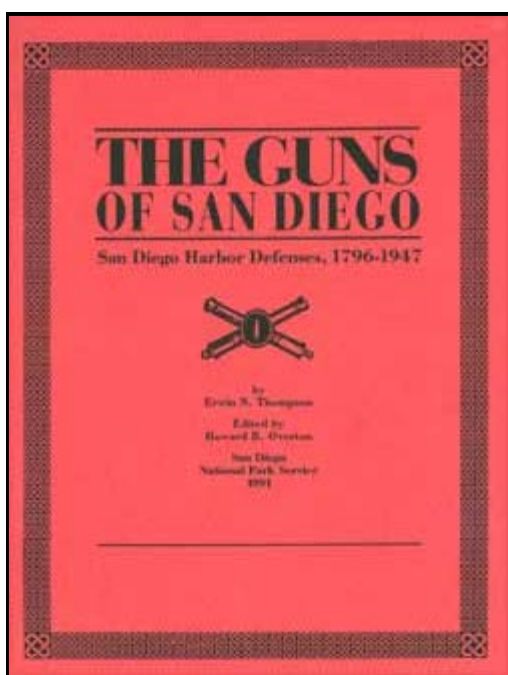


# CABRILLO

## The Guns of San Diego Historic Resource Study



## THE GUNS OF SAN DIEGO

San Diego Harbor Defenses, 1796-  
1947

Historic Resource Study  
Cabrillo National Monument

*by*  
Erwin N. Thompson

*Edited by*  
**Howard B. Overton**

San Diego  
National Park Service

1991

### [TABLE OF CONTENTS](#)

---

[cabr/guns-san-diego-hrs/index.htm](http://cabr/guns-san-diego-hrs/index.htm)  
Last Updated: 19-Jan-2005

# CABRILLO

## The Guns of San Diego Historic Resource Study



## TABLE OF CONTENTS

---

### [COVER](#)

### [LIST OF ILLUSTRATIONS](#)

### [ABBREVIATIONS](#)

### [FOREWORD](#)

### [INTRODUCTION](#)

### [CHAPTER 1: EXPLORATION AND SETTLEMENT, 1535-1846](#)

- A. Exploration, 1535-1602
- B. Settlement, 1768-1846
  - 1. The Presidio of San Diego and the Mission of San Diego
  - 2. Fort Guijarros

### [CHAPTER 2: AMERICAN MILITARY IN SAN DIEGO, 1846-1903](#)

- A. Capture of San Diego, 1846
- B. Mission Becomes Regular Army Post
- C. San Diego Barracks

### [CHAPTER 3: POINT LOMA AND COASTAL DEFENSE, 1852-1874](#)

- A. A Military Reservation
- B. Old Point Loma Lighthouse
- C. The First Battery, 1870s

### [CHAPTER 4: FORT ROSECRANS, 1898-1920](#)

- A. Endicott Board, 1885-1895
- B. The First Batteries, 1896-1900
- C. Mining the Harbor Entrance, 1898
- D. Fort Rosecrans Established, 1898-1917
- E. Advances in Coastal Defense, San Diego Harbor, 1901-1920
- F. Wartime Fort Rosecrans, 1917-1918

### [CHAPTER 5: INTERLUDE, 1920-1935](#)

### [CHAPTER 6: MODERNIZATION, 1936-1941](#)

- A. Annexes to Harbor Defense Project, 1936
- B. Battery Strong

- C. Batteries for 155mm Guns
- D. The Build-up Continued, 1940-1941
- E. HDCP, HECF, and Signal Station
- F. Modernization Program, 1941

## [CHAPTER 7: WORLD WAR II AND AFTER, 1941-1948](#)

- A. Battery Ashburn
- B. Battery Humphreys
- C. Batteries Gillespie and Zeilin
- D. Batteries Grant and Woodward, and Fort Emory
- E. Batteries Cabrillo, Fetterman (11), and Cortez
- F. Additional Defense Measures
- G. Fire Control Stations
- H. Wartime Events
- I. A Final Look at the Defenses

## [CHAPTER 8: ROADS, STATUES, CEMETERIES, AND FORT ROSECRANS](#)

- A. Roads
- B. Statues
- C. Fort Rosecrans National Cemetery
- D. Fort Rosecrans

## [CHAPTER 9: HISTORIC RESOURCES, CABRILLO NATIONAL MONUMENT, RECOMMENDATIONS CONCERNING INTERPRETATION](#)

## [APPENDIX A: LIST OF COMMANDING OFFICERS FORT ROSECRANS, CALIFORNIA](#)

## [APPENDIX B: OFFICERS OF THE U.S. ARMY, AND OTHERS, IN HONOR OF WHOM COAST ARTILLERY FORTS AND BATTERIES IN THE HARBOR DEFENSES OF SAN DIEGO HAVE BEEN NAMED](#)

## [BIBLIOGRAPHY](#)

INDEX (omitted from the online edition)

# **LIST OF ILLUSTRATIONS**

---

- [Fig 1.](#) Mission San Diego Alcala in ruins
- [Fig 2.](#) "El Jupiter," a Spanish cannon
- [Fig 3.](#) Site of Presidio
- [Fig 4.](#) Mission of San Diego
- [Fig 5.](#) Battery Wilkeson, 1903
- [Fig 6.](#) Battery Wilkeson, Firing
- [Fig 7.](#) Calef-Wilkeson Base End Station Exterior
- [Fig 8.](#) Interior of Base End Station
- [Fig 9.](#) General Bliss reviewing troops
- [Fig 10.](#) Battery Fetterman
- [Fig 11.](#) Fort Rosecrans, 1911
- [Fig 12.](#) Battery Mead

- [Fig 13.](#) 12 lb Napoleon, Fort Rosecrans
- [Fig 14.](#) 28th Company, Coastal Artillery Corps
- [Fig 15.](#) 115th Company, Coastal Artillery Corps
- [Fig 16.](#) Coastal Artillery Corps, WW I
- [Fig 17.](#) Battery John White
- [Fig 18.](#) Battery John White
- [Fig 19.](#) Battery Whistler
- [Fig 20.](#) Battery Whistler
- [Fig 21.](#) Searchlight Shelter No. 5
- [Fig 22.](#) Searchlights Nos. 5 & 6
- [Fig 23.](#) Searchlight No. 5
- [Fig 24.](#) Searchlight No. 5
- [Fig 25.](#) Searchlight No. 5
- [Fig 26.](#) Old Point Loma Lighthouse
- [Fig 27.](#) Army radio station
- [Fig 28.](#) Searchlight No. 15
- [Fig 29.](#) Sixty-inch coastal searchlight, drawing
- [Fig 30.](#) Powerplant for searchlights
- [Fig 31.](#) Powerplant for searchlights
- [Fig 32.](#) Fort Rosecrans, 1937
- [Fig 33.](#) Road Dedication
- [Fig 34.](#) Fort Rosecrans, 1933
- [Fig 35.](#) Road to Old Lighthouse
- [Fig 36.](#) Old Lighthouse, 1920s
- [Fig 37.](#) Harbor Defense Command Post & Entrance Control Post
- [Fig 38.](#) Battery Strong Commanders Station
- [Fig 39.](#) Battery Strong Magazine
- [Fig 40.](#) Battery Ashburn Entrance
- [Fig 41.](#) Battery Point Loma
- [Fig 42.](#) Battery Point Loma
- [Fig 43.](#) Battery Point Loma
- [Fig 44.](#) Battery Point Loma
- [Fig 45.](#) Battery Ashburn
- [Fig 46.](#) Battery 134
- [Fig 47.](#) AMTB Battery Bluff
- [Fig 48.](#) Battalion 2 Command Post
- [Fig 49.](#) Battalion 1 Command Post
- [Fig 50.](#) Statue of Juan Rodriguez Cabrillo
- [Fig 51.](#) Old Point Loma Lighthouse
- [Fig 52.](#) Point Loma today

## **Historic Drawings and Historic Base Diagrams**

- [Diagram 1.](#) Army Post at Mission San Diego
- [Diagram 2.](#) Sketch and plan of San Diego Barracks
- [Diagram 3.](#) Plan of army post at Mission
- [Diagram 4.](#) Battery for 15-inch Rodman guns, 1873
- [Diagram 5.](#) Sketch Showing How Fire Control Is Coordinated
- [Diagram 6.](#) Batteries Fetterman, Wilkeson, and McGrath
- [Diagram 7.](#) Site of Fort Guijarros, 1902
- [Diagram 8.](#) Battery John White, plans
- [Diagram 9.](#) Battery Whistler, plans
- [Diagram 10.](#) Fort Rosecrans Radio Station, plans



[Diagram 11](#). Powerhouse for Coastal Searchlights  
[Diagram 12](#). Underground Searchlight Shelter  
[Diagram 13](#). Battery Meed, plans  
[Diagram 14](#). Harbor Defense Command Post  
[Diagram 15](#). Battery Strong, plans  
[Diagram 16](#). Battery Point Loma, plans  
[Diagram 17](#). Battery Ashburn, plans  
[Diagram 18](#). Battery Humphreys, plans  
[Diagram 19](#). Fort Emory  
[Diagram 20](#). Battery Grant, plans  
[Diagram 21](#). Battery 134, plans  
[Diagram 22](#). Battery Woodward, plans  
[Diagram 23](#). Battery Imperial, plans  
[Diagram 24](#). Batteries Cortez, Fetterman, and Cabrillo  
[Diagram 25](#). Harbor Defenses North Fort Rosecrans, 1945  
[Diagram 26](#). Harbor Defenses South Fort Rosecrans, 1945

## ABBREVIATIONS

---

AA	antiaircraft
AG	adjutant general
AGO	Adjutant General's Office
AMTB	anti-motor torpedo boat
AP	armor-piercing
CA	coast artillery
CAC	Coast Artillery Corps
CDSD	Coast Defenses of San Diego
CE	Corps of Engineers
CG	commanding general
CO	commanding officer
CRF	coincidence range finder
DP	deck-piercing
DPF	depression position finder
GPF	Grande Puissance Filloux (French 155mm gun)
HDCP	harbor defense command post
HDSD	Harbor Defenses of San Diego
HE	high explosive
HECP	harbor entrance control post
HS	historic structure
IG	inspector general
LAD	Los Angeles District, U. S. Army Corps of Engineers
NA	National Archives
NM	national monument
NPS	National Park Service
OCH	Office of the Chief of Coast Artillery
OCE	Office of the Chief of Engineers

- PCAD Pacific Coast Artillery District
- QMC Quartermaster Corps
- RG record group
- SPCAD South Pacific Coast Artillery District
- USN U.S. Navy
- WD War Department
- WNRC Washington National Records Center

---

<<< [Previous](#) <<< [Contents](#) >>> [Next](#) >>>

# CABRILLO

## The Guns of San Diego Historic Resource Study



## FOREWORD

---

This work was completed largely by Erwin Thompson, who did all of the original historical research and text under a National Park Service contract. Our sincerest thanks for providing a comprehensive source of the military history of San Diego, California.

A large number of persons and institutions have contributed to the development of this study. We thank them all for their assistance. Thanks to Joan Huff who took an imperfect manuscript and turned it into a readable document.

The Western Regional Office, National Park Service, in the persons of Tom Mulhern, Chief of Park Historic Preservation, and Gordon Chappell, Regional Historian, assisted in the author's efforts and strengthened the study. Thanks also to Elmer J. Hernandez, Denver Service Center, National Park Service, for his efficient management of the contract producing the resource study.

To Diane S. Nixon, Director, and Suzanne Duberry, Archivist, National Archives - Pacific Southwest Region, our thanks for their unstinting efforts to allow the author to make the most of the available time in studying the records of the U.S. Army Corps of Engineers. Likewise, Archivist Rick Cox of the National Archives, Washington, D.C., guided the author through the army records pertaining to the harbor defenses of San Diego.

A special thanks to Maj. Gen. George Ruhlen, U. S. A. Ret., the third regular army officer in a row to bear that name, for the contribution of his father's collection of Fort Rosecrans photographs. The report would be poorer without them and without his father's historical accounts. Another special thanks goes to Lawrence Dinneau, Bancroft Library, University of California, Berkeley. Mr. Dinneau assisted in the quest of the original plan of the Presidio of San Diego, which has been erroneously attributed to the Bancroft Library. Also thanks to Dr. Anthony Turhollow, Los Angeles District, U. S. Army Corps of Engineers, who made available photographs of Fort Rosecrans' coastal searchlights.

A special thanks to Alvin H. Grobmeier, whose special interest in the coast defense history of San Diego, and editorial input answered many questions. Thanks to Kate Johnson. Without her work and technical effort this work would never have come to completion. Thanks to Dr. Barry Joyce who edited the early San Diego history providing us with the most correct historical information. Thanks to Dr. James Nauman who created the camera ready copy of illustrations. Thanks to George R. Schneider who photographed many of the illustrations for final publication.

The following institutions contributed to this study through their historical collections: the San Diego Historical Society; University of San Diego; the Serra Museum; San Diego Public Library; University of California at San Diego; California Historical Society at San Francisco; Bancroft Library at Berkeley; California State Library at Sacramento; National Archives, Pacific Southwest Region, at Laguna Niguel; and the National Archives at Washington, D.C.

We thank the staffs for their generous support.

Howard B. Overton  
1991

---

<<< [Previous](#)

<<< [Contents](#) >>>

[Next](#) >>>

---

cabr/guns-san-diego/hrs0a.htm  
Last Updated: 19-Jan-2005

# CABRILLO

## The Guns of San Diego Historic Resource Study



## INTRODUCTION

---

The idea of a book on the military history on Point Loma was first conceived at Cabrillo National Monument about 1984. There was discussion on the idea among park staff who decided the scope of the project should be larger than just Point Loma. A proposal was written, a contract issued, and Erwin Thompson completed the text of "The Guns Of San Diego: San Diego Harbor Defenses, 1796-1947", in 1988. It was sometime between that completion of this historic resource study and its release as a public document. Its release, however, comes at a good time for Cabrillo National Monument. Beginning in January, 1992 a new general management plan will be prepared and this study will play an important part in determining how the remnants of San Diego's harbor defense system within the park will be preserved. The remnants of coastal defense located within Cabrillo National Monument are treated differently in the text by the use of the abbreviation HS, standing for historical structure. This is important to management of the park and central to one of the purposes of the study.

The "Guns Of San Diego" starts with the Spanish fortifications and continues through Mexico's short occupation of the area before concentrating on the defense efforts of the United States on the west coast. The emphasis is on Coastal Artillery, but also covers infantry, cavalry, and other military units that were stationed in San Diego. As San Diego grew in size and importance, the protection of the city became of greater concern. Much removed from events during the Civil War, San Diego's defenses and military activities were maximal during WW II.

The author and editors have tried to make it as accurate and informative as possible. It is hoped that it will be a useful and enjoyable reference for those interested in the military history of San Diego.

---

[<<< Previous](#)

[<<< Contents >>>](#)

[Next >>>](#)

---

cabr/guns-san-diego/hrs0b.htm  
Last Updated: 19-Jan-2005

# CABRILLO

## The Guns of San Diego Historic Resource Study



### CHAPTER 1:

## EXPLORATION AND SETTLEMENT, 1535-1846

### A. Exploration, 1535-1602

In the year 1535, Hernán Cortes entered Bahía de La Paz and took possession of the peninsula now known as Baja California for Charles I of Spain (also known as Holy Roman Emperor Charles V). A few years later Francisco de Ulloa sailed up the Pacific side of the peninsula on a voyage of exploration. Although a few scholars have concluded that Ulloa reached as far north as San Diego Bay, it is generally accepted that he traveled no farther than about two-thirds the length of the peninsula, to the vicinity of Punta Baja. [1] The honor of discovering San Diego Bay belongs to another captain of the sea, Juan Rodriguez Cabrillo. [2]

Little is known of Cabrillo's birth and early years. He came to Mexico from Cuba in 1520 as a soldier in the expedition of Pánfilo de Narváez. Cabrillo took part in Cortés's march on Mexico City. Besides soldiering, he was known as a skilled mariner and shipbuilder. Later, having achieved wealth through the discovery of gold, he went into semi-retirement on his estates in Guatemala. In 1542 Viceroy Antonio de Mendoza called Cabrillo back to the king's service and appointed him commander of a sailing expedition up California's Pacific coast. According to historian Samuel Eliot Morison, Cabrillo's object "seems to have been exploration pure and simple, including of course, the hope of discovering new sources of gold and silver, or a seaport in 'Quivira,' the fabled country of the Seven Cities." [3]

Manned by conscripts and natives, the flagship San Salvador and the frigate Victoria departed the Mexican port of Navidad on June 27, 1542. [4] Bartolomé Ferrer served as Cabrillo's first pilot. According to the only surviving account of the voyage, on September 28 the vessels entered a hitherto unknown port, "closed and very good, which they named Puerto de San Miguel" in honor of the feast day of the Archangel Michael. [5] Cabrillo probably landed at what later Spanish Explorers named La Punta de los Guijarros (present-day Ballast Point), a spit of land jutting into the harbor entrance from the Point Loma ridge. During their six days in San Diego Bay, as it was later named, the Spaniards contacted the Kumeyaay Indians who informed them of white explorers (Diaz in 1540 and Francisco Vazquez de Coronado in 1541) having passed through the interior country.

After leaving San Diego Bay on October 3, the ships came to the Channel Islands where the sailors spent several days on San Miguel Island. The expedition continued northward, missing the entrance to San Francisco Bay, until it reached a little north of Bodega Bay by November. From there Cabrillo turned back to winter on San Miguel Island. On Christmas Eve, while on shore aiding his men who were fighting off an Indian attack, Cabrillo fell, breaking either his arm near the shoulder or his leg. On January 3, 1543, Cabrillo died from complications resulting from his fall. Pilot Ferrer took command and again sailed northward, finally reaching above 42° north latitude, at Rogue River, Oregon, the farthest north that Europeans had yet sailed in the Pacific. Cabrillo's voyage was soon forgotten, however; even the place

names he bestowed disappeared from maps. [6]

Twenty-one years later, in 1564, a Spanish fleet sailed from Mexico's west coast, crossing the Pacific to Guam and on to the Philippine Islands. One of these ships successfully returned to Mexico in 1565. She had caught the summer westerlies and the Japan Current in the North Pacific and her first landfall was California's San Miguel Island. Thus began the annual sailing of the Manila galleons from Acapulco, the nearly all-ocean route between Spain and the Orient. Before long English ships began roaming the Pacific in pursuit of the Spanish galleons. In 1579 Sir Francis Drake landed north of San Francisco and claimed Nova Albion for Queen Elizabeth I. New Spain became alarmed about the English and grew concerned about Alta California's exposed coast. Also, a northern harbor was needed for the Manila galleons in case of needed repairs or shelter. [7]

As a result of these developments, the viceroy dispatched Sebastian Vizcaino north with an exploring fleet of three ships in 1602. One of the ships was lost at sea, but on November 10, 1602, San Diego and Tres Reyes dropped anchor in Cabrillo's San Miguel Bay. Vizcaino renamed the port in honor of San Diego de Alcalá de Henares (Saint Didacus), a Franciscan saint of the 15th century. [8] They spent ten days exploring the bay. According to a surviving diary of the expedition,

On the 12th of the said month, which was the day of the glorious San Diego, the general, admiral, religious, captains, ensigns, and almost all the men went on shore. A hut was built and mass was said in celebration of the feast of Senor San Diego.

Vizcaíno was impressed with the bay calling it "the best, large enough for all kinds of vessels, more secure than at the anchorage, and better for the careening ships." As did Cabrillo, Vizcaino encountered a large group of Kumeyaay Indians while exploring the harbor. [9]

Besides naming Punta de los Guijarros and San Diego Bay, Vizcaíno examined Point Loma, the grand headland that protects the bay from the sea and which today is the southwestern point of land of the continental United States. The name Loma, however, did not appear on a map until Juan Pantoja's plans of 1772. Following his examination of San Diego Bay, Vizcaíno proceeded north, landing at Monterey Bay, he, too, being unaware of magnificent San Francisco Bay. [10]

## **B. Settlement, 1768-1846**

### **1. The Presidio of San Diego and the Mission of San Diego**

Despite the discoveries of Cabrillo and Vizcaíno in the 16th and 17th centuries and the development of the Manila galleon route, New Spain did not become serious about the protection of Alta California until the mid-18th century. By then, Russian advances southward from Alaska and an increasing British presence in the Pacific, convinced King Carlos III of Spain that the still unknown territory must be colonized. In 1768 the crown ordered the Viceroy of New Spain, Marquez de Croix, to occupy and fortify both San Diego and Monterey.

Two vessels, San Antonio and San Carlos, arrived in San Diego Bay in April 1769, bringing the first scurvy-stricken settlers. In May and June two overland caravans straggled in. One of these overland groups was led by the governor of California, Capt. Gaspar de Portolá. The Franciscan Father Junipero Serra accompanied the overlanders. The captains selected the



lower slope of a hill, now called Presidio Hill, adjacent to the San Diego River for their combination fortification and mission. Father Serra blessed the cross on July 16 and dedicated this first mission in Alta California to San Diego de Alcalá. A hut became the church. Thus began European settlement of Alta California. When Indians attacked the camp in August, the Spaniards quickly erected a stockade around the humble establishment.

