

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

COAST DEFENSES OF Sandy Hook

FORT Hancock, N.J.

BATTERY Urmston, (4 empls. dismantled)

Form 1. Corrected to July 1, 1921.

No. of guns 2 Caliber 3" Carriage Ped.

Battery commenced	: 1899 & 1900	: Sources of electric current	: C.P.P. Bloomfield #1; 25 K.W.
Battery completed	: 1903 & 1904	: Max. kw. required for lights	: Alexander 25 K.W. sets
Date of transfer	: ^{Emp. 1, 2, 5 & 6} Feb. 27, 1903	: Max. kw. required for motors	: 2 K.W.
Material of construction	: concrete		
Portland or Rosendale cement	: Portland		
Cost to date of transfer	: \$13,400.00 ^{Exp. 1, 2, 5 & 6}		
Connected to water supply	: \$12,000.00 ^{" 3 & 4}	: Present condition battery	: Good
Connected to sewer	: Yes	: Rooms wet or dry	: Fairly dry
Type of latrine	: Telephone	: How ventilated	: Through doorways
Type of data transmission	: ^{Emp. #3; 25.0}		
Trunnion elevation in battery	: ^{" #4; 25.0}	: Remarks:-	
Datum plane	: M.L.W.		

ARMAMENT

Emplacement: or Motor No.	Guns or Motors						Carriages				
	Cal.	Length	Model	Serial No.	Mfgr.	Moun. Type	Model	Ser. No.	Manufacturer	Motor	
1	: Dismantled	:	:	:	:	: ted	:	:	:	:	
2	: do.	:	:	:	:	:	:	:	:	:	
3	: 3"	:	: 1903	: #75	: Watervliet	: Yes	: Ped.	: 1903	: 59	: Watertown Ars.	: No
4	: 3"	:	: 1903	: #76	: do.	: Yes	: "	: 1903	: 60	: do.	: No
5	: Dismantled	:	:	:	:	:	:	:	:	:	
6	: do.	:	:	:	:	:	:	:	:	:	
7	:	:	:	:	:	:	:	:	:	:	
8	:	:	:	:	:	:	:	:	:	:	

HOISTS

Emplacement: Number	Type	Deli- very	Motor					Date of Transfer	Remodeled for long points.
			Ser. No.	Make	H.P.	Volts	RPM		
1	:	:	:	:	:	:	:	:	
2	:	:	Note: Guns and Carriages in Empls. 1, 2, 5, & 6 have been dismantled.						:

See 660.2-10, 10th Ind. stating that two 3" (15-pdr) guns, M1903 be retained as recommended in paragraph 1a of 1st Ind., which also states that classification be...

To be relocated near Fort Gunnison. 662 B (New York) MR 9631

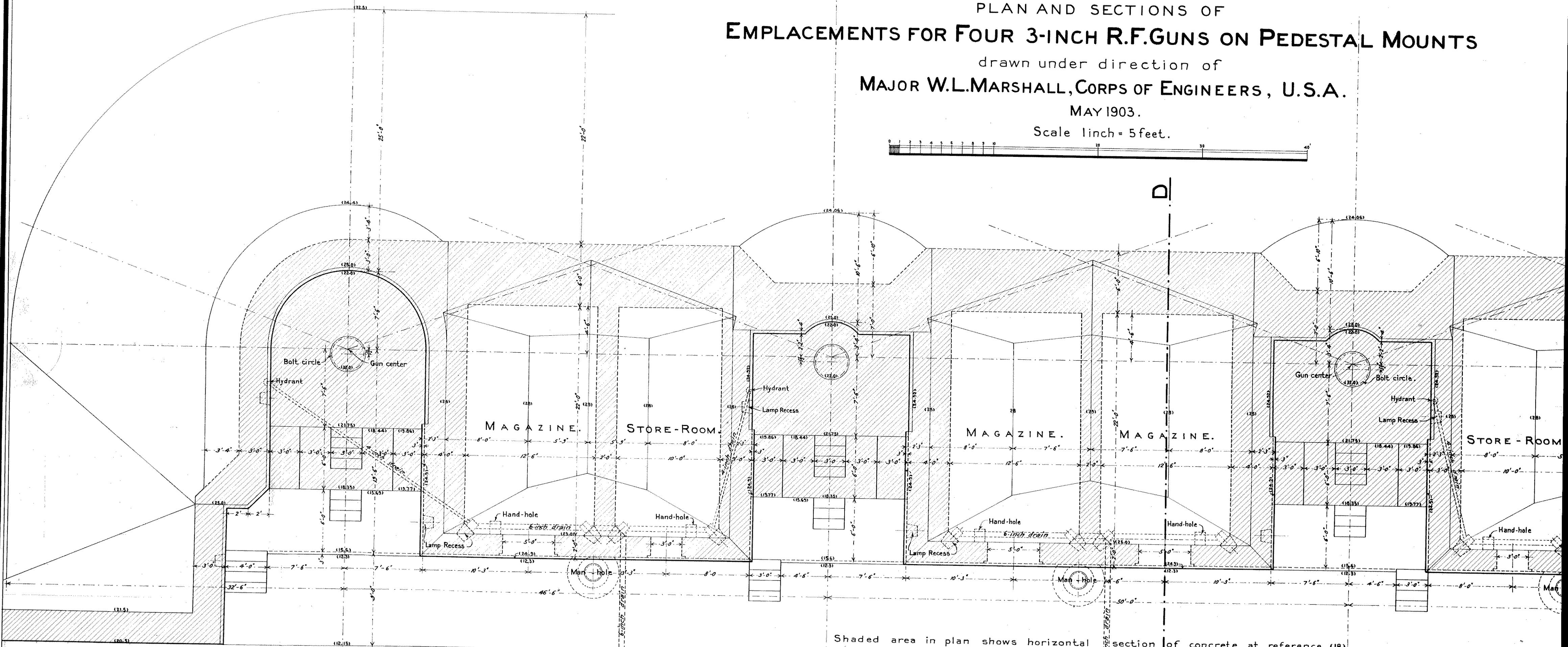
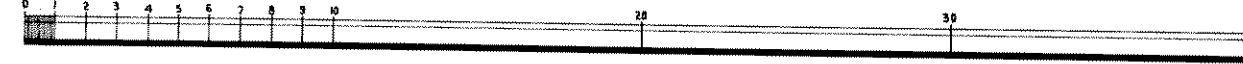
FORT HANCOCK, NEW JERSEY.

