

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

COAST DEFENSES OF Los Angeles, Calif.
FORT MacArthur
* BATTERY 14 In Gun, Ry. Mount.
No. of guns 1 Caliber 50 Carriages RY.

Form 1.

Corrected to May 10, 1926.

**

Battery commenced	: Oct. 15, 1925	: Sources of electric current	: Gasoline engine - generator set,
Battery completed	: Feb. 20, 1926	:	:
Date of transfer	:	: Max. kw. required for lights	: 0.57 kw
Material of construction	: Concrete (reinforced)	: Max. kw. required for motors	: 50 kw
Portland or Rosendale cement	: Portland	:	:
Cost to date of transfer	: \$9344.00	:	:
Connected to water supply	: No.	: Present condition of battery	: New
Connected to sewer	: No	: Rooms wet or dry	: No rooms
Type of latrine	: None	:	:
Type of data transmission	: Telephone	: How ventilated	:
	:	:	:
Trunnion elevation in battery	: 75.65	: Remarks-	:
Datum plane	: M.L.L.W.	:	:

ARMAMENT.

Emplacement or mortar No.	Gal.	length	Model	Serial No.	Manufacturer	Mounted	Type	Model	Serial No.	Manufacturer	Motor
1	: 50	: 715.2"	: 1920 MII	: 7	: Watervliet	: Feb. 20,	: Ry.	: 1920	: 1	: Watertown	: None
	:	:	:	:	: Arsenal	: 1926	:	:	:	: Arsenal	:
	:	:	:	:	:	:	:	:	:	:	:
	:	:	:	:	:	:	:	:	:	:	:
	:	:	:	:	:	:	:	:	:	:	:

HOISTS

Emplacement Number	Type	Delivery	Serial No.	Maker	H.P.	Volts	RPM	Type of control	Date of transfer	Remodeled for long points
1	: Crane	: Back	: 922815	: GE	: 15	: 110	: 500	: Controller and hand	:	:
	:	:	:	:	:	:	:	:	:	:

* This gun now mounted on Emplacement No. 2. See Form 1 on Platforms #2 & 3 dated July 23, 1942.