Perhaps it had been predetermined that the military installation and the mission should eventually be separate installations, as was usually the case, or perhaps conflicts between soldier and missionary caused the separation; in any case a decision was reached that the mission should be reestablished six miles up the river where the land promised greater opportunities for crops and grazing. As was customary, the military retained its own chapel and padre. By the end of December 1774, the fathers had settled in their new quarters. A small detachment of soldiers guarded the establishment.

In November 1775 800 Indians attacked the mission. Father Luis Jayme and two laymen were killed and the Indians set fire to the mission buildings. A new adobe church was completed in 1777, and the mission continued in its efforts to convert Indians. Father Serra, still engaged in expanding the California missions, made his last visit to San Diego in 1783. He died a year later having established nine missions in Alta California. In 1808 still another church was constructed at the mission and was dedicated in 1813.

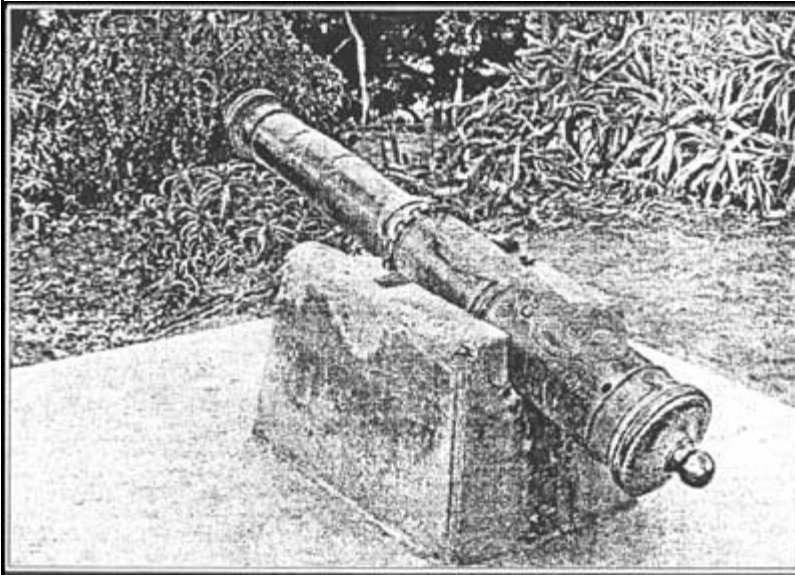
Mexico, which obtained her independence from Spain in 1821, passed the Secularization Act in 1833. A year later Governor Pio Pico awarded the San Diego mission lands to a private citizen, José Rocha. In 1846 the last priest moved away and the mission closed. [11]

An early report of the military camp at San Diego, in 1773, stated that "the stockade is in a certain sense a presidio, two bronze cannons are mounted, one pointing toward the harbor, and the other toward the rancharia," i.e., the Indians. [12] By then the soldiers had manufactured 4,000 adobe bricks and the construction of additional facilities was underway. A year later San Diego was promoted in status to a regular royal coastal presidio authorized to house the guards attached to the missions in addition to protecting the general interests of the Spanish crown. At that time the presidial garrison consisted of a lieutenant, sergeant, two corporals, twenty-two soldiers, two carpenters, two blacksmiths, and a storehouse keeper. Lt. José Francisco Ortega held the office of commander. By 1778 adobe walls had replaced the wood stockade and the population had grown to 125: soldiers, families, and artisans. [13]

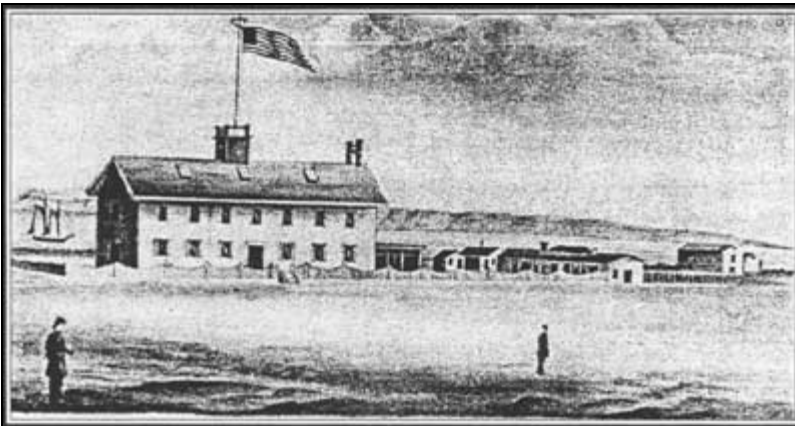


Mission San Diego de Alcalá in ruins. Photo by C.T. Collier, no date, FN - 08418. *Courtesy, California Historical Society*

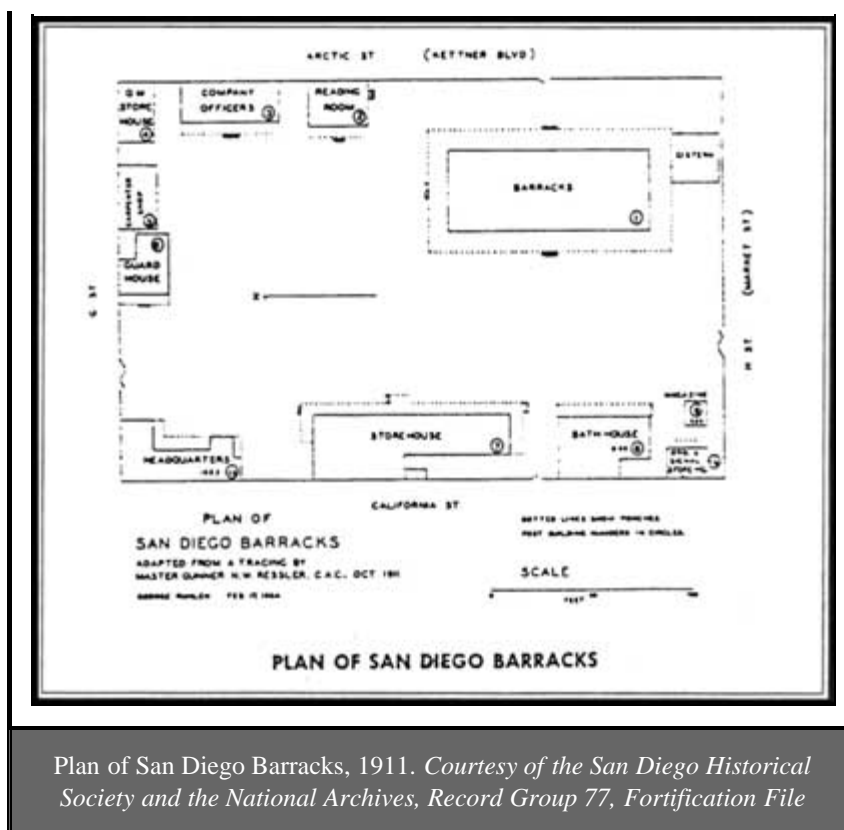




"El Jupiter," a Spanish cannon now mounted on the site of Fort Stockton on Presidio Hill, overlooking San Diego. *Photo courtesy of the National Park Service.*



Undated sketch of the San Diego Barracks. *Courtesy of San Diego Historical Society, Union Title Insurance and Trust Company Collection*



Plan of San Diego Barracks, 1911. *Courtesy of the San Diego Historical Society and the National Archives, Record Group 77, Fortification File*

The number of artillery pieces at the presidio was never large. When George Vancouver, the British sea captain, visited San Diego in 1793, he was surprised at the weakness of the harbor's defenses. He noted that the garrison comprised sixty men and three small brass cannon. Furthermore, the presidio was five miles from the anchorage where there were no defenses. The presidio "seemed to be the least of the Spanish establishments. It is irregularly built, on very uneven ground.... With little difficulty it might be rendered a place of considerable strength, by establishing a small force at the entrance of the port." [14] The acting governor of California, Capt. José Joaquín de Arrillaga, became concerned that Vancouver had learned of the weak defenses of both San Diego and San Francisco, which he had visited earlier. He reported his concern to Viceroy Revilla Gigedo who directed that the coastal presidios be strengthened with batteries of eight 12-pounders and eighty gunners. [15]

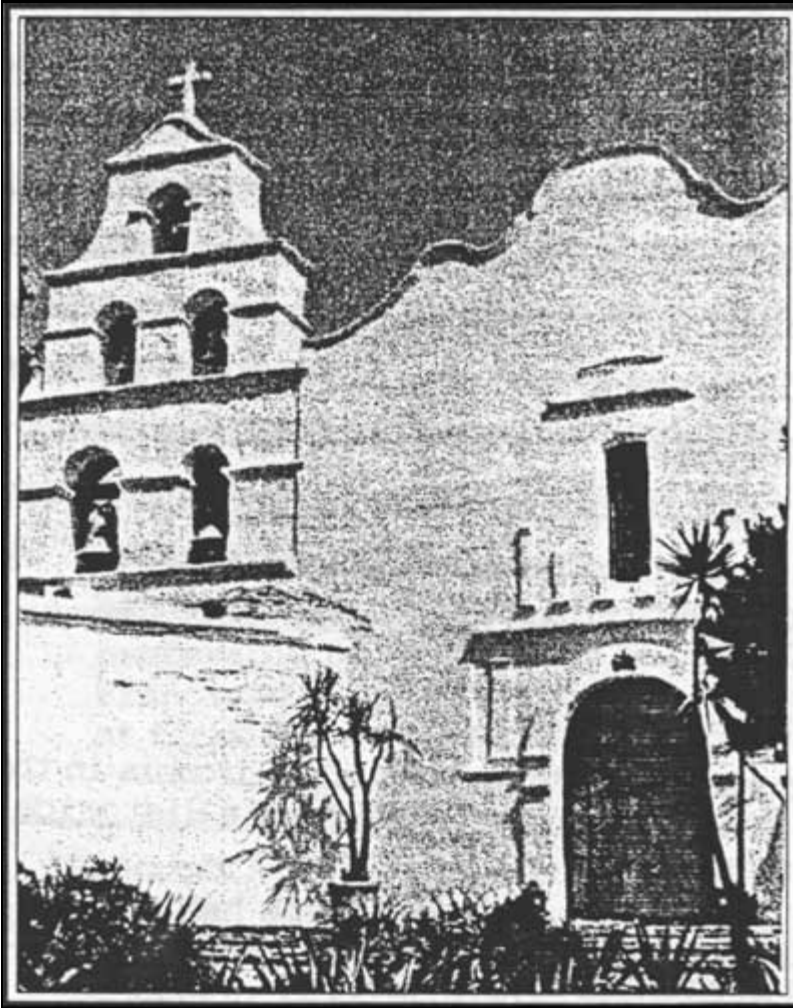
Despite its weaknesses, the presidio served as a prison for a party of American fur trappers during the Mexican period. Sylvester Pattie, his son James, and six others made their way down the Colorado River in 1828. They crossed the desert and the mountains and arrived in San Diego. The Mexican governor accused them of being spies for Spain and had them incarcerated in the presidio cells. There, Sylvester died, while James did not succeed in returning to the United States until 1830. About this time, a French visitor arrived in San Diego and reported:

Of all the places we had visited since our coming to California, excepting San Pedro, which is entirely deserted, the presidio at San Diego was the saddest. It is built upon the slope of a barren hill, and has no regular form: it is a collection of houses whose appearance is made still gloomy by the dark color of the bricks, roughly made, of which they are built." [16]





The site of the Presidio of San Diego which was founded in 1769. The fencing marks the area where archaeological work has uncovered portions of the foundations. *Photo by E. Thompson*



Reconstructed Mission San Diego de Alcalá, 1998. *Photo by E. Thompson*

After Mexico gained her independence, funds became scarce for the upkeep of California's

presidios. When Richard Henry Dana first went ashore at San Diego in 1835, he and a companion rode to the presidio:

The first place we went to was, the old ruinous presidio, which stands on a rising ground near the village [Old Town], which it overlooks. It is built in the form of an open square, like all the other presidios, and was in a most ruinous state, with the exception of one side, in which the commandant lived, with his family. There were only two guns, one of which was spiked, and the other had no carriage. Twelve, half clothed, and half starved looking fellows, composed the garrison; and they, it was said, had not a musket apiece. [17]

Following Dana's visit, the presidio continued to decay. The last commandant, Alferéz Salazar, prepared his final report in 1842. When American forces occupied San Diego in 1846, the establishment lay in ruins.

## 2. Fort Guijarros

When Viceroy Revilla Gigedo directed a battery be built, at no cost to the crown, for the protection of San Diego's port, engineers selected Point Guijarros (Ballast Point). Lumber, including 103 23-foot planks, arrived from Monterey. Santa Barbara furnished axle-trees and wheels sufficient for ten carts. Bricks and tiles came from local sources. The castillo has come down in history as Fort Guijarros despite being officially blessed as El Castillo de San Joaquín in 1796. (The castillo at San Francisco received the same name.) By early 1798, \$9,000 had been spent to construct a battery, a wooden casemate, magazine, barracks, flagstaff, and a flatboat. The number of guns mounted in the battery seems to have varied greatly from time to time. Two Americans who visited the work in 1803 had differing opinions concerning the armament. One said there were eight brass 9-pounders in good order, with plenty of ball. His companion disagreed and described it as a sorry battery of 8-pounders that did not merit consideration as a fortification.

In 1803 the American merchant vessel *Lelia Byrd* arrived in San Diego. William Shaler, the ship captain, assured the local authorities that they had entered the harbor only for water and supplies. The suspicious Spaniards placed a guard on the ship to insure that the Americans would not attempt to purchase and smuggle out otter skins, as commercial intercourse with foreign vessels was prohibited by Spanish law. Smuggle they did, and the next morning they raised anchor and set sail. As the ship approached Fort Guijarros, the battery raised a flag and fired a blank cartridge. *Lelia Byrd* sailed past, firing two broadsides from her six 3-pounders. The Spaniards returned fire but inflicted little damage. Once past the fort, the Spanish guard was allowed ashore and the ship sailed on. [18]

A second incident involving the castillo occurred after Mexico had won independence. In 1828 the American ship *Franklin*, captained by John Bradford, entered San Diego Bay. When Mexican officials ordered Bradford to place his cargo in a warehouse as security for duties and be investigated for smuggling, he refused and prepared to leave port. As the ship passed the castillo, the Mexicans fired some forty rounds, causing some damage to the rigging and wounding Bradford. [19]

Around the same time the Frenchman Duhaut-Cilly was impressed with San Diego Bay and Point Loma, where he went on hunting expeditions:

San Diego Bay is certainly the finest in all California, and much preferable for the safety of vessels, to the immense harbor at San Francisco... it is a passage, from one to two miles wide, running at first in a north-northeast direction, then turning toward the east and southeast, forming an arc five leagues in length. It is sheltered, to the west, by a long, narrow and steep hill extending from the south-

southwest, under the name of Point Loma. Two miles within from this point, juts out, perpendicularly to it, a tongue of sand and pebbles like an artificial mole, ending in a perfectly rounded bank. A deep passage, about two hundred fathoms wide, divides this natural causeway [from a sandy peninsula].

A rasant [low built] fort of twelve guns is built upon the point where this tongue of land joins Loma. On our approach, the Mexican flag was raised and enforced by a shot; at once we hoisted our own, paying it the same respect. [20]

The Franklin incident ended military activity on the bay until the Mexican-American war. Like the presidio, the castillo deteriorated rapidly in the 1830s. The garrison departed in 1835. In 1840 Don Juan Machado, a civilian, purchased the remnants of the fortifications for \$40. Point Guajarro became a part of a United States military reservation in 1852. An army engineer prepared a map of a portion of the reservation in 1902 which shows the location of the castillo in front of Battery Wilkeson. Archaeological excavations of the site in the 1980s disclosed ruins of the ancient fortification, including hundreds of tile fragments and redwood planking. [21]

---

<<< [Previous](#)

<<< [Contents](#) >>>

[Next](#) >>>

---

cabr/guns-san-diego/hrs1.htm  
Last Updated: 19-Jan-2005

# CABRILLO

## The Guns of San Diego Historic Resource Study



### CHAPTER 2:

## AMERICAN MILITARY IN SAN DIEGO 1846-1903

---

### A. Capture of San Diego, 1846

Com. Robert F. Stockton took command of the United States Navy's Pacific Squadron and the land forces in California on July 23, 1846. A few days later sloop USS Cyane, twenty-four guns, entered San Diego Bay. A detachment of sailors and Marines landed at the hide houses at La Playa and marched the five miles to the village where they raised the United States flag. There was no opposition. Lt. Col. John C. Frémont and his battalion of volunteers also disembarked from Cyane. After an eleven-day stay in San Diego, he marched overland to Los Angeles. [1] The shore detachment in San Diego ignored the ruined presidio and established a strongpoint on top of Presidio Hill. They first called it Fort Dupont in honor of the captain of Cyane but soon changed it to Fort Stockton. The work consisted of a ditch or moat behind which were earthworks with embrasures for twelve guns. [2]

In early December, Stockton learned that Brig. Gen. Stephen Watts Kearny was approaching California from Santa Fe. Kearny had left that newly captured town with 300 officers and men of the First Dragoon Regiment. En route, he met Kit Carson with fifteen men who were carrying dispatches from Stockton for Washington. Carson informed the general that the occupation of California had gone smoothly. Kearny decided to send 200 of his men back to Santa Fe. He proceeded toward San Diego with a total of 121 officers and men. By the time the command reached the Colorado River, Kearny learned that the Californios had taken control of large portions of the country. On December 5, the dragoons met a small detachment from San Diego who had come to reinforce the march. That night about eighty Californios arrived at an Indian village named San Pasqual. Early the next morning the two forces clashed briefly and the Californios appeared to be fleeing. The dragoons charged. Suddenly, the Californios wheeled about. In ten minutes the bloodiest battle in the conquest of California was over. Kearny had eighteen men killed; nineteen wounded, three of them fatally; and one soldier missing. The general himself suffered two wounds. Reinforcements consisting of 200 sailors and Marines from San Diego did not reach the survivors until December 11. A day later, the dragoons reached San Diego. Kearny and Stockton planned for a march on Los Angeles. They departed San Diego with a force of 600 men on December 29, 1846. [3]

Lt. William H. Emory, U.S. Army Corps of Topographical Engineers, arrived in San Diego with Kearny's command. The observant lieutenant, who would later be awarded the brevet rank of captain for his part in the battle of San Pasqual, described San Diego:

The town consists of a few adobe houses, two or three of which only have plank floors. It is situated at the foot of a high hill on a sand flat, two miles wide, reaching from the head of San Diego bay to False bay. A high promontory [Point Loma], of nearly the same width, runs into the sea four or five miles, and is connected by the flat with the main land. The road to the hide houses leads on



the east side of this promontory. The hide houses are a collection of store houses where the hides of cattle are packed before being shipped; this article forming the only trade of the little town. [4]

On 27 January 1847, the Mormon Battalion arrived in San Diego ending an 1100 mile march from Fort Leavenworth. The companies were distributed throughout southern California, with Company B remaining in San Diego. That company established itself in the abandoned mission buildings. When their one-year enlistment expired in July 1847, they received their discharges along with the rest of the battalion in Los Angeles. Because of the acute shortage troops in the Southern Military District, the commanding officer asked for volunteer reenlistments for six additional months. Eighty-one men responded. Known as the Mormon Volunteers, they served at the San Diego and San Luis Rey missions until March 1848. [5]

## **B. Mission Becomes Regular Army Post**

Gold fever hit California in 1849. Army troops were bitten as hard as any civilians. Soldiers stationed in San Francisco, Monterey, and elsewhere deserted in droves and headed for the mines. Col. Richard B. Mason, commanding the 10th Military Department (California), recognized the futility of stationing units in Northern California although additional strength was sorely needed. Seven companies of the Second Infantry Regiment were already at sea and their first American port would be San Diego. Mason sent a message to San Diego for their commander, Lt. Col. Bennet Riley, directing him to disembark all the companies at that port. He explained that keeping the troops in Southern California would safely distance his soldiers from the lure of the gold rush in the north. Mason ordered the infantry to march to the Mission of San Luis Rey, about forty miles north of San Diego, where there would be ample facilities. Riley was to leave such force at San Diego as he thought proper, "Never more than one company has garrisoned that post." [6]

Riley stationed Company D at the Mission of San Diego on April 20, 1849, under the command of Capt. Samuel P. Heintzelman. At the end of April, Company A, First Dragoons, joined the post, bringing the total strength up to five officers and eighty-two enlisted men. For the next nine years "Mission San Diego" would be a regular army post. A variety of organizations came and went; besides the Second Infantry and the First Dragoons, companies from the First, Second, and Third Artillery, and the Sixth Infantry garrisoned the mission. The monthly post returns show that the largest garrison was present in January 1852: 8 officers and 141 enlisted men. The Dragoons came and went in these early years, escorting Lt. William Emory and the Boundary Commission surveying the new boundary between the United States and Mexico. In December 1851 most of the garrison joined an expedition to the Colorado River against the Yuma Indians. [7]

Many of the officers at the mission had battle experience in the Mexican War and would have again in the coming Civil War. Five of them emerged from the Civil War with the rank of major general: Samuel P. Heintzelman, the first commanding officer; Philip Kearny, killed in the Civil War battle of Chantilly; William H. Emory, the boundary commissioner; George Stoneman, after whom Camp Stoneman, California, later was named; and J. Bankhead Magruder, who was a Confederate general, seeing action at Malvern Hill. Four others won a brigadier general's star in the Civil War: Nathaniel Lyon, also killed in battle; one-armed Thomas W. Sweeny; Adam J. Slemmer; and Francis E. Patterson. Three officers won the rank of brevet brigadier general for services rendered during the war: Julius Hayden, George A. H. Blake, and William S. Ketchum. One officer, Lt. William A. Slaughter, did not have the opportunity to witness the Civil War. He was killed fighting Indians in Washington Territory in 1855. [8]

Evidence concerning the Army's treatment of the mission building is both meager and contradictory. The historian Robert W. Frazer wrote that during the occupation the mission buildings deteriorated rapidly. A visitor in 1852 said, "The Mission is at present occupied by United States troops, under the command of Col. J. B. Magruder, and in consequence is kept in good repair." An inspector general that same year wrote that the enlisted men were "occupied in making adobes and in collecting material for building quarters before the rainy season set in." He recommended that the post be furnished with a hospital and storehouses. The sick were crowded into two small rooms intended for officers' quarters, while the quartermaster and subsistence supplies were stored in an old building. The Army took some action in the winter of 1854 regarding structures when it hired five civilian carpenters to repair "the Mission Building." [9]

Fifteen years after the soldiers left the mission, The San Diego Union described the establishment, then mostly in ruins:

The main building is now covered by a shingle roof, which was placed there by the U.S. troops, by whom it was occupied from 1847 until about eight years ago [sic]. The interior [of the church] was converted into two stories by the construction of a floor midway between the roof and the ground. Only one-half of this floor now remains

On each side of the main entrance are two apartments, which were used as guard houses by the soldiery. The modifications made in the building by its military tenants failed alike to improve and preserve. [10]

In July 1858 the mission ceased to be an army post when the garrison withdrew to fight Native Americans in Washington Territory. The buildings stood desolate and unused, gradually falling into decay.

