART ROOM	
S	STORAGE VAULT	
T	FIRE CONTROL & POST TELEPHONE SWITCHBOARD	
U	NORTH AIR LOCK	
V	ENLISTED MENS LATRINE	
W	OFFICERS LATRINE	
X	BATTERY ROOM	15'x15'
Y	CORRIDOR	
Z	GENERATOR ROOM	

HARBOR DEFENSES OF NEW YORK

HARBOR DEFENSE COMMAND POST

McCOOK REYNOLDS

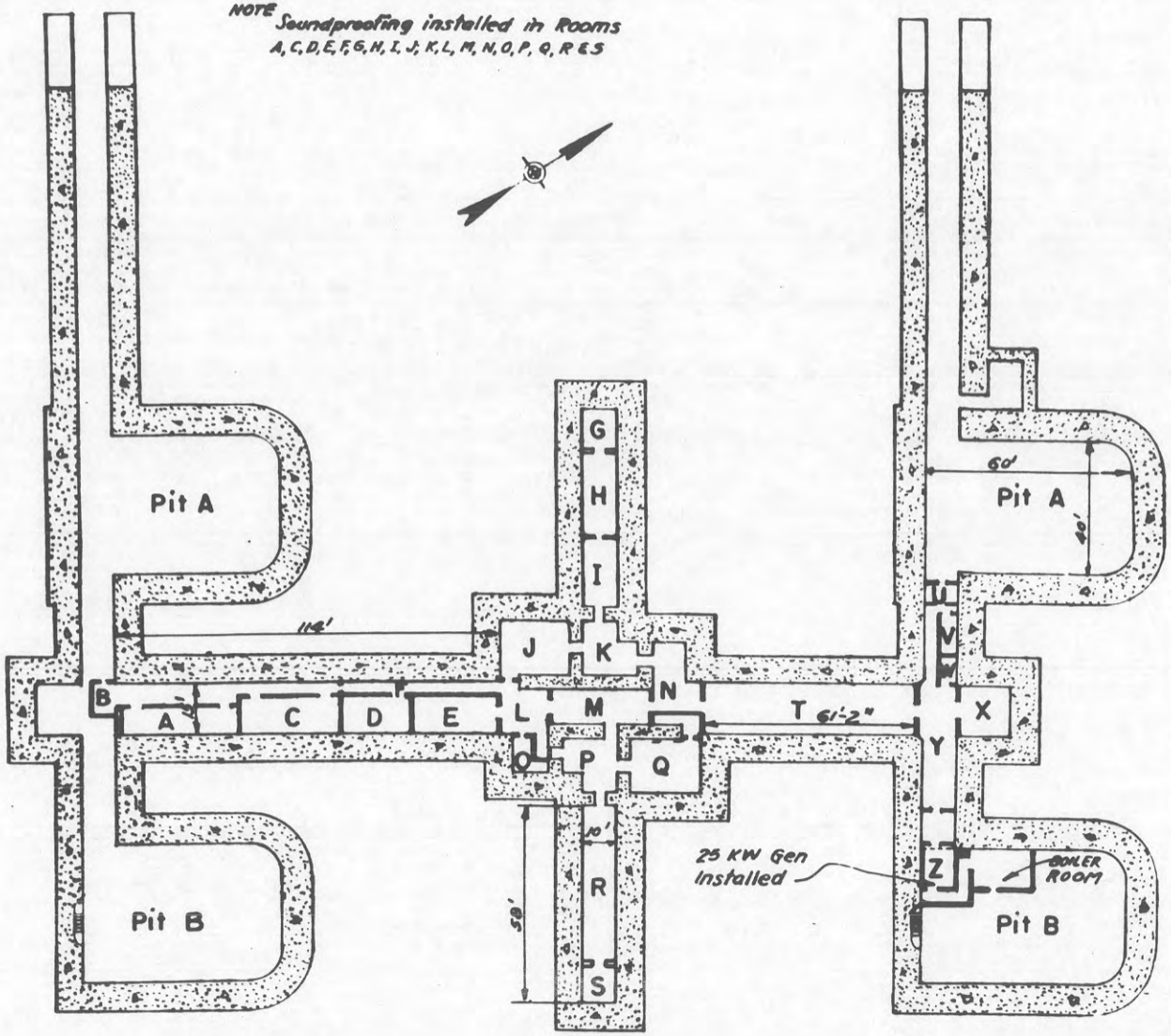
0 20' 40'

FORT HANCOCK NEW JERSEY

WAR DEPARTMENT

CORPS OF ENGINEERS, U.S. ARMY

NOTE Soundproofing installed in Rooms A, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R ES