PLAN AND SECTIONS OF EMPLACEMENTS FOR FOUR 3-INCH R.F.GUNS ON PEDESTAL MOUNTS

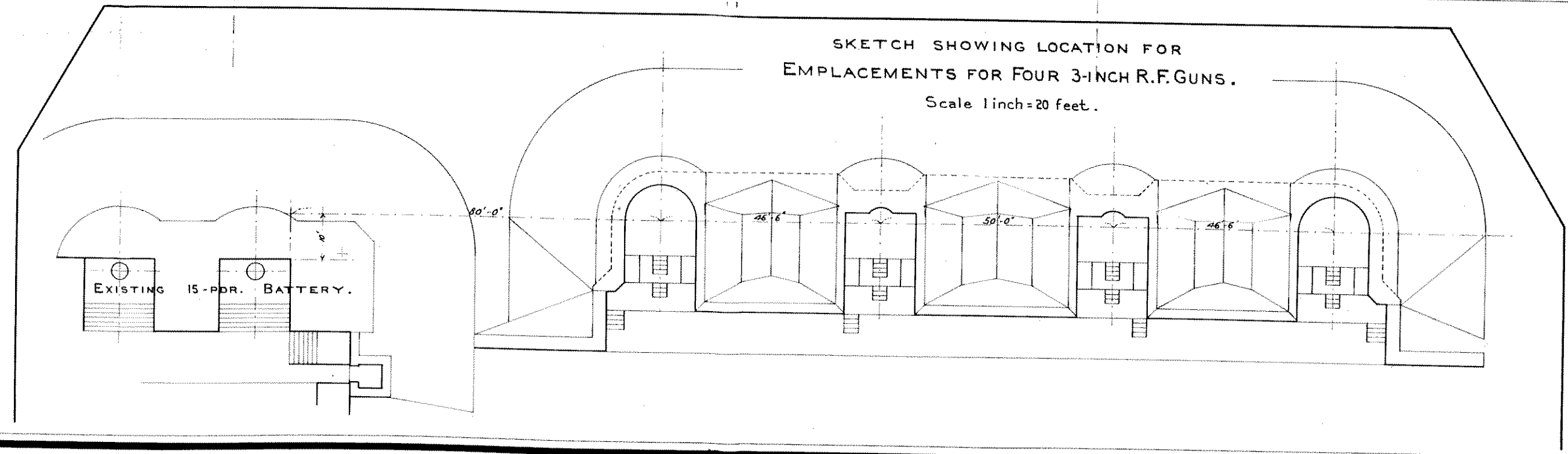
drawn under direction of
MAJOR W.L. MARSHALL, CORPS OF ENGINEERS, U.S.A.

MAY 1903.

Scale 1 inch = 5 feet.



Shaded area in plan shows horizontal section of concrete at reference (18).



SKETCH SHOWING LOCATION FOR
EMPLACEMENTS FOR FOUR 3-INCH R.F.GUNS.
Scale 1 inch = 20 feet.

Elevations refer to the plane of mean low

NOTES FOR CONSTRUCTION

DRAINAGE. At all junctions of drains, catch-basins will be built leading out of battery will be carried to a settling basin.

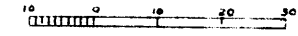
FLOORS. will be level along walls and will fall from a ridge on ceiling than 1 on 60. Near the walls a gutter 2 inches wide with catch-basins.

CONDUITS. Lay 4-duct conduit between man-holes; 2-duct from each tube for light cables to conform to lighting indicated on each magazine to adjacent gun center.

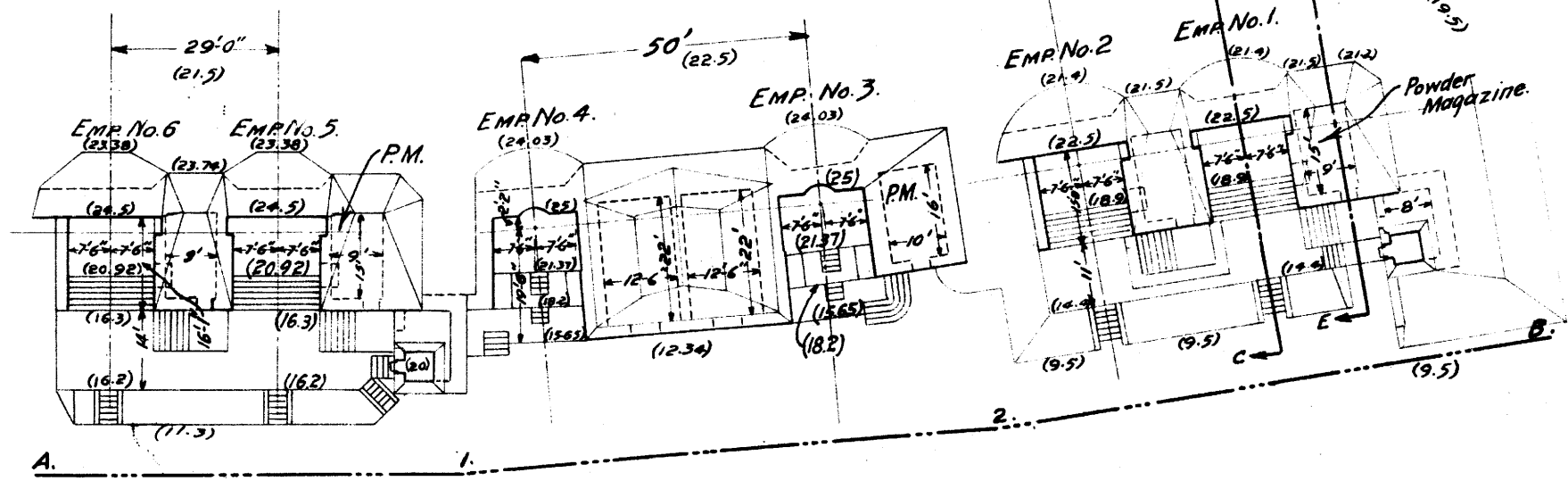
5/11/1032

Corrected to July 1, 1921.

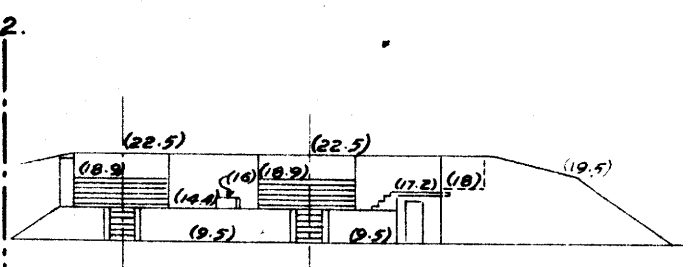
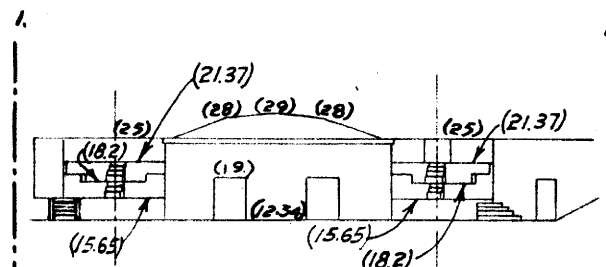
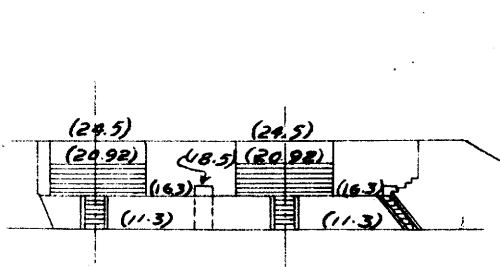
Scale 1"=30'



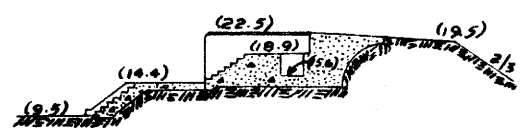
NOTE: Carriages in Emp's. 1, 2, 5 and 6 have been dismantled.