## **C. San Diego Barracks**

By 1850 the Army found it necessary to establish a depot in San Diego from which to distribute quartermaster and subsistence supplies to military establishments in Southern California and Arizona. Lt. Thomas D. Johns arrived in San Diego in 1850 with instructions to establish a depot at La Playa on Point Loma. At the same time a group of developers led by William Heath Davis were establishing "New San Diego" (the area covering present downtown San Diego). They persuaded the lieutenant to erect the depot at their town site in return for a share in the project. The federal government acquired the land by warranty deeds for a nominal consideration on September 12, 1850. Block 39 eventually became the "corral block" with its stables, sheds, and a hay barn; and Block 31 was called the "barrack block" with its quarters and offices. [11]

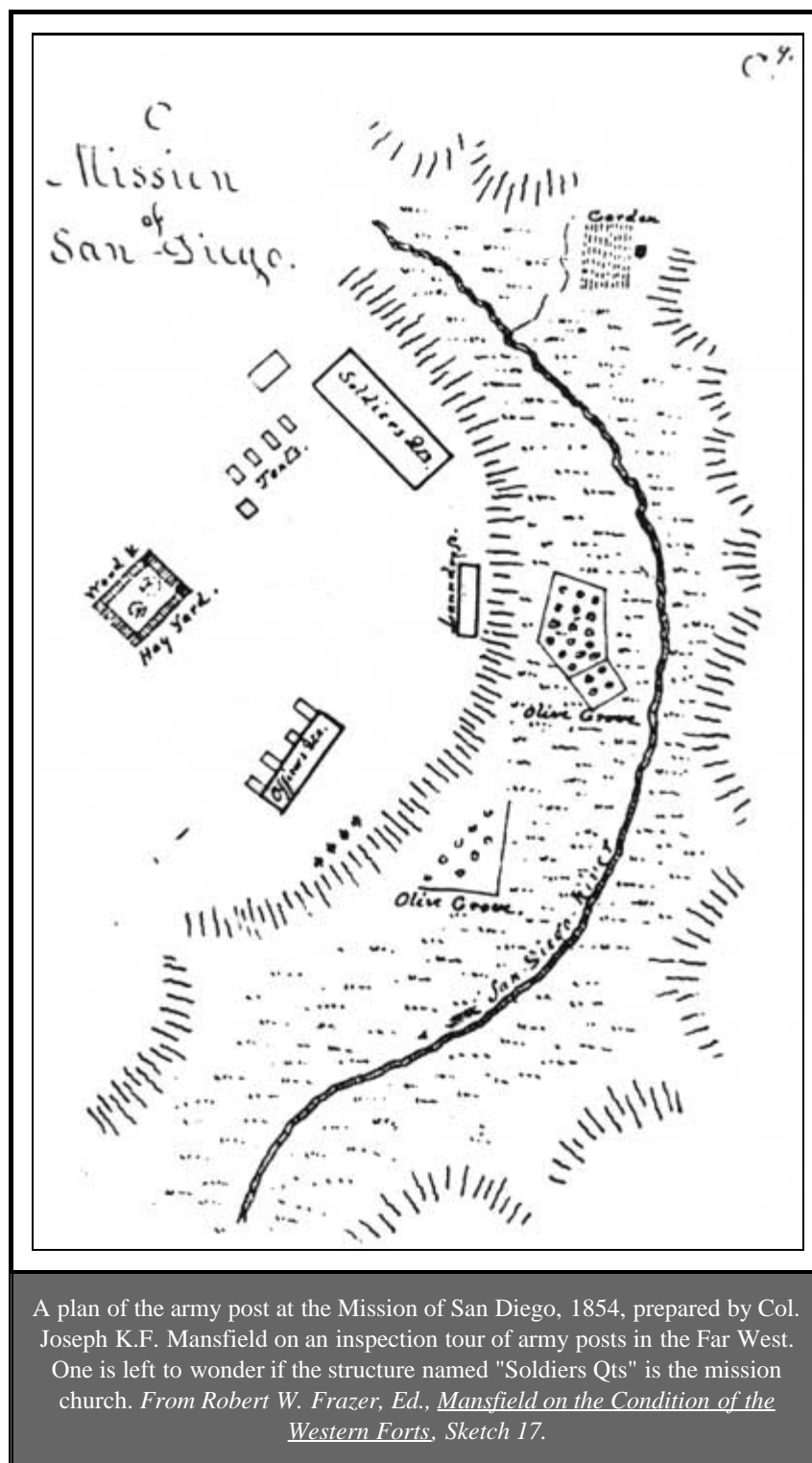
The depot distributed supplies to Forts Tejon, Yuma, Mohave, San Luis Rey, Chino, Santa Ysabel, San Bernardino, and other posts. Consignments for Arizona went both by sea around the Baja peninsula to the Colorado River and overland via contract mule trains. When Inspector General Joseph Mansfield visited the depot in 1854 he called it simply "New San Diego" and said it stood three miles from Old San Diego. The one storehouse that had been erected was a two-story frame building which Mansfield thought was of remarkably good construction. He noted the personnel who operated the depot:

Quartermaster sub-depot: 1 officer, 1 enlisted man, and 23 citizens

Subsistence sub-depot: 1 officer and 2 citizens

Pay department: 1 officer [12]





When the troops at the mission marched away in July 1858, the depot was the only military establishment at San Diego until that December when Company G, Sixth Infantry arrived. Instead of occupying the mission, the soldiers established themselves at the depot. For the next eighteen years troops garrisoned the depot irregularly while the depot continued its supply mission. The establishment was designated the "New San Diego Barracks" in June 1861. [13] That fall the regular army troops withdrew from Southern California to fight in the East and Company E, First Infantry Regiment, California Volunteers took over the post. Companies from the California Volunteers continued to occupy the post until the end of the Civil War. Only rarely was the routine broken. In November 1862 the corporal of the guard shot Pvt. Maurice Stack dead for resisting arrest. A citizen named Martin Trimmer found

himself locked up in the guardhouse for cheering Jefferson Davis and uttering other disloyal sentiments in 1863. Toward the end of the war, Maj. Gen. Irvin McDowell, commanding the Department of the Pacific, visited and inspected the volunteer troops. The last of the California Volunteers left San Diego Barracks in August 1865. Regulars took over the post. [\[14\]](#)

Cavalry troops occupied San Diego Barracks in 1876-1877 and made a series of patrols along the Mexican border because of "reports that Indians and Mexicans were stealing cattle and driving them to Lower Cal." At the height of this activity, a ten-men detachment was stationed at the border village of Campo. Diplomatic niceties were observed in 1880 when the Mexican gunboat Mexico, commanded by a Lt. Salace, arrived in the harbor. Troops returned to the border in 1885 to prevent an armed body of deserters from the Mexican Army from crossing the border. San Diego Barracks was transferred from the Department of California to the Department of Arizona at the end of 1866, but this change had little effect on the garrison routine.

San Diego celebrated the 350th anniversary of Cabrillo's discovery of the bay in September 1892. The garrison, Company C of the 10th Infantry, took part in the various activities. Foretelling the coming development of harbor defenses for San Diego, the garrison changed from infantry to artillery in December 1897. Capt. Charles Humphreys commanded the sixty-three men of Company D, Third Artillery. Over at Ballast Point on Point Loma army engineers began construction of the harbor's coastal batteries. [\[15\]](#)

On 15 February 1898, American battleship Maine blew up in Havana harbor, an event that led to the Spanish-American War. Humphreys sent Lt. George T. Patterson and twenty-two men to Ballast Point that same month and he and the rest of the company arrived at the new works in March. The company remained at Point Loma until August when it returned to the Barracks. [\[16\]](#)

During the following months, the company remained at the San Diego Barracks, but a detachment was maintained at Point Loma to protect the big guns. Maj. Gen. William R. Shafter arrived in San Diego in April 1900 and inspected the barracks as well as the new post. Four months later, Humphreys and his artillery company departed San Diego for China. For the next year a motley collection of troops occupied San Diego Barracks during the confusion following the Spanish-American War, fighting in the Philippines, and the Boxer Rebellion in China. At one point, the eighty-four enlisted men at the Barracks came from forty-three different companies. Finally, in July 1901, the 30th Company, Artillery Corps, arrived for duty at both San Diego and the new post at Fort Rosecrans. [\[17\]](#)

Sufficient quarters having been constructed at Fort Rosecrans, it was organized as a separate post and the artillerymen took up residence there in 1903. A small detachment remained in San Diego until September. San Diego Barracks remained a sub-post of Fort Rosecrans until the Army abandoned it in 1921. The City of San Diego acquired the property from the federal government in 1938. [\[18\]](#)

---

[<<< Previous](#)

[<<< Contents >>>](#)

[Next >>>](#)

# CABRILLO

## The Guns of San Diego Historic Resource Study



### CHAPTER 3:

## POINT LOMA AND COASTAL DEFENSE, 1852-1874

### A. A Military Reservation

Almost as soon as American forces occupied California, the War Department organized the territory as the Tenth Military Department with headquarters at Monterey. Brig. Gen. Stephen Watts Kearny became the first commander in February 1847, soon to be succeeded by Col. Richard Barnes Mason. Both officers took steps to reserve parcels of land for use by the military. Lt. Henry W. Halleck, on Kearny's staff, visited San Diego in 1847 and recommended coastal defenses for Point Guajarras on Point Loma. In 1849 the Secretaries of War and the Navy appointed a joint commission of three army engineer officers and three naval officers to plan the defenses of the Pacific Coast. Delayed on account of enlisted desertions to the gold mines, the commission did not begin its surveys until 1850. Traveling on board the army transport Massachusetts, the officers examined San Francisco Bay, the mouth of the Columbia River in Oregon Territory, and San Diego Bay.

While concluding that San Francisco and the Columbia River should have priority over San Diego, the commissioners were impressed with the last, "San Diego Harbor is in many respects the best on this coast." It was spacious, sheltered, free from shoals, secure from storms, and the narrow entrance could be easily defended. "It is a remarkable harbor and a valuable acquisition to a coast where good harbors are rare." The officers noted that a battery could be constructed on either side of the entrance but that "Punta de Guiranos" (sic) was preferred. Since the point could be attacked on the land side from the heights of Point Loma that area must be occupied by a strong work. [1]

President Millard Fillmore signed an Executive Order on February 26, 1852, establishing the Point Loma Military Reservation consisting of 1,300.42 acres. The northern boundary of the reservation was a straight line from the bay to the ocean 1-1/2 miles north of Ballast Point. Neither Congress nor the War Department took action at this time to fortify the bay. The tumultuous affairs of Northern California and Indian wars in Oregon no doubt took precedence over the sleepy port. The first United States census in California, in 1850, showed a population in the San Diego area of 798 people. [2]

The Army's Chief Engineer Joseph G. Totten inspected the Pacific Coast regarding its defenses in the winter of 1859-1860. He agreed with the findings of the joint commission, particularly with regard to San Diego. He noted that it stood at one end of a 500-mile coastline with San Francisco at the other end, "The admirable properties of San Diego Harbor - deep, close, roomy and defensible - its position just at the southern limit of our possessions, with no other to compare with it within a long distance, raise it beyond all question into the first class; and demand for its defenses...." Despite all the praises of its merits, San Diego Bay remained undefended as the nation drifted toward civil war. [3]

## **B. Old Point Loma Lighthouse [4]**

It is said that the only navigational aid in San Diego Bay in the early years was a lantern hanging from a pole at Ballast Point. Then, in 1852, Congress authorized the first eight lights for the Pacific Coast. These lights marked two significance advances in the history of navigational aids in the United States. The administration of such aids acquired a high degree of professionalism with the establishment of the Lighthouse Board composed mostly of military engineers. Also, the West Coast lights were to be illuminated by a new, greatly improved method, the French-designed Fresnel lens system. In 1854, a contractor completed construction of one of these lighthouses on Point Loma's highest point, 422 feet elevation.

To get his construction materials to the site, the contractor built a crude road from Ballast Point to the top of Point Loma. The two-story sandstone lighthouse measured twenty by thirty feet. A brick tower, forty feet tall rose from the center of the house. A third order (out of seven) Fresnel lens was installed and the light was lit November 15, 1855. For the next thirty-six years, the Point Loma light served mariners at sea and as a harbor light for San Diego. It was the highest light in the United States, which fact quickly became a problem when coastal fog dimmed its usefulness. In 1891 the light was abandoned and a new light was erected at the tip of Point Loma at an elevation of thirty feet, below the fog. In addition to this new site, the War Department issued another permit for a light at the end of Ballast Point to serve as a harbor light.

The old lighthouse, which became known as "the old Spanish lighthouse," became a favorite tourist destination because of the magnificent views obtained there of San Diego and the Pacific Ocean. In 1913 President Woodrow Wilson issued a proclamation setting aside the lighthouse and the one-half acre of land surrounding it as Cabrillo National Monument in honor of San Diego's discoverer. The U.S. Army administered the monument until 1933 when it turned it over to the U. S. Department of the Interior to become part of the National Park system. Except for the war years 1941-1946, the National Park Service has continued to administer the greatly enlarged national monument. [5]

## **C. The First Battery, 1870s**

By the time of the Civil War, San Diego's population had grown fivefold, to 4,300. Army engineers at San Francisco, concerned that Great Britain, which was friendly with the Confederacy, might attack California from its naval base on Vancouver Island and worried about Confederate raiders in the Pacific, sought to increase San Francisco's harbor defenses. As for San Diego, however, the small garrison of California Volunteers at the Barracks had to suffice for the town's defense. Except for an occasional Southern sympathizer expressing his views, however, San Diego survived the war in peace.

Following the war, army engineers realized that advances in warfare, such as rifled artillery and steam-propelled warships protected with iron armor, had made the handsome and costly masonry casemated forts of the past obsolete. Engineer boards in both San Francisco and New York began planning the fortifications of the future. In 1868, the New York board prepared a report detailing the proper profile for postwar barbette batteries. As a material for parapets, sand was far superior to clay. A parapet of sand, twenty feet between the crests and supported by a breast-height wall four feet thick was sufficient as a minimum. The distance between 15-inch Rodman guns should be twenty-four feet. The terreplein should not be less than thirty feet in depth. There should be a traverse for every two guns. The minimum dimensions for a traverse should be fourteen feet in height, twelve feet in thickness at the top, and twenty feet thick at the bottom. Service magazines were indispensable and should be made of well-rammed concrete with no lining. E. Raymond Lewis wrote, "Never again

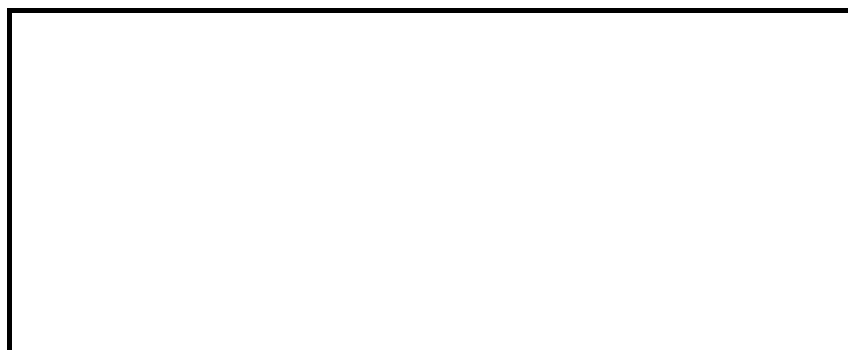
would forts be built in the storybook style as single structures housing large numbers of cannon. From this time on, a fort was a piece of real estate occupied by a number of dispersed individual batteries." [6]

Soon after the war, the Army underwent a major reorganization. On the West Coast the Division of the Pacific was constituted with Maj. Gen. Henry W. Halleck as its commander, the same person who had inspected San Diego Harbor in 1847. The new senior engineer on the Pacific Coast, Maj. Barton Stone Alexander, convened a board of engineers in 1867 to consider the future of the coastal defenses. This time San Diego was included in the planning. [7]

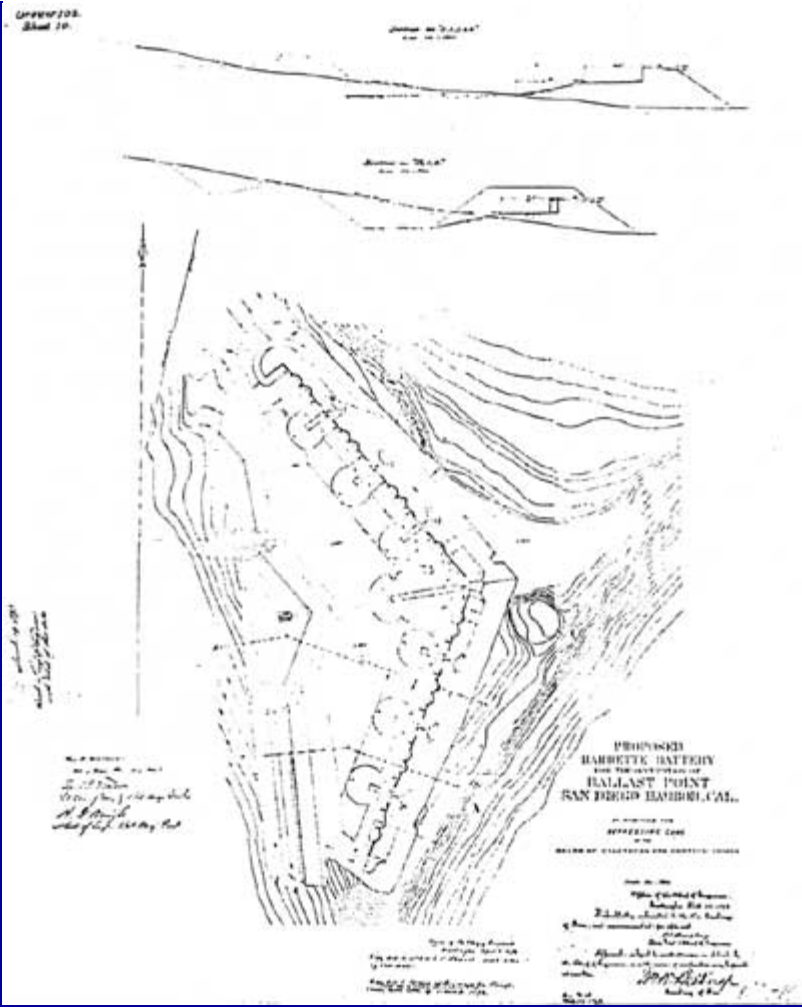
San Diego's population had grown to almost 5,000 by the time of the 1870 census. In 1871 an announcement was made that the Texas & Pacific would construct a railroad linking San Diego to the east. While the announcement proved premature, it pointed up that San Diego was soon to be an important port of call. The Board of Engineers in San Francisco prepared plans for a barbette water battery to be located at the junction of Ballast Point and Point Loma, near the site of former Fort Guijarros. These plans followed the concepts of the 1868 New York board's report. The work had two parts: the battery proper, a triangular earthwork having positions for fifteen 15-inch Rodman smoothbores and four mortars; and an outwork on the point itself which had positions for seven of the heavy guns and two mortars. [8]