GENERAL LAYOUT

ROOM SCHEDULE

A	ENLISTED MEN'S ROOM	
B	SOUTH AIR LOCK	
C	MESSAGE CENTER	20'x10'-6"
D	P & D NAVY LIAISON	20'x10'-6"
E	S-4	
F	CORRIDOR	
G	COMMANDING GENERALS' ROOM	
H	COMMANDING GENERALS' OFFICE	
I	EXECUTIVE OFFICER	
J	SGT. MAJOR'S OFFICE	20'x16'-0"
K	S-1	
L	CORRIDOR	
M	CLASSIFICATION SECTION	
N	S-1 FILE	
O	RADIO ROOM	
P	S-2	
Q	S-3	20'x16'
R	CHART ROOM	
S	STORAGE VAULT	
T	FIRE CONTROL & POST TELEPHONE SWITCHBOARD	
U	NORTH AIR LOCK	
V	ENLISTED MENS LATRINE	
W	OFFICERS LATRINE	
X	BATTERY ROOM	15'x15'
Y	CORRIDOR	
Z	GENERATOR ROOM	

HARBOR DEFENSES OF NEW YORK

HARBOR DEFENSE COMMAND POST

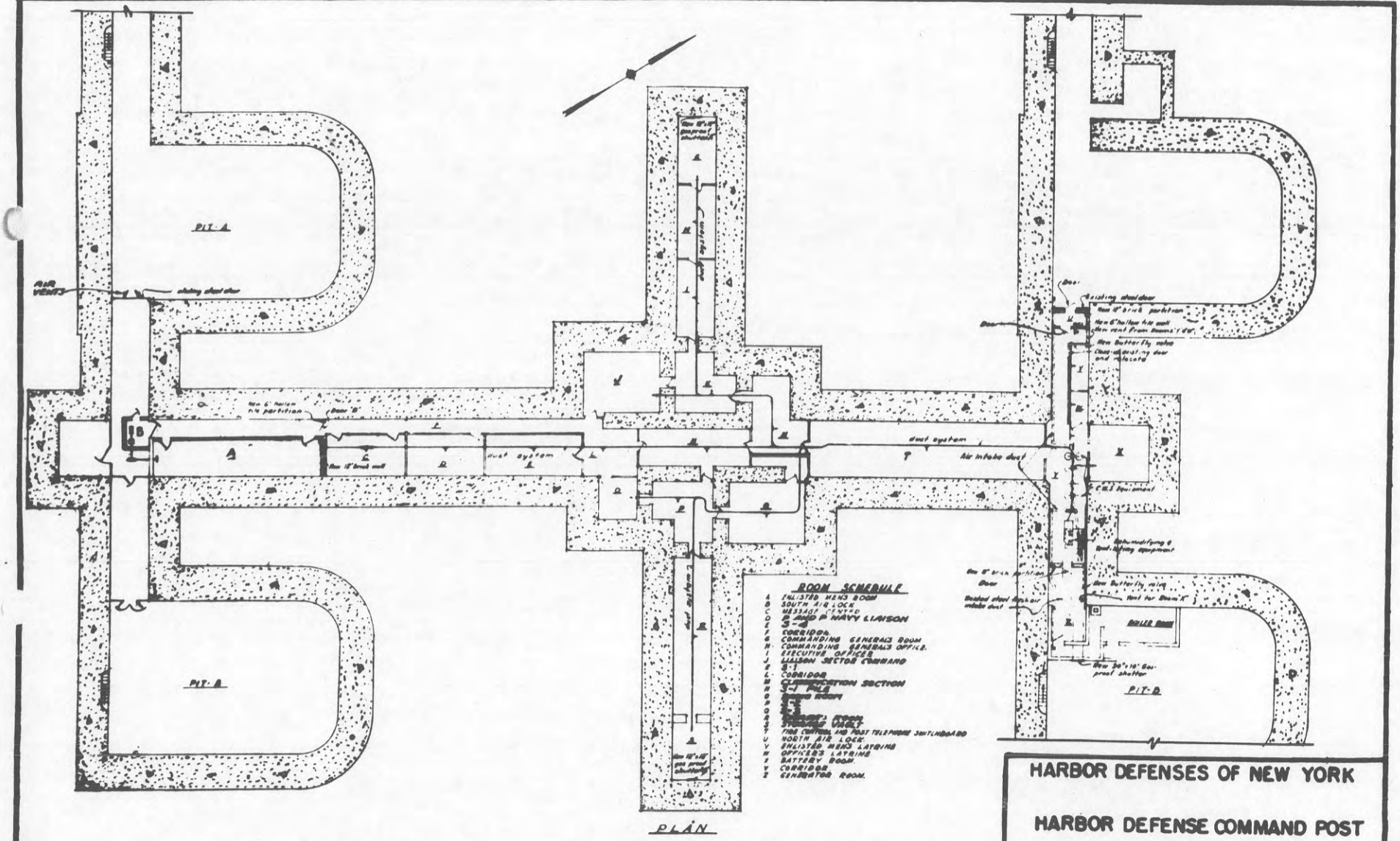
McCOOK REYNOLDS

0 20' 40'