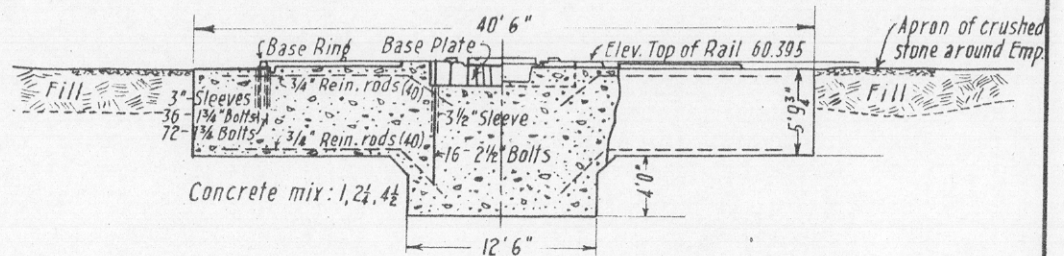
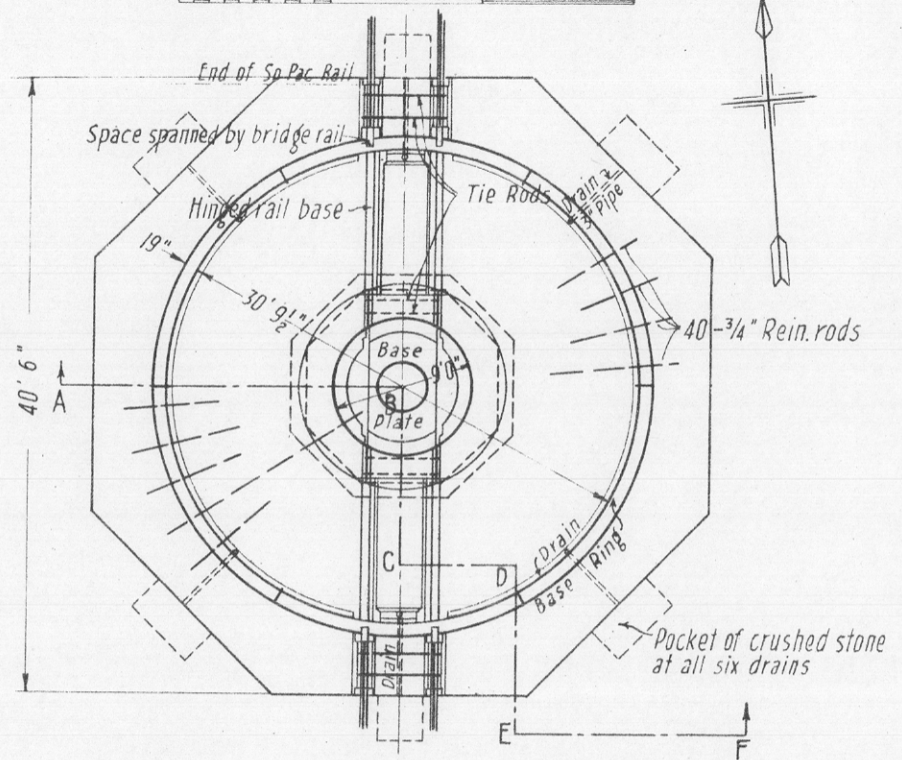
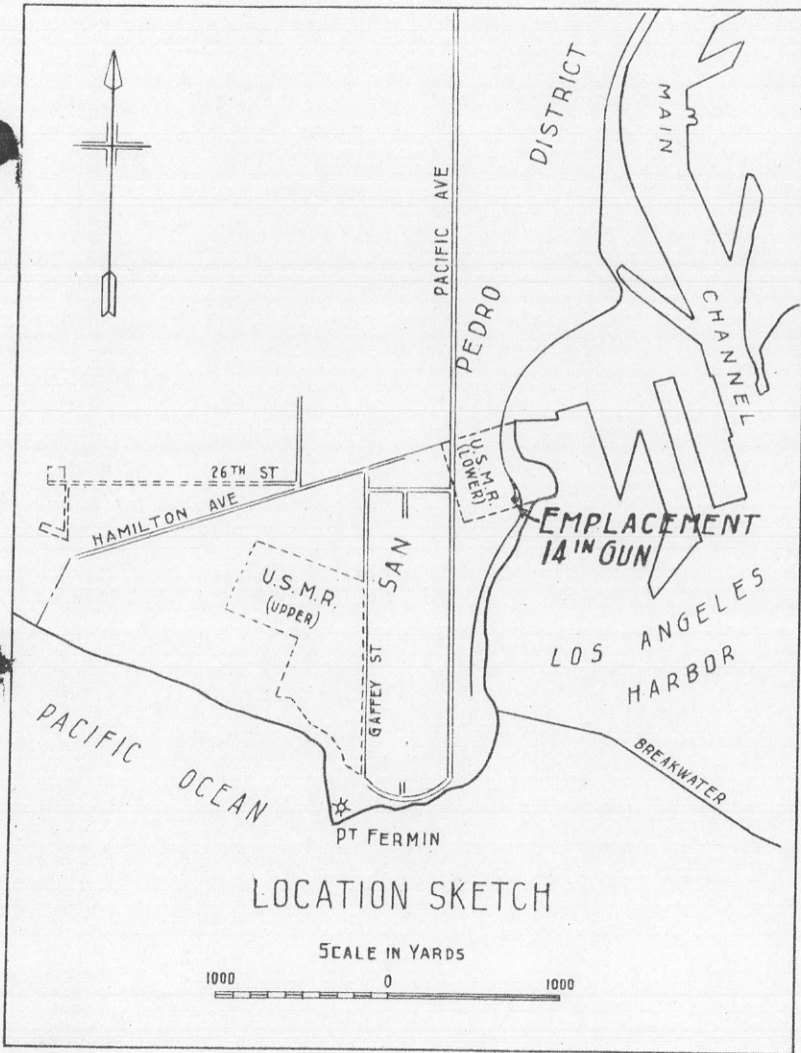
** Emplacement to be abandoned. No further use of base ring and plate other than cannibalization.
See 400.93 (L.A.) CM 124927

BDS 1/24/45

REPORT OF COMPLETED WORKS SEACOAST FORTIFICATIONS
 BATTERY PLAN
 FORM 7

COAST DEFENSES OF LOS ANGELES, CALIF.
 FORT MACARTHUR
 BATTERY: 14 IN GUN, RY. MOUNT
 NO OF GUNS: ONE CALIBER: FIFTY
 CARRIAGE: RY. MOUNT

SCALE IN FEET
 0 10 20



FORT MACARTHUR, Calif.

May 8, 1936.

NOTE FOR REPORT COMPLETED WORKS.

14" Ry. Gun & Mount M 1920 in storage at Ft. MacArthur,
California. Not emplaced.