The Pacific Board forwarded the plan to Washington in May 1871 and in June the Chief of Engineers sent it on to the Board of Engineers for Fortifications in New York for review. The plan was returned to San Francisco with recommendations for modifications, the principal one being the deletion of the outwork. Finally, Secretary of War William W. Belknap approved the plan in March 1873. It called for an earthwork containing guns mounted in pairs (with one exception), and the pairs separated by earthen traverses, each containing a magazine. All mortars had been deleted from the battery. A slight mound shown to the east of the battery and just outside the parapet seemed to mark the site of ancient Fort Guijarros. [9]

Congress passed an appropriation of \$50,000 for San Diego for fiscal year 1874. Even before the fiscal year began on July 1, The San Diego Union learned that Lt. John H. Weeden, Corps of Engineers, would soon arrive from San Francisco to supervise construction of the battery. The lieutenant, accompanied by his superior officer, Lt. Col. Charles S. Stewart, arrived in San Diego in May, and work was commenced at Ballast Point promptly. Temporary quarters for overseers sprang up, as did a storehouse, messhouse, and a stable. Unfortunately, the work ran out of money in April 1874, never to be resumed. In fiscal year 1876, Congress refused to pass any appropriations for new fortifications nationwide, a drought that lasted fifteen years. In 1897 the incomplete battery was obliterated in the construction of a new battery. A site map drawn in 1896 showed the one concrete magazine that had been constructed in 1874. It was located at the west end of the battery in the traverse between guns two and three, at the proposed gun emplacement no. 1 of the future Battery Wilkeson. The construction of Wilkeson resulted in the destruction of the magazine. [10]







Plans for a barbette battery of fifteen 15-inch Rodman guns were approved in 1873. Work began at the neck of Ballast Point but the project ran out of funds in 1874, never to be resumed. Only one concrete magazine had been completed. The unnamed battery would have been similar to Battery Cavallo in the harbor defenses of San Francisco. *National Archives, RG 77, Fortifications File, Dr. 102, Sht. 10. (click on image for an enlargement in a new window)*

[<<< Previous](#)

<<< **Contents** >>>

**Next** >>>

# CABRILLO

## The Guns of San Diego Historic Resource Study



### CHAPTER 4: FORT ROSECRANS, 1898-1920

#### A. Endicott Board, 1885-1895

During the fifteen years that Congress refused to appropriate funds for new construction of coastal fortifications, it did allow for the "protection, preservation, and repair" of existing works. Lt. Col. Charles Stewart, in the Engineers' San Francisco office, became responsible for the maintenance of Fort Point batteries at the Presidio of San Francisco and the battery at Point Loma. About \$1,500 was allotted annually for each area, most of which went to pay civilian "fort keepers." Stewart and his successors visited San Diego from time to time, but these trips involved mostly the Corps of Engineers' civil works responsibilities concerning San Diego Bay. [1]

By the 1880s, a sizable segment of the American public in government and out, and in the military, became increasingly alarmed at the deterioration of coastal fortifications and the development of modern steam battleships in foreign navies. At the same time, arsenals were employing steel in building guns; breech loading and rifling were perfected; improved gun carriages were devised; and new propellants were developed. E. Raymond Lewis has pointed out that a Civil War 10-inch Rodman smoothbore had a maximum range of 4,000 yards with a 123-pound shot, while an 1890 10-inch rifled gun had a range of 12,000 yards with a 604-pound shot. In the face of mounting concern, Congress passed a bill early in 1885 calling for the executive branch to review the matter of the United States' coastal defense. [2]

The newly elected President Grover Cleveland promptly appointed a Board of Fortifications or Other Defenses on March 3, 1885. Secretary of War William C. Endicott became president of the board, thus lending his name to the undertaking. Four army officers, two naval officers, and two civilians made up the rest. The board met regularly throughout the summer and fall and in December announced a list of twenty-two American ports arranged in order of importance and the urgency necessary for their defense. The first port on the list was New York; the twenty-second, San Diego. The Endicott Board's final report, issued in 1886, recommended four high-power, 10-inch rifled guns for San Diego, two to be emplaced at Point Loma and two at Ballast Point. [3]

Despite the thoroughness of the board's investigation, Congress was slow to act. Not until 1890 did it pass the first appropriation for the modernization to begin. The Endicott Board had estimated the total cost of the project at \$126 million; through the 1890s, the annual appropriations averaged \$1.5 million. [4] The next recommendation for San Diego came from an Artillery Board appointed by the commanding general of the Division of the Pacific in 1889. This board proposed four high-power rifled guns, three converted rifles, and eight rifled mortars:

Point Loma two 10-inch guns and four 12-inch mortars  
Ballast Point three 8-inch converted rifles

North Island two 8-inch guns and four 12-inch mortars [5]

The next investigation resulted from a bill that the U.S. Congress passed in 1891 directing the Secretary of War to appoint a special board of officers to determine sites for a military post and harbor defenses in San Diego. The board's findings were transmitted to the Congress in December. It concluded that there should be batteries at Ballast Point and the west end of North Island. A mortar battery and a "few" guns were recommended for Point Loma. Also, batteries should be placed at the "Brickyard" southeast of the Coronado Hotel. As for a post, the board rejected the military reservation and recommended 1,030 acres of private land located two miles northeast of the reservation. [6]

These early boards set the stage for the Corps of Engineers to get down to serious business regarding the defenses of San Diego in 1894. This newest board was composed of six experienced engineers: Cols. George H. Mendell, Henry L. Abbot, Cyrus B. Comstock, and Lt. Cols. Peter C. Hains, Henry M. Robert (of parliamentary procedure fame), and George L. Gillespie. The colonels visited San Diego in May and finished their report early in 1895. They noted that San Diego's population now exceeded 30,000 and that it had railroad connections to the rest of the country. The party traveled to Point Loma on a road along the crest of the ridge and reached the summit near the old lighthouse. This summit commanded the harbor and its approaches. East of the lighthouse at an elevation of 70 to 100 feet they spotted a space sufficient for three or four guns. (The Army later called this site Billy Goat Point.) South of the lighthouse at 300 feet elevation they selected a site for a gun battery that commanded the ocean approach to the harbor (probably the later location of Battery Humphreys). The trip out to Ballast Point was on a difficult trail that wound among the steep escarpments. On examining the 1873 work, they concluded the site was suitable for a battery that would sweep the harbor entrance. As for the island across the channel (they did not know it as North Island), they disagreed with the 1891 board and recommended no battery there. The board also visited Coronado Beach where they selected a site 1-1/2 miles south of the Coronado Hotel for a mortar battery that would cover the ocean area in front of San Diego and National City. They summarized their findings thus:

Point Loma, south of old lighthouse, two 10-inch guns, non-disappearing carriages

Point Loma, east of old lighthouse, two 8-inch guns, disappearing carriages

Ballast Point, four 10-inch guns, disappearing carriages

Coronado Beach, sixteen 12-inch mortars protected by three quick-fire guns to repel landing parties.

The board also suggested some rapid-fire guns at Ballast Point to cover the submarine minefield and repel landing parties. The colonels estimated the total cost for San Diego Harbor to be \$882,000. [7]

## **B. The First Batteries, 1896-1900**

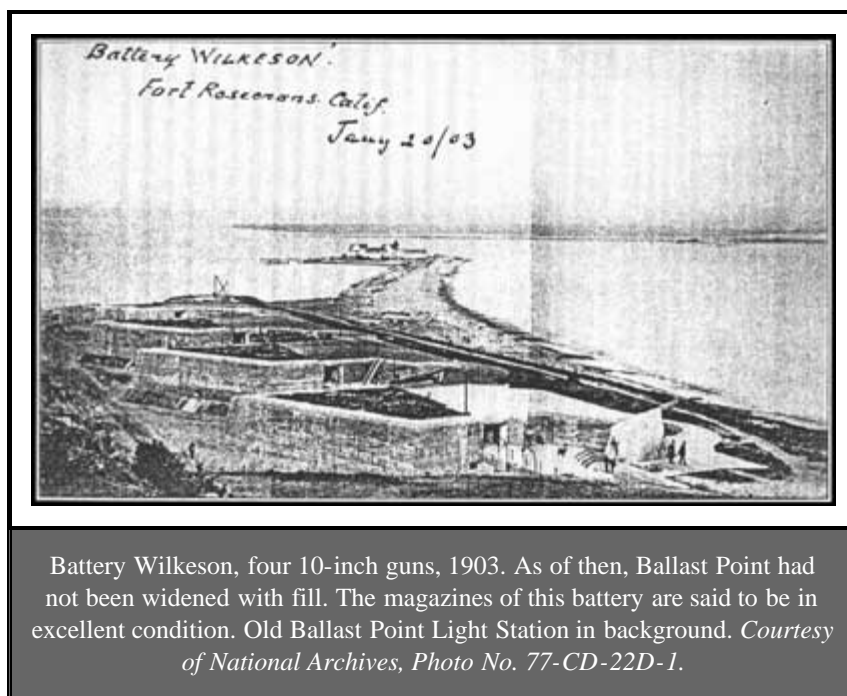
Of the four sites selected by the 1895 board, engineers constructed a battery only at Ballast Point, the four 10-inch guns on disappearing carriages. In September 1897 Col. Charles R. Suter, the Pacific Division Engineer, visited the contractor's work at Ballast Point. "Three emplacements for 10-inch guns on disappearing carriages are being built on Ballast Point, and also a torpedo [submarine mines] casemate. This latter was well advanced towards completion and nearly ready for back-filling. The two left-hand emplacements, contracted for

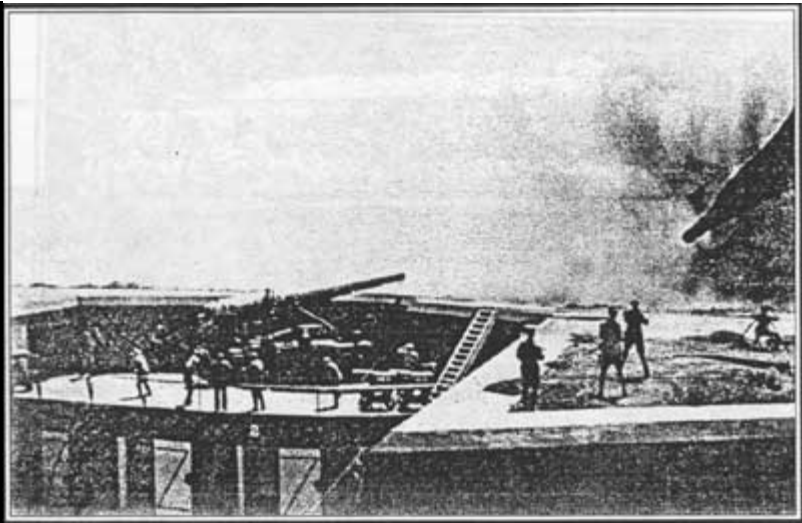


last year, were about completed so far as the concrete work is concerned, but the earth filling of parapets and traverses had not been commenced. The third emplacement had been begun, excavation completed, foundations laid, and erection of forms begun." Suter was generally pleased with the work which 1st. Lt. James J. Meyler, CE, supervised. [8]

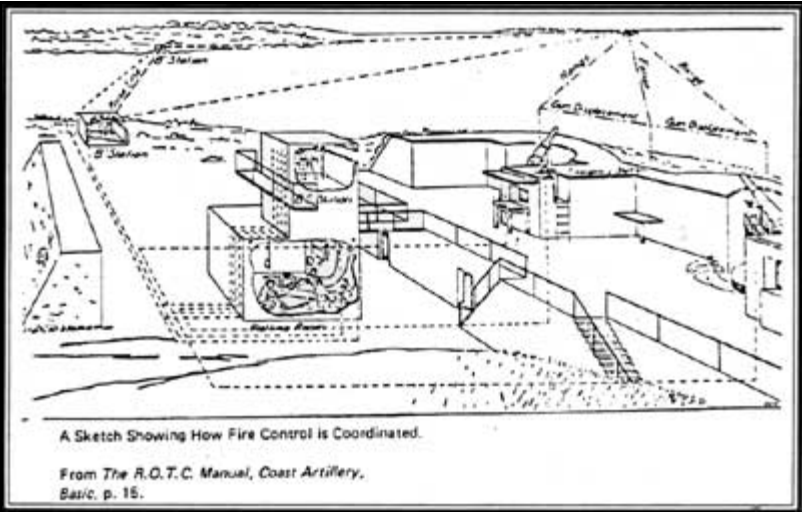
Suter considered the roads on Point Loma terrible. He recommended construction of a road along the harbor shore from a wharf at La Playa to Ballast Point and beyond to Billy Goat Point and on up the ridge to the old lighthouse. Also, the old road from Ballast Point up to the old lighthouse, which had been built for the Lighthouse Board in the 1850s, should be reconstructed. He thought the road on top of Point Loma should be strengthened for the transport of heavy ammunition. [9]

A month later, the Fortifications Board in New York, which reviewed all plans for coastal defense in the nation, had some additional thoughts on the defense of San Diego. In addition to rapid-fire guns at Ballast Point, it recommended six for "The Island" east of the entrance channel. As for the defenses on Coronado Beach, the board thought that work could be postponed until all the batteries for the protection of the entrance channel were completed. [10] By March 1898, the third 10-inch emplacement was completed and work had begun on the fourth. When completed the battery was named in honor of Bvt. Lt. Col. Bayard Wilkeson, an artilleryman killed at Gettysburg, July 1, 1863. In 1915, the battery was divided; guns 1 and 2 on the right flank retained the name Wilkeson, and rifles 3 and 4 were named in honor of Col. John H. Calef, another artilleryman who had fought in the Civil War. He retired from the U.S. Army in 1900 and died in 1912. [11]

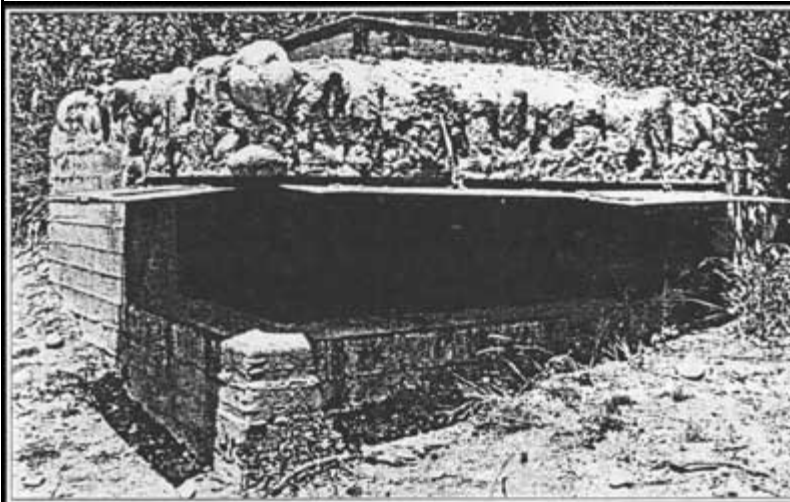




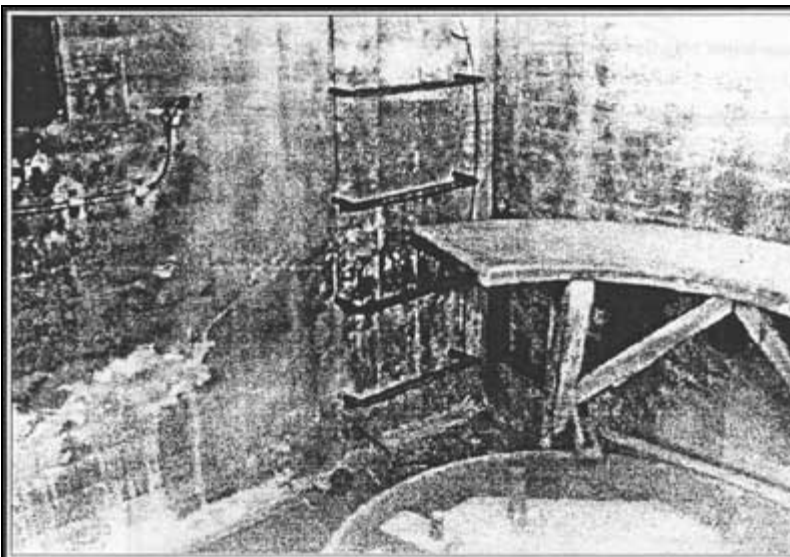
No. 2 Gun, Battery Wilkeson, firing. These 10-inch guns were mounted on disappearing carriages. At the moment this photo was taken, the gun tube was beginning to retract — note the soldiers at the rear ducking. Photo taken between 1904 and 1911. *Photo courtesy of Maj. Gen. George Ruhlen, U.S.A. Ret.*



A sketch showing how fire control is coordinated. *From the R.O.T.C. Manual, Coast Artillery, Basic, p. 15.*



Calef-Wilkeson base-end station, located in the northeast quadrant of Cabrillo National Monument. Station is located to the west of the Bayside Trail/Sylvester Road. *Photo courtesy of George R. Schneider.*

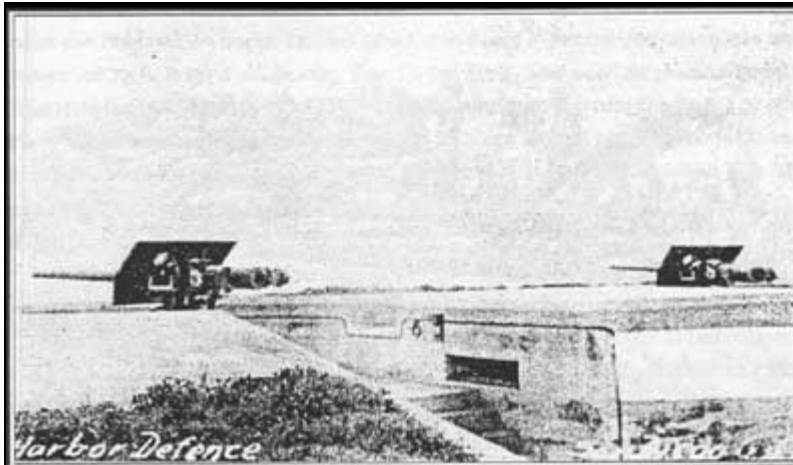


Interior of base-end station with bench and ring on floor intact. *Photo courtesy of George R. Schneider.*



General Tasker H. Bliss, Chief of Staff, U.S. Army, reviewing Fort Rosecrans' Coast Artillery in 1911. Battery Wilkeson in background. Photo

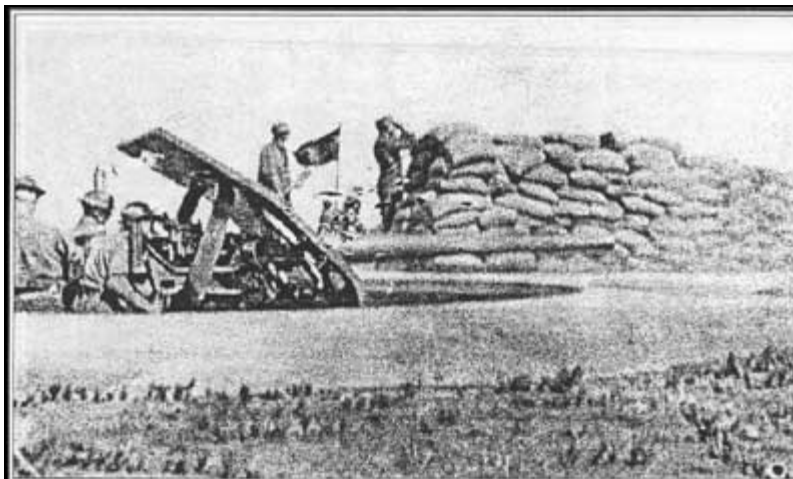
by Col. George Ruhlen, U.S.A. *Photo courtesy of Maj. Gen. George Ruhlen, U.S.A. Ret.*



Battery Fetterman, 3-inch guns. Note apparent censorship effort in lower right. No date. *Photo courtesy of Maj. Gen. George Ruhlen, U.S.A. Ret.*



Fort Rosecrans, 1911. Officers' row in foreground; enlisted barracks in distance. Photo by Col. George Ruhlen, U.S.A. *Photo courtesy of Maj. Gen. George Ruhlen, U.S.A. Ret.*



Battery James Meed, Fort Pio Pico, 1911. A 3-inch gun firing. These weapons were later moved to Battery McGrath, Fort Rosecrans. Photo by Col. George Ruhlen, U.S.A. Ret. *Photo courtesy of Maj. Gen. George Ruhlen, U.S.A. Ret.*

The cost of the battery amounted to \$217,300. Data on the guns and their carriages follow.