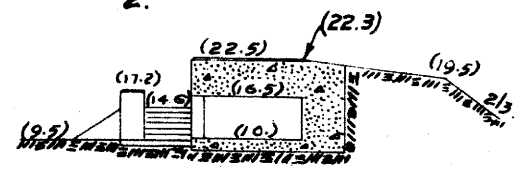
PLAN.



REAR ELEVATION ON A-1-2B



SECTION C-D



SECTION E-F

REPORT OF COMPLETED WORKS - SEACOAST FORTIFICATIONS

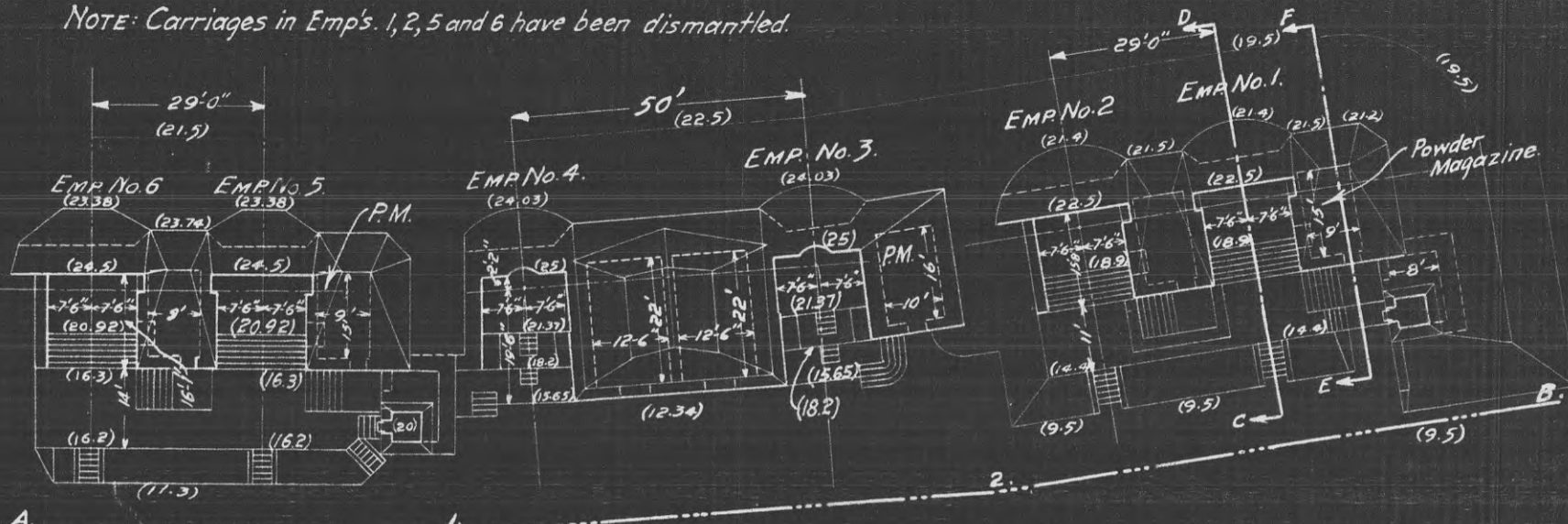
COAST DEFENSES OF SANDY HOOK.
FORT HANCOCK.

Corrected to July 1, 1921.

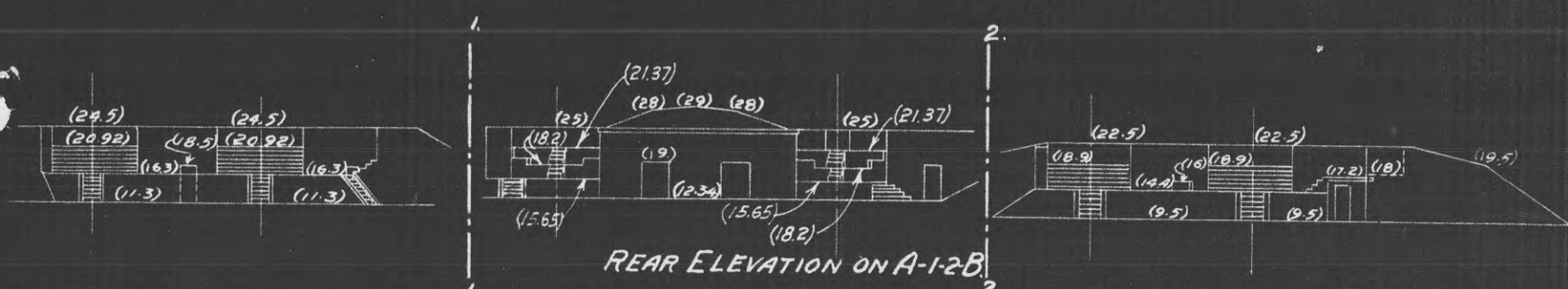
BATTERY THOMAS URMSTON.
No. of Guns 2 Caliber 3"
Scale 1"=30'

Carriage 4-BP 2-P

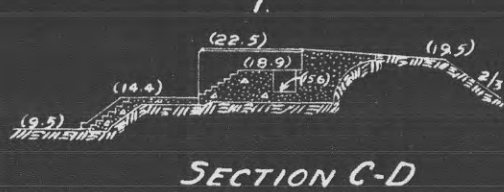
NOTE: Carriages in Emps. 1, 2, 5 and 6 have been dismantled.



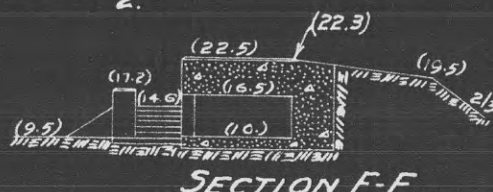
PLAN.



REAR ELEVATION ON A-1-2B



SECTION C-D



SECTION E-F

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

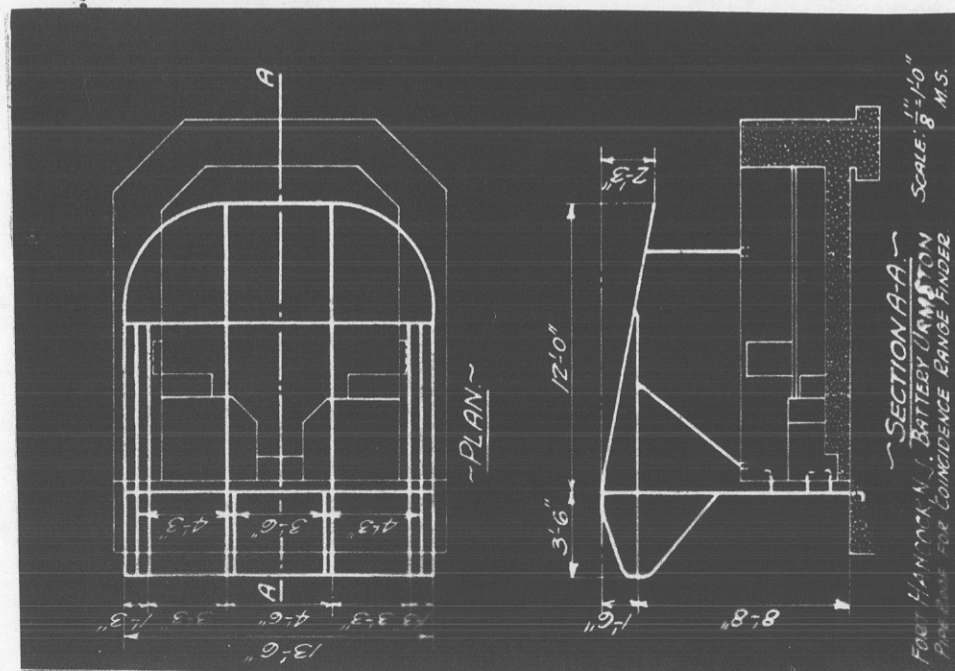
COAST DEFENSES OF Sandy Hook
FORT Hancock, N. J.