Gun No. 1 - Mount No. 4

Shipped from Benicia Arsenal, San Francisco, 10 AM, June 25,
1930; arrived Ft. MacArthur, 11:30 AM, June 28, 1930, Southern Pacific Ry.

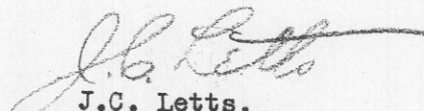
Train consisted of Gun & Mount, 1-40' flat car, 1-40' side opening
automobile car and 1 tourist car.

Total weight 730,000 lbs. including parts for permanent emplacement.

Cost of Shipment \$3,519 (about).

Average speed of travel, 6.3 m/hr.

Time of travel 3 d. 1 hr. 30 m. Distance 471 mi.


J.C. Letts,
Principal Engineer.

REPORT OF COMPLETED WORKS - SEACOAST FORTIFICATIONS

HARBOR DEFENSES OF LOS ANGELES, CALIFORNIA
 FORT MAC ARTHUR - LOWER RESERVATION (14-INCH RAILWAY BATTERY)

Form 6

Corrected to July 17, 1942

ENGINEER DEPARTMENT STRUCTURES - APPROACH TRACK AND UNDERPASS

APPROACH TRACK

Material: 90-lb. A.S.C.E. rail, wooden ties, stone ballast

Length: 2,760' (approximately)

urtenances:

- 1 - steel, single-span, I-beam bridge, reinforced concrete foundation on wood piling
- 1 - 54-inch reinforced concrete pipe storm drain (under bridge)
- 3 - 24-inch reinforced concrete pipe culverts
- 5 - 18-inch reinforced concrete pipe culverts
- 3 - 12-inch reinforced concrete pipe culverts

Total cost to date: \$35,354.30

UNDERPASS AT 22D STREET

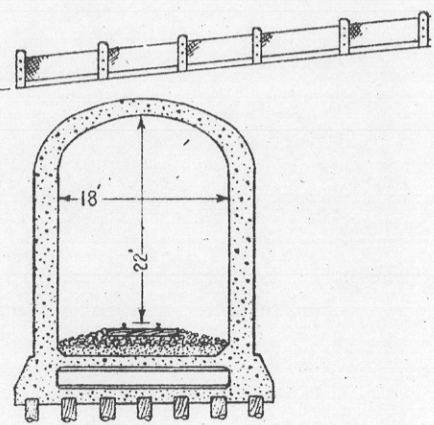
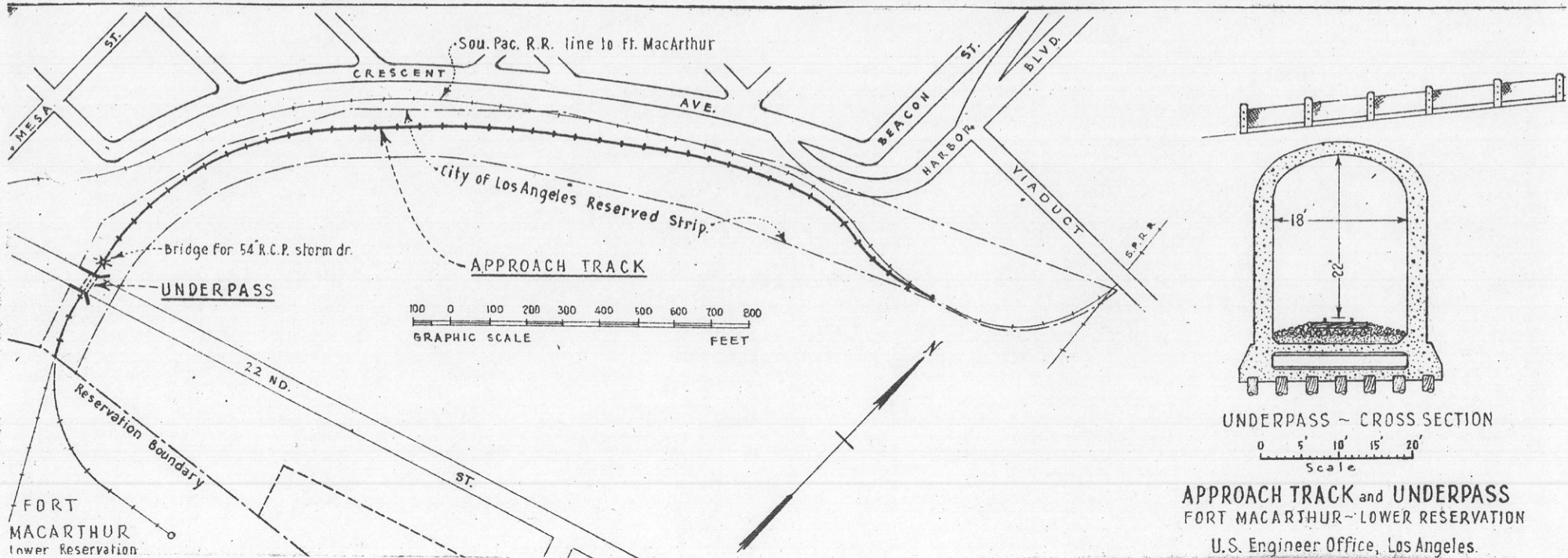
Material: Reinforced concrete