<b>Guns</b>	<b>Caliber</b>	<b>Model</b>	<b>Serial No.</b>	<b>Manufacturer</b>
1	10-inch	1895	8	Watervliet Arsenal
2	10-inch	1888 M1	10	Bethlehem Iron Company
3	10-inch	1888 M1	10	Watervliet Arsenal
4	10-inch	1888 M1	4	Watervliet Arsenal

<b>Carriages</b>	<b>Model</b>	<b>Serial No.</b>	<b>Manufacturer</b>	<b>Motor</b>
1	1896	53	Watertown Arsenal	8 hp
2	1896	7	Niles Tool Works	8 hp
3	1896	5	Niles Tool Works	8 hp
4	1896	6	Niles Tool Works	8 hp

The destruction of the battleship USS Maine in La Habana Harbor on February 15, 1898, resulted in a fresh sense of urgency to provide additional defenses on all coasts. Within a month, Congress voted \$50 million for defense. In April, the Spanish-American War began. At San Diego, three additional batteries at the harbor entrance were completed by 1900: Battery McGrath, two 5-inch rapid-fire guns on balanced pillar mounts on Battery's right flank, its primary mission being the defense of the minefield; Battery Fetterman, two 3-inch guns on Wilkeson's left flank, for sweeping the channel in case of attack by boats or small vessels; and Battery James Meed, also two 3-inch guns, across the channel on North Island (Fort Pio Pico). Battery McGrath was named in honor of Maj. Hugh J. McGrath, Fourth Cavalry, who died of wounds received in the Philippines in 1899. In 1902 the Congress awarded him the Medal of Honor for heroism. Battery Fetterman was named in honor of 2nd Lt. George Fetterman, 3rd U.S. Artillery, who died in 1844. Battery James Meed was named for Capt. James Meed, Seventeenth Infantry, who was killed in action against the British and Indians at Frenchtown, Michigan, 1813. [[12](#)]

---

<<< [Previous](#)

<<< [Contents](#) >>>

[Next](#) >>>

---

# CABRILLO

## The Guns of San Diego Historic Resource Study

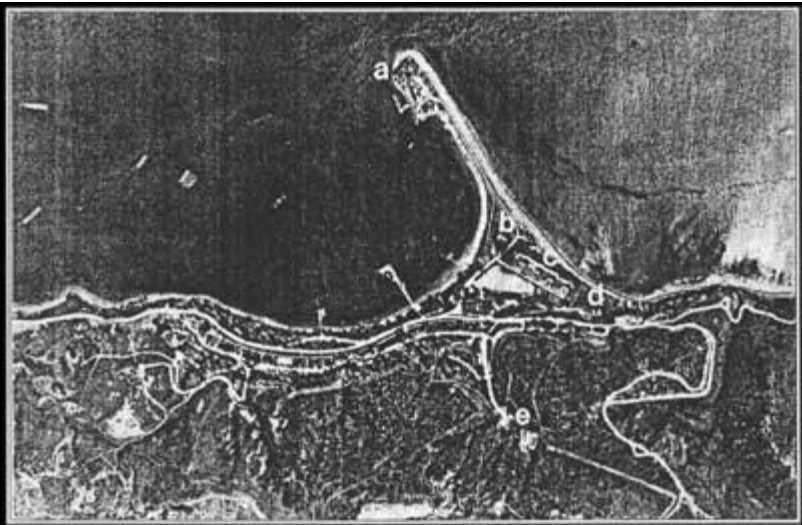


### CHAPTER 5: INTERLUDE, 1920-1935

In 1925 the Coast Defenses of San Diego were renamed the Harbor Defenses of San Diego.

Following the war, defense activities at San Diego declined rapidly. Soon, the garrison at Fort Rosecrans diminished to one company of Coast Artillery and an occasional detachment from another arm. In 1931 the Headquarters and Headquarters Company, Sixth Brigade, and a detachment of the 11th Cavalry Regiment were temporarily at the post, along with Battery D, 3rd Coast Artillery, the permanent garrison. The following year, a 35-man detachment of the 9th Cavalry Regiment (Black) was temporarily at the post in connection with the Equestrian Olympic Team. At one point the Army considered disposing of the fort but quickly changed its mind. In March 1932 Headquarters, 9th Coast Artillery District, San Francisco, stated that Fort Rosecrans had been withdrawn from the list of reservations to be disposed of and it was retained in entirety for military purposes. [1]

The fort came to the attention of scientists in 1923 when Point Loma was the most suitable and most accessible place in the United States to make observations of a solar eclipse. Dr. Walter S. Adams, Acting Director of the Mount Wilson Observatory, sent workmen to construct concrete foundations and pillars for mounting observation instruments. Among the visitors were John C. Merriam, President, Carnegie Institution, Washington, D.C.; S.A. Mitchell, Director, Leander McCormick Observatory, University of Virginia; and a French mission under C. LeMorvaux, Astronomer at the Paris Observatory. September 10 brought bad weather and the scientists were disappointed, yet they praised the Coast Artillery effusively for its hospitality and cooperation. [2]



The post of Fort Rosecrans, 1937; (a) U.S. Coast Guard Station; (b) Battery Fetterman, 3-inch guns; (c) Batteries Wilkeson and Calef, 10-inch guns; (d)



Battery McGrath, 3-inch guns (formerly 5-inch); (e) Battery White, 12-inch mortars. *Photo courtesy of San Diego Historical Society — Ticor Collection.*

In 1933 the War Department transferred the 1/2-acre Cabrillo National Monument to the Department of the Interior. When Superintendent John R. White, Sequoia National Park, made his first visit to the monument in 1934, he held meetings with interested citizens to discuss the monument's future. Lt. Col. George Ruhlen, then commanding Fort Rosecrans, attended the meetings. Greatly interested in San Diego's history, Ruhlen proposed a resolution to make the historic lighthouse, the principal structure at the monument, a permanent feature. This resolution was passed unanimously. Ruhlen had additional plans for Point Loma. He wrote a friend that he had procured several thousand Monterey cypress and Torrey pines from the County and City of San Diego and they would be planted all along the peninsula. [3]

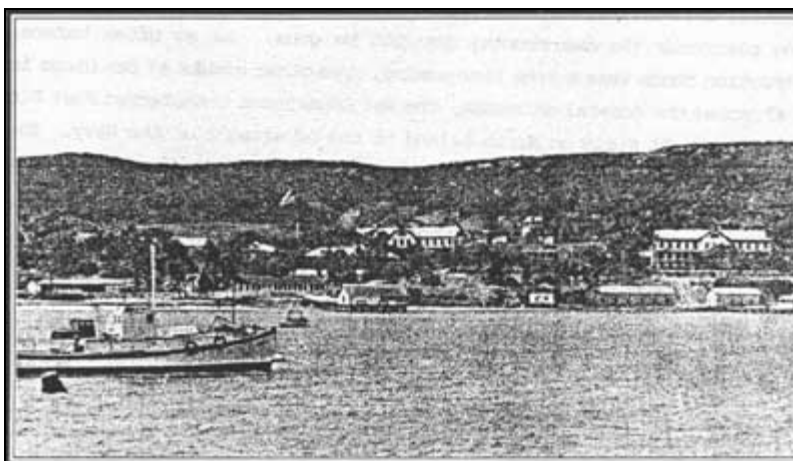
San Diego celebrated 1935 with the California-Pacific International Exposition. Rosecrans' tiny garrison could not supply the personnel that it had at the Panama-California International Exposition in 1915, but it did what it could. In July a reporter from the San Diego Union visited the fort and found it "dressed up" for the exposition and open daily to visitors. A detachment of 100 soldiers was coming to help the 48 officers and men at the fort. Each Tuesday and Thursday, at 2 p. m., the artillerymen would give a special demonstration of loading one of the 10-inch disappearing guns. [4]

While life at Fort Rosecrans was relatively uneventful in the 1920s and early 1930s, its existence was not forgotten in the offices of the Engineers and Coast Artillery in the War Department. The state of San Diego's harbor defenses came to the attention of the National Harbor Defense Board in 1932. The Chief of Coast Artillery informed the Board that some railroad guns, all of which were then stored on the Atlantic seaboard, should be moved to the Pacific Coast as soon as possible, because such transportation would take an extensive period of time. The Board's examination of San Diego showed that the five existing batteries were inadequate both in range and volume. It concluded that new seacoast guns had to be added, at which time the 10-inch guns could be removed. The new project called for two 8-inch (Navy) guns on barbette carriages, two 8-inch (Navy) guns on railway mounts, and eight 155mm guns in two batteries. [5]



Dignitaries gathered to celebrate the completion of a paved road to the Old Point Loma Lighthouse, 1934. Col. George Ruhlen, commanding Fort

Rosecrans and dedicated to Point Loma's history, is in uniform. To his left is Assistant Superintendent Daniel J. Tobin, Sequoia National Park. *Photo courtesy of Maj. Gen. George Ruhlen, U.S.A. Ret.*



Fort Rosecrans from Ballast Point, 1933. Photo by Col. George Ruhlen, U.S.A. *Photo courtesy of Maj. Gen. George Ruhlen, U.S.A. Ret.*

A local board, composed of Engineer and Coast Artillery officers, met at San Diego in 1933 to select sites for the new weapons. For the 8-inch battery it selected a site near Battery Whistler. The board chose a site for one battery of 155mm guns at Point Loma near the new lighthouse, and recommended a location 1,500 yards south of Coronado Heights and west of south San Diego, on the former Camp Hearn site, for the other 155mm battery, which was never built. The board identified sites for the railroad guns but these weapons were not destined to arrive in San Diego. It also chose locations for two 3-inch antiaircraft guns which had been added to the project, one 100 yards south of the old lighthouse, the other north of Whistler near the boundary. [6]

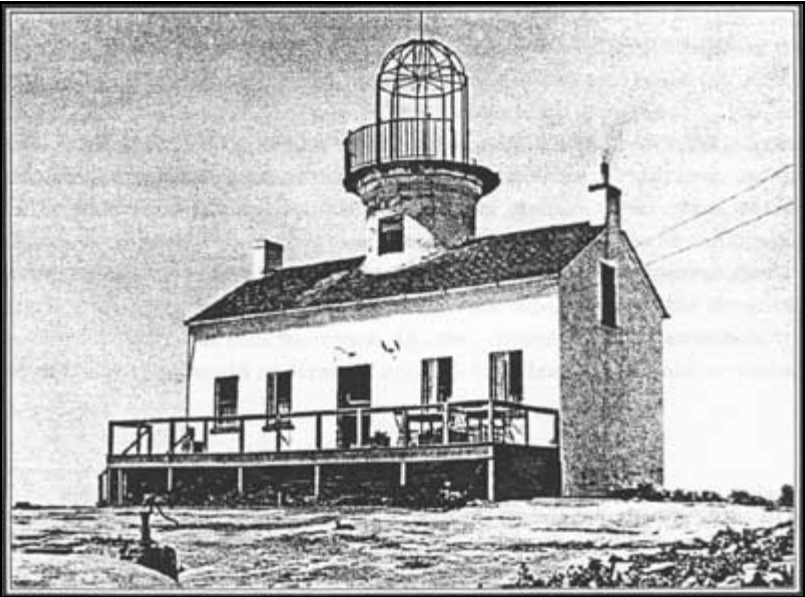
In 1935 the War Department notified the Los Angeles District Engineer that it seemed probable emergency relief funds would become available for defense projects in the harbor defenses of Los Angeles and San Diego. For Fort Rosecrans it directed the engineers to prepare plans for six 3-inch antiaircraft gun blocks, the 8-inch fixed battery and its four fire control stations, and four firing platforms (Panama mounts) for 155mm guns. As so often before, construction funds were a long time coming. Two other events at San Diego in 1935 affected the coastal defenses. The War Department transferred Fort Pio Pico and Rockwell Field on North Island to the Department of the Navy. The commanding officer at Fort Rosecrans, Lt. Col. Edward L. Kelly, announced that two of the mortars would be fired on July 22, the first time in eleven years. This practice required eighty-five officers and men to fire twenty-four projectiles 18,000 feet into the air toward a target eight miles away. Things were beginning to stir at Fort Rosecrans. [7]







The road to the lighthouse in 1934, prior to its reconstruction and paving. Cabrillo National Monument at that time consisted of the lighthouse and the road around it. *Photo courtesy of Maj. Gen. George Ruhlen, U.S.A. Ret.*



Old Point Loma Lighthouse, early 1920s. The building was used as a residence by a sergeant from Ft. Rosecrans. *Photo courtesy of Cabrillo National Monument.*

---

[<<< Previous](#)

[<<< Contents >>>](#)

[Next >>>](#)

---

# CABRILLO

## The Guns of San Diego Historic Resource Study



## CHAPTER 6: MODERNIZATION, 1936-1941

### A. Annexes to Harbor Defense Project, 1936

San Diego Harbor's defense project was completely overhauled in 1936. A series of "annexes" outlined the organization of the seacoast guns, fire control installations, searchlights, antiaircraft gun defense, and supporting aircraft. The defenses were to be organized into three groups, a separate battery of seacoast armament, and one group of antiaircraft weapons:

Group 1: Batteries Whistler and John White, 12-inch mortars. Installed. Maximum range, 14,650 yards.

Group 2: Battery Strong, 8-inch guns to be installed. Maximum range, 33,000 yards. Battery Point Loma, 155mm guns to be installed. Range 17,400 yards.

Separate battery: Battery McGrath, 3-inch guns. Installed. Maximum range 8,700 yards.

Group 3: Antiaircraft group. Two battalions. Fort Rosecrans: Two batteries, each having three 3-inch guns. Vertical range, 9,300 yards.

Horizontal range, 10,550 yards. Thirty-six antiaircraft (AA) guns, .50 caliber. Seven AA searchlights, portable. All were to be installed but were never actually emplaced.

South San Diego: One battery of three 3-inch AA guns, mobile. Vertical range, 7,500 yards. Horizontal range, 7,700 yards. Twelve AA machine guns, .50 caliber. Six AA searchlights, portable. All were to be installed but were never actually emplaced.

Group 4: Railroad battery of two 8-inch guns. Maximum range, 33,000 yards. A battery of four 155mm guns, mobile. Maximum range 17,400 yards. Four portable coastal searchlights. All were to be installed but were never actually emplaced.

Batteries Wilkeson and Calef were to be retained temporarily but would be abandoned when the 8-inch railroad guns arrived in San Diego. The long-range modernization project called for the additional construction of two batteries of 16-inch guns (construction nos. 126 and 134) and three batteries of rapid-fire 6-inch guns (construction nos. 237, 238, and 239). When these five batteries were armed, the Coast Artillery would abandon Batteries Whistler, John White, Wilkeson, and Calef, along with the 155mm and 8-inch railroad guns. [1]

Annex B concerned fire control installations. It noted that the fire control switchboard room was in the southeast corner of Battery John White. A second one would be located near the Group 4 station at Coronado Heights. A bombproof room in the west end of Battery Wilkeson would become home to the harbor defense radio transmitting station, while the

receiving station would be put in the old mine station 1,200 yards to the south. Base-end stations were scheduled for Torrey Pines State Park (not built), Soledad Mountain, and Ocean Beach north of Point Loma (not built); at Fort Rosecrans; and at North Island, Silver Strand, Coronado Heights, and near the Mexican border to the south. When completed, the fire control system would be a complex undertaking:

**Batteries Whistler (tactical no. 1) and John White (2):**

Double fire control stations: Battery commanders (BC) stations and base-end stations B<sup>2</sup>S<sup>2</sup>, to be constructed near the old lighthouse, elevation 380 feet.

Emergency BCs and base-end stations B<sup>1</sup>S<sup>1</sup> to be constructed on Point Loma, elevation 224 feet.

Base-end stations B<sup>3</sup>S<sup>3</sup>, existing stations on North Island, elevation 50 feet.

Base-end stations B<sup>4</sup>S<sup>4</sup>, to be built on Ocean Beach, elevation 60 feet (not built).

**Battery Strong (tactical no. 3; not yet constructed)**

BC and B<sup>1</sup>S<sup>1</sup>, to be constructed 200 yards south of Whistler, elevation 421 feet

B<sup>2</sup>S<sup>2</sup>, the present commanding officer's station on Point Loma, elevation 350 feet

B<sup>3</sup>S<sup>3</sup>, a 100-foot steel tower to be erected on Silver Strand

B<sup>4</sup>S<sup>4</sup> a 100-foot steel tower to be erected at Coronado Heights

B<sup>5</sup>S<sup>5</sup>, to be constructed near Mexican border, elevation 290 feet

B<sup>6</sup>S<sup>6</sup>, to be constructed on Ocean Beach, elevation 60 feet (not built)

B<sup>7</sup>S<sup>7</sup>, to be constructed on Soledad Mountain, elevation 290 feet

B<sup>8</sup>S<sup>8</sup>, to be erected at Torrey Pines State Park (not built)

**Battery Point Loma (tactical no. 4; not yet constructed)**

BC Station, to be constructed 150 yards east of the battery, elevation 250 feet

B<sup>1</sup>S<sup>1</sup>, to be constructed near the old lighthouse, elevation 253 feet

Coincidence range finder (CRF), at the battery, elevation 100 feet

Plotting room, in a plotting trailer, near the battery.

**Battery McGrath (tactical no. 5)**

BC station and CRF, 150 yards south of and above the battery, elevation 100 feet.

Many of the depression position finders (DPF, M-1-4 and other models), azimuth instruments (M1900 and M1910), and observing telescopes (M1908) were already on hand for these fire control stations. The large number of base-end stations required for the long-range guns of

Battery Strong was a marked contrast to Battery McGrath's single BC station.

The center of operations was the Harbor Defense Command Post (HDCP). This bombproof structure had a 12-foot by 12-foot observation station. Covered stairs led from it down to two underground rooms, one measuring 15 feet by 20 feet and containing telephones and charts, the other 20-foot by 20-foot space serving as the antiaircraft message center. Connected to the HDCP were fire control stations for Group 2 and the Group commanders. Before long a number of changes occurred for the HDCP which will be discussed farther on.

In addition to the eight coastal searchlights already installed at Fort Rosecrans and North Island, six portable searchlights were proposed for illuminating the extreme north ranges of the new armament. These sites ranged from Ocean Beach to Torrey Pines. Another four portable searchlights would be added in the south, at Coronado Heights and near the Mexican border. As a result, the two searchlight shelters now within Cabrillo National Monument on the Bayside Trail, which were originally 5 (HS5) and 6 (HS7) now became searchlights 11 and 12. [2] (By the end of World War II searchlights 1 through 27 were located at 14 sites from Cardiff to the border.)

340 (San Diego) 34536

REPORT OF COMPLETED WORK - MAGAZINE FORTIFICATIONS  
(Fire control or torpedo structures)

37536

Form 2

Corrected to January 20, 1943

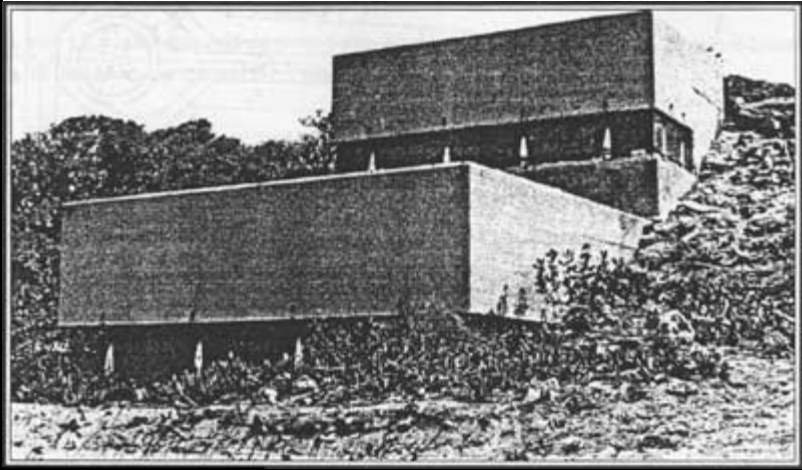
HARBOR DEFENSES OF SAN DIEGO, CALIFORNIA  
FORT ROSECRANS  
STRUCTURE: HARBOR DEFENSE COMMAND POST,  
HARBOR ENTRANCE CONTROL POST  
GROUP 1 COMMAND POST  
GROUP 2 COMMAND POST  
GROUP 3 COMMAND POST

STRUCTURE:  
Location: Cemetery Bluff, Point Loma  
Date of transfer: October 12, 1942  
Cost to that date: \$38,668.94  
Type of construction:  
Roof: Reinforced concrete  
Walls: Reinforced concrete  
Floor: Reinforced concrete  
Roof concealed: Earth cover and water growth  
Roof protected: Steel door and pilot covers  
Height above concealment: 16 feet (at observation station)  
Height above protection: 16 feet (at observation station)  
Compassion at 200 yards: 1  
ELECTRIC CURRENTS:  
Source of: Commercial power and stand-by  
generator (6 kv., 4)  
Elements required: 11.7  
Type of lighting fixtures: Incandescent 25000 - 200 w.  
HEAT:  
Hot heated: Not heated  
WATER AND SEWER:  
Connected to water main: Yes  
Connected to sewer: Yes (septic tank)  
Type of latrine: Flushproof - system jet  
Permanent or temporary installation: Permanent  
Present condition: Good  
REFERENCE:  
Reference of site: 15, 22, 209, 8 - 7, 18, 196, 9  
(the upper level D.P.F.)  
Reference of instrument axis: Elevation 421.36 & 477.20  
Type and capacity of crane: None  
Loc. dia. of reel handled: None

INSTRUMENTS AND EQUIPMENT:  
Type of clearing instru-  
ment: 1 D.P.F. instrument in each  
level  
Type of plotting board: None  
DATA TRANSMISSION:  
Type of: Telephone (installed by  
Signal Corps)  
Date of transfer: Not transferred (Signal  
Corps)  
Known (Signal Corps)  
Elevations are in feet above  
mean lower low water.  
Origin of U.S.M.S. local  
coordinates is U.S.C. &  
G.S. station "Old Town."  
See Navigation on reverse side