Form 2 Corrected to July 1, 1921

STRUCTURE C.R.F. Urmston

superseded

Location	: Rear of Battery Urmston	Type of data transmission	: -
Date of transfer	: Feb. 21, 1919.	Date of transfer	: -
Cost to date	: \$770.00	Cost of data transmission	: -
Type of construction	: Pipe & canvas covered	equipment.	: -
(a) Roof	: Concrete	For tide stations give	: -
(b) Remainder of building	: Battery Urmston	description of tide	: -
How concealed	: do.	gauge.	: -
How protected	: -	For datum points give Forts:	: -
Height above concealment	: -	from which visible	: -
Height above protection	: -	For dormitories give sta-	: -
Conspicuous at 1000 \pm yards	: Yes	tions served	: -
Source of electric current	: -	For cable hut give S.G. type:	: -
Kilowatts required	: -		
Type of lighting fixtures	: -		
How heated	: -		
Connected to water mains	: No		
Connected to sewer	: No		
Type of latrine	: None		
Permanent or temporary installation	: Permanent		
Present condition	: Good		
Reference of site	: 25.14 above m.l.w.		
Reference of instrumental axis	: 29.14 " "		
Type of observing instrument	: -		
Type of plotting board	: -		
Type and capacity of crane	: -		
Max. dimensions of reel handled	: -		



100,944 (New York) (N) 63166

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

HARBOR DEFENSES OF New York
 FORT Hancock, New Jersey
 BATTERY No. 6
 No. of guns 2 Caliber 3" Carriage Barbette

Form 1 Corrected to **15 September 1943**

GENERAL:		ELECTRIC CURRENT:	
Battery commenced	7 June, 1942	Sources of	None
Battery completed	5 Sept. 1942	Max. kw. required for lights	None
Date of transfer	20 July 1943	Max. kw. required for motors	None
Cost to date of transfer	\$4,587.52	Present condition of battery	New
Materials of construction	Concrete	Rooms wet or dry	Exposed battery
Type of cement	SS-C-206	How ventilated	Exposed
WATER & SEWER:		Type of data transmission	Telephone
Connected to water supply	No	Remarks-	Guns concealed with camouflage fabric on sliding frame.
Connected to sewer	No		
Type of latrine	None		
Trunnion elevation in btry.	El. 22.5'		
Datum plane	Mean Low Water at Sandy Hook,		

ARMAMENT

Emplacement or mortar No.	Cal.	Length	Guns or Mortars				Carriages				
			model	Serial No.	Manufacturer	mounted	Type	model	Serial No.	Manufacturer	Motor
1	3	170"	M1903	76	Watervliet Ar.	1942	Bar-	M1903	60	Watertown Ar.	None
2	3	Total	"	75	1908	1942	bette	M1903	59	1909	
3		Length									
4											
5											
6											
7											
8											

HOISTS

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

SECRET

Statement of Nature & Cost of Repairs & Modifications

1943

Ramp and aprons added.....\$ 867.30

8124

8991

SECRET

Sheet 2

COAST DEFENSES OF Sandy Hook

FORT Hancock

BATTERY Umston

NO OF GUNS: 6 CALIBER: 3"

	EMPLACEMENT NUMBER <u>5</u>		EMPLACEMENT NUMBER <u>6</u>		EMPLACEMENT NUMBER <u>3</u>		EMPLACEMENT NUMBER <u>4</u>	
	FROM	To	FROM	To	FROM	To	FROM	To
1-a. Azimuth	88°		90°					
b. Distance	44' - 10"		29' - 0"					
2-a. Model of Gun	1898 #101		1898 #102					
b. " " Carriage	1898 #101		1898 #102					
c. Type of " "	B. P.		B. P.					
3- Elevations of	-		-					
a. Gun trunnions (in battery)	25.16		25.16					
b. Interior crest	24.46		24.46					
c. Loading platform	21.08		21.08					
4- Angle of depression	58°.90		58°.90					
5- Limiting azimuths of field of fire as determined by:	FROM	To	FROM	To	FROM	To	FROM	To
a. construction of emplacement	71.87	302.62	72.80	303.64				
b. Interference by adjacent emplacements.	113.87	255.69	114.80	256.69				
c. Interference of other obstacles external to emplacement.	113.87	245.68	114.80	246.69				
d. Position of Ordnance stops.	None							

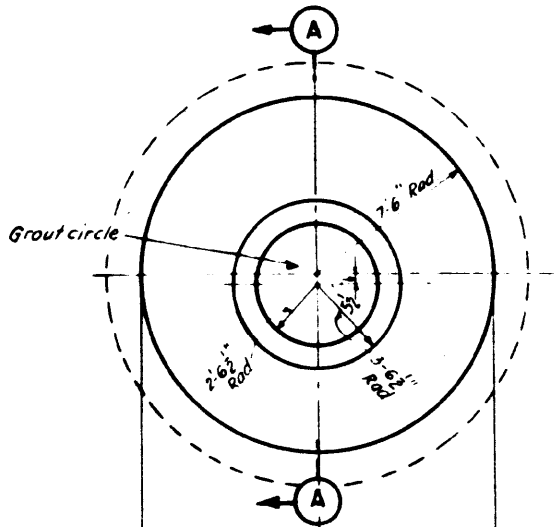
NOTES.

1. Azimuth and distance of emplacement No. 2 are given with reference to No. 1, of No. 3, with reference to No. 2, etc. Azimuth and distance of No. 5 are given with reference to #1 Umston gun center

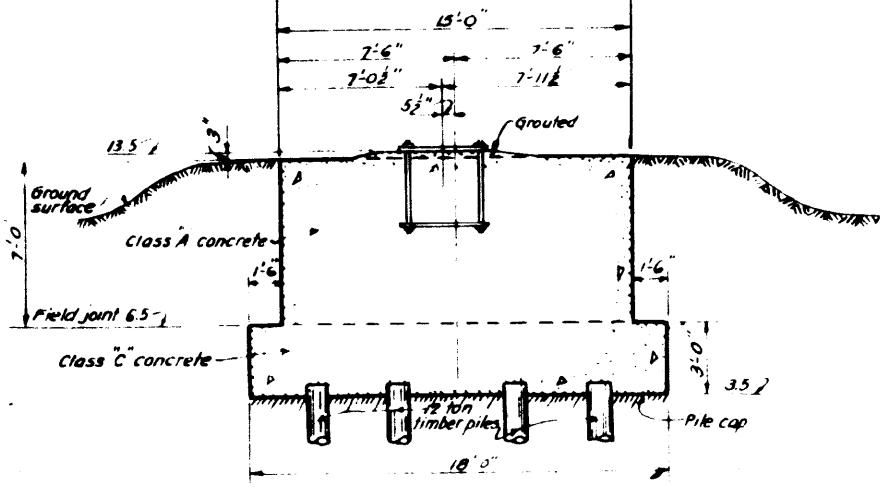
3. Above plane of M. L. W.