Dimensions: Length (over-all): 60' 7"
 Clearance (above track): 22' 0"
 Width (inside): 18' 0"

Total cost to date: \$34,661.42

(Not transferred. Proposed to be ultimately deeded to City of Los Angeles, California, in return for maintenance and repair.)

GRAND TOTAL COST TO DATE: \$70,015.72



UNDERPASS - CROSS SECTION
 Scale: 0 5' 10' 15' 20'

APPROACH TRACK and UNDERPASS
 FORT MACARTHUR - LOWER RESERVATION
 U.S. Engineer Office, Los Angeles.

REPORT OF COMPLETED WORKS - SEACOAST FORTIFICATIONS.

BATTERY PLAN.

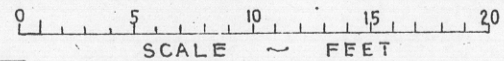
FORM 7.

Corrected to July, 20, 1942

HARBOR DEFENSES OF LOS ANGELES, CALIFORNIA.

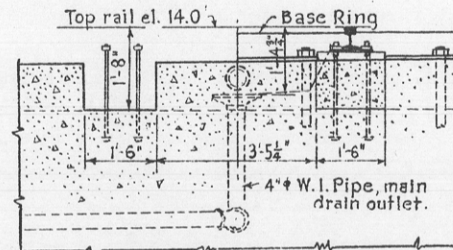
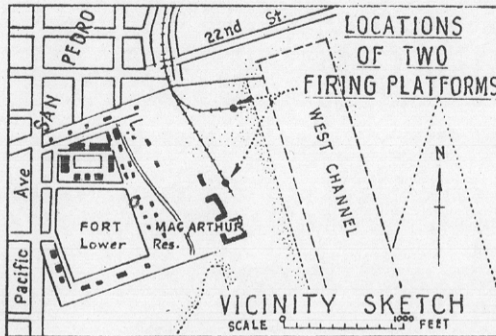
FORT MAC ARTHUR
FIRING PLATFORM

No. of guns - TWO. Caliber - 14 INCH. Carriage - RY.

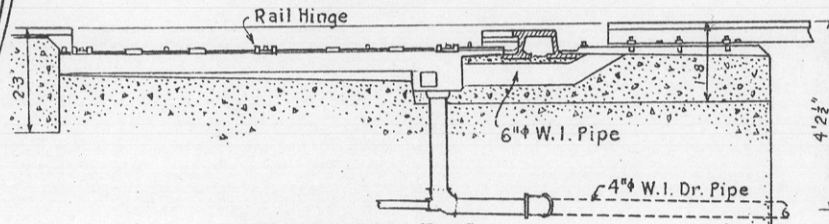


Note:

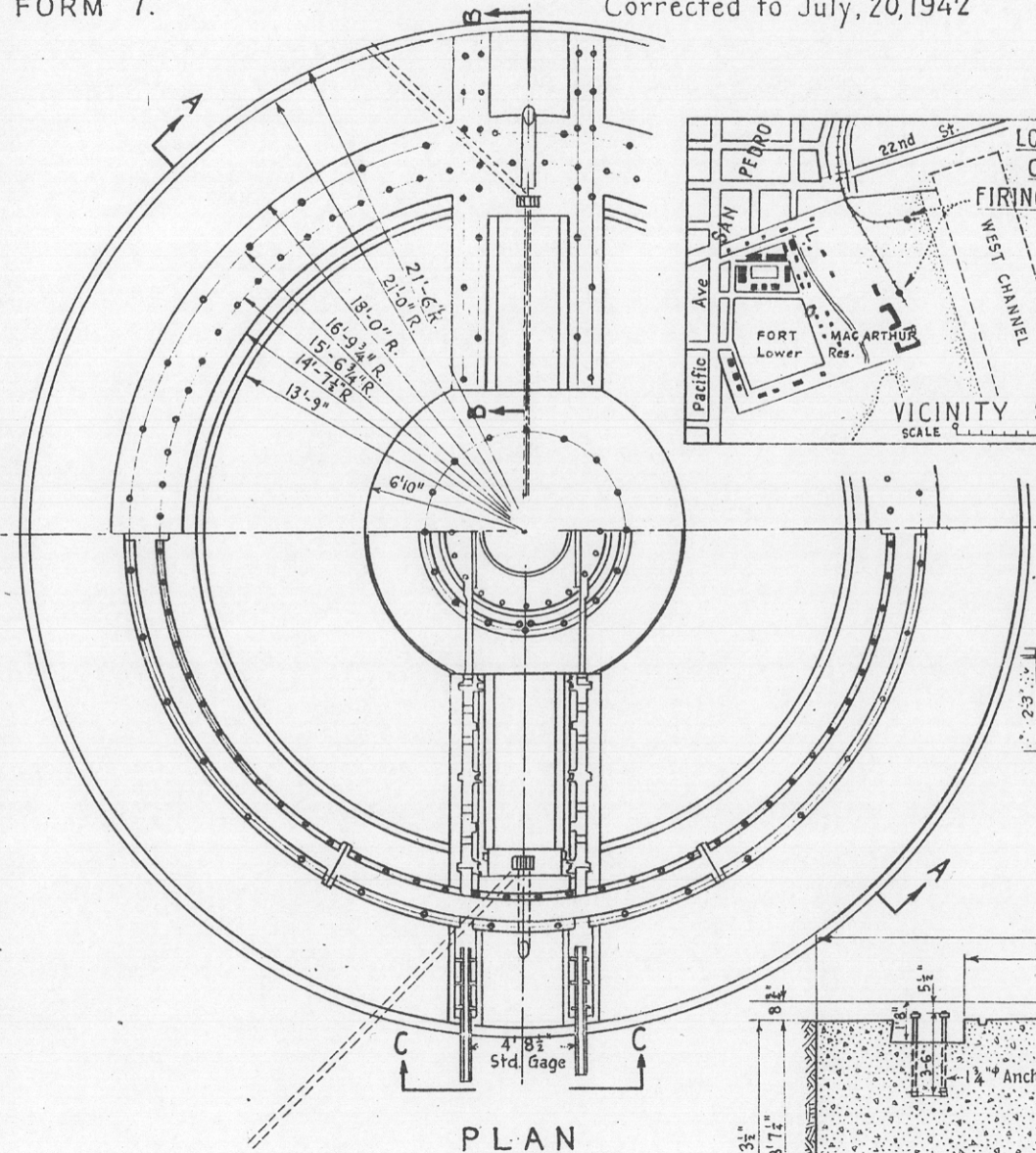
Each firing platform enclosed by No. 6 ga. woven wire mesh fence 84" high. 14-150 watt lights mounted on top.



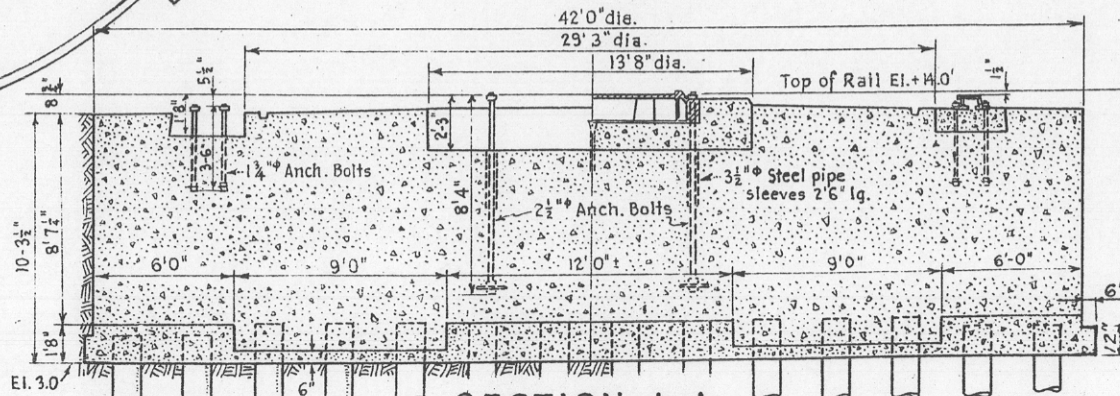
ELEVATION C-C.



SECTION B-B.