Harbor Defense Command Post (HDCP), Fort Rosecrans. The Antiaircraft Message Center (AAMC) became the Harbor Entrance Control Post (HECP). The additional room became the Army and [text missing]. (click on image for an enlargement in a new window)

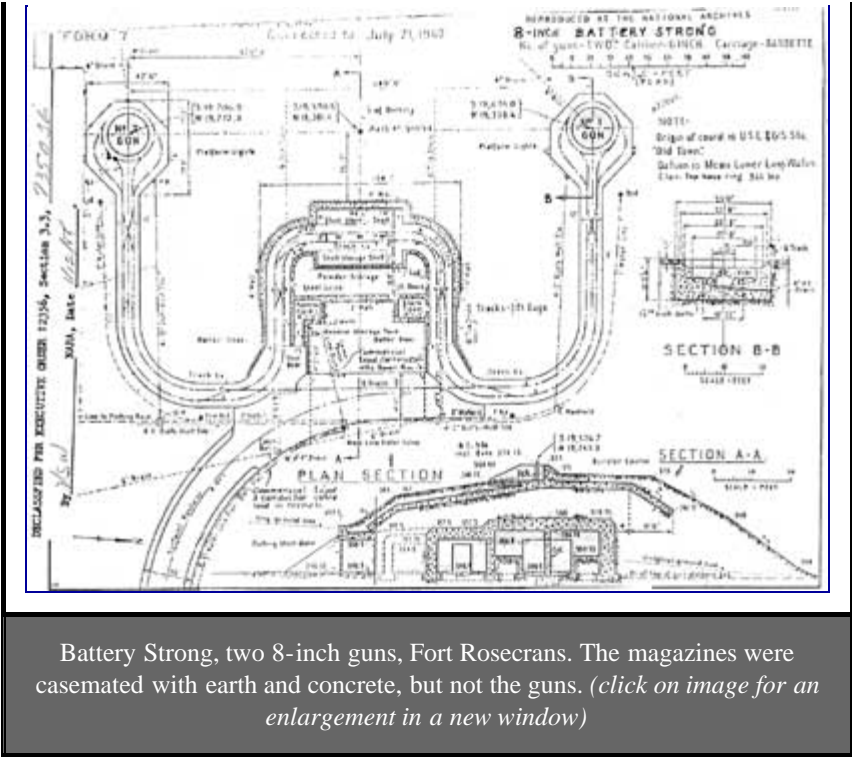
http://www.nps.gov/history/history/online\_books/cabr/hrs6.htm[12/28/2011 9:11:40 AM]



Upper: Battery commander's station for Battery Strong. Lower: Base-end station B1/2 S1/2 for Battery Strong. Currently located on Naval Ocean Systems Center property. *Photo courtesy of George R. Schneider.*



Upper: Harbor Entrance Control Post. Lower: Harbor Defense Control Post. Structure can easily be seen from the northwest section of Fort Rosecrans National Cemetery. *Photo courtesy of George R. Schneider.*



Battery Strong, two 8-inch guns, Fort Rosecrans. The magazines were casemated with earth and concrete, but not the guns. (click on image for an enlargement in a new window)

Although the Army had transferred Rockwell Field to the Navy, the Army retained the right to use the landing field. The annexes estimated that a flight of three aircraft would be necessary for the observation of fire for the long-range guns. These were in addition to whatever aircraft were necessary for reconnaissance and border patrol. [3]

B. Battery Strong

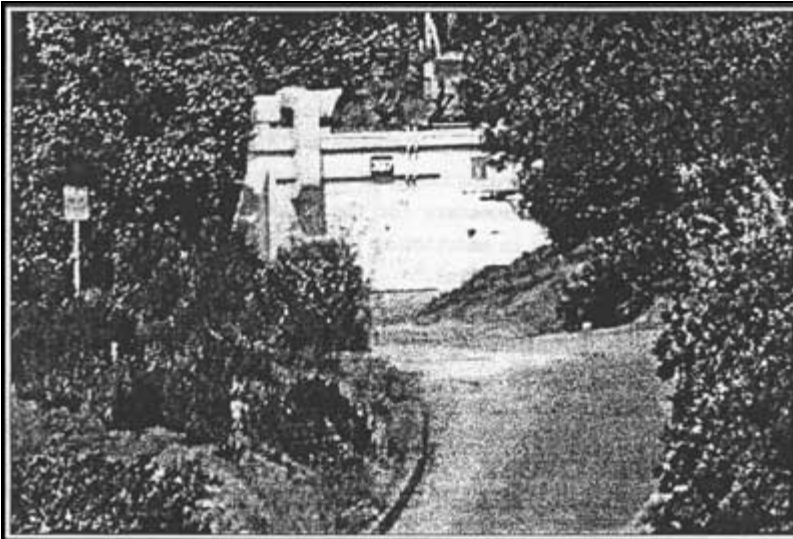
Construction began on Battery Strong early in 1937. The engineers selected a site on the ocean side of Point Loma toward the north end of the reservation. Barely had work got underway when U.S. Congressman Edouard V. Izac learned that several workmen on the project complained they were underpaid, their supervisors were incompetent, the work quality was poor, and there were no safety precautions. Izac queried Secretary of War Harry H. Woodring as to the circumstances. Los Angeles District Engineer Theodore Wyman, Jr., informed Washington that the complaints were unfounded. Two of the three men involved had performed unsatisfactorily and were no longer on the job, while the third man had been about to be promoted when he quit. [4]

In 1937 the Ordnance Office notified the Chief of Engineers that it would be at least a year before the 8-inch Navy, 45 caliber guns would be ready for shipment. In order to obtain the ballistics required it was necessary to redesign the powder chamber, which meant relining the guns. Also, ordnance would not complete the manufacture of the two barbette carriages until May 1938. The Watertown Arsenal supplied some statistics for an 8-inch. gun on a barbette carriage:

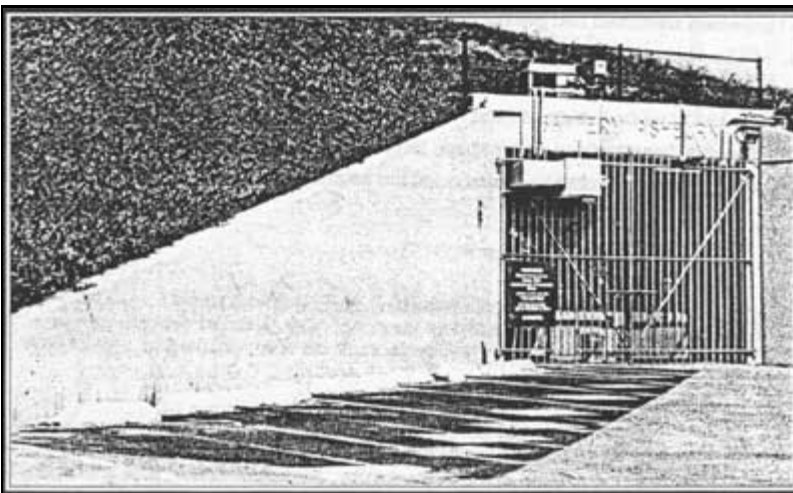
Gun, recoil band, and cradle complete	67,000 lbs.
Racer, side frames, and transoms	22,000
Distance ring	1,000
Base plate	9,000
Miscellaneous	4,000
Total	103,000 lbs. [5]



Long before the 8-inch guns arrived at Fort Rosecrans, the Adjutant General announced that the battery was named in honor of the late Maj. Gen. Frederick S. Strong, who graduated from West Point in 1880 and was appointed a lieutenant in the 4th Artillery. From 1916 to 1917, Brig. Gen. Strong commanded the Department of Hawaii. Promoted to major general in 1917, he organized the 40th Division (California National Guard) at Camp Kearny, California and took it to France in 1918. General Strong died in 1935 and was buried in Arlington National Cemetery. [6]



Battery Strong's magazine today. *Photo courtesy of George R. Schneider.*



Entrance to Battery Ashburn today. The 16-inch gun tube was mounted and dismounted through this door. *Photo courtesy of George R. Schneider.*

While waiting for the guns, the engineers carried out experiments in camouflage at the battery, without any great degree of success. The Coast Artillery became anxious too, stressing the fact that the navy was increasing its activities at San Diego and the battery was "imperative" for the defense. Finally, in August 1940 the Ordnance Department announced that the carriages were completed and the weapons would be proof-fired at Aberdeen Proving Ground. All good things take time and, in April 1941, the Los Angeles District Engineer reported the mounting of the armament at Battery Strong completed:

Guns					
	Caliber	Model	Serial No.	Manufacturer	Mounted
1	8-inch	3A2	193L2	Watervliet Arsenal	April 1941
2	8-inch	3A2	195L2	Watervliet Arsenal	April 1941
Carriages					
	Model	Serial No.	Manufacturer		
1	barbette	M-1	2	Watertown Arsenal	
2	barbette	M-1	1	Watertown Arsenal [7]	

---

<<< [Previous](#)                    <<< [Contents](#) >>>                    [Next](#) >>>

---

# CABRILLO

## The Guns of San Diego Historic Resource Study



### CHAPTER 7: WORLD WAR II AND AFTER, 1941-1948

On the first anniversary of the Japanese attack on Pearl Harbor, Fort Rosecrans' newspaper, Cannon Report, asked its readers, "Where Were You on Dec. 7th?" It replied to its own question:

Ft. Rosecrans was a hotbed of excitement. Furloughs were literally snatched away from men as they were leaving the gate. Soldiers out on passes rushed back as they never rushed before. Five men reported a Japanese submarine off Point Loma. Cpl. Don Whitehead, then on duty at headquarters, reflects: "The mass of telegrams, telephone calls and messages to man the guns gave me the most thrilling experiences yet. A day I'll never forget." [1]

When Japanese planes bombed Oahu, the Harbor Defenses of San Diego went on full alert. Troops moved to the gun positions immediately. Soldiers hauled ammunition to the coastal guns. Machine guns were set up. Guards prohibited citizens from entering the reservation, thus isolating Cabrillo National Monument. Batteries H and I, 19th Coast Artillery, set up 30 caliber machine guns for the antiaircraft protection of the Consolidated Aircraft Company. The Harbor Defense Command Post and the Harbor Entrance Control Post were manned immediately and continuously until the end of the war. Battery Point Loma replaced Battery McGrath as the alert/examination battery. [2]

#### A. Battery Ashburn

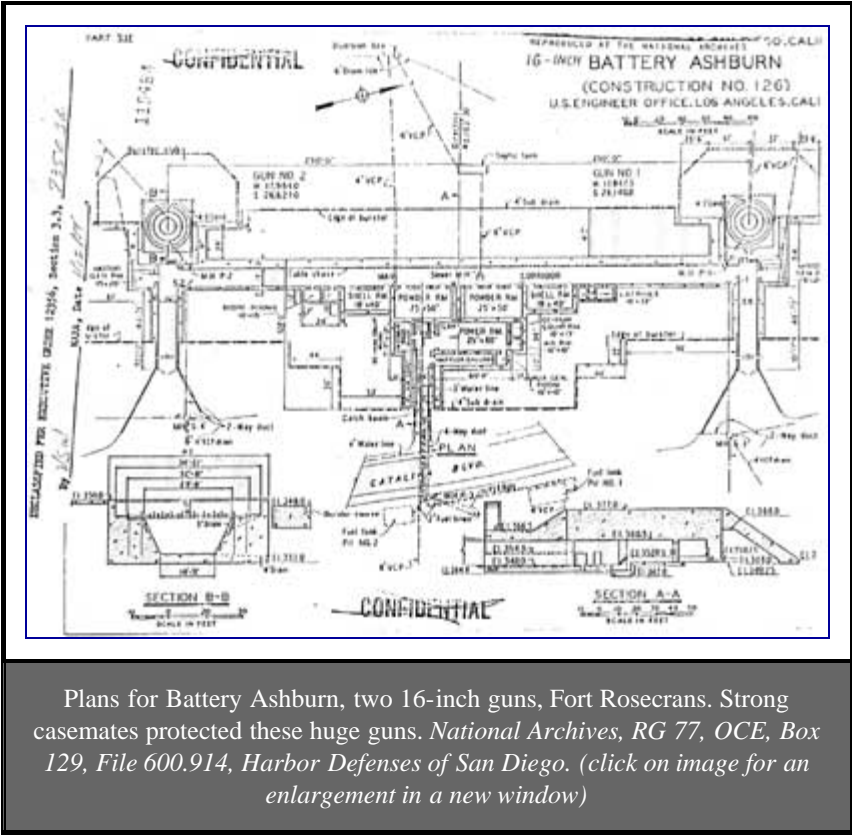
In November 1941, the Chief of Engineers received funds for the construction of a 16-inch gun battery at Fort Rosecrans. These two guns, the largest type in the harbor defenses of the United States, were the only ones in San Diego's defenses to be casemated. Known first as Battery Construction No. 126, it was named in honor of Maj. Gen. Thomas Quinn Ashburn, who graduated from West Point in 1897 and began his army career in the Artillery. He won a Silver Star in the Philippines and a Purple Heart in France. General Ashburn died in 1941.

The Macco Construction Company began work on the battery in June 1942 and completed it in March 1944 at a cost of \$1,324,000. The guns were proof-fired in July, but the gun shields did not arrive until early 1945. The data concerning the guns and the barbette carriages were as follows:

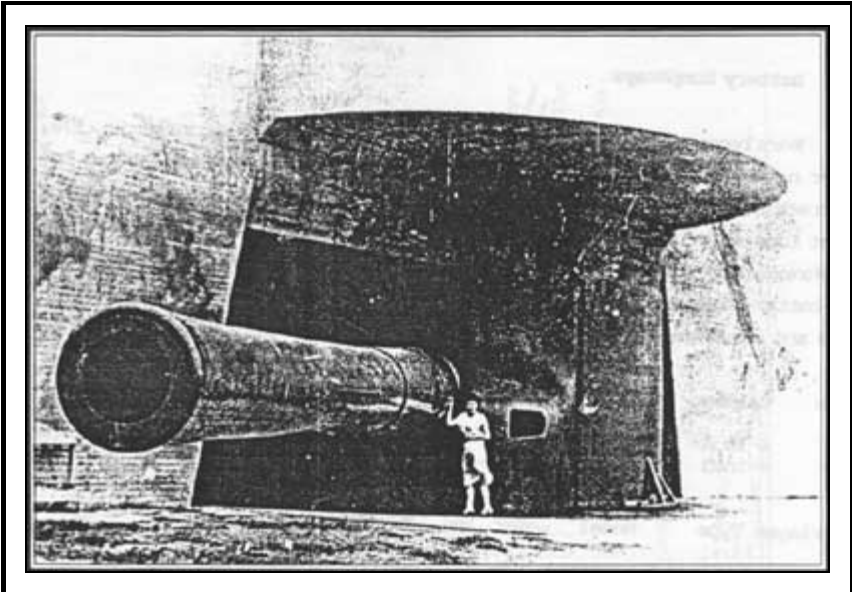
Guns	Caliber	Length	Model	Ser. No.	Manufacturer	Mounted
1	16-inch	816 in.	I	71	Bethlehem Steel	March 1944
2	16-inch	816 in.	Mark II Model I	97	Watervliet Arsenal	March 1944

Carriage Type	Model	Ser. No.	Manufacturer
1 barbette	M-4	31	Wellman Engineering Company
2 barbette	M-4	39	Watertown Arsenal

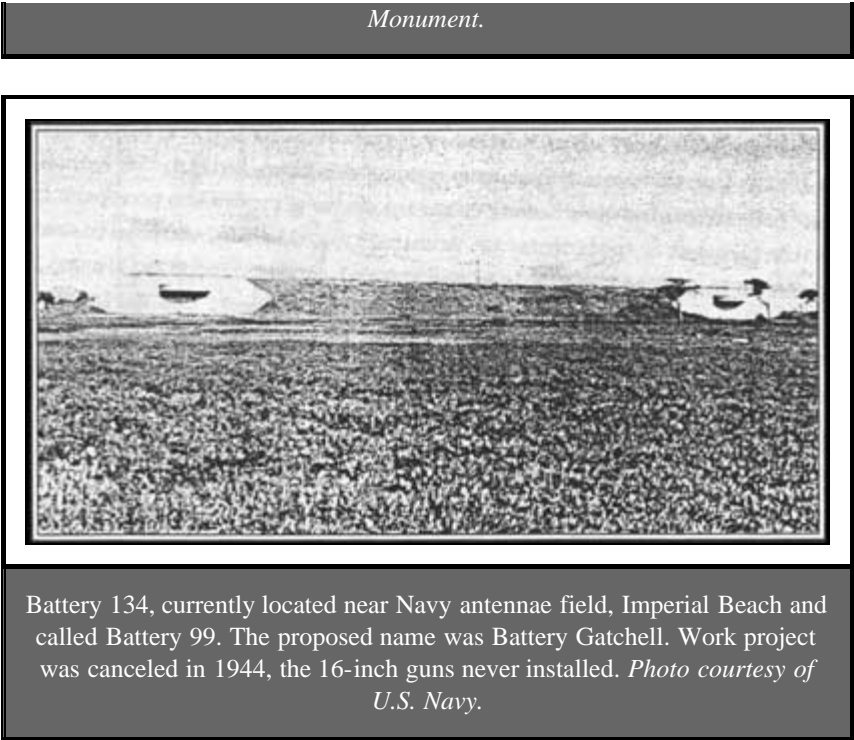
Battery Ashburn served through the rest of the war but was declared surplus in May 1948, with the advent of atomic bombs and missiles. [3] Ashburn's plotting and switchboard room (PSR) was built as a large underground concrete structure to the north and east across the road from the battery.



Plans for Battery Ashburn, two 16-inch guns, Fort Rosecrans. Strong casemates protected these huge guns. *National Archives, RG 77, OCE, Box 129, File 600.914, Harbor Defenses of San Diego.* (click on image for an enlargement in a new window)



One of Battery Ashburn's two 16-inch guns. This photo must have been taken after World War II. The army would not have allowed such a picture during the war. *Courtesy, historic photo collection, Cabrillo National*



B. Battery Humphreys

Work began on the first of three 6-inch batteries, Construction No. 238, later named Humphreys, in February 1942. V. R. Dennis of San Diego won the contract in the amount of \$128,000 (actual cost, \$200,000). Located on top of Point Loma above the new lighthouse, it was named in honor of Capt. Charles Humphreys, Fort Rosecrans' first commanding officer. The engineers considered the battery completed on October 14, 1943. A completion report recorded the guns and carriages thus:

Guns			Caliber	Model	Ser. No.	Manufacturer
1	6-inch	M1903A2	1			Watervliet Arsenal
2	6-inch	M1903A2	101			Watervliet Arsenal

]

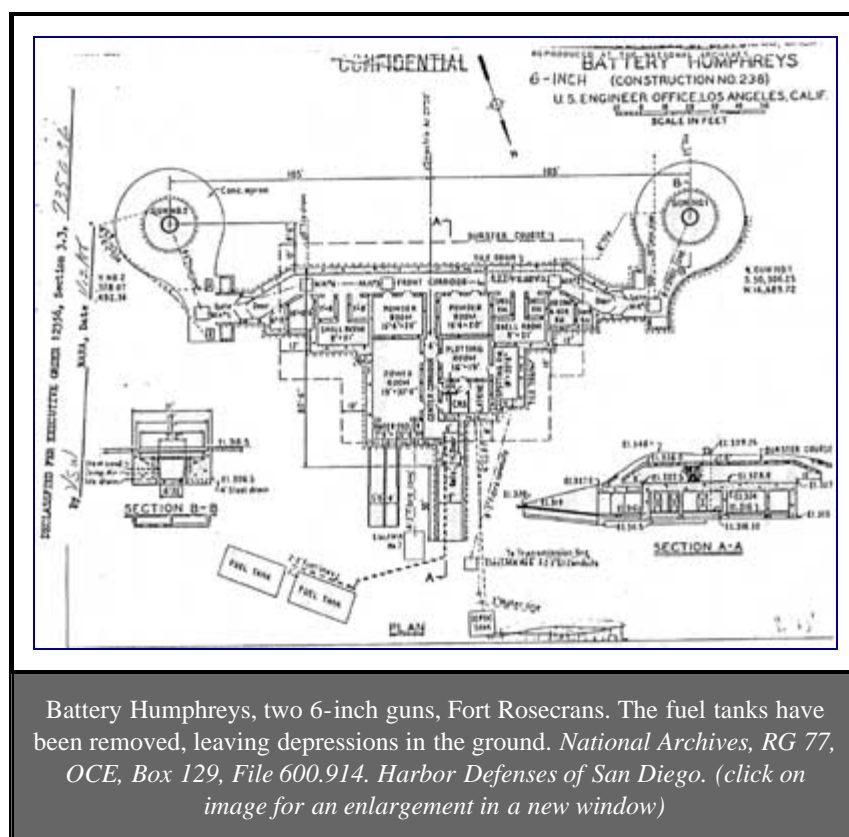
Carriages		Type	Model	Ser. No.	Manufacturer
1	barbette	barbette	101		Wellman Engineering Company
2	barbette	barbette	100		Wellman Engineering Company

C. Batteries Gillespie and Zeilin

Before the attack on Pearl Harbor, the Army allowed the Marines to emplace two gun batteries in northwest Fort Rosecrans for training purposes:

Battery Gillespie, three 5-inch navy guns, and Battery Zeilin, two 7-inch navy guns. Both batteries were named for Marine Corps officers who took part in the American conquest of California: Lt. Archibald H. Gillespie, who came to Kearny's assistance following the Battle of San Pasqual, and Lt. Jacob Zeilin who later became commandant of the Corps. Soon after December 7, the Marines turned both batteries over to the Army and soldiers manned them on a twenty-four hour basis. Col. Ottosen expected to keep the guns as long as the Marines

did not require them. The colonel reported that Battery Gillespie, along with Battery Point Loma, had an antisubmarine mission. [5] A 155mm battery was manned by HDSD troops for several months after the beginning of the war at Camp Callan Coast Artillery Replacement Training Center south of Torrey Pines State Park.