5-c. Nature of obstacles: Light keeper's house.

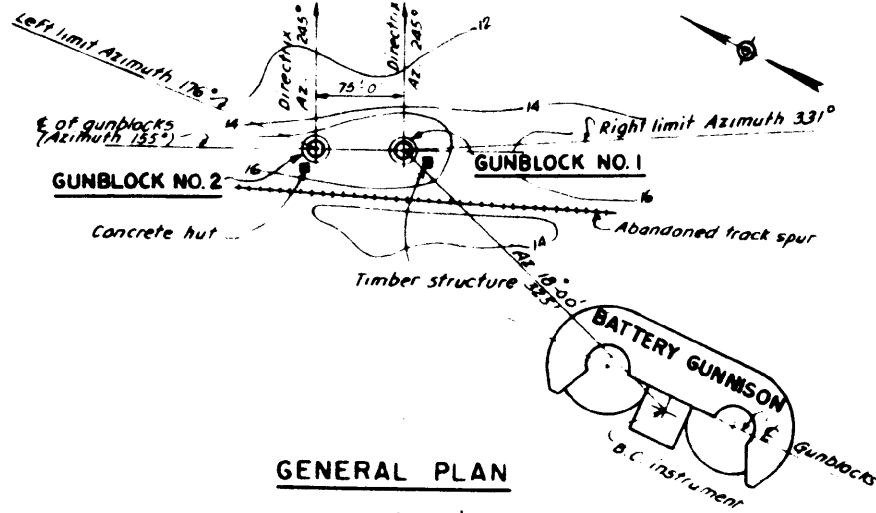
2-c. Use one of following abbreviations or designations: Dis; Nondis; Alt. gun-lift, Turret, Casemate, Ped; B.P.