PLAN



SECTION A-A

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

HARBOR DEFENSES OF LOS ANGELES, CALIFORNIA
FORT MAC ARTHUR - LOWER RESERVATION

* * BATTERY 14-INCH RAILWAY - FIRING PLATFORMS NO. 2 & NO. 3
No. of guns 2 Caliber: 50 Carriage: Railway

Form 1 Corrected to July 23, 1942

GENERAL:	:	ELECTRIC CURRENT:	:	NOTE:
Battery commenced	: March 1937	Sources of	: Commercial	Co-ordinates
Battery completed	: June 1937			Gun No. 2 S 1588.84
Date of transfer	: April 21, 1942	Max. kw. required for lights	: 5 kw.	W 3731.14
Cost to date of transfer	: \$27,884.44*	Max. kw. required for motors	: None	
Materials of construction	: Reinforced concrete on:			Gun No. 3 S 792.91
	: piling			W3758.26
Type of cement	: American Modified			
	: Portland			Origin of U.S.E.D.
WATER & SEWER:	:	Present condition of battery	: Good	co-ordinates is U.S.C &
Connected to water supply	: No	Rooms wet or dry	: None	G.S. Station "R"
Connected to sewer	: No			(Deadman's Island)
Type of latrine	: None	How ventilated	: None	
	: (Block #2 = 29.253	Type of data transmission	: Telephone	Elevation top of base plate
Trunnion elevation in btry.	: (Block #3 = 29.228			Gun No. 2 - 14.003
Datum plane	: M.L.L.W.			Gun No. 3 - 13.978
	:	Remarks-		
	:			No. 2 Gun originally on emplacement
	:			No. 1, completed February 1926
	:			*Cost to date includes fence and
	:			lighting

ARMAMENT

Em cement or mortar No.:	Cal.:	length:	Guns or Mortars				Carriages				
			model	Serial No.:	Manufacturer:	Mounted:	Type:	Model	Serial No.:	Manufacturer:	Motor
2	50	715.2"	1920 M II:	7	Watervliet	1938	RY	1920 M II:	1	Watervliet	Sterling Engine
3	50	715.2	1920 M II:	10	Watervliet	1938	RY	1920 M II:	4	Watervliet	power unit

HOISTS

Emplacement: Number	Type	Delivery:	Serial No.:	Maker:	Motor				Date of transfer	Remodeled for long points
					H.P.:	Volts	RPM	Type of control:		
2	GBC 39	Back	922815	G.E	15	110 DC	500	(Waterbury speed:	None	
3	TEC 1	Back	572849	Diehl	15	110 DC	500	(gear	* Eliminated from the harbor defense project and declared excess to the needs of the Western Defense Command: 682 (Los Angeles) CTR 143 541 AWR 12/11/45	
	WT									

* Guns scheduled to be withdrawn from these locations upon completion of the modernization program. See 400.93 (L.A.) EM 129927

Serial Card 59 Dir FS-909

1325 5/22/45

16220

REPORT OF COMPLETED WORKS - SEACOAST FORTIFICATIONS

HARBOR DEFENSES OF LOS ANGELES, CALIFORNIA
 FORT MAC ARTHUR - LOWER RESERVATION (14-INCH RAILWAY BATTERY)

Form 6

Corrected to July 17, 1942

ENGINEER DEPARTMENT STRUCTURES - APPROACH TRACK AND UNDERPASS

APPROACH TRACK

UNDERPASS AT 22D STREET

Material: 90-lb. A.S.C.E. rail, wooden ties, stone ballast

Material: Reinforced concrete

Length: 2,760' (approximately)

Dimensions: Length (over-all): 60' 7"
 Clearance (above track): 22' 0"
 Width (inside): 18' 0"