FORT HANCOCK NEW JERSEY

WAR DEPARTMENT

CORPS OF ENGINEERS, U.S. ARMY



PLAN

SECRET

GASPROOFING LAYOUT

HARBOR DEFENSES OF NEW YORK

HARBOR DEFENSE COMMAND POST

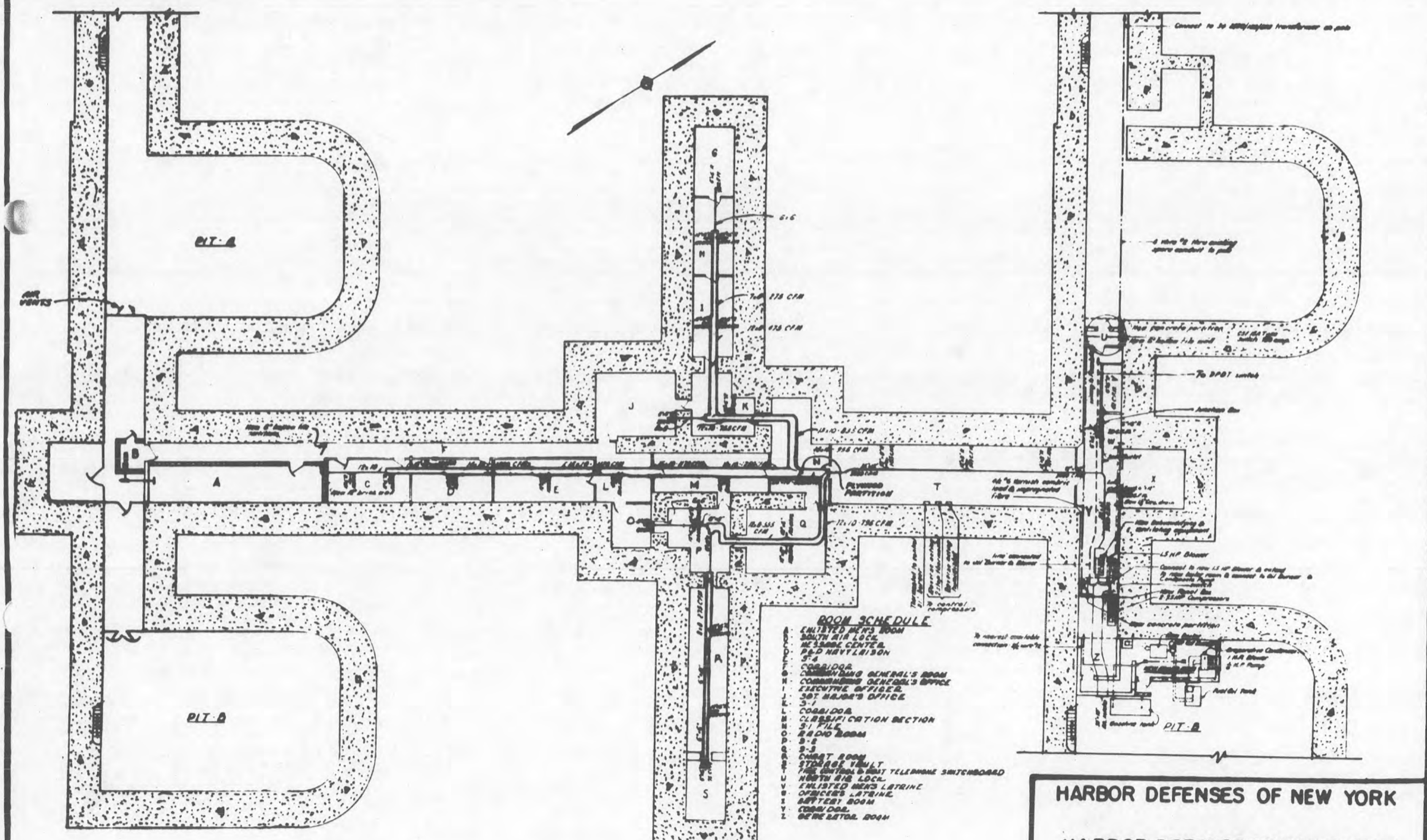
McCOOK REYNOLDS

0 20' 40'

FT. HANCOCK NEW JERSEY

WAR DEPARTMENT

CORPS OF ENGINEERS, U.S. ARMY



SECRET

DEHUMIDIFYING LAYOUT

HARBOR DEFENSES OF NEW YORK

HARBOR DEFENSE COMMAND POST

M^c COOK REYNOLDS

0 20' 40'

FORT HANCOCK NEW JERSEY