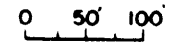
**PLAN OF GUNBLOCK
2- INSTALLED**



SECTION A-A
SCALE: $\frac{1}{8}'' = 1'-0''$



GENERAL PLAN

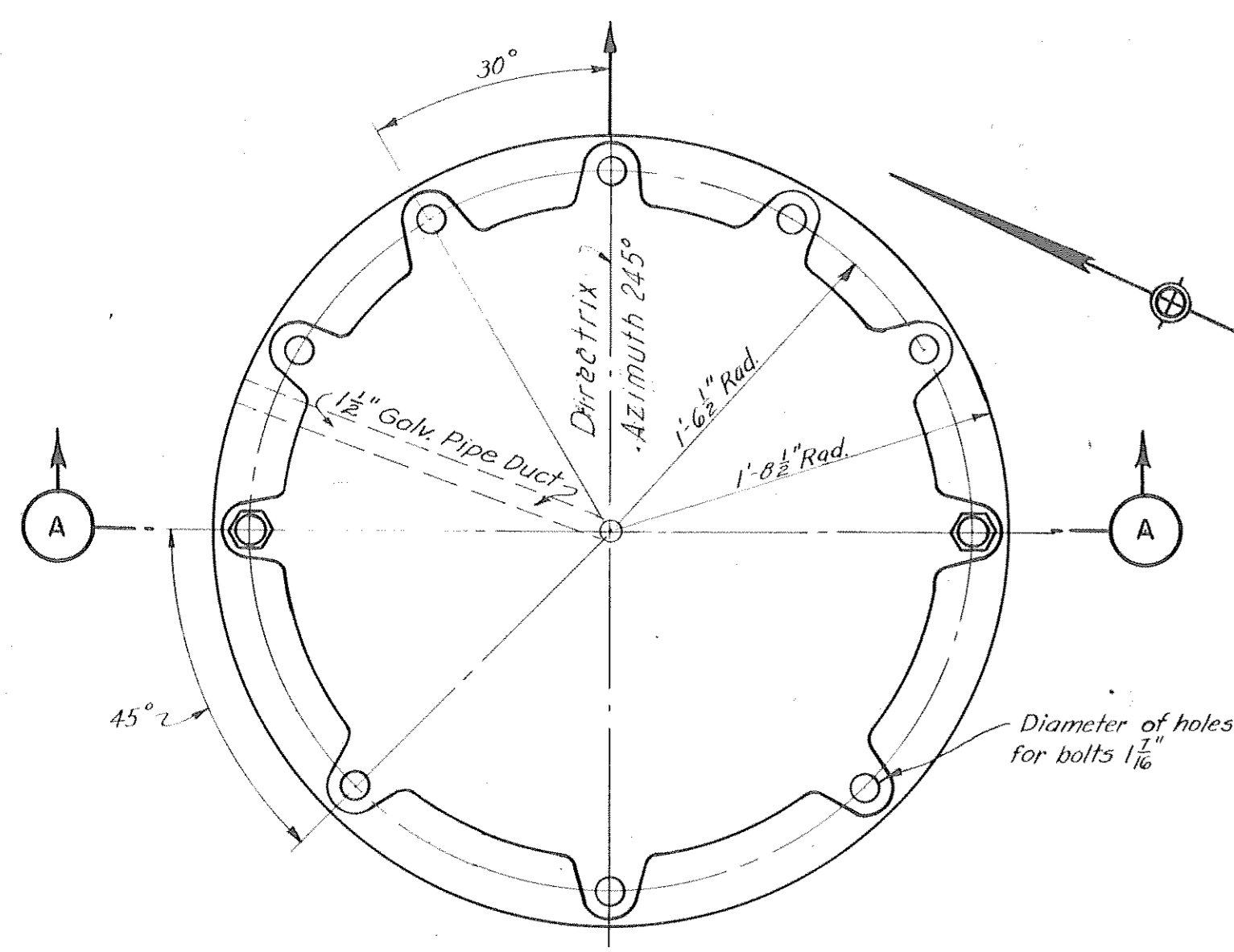


SECRET

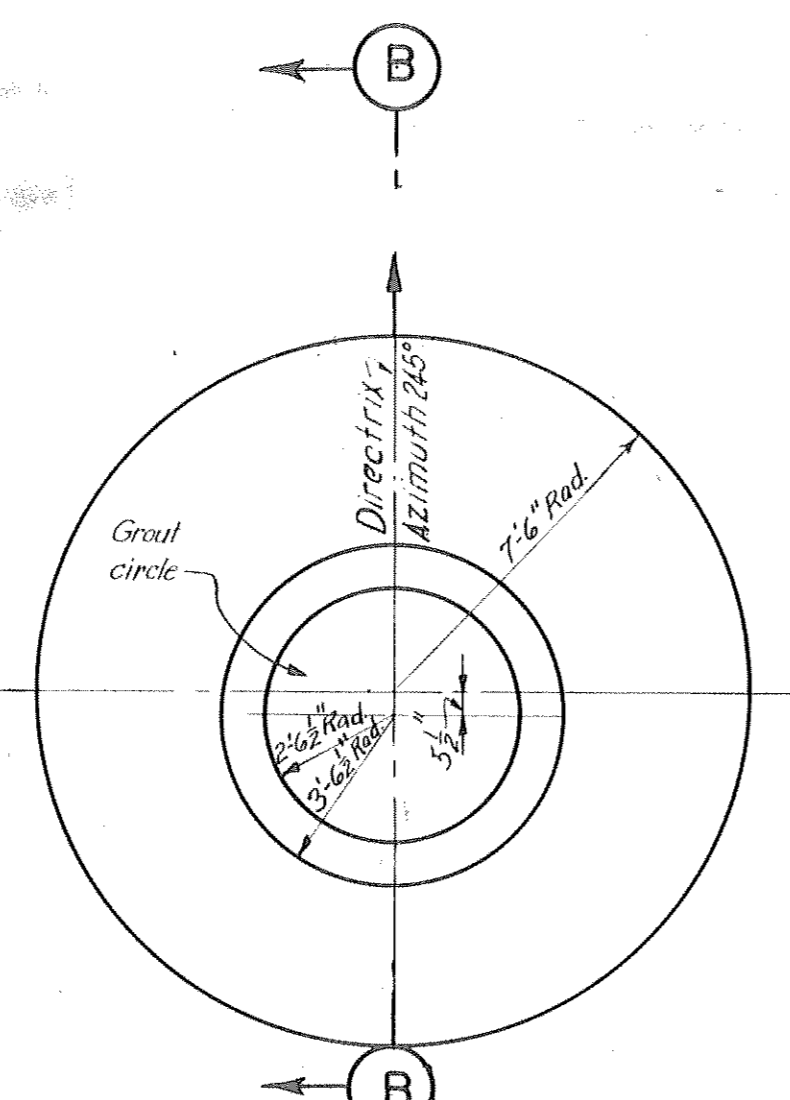
NOTE:

Elevations refer to Mean Low Water Datum

HARBOR DEFENSES OF NEW YORK
 GUN PLATFORM
 3 IN. RAPID FIRE GUNS
 FORT HANCOCK NEW JERSEY
 SCALE AS SHOWN



PLAN

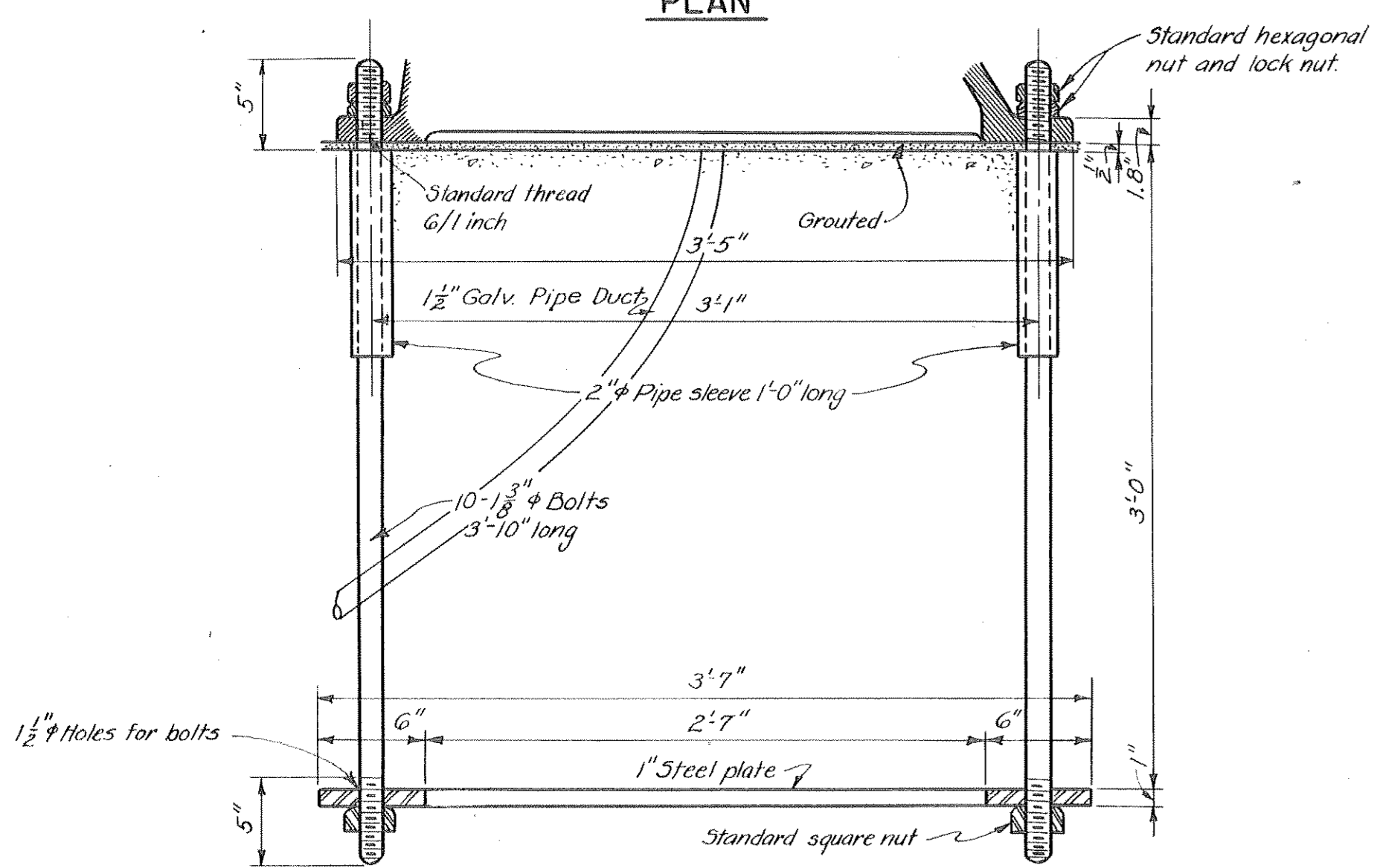


PLAN OF GUNBLOCK

SCALE: 1/4" = 1'-0"

PILE PLAN

SCALE: 1/4" = 1'-0"