Total cost to date: \$34,661.42

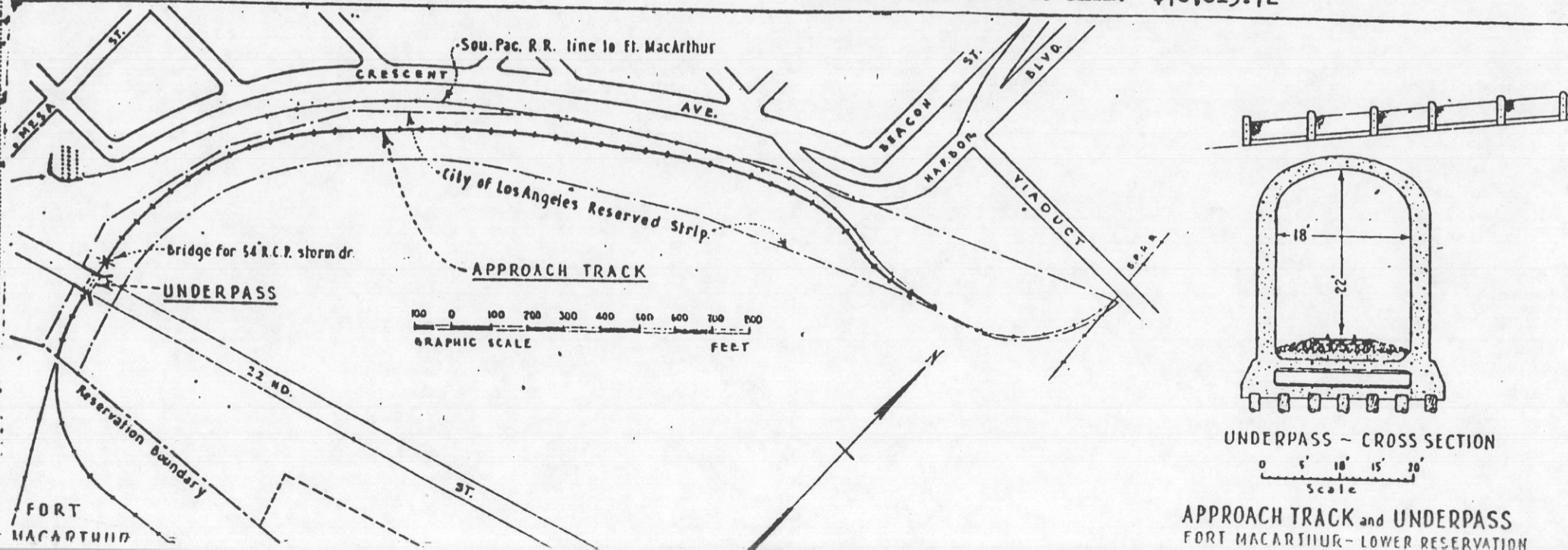
Maintenances:

- 1 - steel, single-span, I-beam bridge, reinforced concrete foundation on wood piling
- 1 - 54-inch reinforced concrete pipe storm drain (under bridge)
- 3 - 24-inch reinforced concrete pipe culverts
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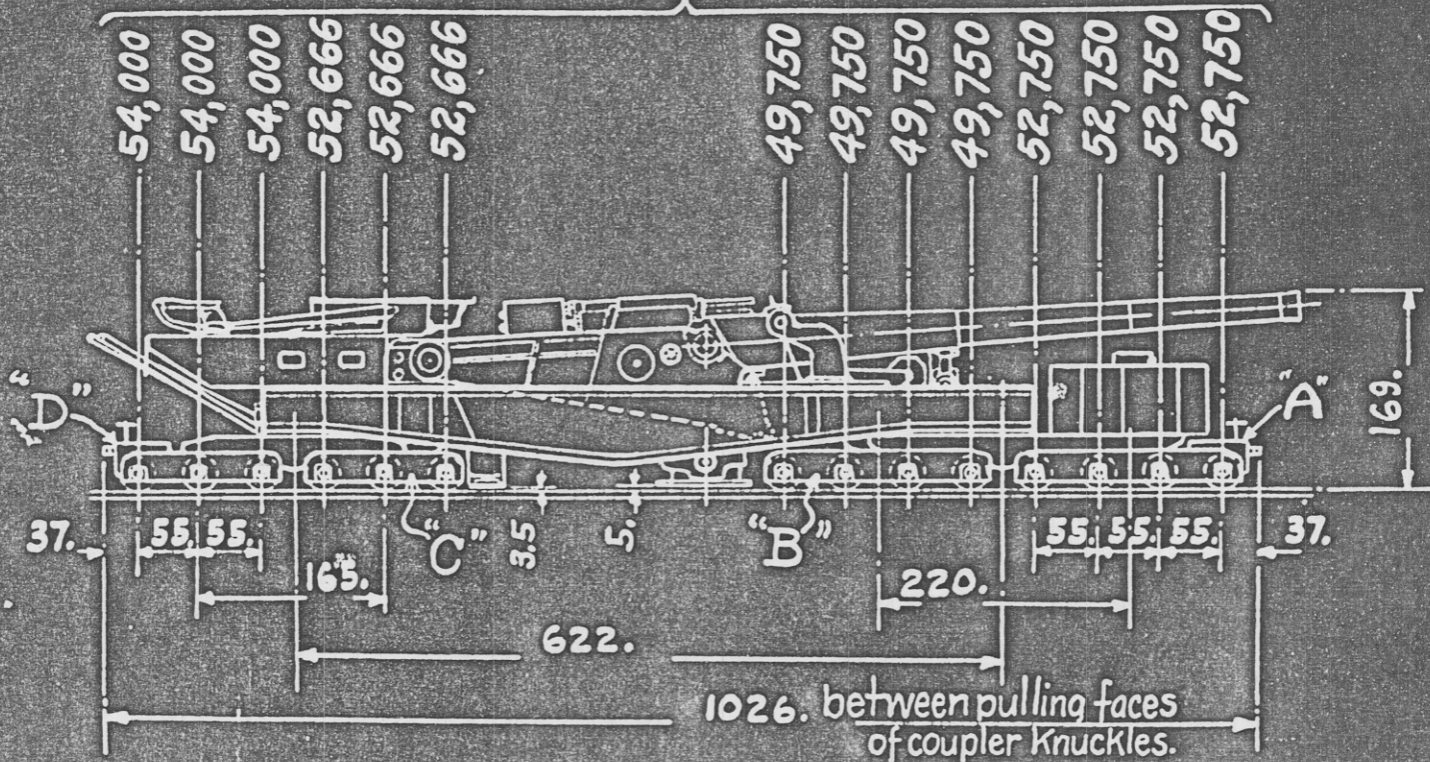