[<<< Previous](#)

[<<< Contents >>>](#)

[Next >>>](#)



# CABRILLO

## The Guns of San Diego Historic Resource Study



### CHAPTER 8:

## ROADS, STATUES, CEMETERIES, AND FORT ROSECRANS

### A. Roads

The construction of a lighthouse on Point Loma in 1854 caused the first crude road to be built to the top of the peninsula. Eighteen men worked for thirty-five days to carve out the road from Ballast Point to the lighthouse site. Today a road crawls up the slope from the south end of Ballast Point to the top of the ridge, possibly on the alignment of that first road. In order for the keepers to haul in fresh water and supplies, the Congress appropriated \$1,500 to build a road from La Playa along the Point Loma ridge to the lighthouse, which was built in 1857. [\[1\]](#)

When army engineers began construction of the Endicott batteries at Ballast Point in 1897, they found the roads on Point Loma in terrible condition. Col. Charles R. Suter wrote that it was necessary to construct a road along the harbor shore from a wharf at La Playa to Ballast Point and beyond to Billy Goat Point. From there one branch should climb up the slope to the old lighthouse, while another would continue on to the south end of the peninsula. The old road from Ballast Point, built by the lighthouse contractor forty years earlier was in need of reconstruction. Also, the road along the ridge needed strengthening for the hauling of ammunition. Because the engineers did not construct proposed batteries at Billy Goat Point and on top of Point Loma at this time, the colonel's recommendations were not carried out, with the exception of a rough road from La Playa to Ballast Point, the predecessor of Rosecrans Street. [\[2\]](#)

In 1908 the Chief of Engineers learned that the City of San Diego had begun construction of a 100-foot-wide boulevard around the upper end of San Diego Bay and which led toward the naval reservation and Fort Rosecrans. The local army engineer considered it advisable that the new road should be continued through Fort Rosecrans. Such a road would be of great value in time of war, "as well as affording conveniences of travel for visitors, the majority of whom desire to go to the top of the peninsula near the southerly end where the view in all directions is extraordinarily fine." The Army's Quartermaster General caused such a road, three miles long and surfaced with decomposed granite, to be constructed out to the old lighthouse in 1910 at a cost of \$30,000. [\[3\]](#) It is an extension of Catalina Boulevard and is now known as Cabrillo Memorial Drive.

The construction of searchlights 5 and 6 and their power plant near Billy Goat Point in 1918-1919 led to the building of a road "merely graded, without surfacing" from Ballast Point to Billy Goat Point. From the point a trail continued on curving up the hill to the old lighthouse. In the beginning the road was called Meyler Road, in honor of 1st. Lt. James J. Meyler, the engineer who built the first Endicott batteries at San Diego. Later it was named Sylvester Road in honor of 1st Lt. William G. Sylvester, the first coast artillery officer killed in action

in WW II, at Hickam Field, Hawaii on Dec 7, 1941. For the same reasons, a dirt road was constructed from the northern part of the reservation south along the west side of the peninsula to the new lighthouse, now known as Cabrillo Road. The cost of both roads was estimated at \$3,000 per mile. [4]

In 1933, the year the Army transferred Cabrillo National Monument to the Department of the Interior, the Secretary of War gave permission to the State of California to extend and maintain a state road through the military reservation to the old and new lighthouses. Dedicated on July 24, 1934, this road has been named Cabrillo Memorial Drive. [5] Also in 1934, the post commander, Col. George Ruhlen, had the trail from the old lighthouse to Billy Goat Point widened into a road that tied into Meyler Road, thus creating a loop on the eastern half of the peninsula. In 1974 the Navy declared a portion of the loop road surplus and it was added to Cabrillo National Monument. Known today as the Bayside Trail, the old oiled road and its military and natural history have been incorporated into the monument's interpretive program. [6]

## B. Statues

In 1892, on the occasion of the 350th anniversary of Cabrillo's discovery of San Diego Bay, the citizens of San Diego and Southern California celebrated "Discovery Day" on September 28-30. Parades, boat races, Indian demonstrations, a reenactment of Cabrillo's coming ashore, banquets, and a grand ball marked the festive occasion. The Sun newspaper thought that the successful affair should be made an annual event. The San Diego Union, meanwhile, advocated a monument to Cabrillo, perhaps a pile of rough boulders on the crest of the hill in the city park. But the time was not ripe for either a holiday or a monument. [7]

As San Diego prepared to hold the Panama-California International Exposition scheduled for 1915, a local group, the Order of Panama, planned to construct a 150-foot statue on the Army's Point Loma. For that purpose President Woodrow Wilson signed a proclamation establishing Cabrillo National Monument on October 14, 1913. The land consisted of the half-acre on which the old lighthouse stood. The Order of Panama planned to demolish the lighthouse and build the statue on the site. Despite the enthusiasm with which this movement began, detailed plans were not prepared. Attention turned to the exposition. When the successful fair ended, the Order of Panama disbanded. The Native Sons of the Golden West next became interested in a monument to Cabrillo on Point Loma, in 1926. But when efforts to raise funds failed, hopes dashed and interest disappeared. [8]

The Portuguese government originally commissioned Alvaro DeBree to create a statue of Cabrillo for exhibition at the 1939 New York World Fair. Too late for New York, the fourteen-foot statue arrived in San Francisco for that city's 1940 world fair. The damaged statue never got to the fair but ended up in a private garage in San Francisco. Col. Ed Fletcher, a state senator from San Diego, believed that the statue should come to San Diego. Governor Culbert Olson, however, promised the statue to the city of Oakland where a large number of Portuguese had settled. Fletcher persuaded the owner of the garage that he had the authority to remove the statue and took it to San Diego before Governor Olson could object. At San Diego the statue was placed at the west end of the Naval Training Center where it stayed through World War II. [9]

In 1949 the City of San Diego paid to have the seven-ton statue moved to Cabrillo National Monument where it was rededicated on September 28 at a site near the lighthouse. [10]





Statue of Juan Rodríguez Cabrillo, Cabrillo National Monument. *Photo courtesy of George R. Schneider.*



Old Point Loma Lighthouse, Cabrillo National Monument, in service from 1855 to 1891. *Photo courtesy of the National Park Service.*

A 150-foot Cabrillo statue sprang into the news once again in 1967, when San Diego Mayor Frank Curran announced a plan to construct one at Cabrillo National Monument, a west coast version of the Statue of Liberty. After considerable debate and delay, the National Park Service objected to the huge size of the projected statue. A proposal was developed for a much smaller statue, but Mayor Curran was not impressed. For the third time, the concept of a 150-foot statue faded away. [11]

In 1959 President Dwight Eisenhower signed a proclamation transferring approximately eighty acres of former Fort Rosecrans land to Cabrillo National Monument. This vast increase in acreage allowed the National Park Service to plan a huge increase in visitor services and interpretation of the historic lighthouse, Cabrillo's discoveries, and the natural history of the monument. The museum in the new visitor center told the story of Cabrillo's voyage. Nearby is a magnificent overlook that commands views of the ocean, North Island, San Diego Bay, the city, and the mountains. The National Park Service moved the Cabrillo statue from the lighthouse to this dramatic site in 1966. A concrete structure at this site had to be removed to make room for the statue.

The original statue, carved from a porous, stratified limestone and broken, even before it came to the monument, suffered in the maritime air in the years since its arrival. In the 1980s steps were initiated to have an exact duplicate of the statue carved by a Portuguese sculptor, Joao Charters Almeida, from harder stone. The original statue was carefully removed and placed in permanent storage. The duplicate work was installed amid ceremonies involving the Portuguese and Spanish governments in February 1988. The gleaming white statue continues to command the magnificent vistas that greeted Cabrillo so many years ago. Carved on the front of the imposing statue is "Joao Rodrigues Cabrilho," on the reverse, "Joao Rodrigues Cabrilho, Descobridor California 1542," and the name of the original sculptor, "Alvaro DeBree, 1939, Lisboa." A new plaque, a tribute from the Portuguese Navy, has been emplaced near the base of the statue. Spain's navigator, who died in California's lands, is thus commemorated at Cabrillo National Monument. [12]

### C. Fort Rosecrans National Cemetery

When Pvt. John T. Welch, 8th Infantry, died at San Diego Barracks in 1879, his remains were buried on the crest of the military reservation at Point Loma. The Army named the one-acre burial place "Post Cemetery, San Diego Barracks (Point Loma)." In 1888 the remains of the eighteen First Dragoon soldiers killed in the battle of San Pasqual in 1846 were removed from a civilian cemetery in San Diego and reburied in the post cemetery, the gravesite marked "Unknown." The Native Sons and Daughters of the Golden West rectified this in 1922 when they placed a granite boulder taken from the San Pasqual battlefield on the site. A bronze plaque affixed to the boulder listed the eighteen names. When Fort Rosecrans was established in 1899, its name was applied to the cemetery. [13]

As the Navy's and Marine Corps' activities increased in San Diego, these services used the cemetery for their dead. When an explosion tore apart the boiler room of USS Bennington in San Diego Harbor in 1905, one officer and sixty-five of the crew lay dead. The Navy interred the remains of thirty-five sailors in the post cemetery. The officers and men of the Pacific Squadron erected a seventy-five-foot high granite obelisk "to the Memory of Those Who Lost Their Lives in the Performance of Duty." [14]

By 1913 space had become a rarity in the cemetery, so much so that the Quartermaster General asked the War Department for funds to enlarge the area. Funds were not available, nor were they a year later when the post quartermaster submitted a requisition for \$1,320 for a wrought-iron fence to be placed around the cemetery. [15] In 1915 the post commander, Lt. Col. W. C. Davis, recommended that the cemetery be enlarged to twice its size, a caretaker employed, a lodge built for a superintendent, and that legislation be secured designating it as a national cemetery. His recommendations went unheeded. [16]

Affairs reached a crisis in 1932 when an inspector general visited Fort Rosecrans. He inspected the cemetery and found it to be in excellent condition. But the available space would be filled by the end of the year. The average annual rate of internments over the past five years had been nineteen, and but twenty-one plots remained in the enlisted section. The officers' section, however, still had sufficient space for some time to come. At that time the Army was considering abandoning Fort Rosecrans, thus the Inspector General recommended that the post cemetery be made a national cemetery. Upon receipt of these remarks, the War Department decreed that the cemetery would not be enlarged, but that only army personnel could be buried there. The Quartermaster General so notified the Chief of Naval Operations. [17]

A more permanent solution was achieved in 1934 when War Department General Orders No. 7 designated eight acres of Fort Rosecrans as Fort Rosecrans National Cemetery. Since then

additions to the cemetery have brought its size to seventy-one acres. Even so, in 1966 the Army announced that the national cemetery was closed to internments "except for those in reserved gravesites". [18]

In 1973 the Department of the Army transferred jurisdiction of the national cemetery to the Veterans Administration. Grave markers identify seven men awarded the Medal of Honor: Brig. Gen. Ross L. Winans, U.S. Marine Corps; Capt. Willis W. Bradley, U.S. Navy; Lt. John E. Murphy, U.S. Navy; Lt. Cdr. William S. Cronan, U.S. Navy (USS Bennington); Ens. Herbert C. Jones, U.S. Navy (killed at Pearl Harbor, December 7, 1941); S. Sgt. Peter S. Connor, U.S. Marine Corps (Vietnam); and Sgt. Anund C. Roark, U.S. Army (a memorial marker; his body was not recovered in Vietnam). There are 158 additional memorial markers for men whose remains were not recovered, or identified, or who were buried at sea. Every day the flag of the United States flies twenty-four hours. [19]

## **D. Fort Rosecrans**

World War II developments such as long-range missiles and the atomic bomb rendered the traditional coastal defenses obsolete. Amphibious warfare, especially as it was developed in the Pacific, made it unnecessary to capture an enemy's ports when invading his territory. The demise of the Harbor Defenses of San Diego came swiftly. In March 1947 Fort Rosecrans was placed in a caretaking status with a garrison of 101, which number would further decline. The Department of the Army ordered the forty-nine-year-old fort to be a subinstallation of Fort MacArthur at Los Angeles effective December 1, 1948. The Harbor Defenses of San Diego were formally discontinued on January 1, 1950. [20]

The Department of the Army transferred Fort Rosecrans to the Department of the Navy in May 1957. The army, however, did not leave the installation until March 1959 and the Navy occupied the fort in June:

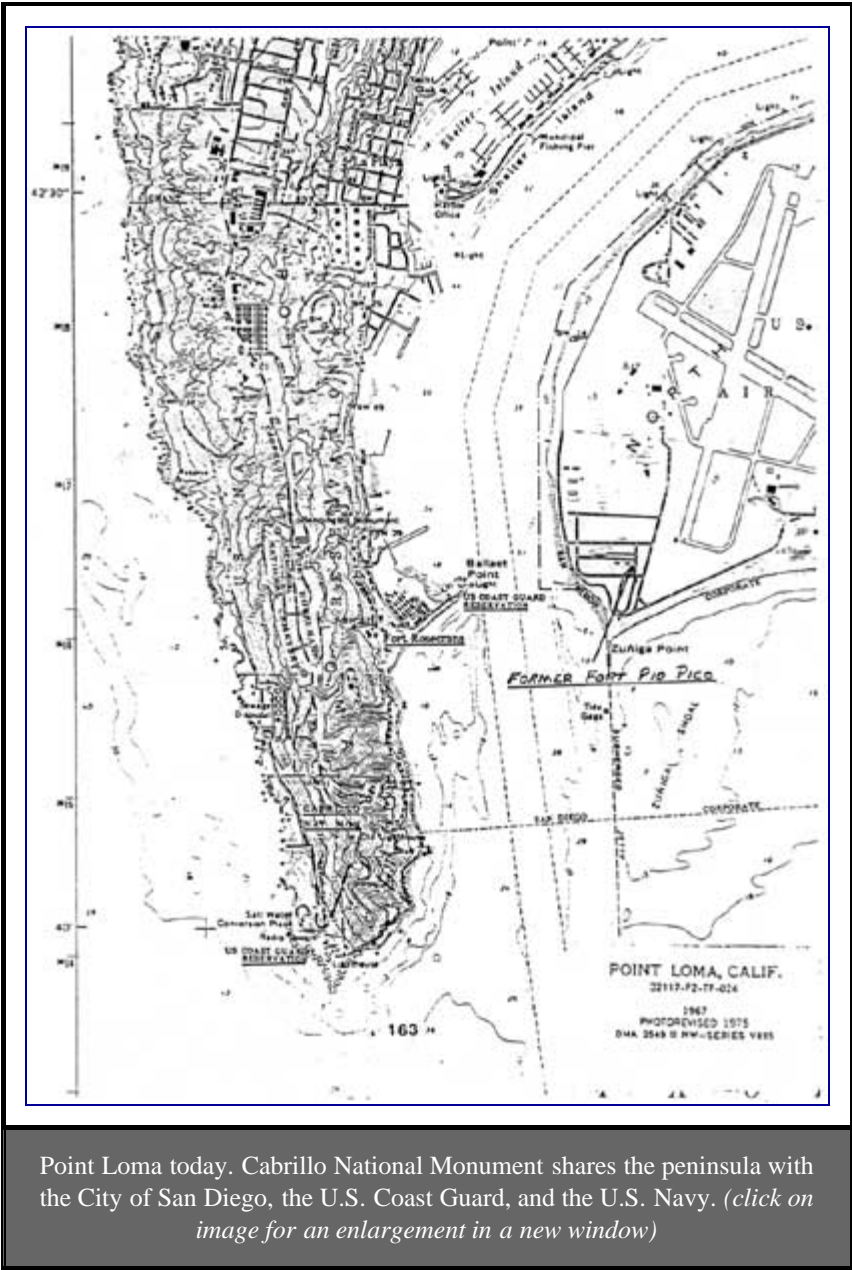
On Wednesday, San Diego's Fort Rosecrans will end its long career as an Army post. The fort's Regular Army detachment of one officer and four enlisted men will turn the 557 acre post over to Navy maintenance personnel, and for the first time in 61 years, the old harbor bastion will be without a garrison. There will be no ceremonies... [21]

The U.S. Navy had first come to Point Loma in 1904 when the War Department transferred the north end of Fort Rosecrans to the Navy for a coaling station and, in 1906, a naval radio station. Point Loma Naval Reservation today has a Submarine Base, Degaussing Station, Naval Supply Center, Fleet Combat Training, and the Naval Ocean Systems Center (NOSC), which "is a major contributor of communications and electronics data applicable to the Navy's fleet operations. [22]

The 16-inch-gun Battery Ashburn now houses a micro-electronics laboratory, while 12-inch-mortar Battery Whistler is home to the Arctic Submarine Research Laboratory. The Navy uses 6-inch-gun Battery Woodward as a radio facility. Both 8-inch-gun Battery Strong and the former Harbor Defense Command Post contain communications systems laboratories. The Navy has installed offices and a Naval Reserve HECF in 6-inch-gun Battery Humphreys. The Submarine Base has adapted 12-inch-mortar Battery John White for use as shops and storage, and 3-inch-gun Battery McGrath for use as an explosives magazine. Battery Calef-Wilkeson's magazines are currently used for storage by the Naval Submarine Base. Many of the Fort's original barracks and officers' quarters are used by the Submarine Base as offices and quarters. Fort Emory at Imperial Beach was transferred to the Navy in 1947 as part of the Naval Radio Station which had been established there in 1920. In a different way, the harbor



defenses of San Diego continue to exist. [23]





# CABRILLO

## The Guns of San Diego Historic Resource Study



### CHAPTER 9:

## HISTORIC RESOURCES CABRILLO NATIONAL MONUMENT

### Old Point Loma Lighthouse

Built in 1854 as one of the first navigational lights on the west coast of the United States, the lighthouse is a prime historic resource at Cabrillo National Monument. It served mariners at sea and was a harbor light for San Diego Bay for thirty-seven years. Situated at an elevation of 422 feet, the light was the highest in the United States. From time to time high fogs dimmed its effectiveness, thus the light was abandoned in 1891 in favor of one at a lower elevation. The Army at Fort Rosecrans became responsible for the structure but allowed the lantern housing to deteriorate. Married noncommissioned officers and their families lived in the residence and there is a suggestion that one woman maintained a store of sorts around 1911, possibly for the many visitors who came out to Point Loma for the magnificent views. [1]

The site of the lighthouse became Cabrillo National Monument in 1913 and, while some commanders of Fort Rosecrans desired to remove the lighthouse, it remained standing. [2] The Department of the Interior acquired the monument in 1933 and the National Park Service carried out the restoration of the structure. A concessionaire occupied the building before and after World War II. The Interior Department permitted the Cabrillo National Monument to the War Department in 1941 and the Navy occupied the structure as part of its signal station for the duration of the war. During this period the white building was painted in camouflage colors. The Army made minor repairs to the building before returning it to the National Park Service in 1946.

In the early 1980s the National Park Service prepared a historic structure report for the lighthouse complete with recommendations. Further restorations have been carried out. Today the two-story, twenty feet by thirty feet, sandstone residence and the brick tower which it surrounds have been furnished to approximately the appearance of an 1887 keeper's home. It is an unmanned exhibit-in-place and a 134-year-old San Diego landmark.

### Army Radio Station

Constructed in 1918, this small concrete structure was the Army's first radio station in the Harbor Defenses of San Diego. Among its duties was the challenging of vessels approaching the harbor during international emergencies. By World War II, army and navy radios operated from the harbor defense command post and the radio station became the meteorological station for the coast artillery. When National Park Service personnel manned the monument after the war, the superintendent established his offices in the building until the present administration building was erected under the MISSION 66 program. Today the building is used for storage. The building had three rooms: an operating room, motor-generator room, and sleeping room. Overall, dimensions are twenty-one feet, eight inches by

fifteen feet, eight inches.

### **Battery Commander and Base End Station, BC3 and B1/3 S1/3, Battery Ashburn**

Constructed during World War II, this concrete and steel fire control station was most important in Harbor Defenses of San Diego in that the battery commander of 16-inch-gun Battery Ashburn operated from the top level (BC3) directing the fire of his guns. The lower level (B1/3 S1/3) served as one of five base end stations for Ashburn. The roofs have been camouflaged to resemble large rocks. Steel rings on the roofs were anchors for camouflage netting. The steel shutters that protected the observation slits remain and the structure is in excellent condition. An exterior flight of concrete steps leads to the lower level.