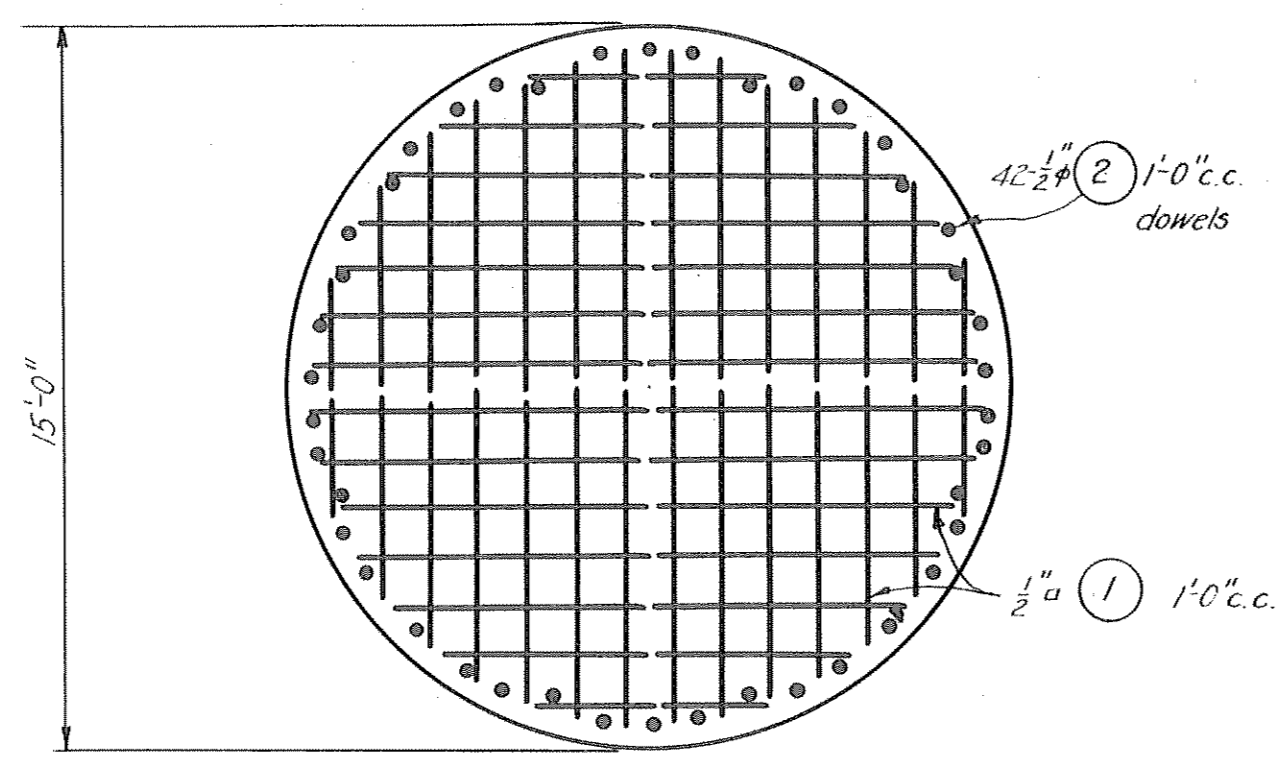


SECTION A-A

DETAILS OF PEDESTAL

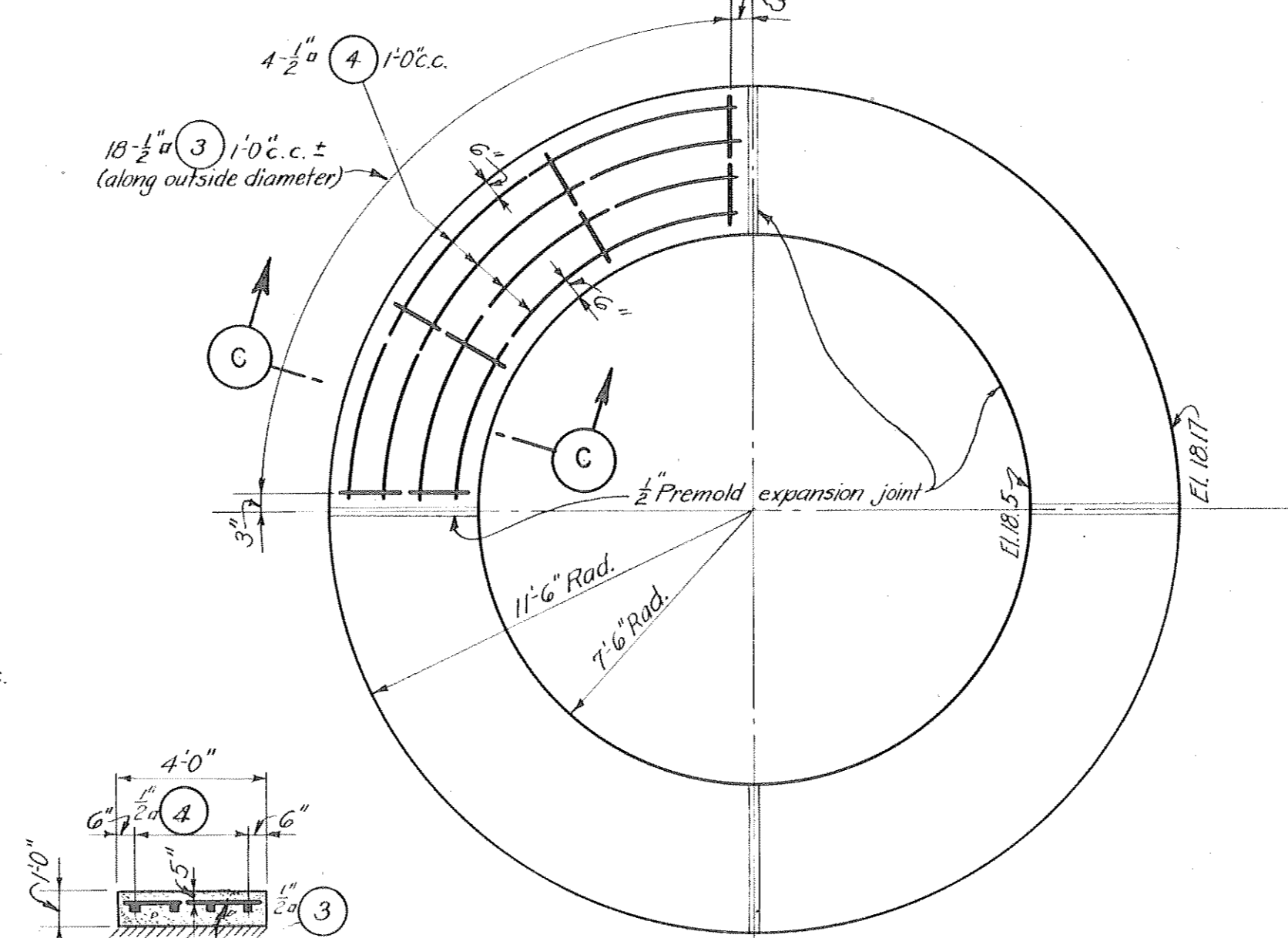
SCALE: 1 1/2" = 1'-0"

12" 9" 6" 3" 0" 6" 12"



PLAN - MAT NO. 1 & NO. 2

SCALE: 1/4" = 1'-0"