APPROACH TRACK and UNDERPASS
 FORT MACARTHUR - LOWER RESERVATION

14-INCH GUN RAILWAY MOUNT MODEL OF 1920

TRAVELING WEIGHT 730,000 LBS.

LOAD AT RAILS IN POUNDS



ALL DIMENSIONS IN INCHES.

14-INCH GUN, MODEL OF 1920 MII (CLASS 61-DIV. 19-DRG. 1)

LENGTH	CAL.	50
WEIGHT (WITH B.M. & BAND)	LBS.	233,782
MUZZLE VELOCITY	FT. SEC.	2650
RANGE 15° ELEV.	YDS.	23,300
RANGE 43° ELEV.	YDS.	45,000
WEIGHT OF PROJECTILE	LBS.	1560
WEIGHT OF POWDER CHARGE	LBS.	463
CHAMBER PRESSURE	LBS. SQ. IN.	38,000
MUZZLE ENERGY	FT. (LONG) TONS	76,035

14-INCH GUN RV. MT., MODEL OF 1920 (CLASS 11-DIV. 24-DRG. 5)

TYPE	RAILWAY CARRIAGE
LOADING ANGLE	-7°
MAX. FIRING ANGLE (EMPLACED)	+50°
MAX. FIRING ANGLE (ON TRACK)	+50°
MT. TRAVERSE (EMPLACED)	360°
TOP CARR. TRAVERSE (ON TRACK)	7°
WT. OF TIPPING PARTS	LBS. 296,968
WT. OF RECOILING PARTS	LBS. 243,866
NO. OF RECOIL CYLINDERS	2 LONG & 2 SHORT
RECUPERATOR	2 PNEUMATIC CYLINDERS
TOTAL ROD PULL 0° ELEV.	LBS. 918,828
	50° ELEV. 1,105,640 LBS.
WT. OF TRAVERSING PTS. {	TOP CARRIAGE 354,600 LBS.
	MT. MINUS TRUCKS 594,000 LBS.
	SPAN BOLSTERS & POWER PLANT

8 WHEEL TRUCK "A"

(CLASS 15-DIV. 22514-DRG. 2)

WEIGHT OF TRUCK	LBS. 30,040
DIA. OF WHEELS (ALL TRUCKS)	INCHES 30
SIZE OF JOURNALS (ALL TRUCKS)	INCHES 6 X 11
WEIGHT OF SPAN BOLSTER	LBS. FRONT 19840
	REAR 10785

8 WHEEL TRUCK "B"

(CLASS 15-DIV. 22515-DRG. 2)

WEIGHT OF TRUCK	LBS. 25,320
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6 WHEEL TRUCK "C"

(CLASS 15-DIV. 22517-DRG. 2)

WEIGHT OF TRUCK	LBS. 19,300
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6 WHEEL TRUCK "D"

(CLASS 15-DIV. 22516-DRG. 2)

WEIGHT OF TRUCK	LBS. 23,540
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TRUCKS "A" & "D" EQUIPPED WITH AIR AND HAND BRAKES AND DRAFT GEAR.
TRUCKS "B" & "C" EQUIPPED WITH TRANSLATING MECHANISM.