PLAN

DETAILS OF WALKWAY

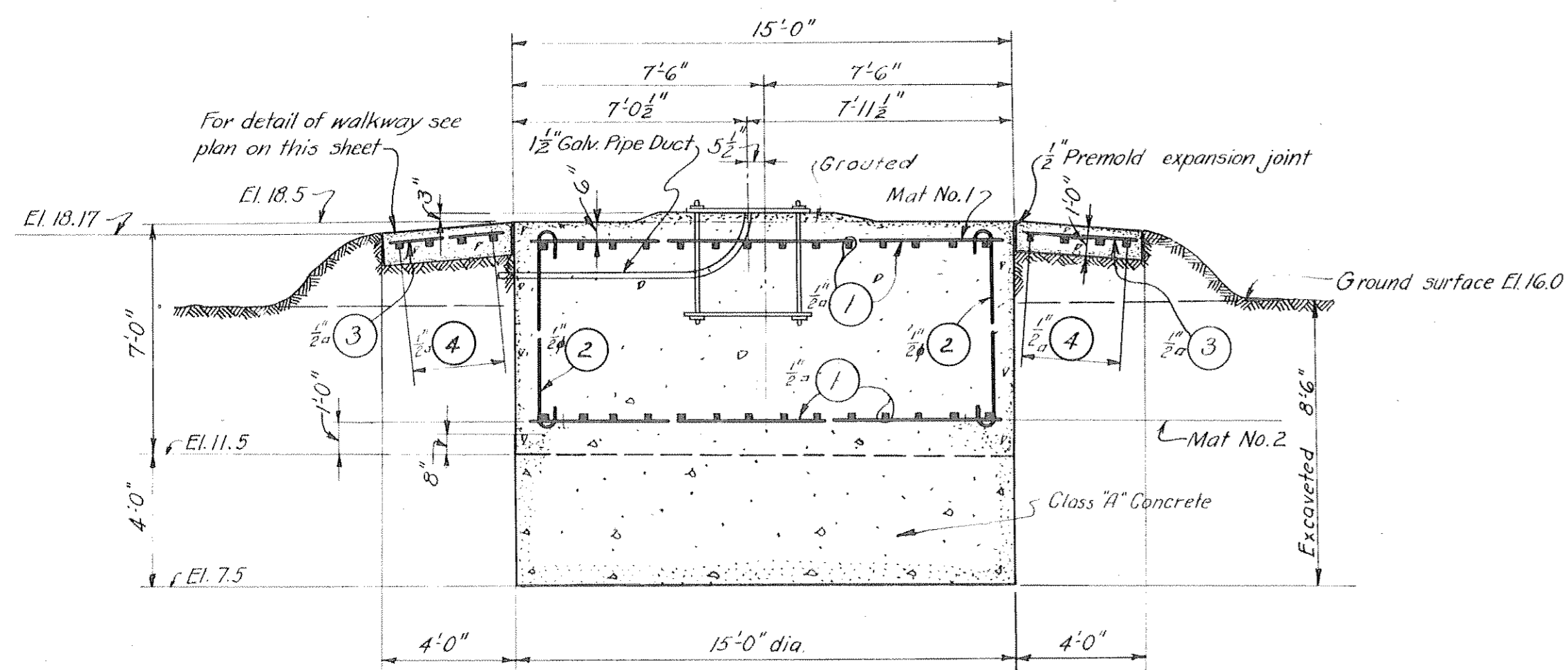
SCALE: 1/4" = 1'-0"

SECTION C-C

SCALE: 1/4" = 1'-0"

BAR LIST

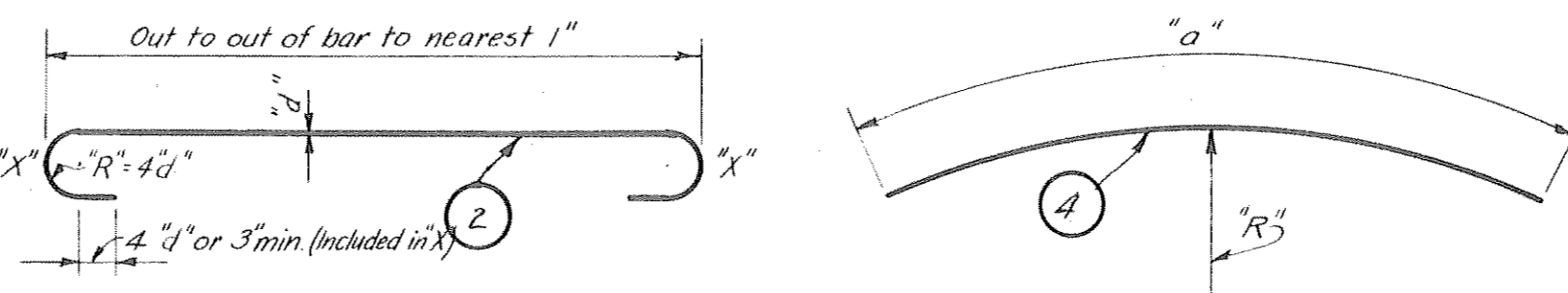
MARK	LOCATION	NO.	SIZE	LENGTH		WEIGHT			DETAILS	
				FT.	IN.	FOOT	EACH	SUB-TOTAL		TOTAL
MAT NO. 1 - MAT NO. 2 Same. 1 Listed - 2 Installed per gunblock										
1	300 linear feet		1/2" ø			0.850		255.0	510.0	Straight-cut in field
2	Dowels	42	1/2" ø	6	10	0.668	4.6	193.2	193.2	8" x 5 1/2" x 8"
WALKWAY - 1 Listed - 1 Installed per gunblock										
3	300 linear feet		1/2" ø			0.850		255.0	255.0	Straight-cut in field
4	Longitudinal	16	1/2" ø	Average 14"	4 1/2"	0.850	12.2	195.2	195.2	2" varies in groups of 4 bars from 16" to 12" by 1" increments. 2" varies in groups of 4 bars from 11" to 8" by 1" increments.
Total steel reinforcement for one gunblock									1,153.4	
Total steel reinforcement for two gunblocks									2,306.8	



SECTION B-B

SCALE: 1/4" = 1'-0"

BAR	1 1/2" ø	1" ø
X" in inches	8	8
Area in square inches	0.20	0.25
Weight pounds per foot	0.668	0.850



X" at hook indicates amount added to dimension shown to allow for hook (X" distance is measured along 1/4" of bar)

BAR BENDING DETAILS

NOT TO SCALE

RECORD DRAWING
CERTIFIED AS CONSTRUCTED DEC. 16, 1942.

J. O. Keady
Major, Corps of Engineers

CONFIDENTIAL

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE ACT, U.S.C. 50: 31 AND 32. ITS TRANSMISSION OR REVELATION TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW.

NOTES
Elevations shown are in feet and refer to plane of Mean Low Water, which is 2.4 feet below Mean Sea Level at Sandy Hook, New Jersey.
True North conforms to the Special Lambert System as developed by the U. S. C. & G. Survey for Sandy Hook, New Jersey.
Azimuths are measured clockwise from the South.
Quantities called for on this sheet are for one platform only. 2 platforms installed.

CONFIDENTIAL

HARBOR DEFENSES OF NEW YORK
GUN PLATFORMS
3 INCH RAPID FIRE GUN
PLANS AND DETAILS

FORT HANCOCK NEW JERSEY

IN 1 SHEET SHEET NO. 1

SCALES AS SHOWN

U. S. ENGINEER OFFICE, NEW YORK DISTRICT, NEW YORK, N. Y., MAY 14, 1942.

Submitted: J. G. Gackler Senior Engineer
Recommended: Charles P. Smith Principal Engineer
Approved: W. J. Jones Colonel, Corps of Engineers

DATE	REV. NO.	REVISION	REV. BY	APP. BY
11-7-42		Revised as constructed	H.A.T.	J.G.P.