### **Electrical Connection Box**

This concrete connection box, part of the artillery fire control system, stands on the waterside of the Bayside Trail. Within the metal door is an aluminum box marked "1909 Engineers Department U. S. Army, Colin Electric Company, New York." On the exterior of the structure is "1941, U.S.A.," indicating that this box was installed as part of the modernization program on the eve of America's entry into World War II. The dimensions are: width, two feet, four inches; length, three feet, two inches; and height, three feet, eight inches.

### **Searchlight Shelter**

This concrete shelter protected a 60-inch coastal searchlight. Engineers built it in 1918-1919. It is an above-ground structure built into a cliff on the land side of the Bayside Trail at an elevation of 218 feet. The searchlight was mounted on narrow-gauge rails that ran from the structure up the Bayside Trail about seventy-five feet to a point overlooking the entrance to San Diego Harbor. A short section of these rails remains within the shelter and protrudes under the door. The double door was wood framed and covered with metal. Earth and vegetation covered the flat roof blending the shelter into the hill above. The structure measures sixteen feet in length, twelve feet in width, and thirteen feet in height. Originally searchlight no. 5, it was renumbered 11 when additional lights were added in 1936, and in World War II it became searchlight no. 18.

### **Searchlight Generator Plant**

The concrete power plant for searchlights 5 and 6 was built into a ravine between the two lights in 1918-1919. It had two rooms: a radiator room with two metal doors, that were opened for cooling, and two gassed windows above the doors; and the engine room that contained two 25 kw generating sets. The engine room had a wooden door leading to the exterior and two large, glassed windows. Today, one of these windows is filled in and the doorway has been doubled in width. The three remaining windows are now covered with vertical steel bars. When the building was constructed, two exhaust pipes emerged from the front of the structure and rose up over it. A part of one remains. Two ventilators stood on the flat roof which was covered with earth and vegetation. The dimensions of the structure are nineteen feet by twenty-nine feet. Two underground gasoline tanks in front of the structure have been removed.

### **Searchlight Shelter**

The underground searchlight shelter, built in 1918-1919 at an elevation of 210 feet, contained 60-inch searchlight no. 6. The light was renumbered 12 in 1936, and 19 in World War II. The concrete pit is covered with a steel sliding door on rollers. This door or roof has a slightly sloped hip. Personnel access is through a steel-covered manhole and metal rungs embedded in a wall. The counterweighted elevator can still be operated manually with a chain sprocket

drive. An original wood locker remains in a corner. The portion of the shelter that contained the elevator and searchlight is fourteen feet in depth, while the personnel portion is nine feet, six inches deep. The interior of the structure measures eighteen feet by ten feet, eleven inches. The shelter is several feet above the Bayside Trail and cannot be seen by passers-by.

### **Base End Station**

The nearer of two fire control stations above the Bayside Trail near the north boundary of the monument was constructed circa 1920. It served as a base end station for the 10-inch guns of Batteries Wilkeson and Calef. [3] It is an example of the first base end stations constructed at Fort Rosecrans. The flat roof was originally covered with earth and vegetation. Later, probably in World War II, the roof was covered with cemented boulders. Steel shutters cover the observation slits which are on two sides of the structure. A steel-covered manhole in the roof allows entrance to the station. Dimensions of the structure are six feet, ten inches by seven feet, ten inches, and six feet, six inches in height. On the floor is a low, concrete, octagonal base for a depression position finder. This station may be seen from near the north end of the Bayside Trail, but access to it is difficult and dangerous and damaging to vegetation.

### **Base-End Station**

This fire control station, about twenty feet above the previous, was also built circa 1920. It is identical to the other in appearance. Besides the octagonal DPF base, the station still has the swivel bench the observer sat on. The station served either Battery Wilkeson or Battery Calef. When Calef-Wilkeson was abandoned in 1942, neither base end station 8 nor 9 was reassigned.

### **Commander's Station and Base End Station, BC6 B1/6, Battery McGrath**

Located directly below the Cabrillo Statue, this fire control station was also built in 1920 and is identical to Nos 8 and 9. It served as 3-inch Battery McGrath's sole fire control station. McGrath was the only Endicott battery incorporated into the modernization of San Diego's harbor defenses.

### **Battery Bluff**

Engineers constructed this two-weapon 37mm battery in 1942. It served as an anti-motor torpedo boat (AMTB) battery for the entrance channel. Each emplacement consisted of an arc of concrete three feet wide and two feet high on the inside. The eight bolts for a base plate, embedded in concrete, may be seen in the more northerly emplacement. Farther north, standing alone, is a four-foot steel pipe filled with concrete. When the battery was active, an azimuth instrument was mounted on this pipe. A short distance north of the pipe are two U.S. Coast and Geodetic Survey markers, both dated 1933.

Between the emplacements and to the rear is a circle of concrete three feet in diameter with a hole in the center about one foot in diameter. This object has not been identified as to function. Still farther to the rear is a depression in the ground. Nearby are fragments of window glass and plaster. South of the battery, across a gully, a square wooden box is sunk into the ground. It measures about five feet by five feet and about 2-1/2 feet deep. Still farther south at the mouth of a deep ravine lie the wooden ruins of an unknown structure. The battery can be spotted from the Bayside Trail but its function is not apparent to the casual visitor. Access to it is not permitted because of the delicate vegetation and already severe erosion, as well as the steepness of the terrain.

### **Battery Commander Station, Battery Humphreys and Base-End Station, Battery**

## **Woodward, BC5 and B1/5 S1/5**

The two-level fire control station, immediately below the Whale Overlook, is of World War II construction. The concrete and steel structure has slightly domed roofs that have rocks cemented on them for purposes of camouflage. The observation slits are covered with steel shutters making them splinterproof. The upper level, BC5, served as the battery commander's station for 6-inch-gun Battery Humphreys. The lower level's observation room was Humphreys' No. 1 base-end station. The concrete octagonal platform for a depression position finder remains but the steel pipe for an azimuth instrument has been removed. Personnel entered the structure through a manhole in the roof of the upper level and an interior ladder led to the lower level. The rear room in the lower level was sometimes used as sleeping quarters. Visitors may view the structure from a short spur trail.

## **Base-End Stations for Battery Woodward, B2/1 S2/1, and Battery Grant, B4/10 S4/10**

Almost identical in construction to HS-12 above, this fire control station served as base-end station to two 6-inch-gun batteries: the upper level, B2/1 S2/1, served Battery Woodward in north Fort Rosecrans, and the lower level, B4/10 S4/10, for the guns of Battery Grant at Fort Emory. HS-13, farther down a steep slope than HS-12, may not be visited due to erosion problems and physical danger to visitors.

## **Battery Point Loma**

Because of delays in the modernization of San Diego's harbor defenses, the Army installed a battery of four mobile, 155mm guns 300 yards north of the new Point Loma lighthouse before World War II. Battery Point Loma covered the water areas to the west and northwest of San Diego. The guns arrived at Fort Rosecrans in 1939. Engineers constructed "Panama" mounts for the guns in 1941. After Pearl Harbor Point Loma became the challenge battery for the harbor defenses and the primary anti-submarine battery. The guns were removed circa 1943 when a 90mm AMTB battery was emplaced in the same area.

The four Panama mounts remain in place. Archaeologists have excavated emplacement no. 4 at the south end of the battery. The mounts were ninety feet apart, center to center. In the center of each emplacement was a circular concrete pad ten feet in diameter, on which the gun rested. Outside the pad was a circle of concrete, three feet wide and having a diameter of 38-1/2 feet. This complete circle allowed for 360 degrees traverse. A circular steel rail was embedded in the concrete on which the gun's trails rode.

An underground communications trench in the rear of the battery ran from gun no. 1 to gun no. 4. In the vicinity of gun no. 4 are three bunkers: one is about ten feet long and is made of corrugated, galvanized iron barrel vault, similar to a quonset hut; a second is approximately forty feet long and the corrugated, galvanized iron barrel vault is surrounded by a layer of concrete; the third bunker is similar to the first. The ruins of tunnels that connected these bunkers to the communications trench may be traced. Three additional bunkers are in the vicinity of gun 1. They are similar to those near gun no. 4.

While the one plan of Battery Point Loma does not show these bunkers, it is probable that the two bunkers covered with concrete were built as ammunition magazines but used as bunk rooms. Inside both of them are remnants of wood frames covered with chicken wire. These "bunks" have collapsed at gun no. 4, but are relatively sound at gun no. 1. The four other bunkers probably served as ready ammunition storage. The completion report for the similar Battery Imperial at Fort Emory said that underground shelters and magazines were constructed by troop labor.

## **Searchlight Shelter**

Searchlight Shelter No. 15 is an underground shelter with a sliding, metal roof, similar to Shelter No. 6, above. It was constructed just west of Gatchell Road on the ocean side of Point Loma in World War II. Of the several searchlight shelters on the ocean side of the harbor defenses, this is the only one within the national monument.

## **Generator Station**

This underground, concrete structure housed a generator set to supply electricity to the nearby coastal searchlight no. 15, above. Located about twenty feet to the west of Gatchell Road, it was entered through a door reached via a sunken, declined walkway. Because of vandalism problems, this walkway has been filled in and the door is not now visible. The interior condition of the plant is not known.

## **Bunker**

Recently discovered, this underground bunker is 216 feet north of gun no. 1 of Battery Point Loma, and just east of Cabrillo Road. In general it resembles the bunkers at the battery. The top part of the structure is corrugated, galvanized iron barrel vault while the lower four feet of the walls are vertical concrete. The ends of the structure are concrete and there is a doorway in both ends. The bunker measures forty feet in length, ten feet in width, and nine feet, eight inches in height. There are wood-frame "shelves" or "bunks" with wire screen bottoms bolted to the concrete walls at the east end. The 1936 project called for the 4 gun, 155mm battery to have one magazine for projectiles, one for propelling charges, and a storeroom, all of permanent concrete construction, to be erected at the battery site. Presumably, this bunker was the storeroom, with part of it later converted to a bunk room.

## **Cistern**

This cistern, in front of the old Point Loma lighthouse, stored water for the keeper and his family. It was one of two outdoor cisterns. The first one may have been constructed as early as 1858. The one now existing was an 11,000-gallon brick structure built around 1882. It was fitted with a Douglas hand pump and a suction pipe. At the same time a 2,900-square-foot catch basin was added. Today the cistern is capped with a dome-shaped concrete roof. The hand pump remains attached.

---

[<<< Previous](#)

[<<< Contents >>>](#)

[Next >>>](#)

# CABRILLO

## The Guns of San Diego Historic Resource Study



### APPENDIX A:

## LIST OF COMMANDING OFFICERS FORT ROSECRANS - CALIFORNIA

<u>Name and Rank</u>	<u>Branch of Service</u>	<u>From</u>	<u>To</u>
Capt. Charles Humphreys	3d Arty	Feb 15, 1898	Jul 26, 1900
1st Lt. John P. Haynes	3d Arty	Jul 28, 1900	Feb 3, 1901
Capt. Edward T. Cole	6th Inf	Feb 3, 1901	Jul 24, 1901
Col. A.W. Vodges	Arty Corps	Jul 24, 1901	Oct 1, 1903
Lt. Col. R.H. Patterson	Arty Corps	Oct 1, 1903	Jun 9, 1904
Capt. A.B. Fleming	Arty Corps	Jun 9, 1904	Jul 13, 1904
1st Lt. L.S. Ryne	Arty Corps	Jul 13, 1904	Aug 8, 1904
Capt. E.D. Scott	Arty Corps	Aug 8, 1904	Aug 11, 1904
Lt. Col. John McClellan	Arty Corps	Aug 11, 1904	Mar 20, 1906
Capt. Edward Hill	Arty Corps	Mar 20, 1906	Mar 29, 1906
Maj. Charles Woodward	Arty Corps	Mar 29, 1906	May 31, 1907
Maj. George W. Gatchell	CAC	Jun 1, 1907	Apr 16, 1910
Capt. Theodore H. Koch	CAC	Apr 16, 1910	Jun 6, 1910
Maj. George H. McManus	CAC	Jun 6, 1910	May 1, 1912
Maj. George Blakley	CAC	May 2, 1912	Jan 18, 1913
Capt. John M. Page	CAC	Jan 19, 1913	Feb 8, 1913
Lt. Col. W.C. Davis	CAC	Feb 9, 1913	Nov 2, 1915
Capt. Hugh K. Taylor	CAC	Nov 3, 1915	Nov 15, 1915
Maj. Johnson Hagood	CAC	Nov 16, 1915	Jul 26, 1916
Capt. Hugh K. Taylor	CAC	Jul 27, 1916	Dec 21, 1916
Lt. Col. George T. Patterson	CAC	Dec 22, 1916	Feb 23, 1917
Capt. Harrison S. Kerrick	CAC	Feb 24, 1917	Mar 3, 1917
Lt. Col. George T. Patterson	CAC	Mar 4, 1917	May 16, 1917
Capt. Hugh K. Taylor	CAC	May 17, 1917	Jun 20, 1917
Capt. Harrison S. Kerrick	CAC	Jun 21, 1917	Jul 20, 1917
Lt. Col. Percy M. Kessler	CAC	Jul 21, 1917	Dec 30, 1917
Lt. Col. Harrison S. Kerrick	CAC	Dec 31, 1917	Feb 9, 1918
Col. James R. Pourie	CANA	Feb 10, 1918	Sep 3, 1918
Col. Harry Mccauley	CANA	Sep 4, 1918	Sep 14, 1918
Col. James R. Pourie	CANA	Sep 15, 1918	Nov 30, 1918



Col. Samuel A. Kephart	CAC	Dec 1, 1918	Feb 26, 1919
Col. James R. Pourie	CAC	Feb 27, 1919	Jun 18, 1919
Col. Edward Landon	CAC	Jun 19, 1919	Jul 10, 1922
Capt. William H. Sweet	CAC	Jul 11, 1922	Aug 13, 1922
Maj. Edgar B. Calladay	CAC	Aug 14, 1922	Sep 16, 1922
Maj. Walter K. Wilson	CAC	Sep 17, 1922	Oct 14, 1922
Maj. Edgar B. Calladay	CAC	Oct 15, 1922	Feb 14, 1923
Capt. William K. Sweet	CAC	Feb 16, 1923	Jul 17, 1923
1st Lt. B.C. Dailey	CAC	Jul 17, 1923	Jul 13, 1924
2d Lt. R.H.. Kreuger	CAC	Jul 13, 1924	Jul 31, 1924
Maj. Ward E. Duvall	CAC	Aug 1, 1924	Jan 31, 1928
Brig.Gen. Ralph H. Van Deman	USA	Feb 1, 1928	Jul 1, 1929
Lt. Col. Philip B. Peyton	Inf 6th Brig	Jul 2, 1929	Jul 18, 1929
Brig. Gen. George C. Shaw	USA	Jul 19, 1929	Jan 23, 1930
Lt. Col. Philip B. Peyton	Inf 6th Brig	Jan 24, 1930	Jun 30, 1930
Brig. Gen. Robert McCleave	USA	Jul 1, 1930	Oct 5, 1931
1st Lt. W.E. Griffin	CAC	Oct 5, 1931	Oct 18, 1931
Capt. F.W. Koester	CAV	Oct 18, 1931	Nov 6, 1931
Maj. J.T. Cole	CAV (DOL)	Nov 6, 1931	Nov 10, 1931
Maj. A.P. Thayer	CAV (DOL)	Nov 10, 1931	Nov 24, 1931
Lt. Col. C.L. Scott	CAV (DOL)	Nov 24, 1931	Aug 4, 1932
Maj. Joseph F. Cottrell	CAC	Aug 5, 1932	Jun 6, 1933
Lt. Col. George Ruhlen, jr	3d CA	Jun 6, 1933	Oct 7, 1933
1st Lt. W.E. Griffin	3d CA	Oct 8, 1933	Oct 22, 1933
Lt. Col. George Ruhlen, jr	3d CA	Oct 23, 1933	Oct 10, 1934
1st Lt. W.E. Griffin	3d CA	Oct 10, 1934	Nov 3, 1934
Capt. P.W. Hardie	3d CA	Nov 4, 1934	Aug 26, 1935
Maj. P.W. Hardie	3d CA	Aug 26, 1935	Oct 28, 1935
Lt. Col. Edward L. Kelly	3d CA	Oct 29, 1935	May 12, 1938
Maj. James P. Jacobs	3d CA	May 13, 1938	Jul 23, 1938
Col. Robert E. Guthrie	3d CA	Jul 24, 1938	May 4, 1940
Maj. Victor R. Woodruff	FA	May 6, 1940	Jul 20, 1940
Col. P.H. Ottosen	CAC	Jul 21, 1940	Dec 18, 1945
Col. Frank Drake	CAC	Dec 19, 1945	Feb 13, 1946
Col. Fred B. Waters	CAC	Feb 14, 1946	Aug 1, 1947
Capt. J.W. Sickenja	QMC	Aug 1, 1947	Sep 2, 1947
Col. Fred B. Waters	CAC	Sep 2, 1947	Sep 30, 1948
Capt. T.R. Kangas	ORD	Oct 1, 1948	Mar 17, 1949

Captain Kangas was the last commanding officer. All succeeding officers were Deputy Post Commander.

Maj. Donald E. Barrett	CAC	Mar 17, 1949	Mar 24, 1950
Maj. Victor T. Arnim	CE	Mar 24, 1950	Nov 26, 1951

CWO Charles J. Knapp	USA	Nov 26, 1951	Jan 14, 1952
Maj. David S. Mobley	CE	Jan 14, 1952	May 17, 1952
Capt. Eugene J. Gasior	INF	May 17, 1952	Nov 18, 1952
Capt. John J. Kintzel	CE	Nov 18, 1952	Aug 12, 1953
Capt. James H. Hood	CE	Aug 12, 1953	Oct 27, 1953
Capt. Dennis N. Caplinger	CE	Oct 27, 1953	Dec 16, 1955
Capt. Courtney P. Hollar	CE	Dec 16, 1955	Nov 15, 1957
1st Lt. David Brown	CE	Nov 15, 1957	

This list carries through to April 11, 1958. Data obtained from official files of Fort Rosecrans, California.

Submitted by:  
Col. George Ruhlen  
US Army, Retd.

---

<<< [Previous](#)

<<< [Contents](#) >>>

[Next](#) >>>

# CABRILLO

## The Guns of San Diego Historic Resource Study



### APPENDIX B:

## OFFICERS OF THE U.S. ARMY, AND OTHERS, IN HONOR OF WHOM COAST ARTILLERY FORTS AND BATTERIES IN THE HARBOR DEFENSES OF SAN DIEGO HAVE BEEN NAMED

ASHBURN, Maj. Gen. Thomas Quinn, U.S. Army, who died May 2, 1941.

GO 69, 1942

\*CABRILLO, Juan Rodriguez, Portuguese navigator in the Spanish service who discovered San Diego Bay, and who died Jan 3, 1543.

RCW, 1944

CALEF, Lt. Col. John Haskell, 3rd U.S. Artillery, who died Jan 4, 1912

GO 36, 1915

\*CORTEZ, Hernando, Spanish soldier and explorer, conqueror of Mexico, who died December 2, 1547.

RCW, 1944

EMORY, Brig. Gen. William Hemsley, U.S. Army, who died Dec 1, 1887

GO 67, 1942

FETTERMAN, 2d Lt. George, 3rd U.S. Artillery, who died June 27, 1844. (2 batteries including\*)

GO 16, 1902

\*GILLESPIE, Maj. Archibald H., U.S. Marine Corps, who participated in the first occupation of southern California in 1846, and who died Aug 16, 1873

\*

GRANT, Col. Homer Blackie, CAC, U.S. Army, who died 19 Nov 1939

GO 69, 1942

HUMPHREYS, Capt. Charles, Artillery U.S. Army, the first commanding officer of Fort Rosecrans Feb, 1898 to Jul, 1900

GO 28, 1942

MCGRATH, Maj. Hugh J., 4th U.S. Cavalry, who died Nov 7, 1899 of wounds received in action at Novaleta, Luzon, Philippine Islands on Oct 8, 1899.

GO 16, 1902

MEED, Capt. James, 17th U.S. Infantry, who was killed in action at Frenchtown, Michigan, Jan 22, 1813

GO 20, 1906

PICO, Pio, last Governor of California under Mexican rule who died Sep 11, 1884.

GO 20, 1906

ROSECRANS, Maj. Gen. William Starke, U.S. Volunteers, Brig. Gen., U.S. Army who died Mar 11, 1898.

GO 134, 1899

STRONG, Maj. Gen. Frederick S., U.S. Army, who organized the 40th Division at Camp Kearny, California in 1917 and commanded it in France in World War I, died Mar 9, 1935

GO (unknown)

WHISTLER, Col. Garland N., CAC, U.S. Army, who died Jun 25, 1914

GO 15, 1916

WHITE, Col. John V., CAC, U.S. Army, who died Aug 25, 1915

GO 15, 1916

WILKESON, 1st Lt. Bayard, 4th U.S. Artillery, who was killed in the battle of Gettysburg, Pennsylvania July 1, 1863

GO 16, 1902

WOODWARD, Col. Charles G., U.S. Army, who died Nov 23, 1939, a former commanding officer of Fort Rosecrans Mar, 1906 to May, 1907

GO (Unknown)

\*ZEILIN, Brig. Gen. Jacob, U.S. Marine Corps, who took part in the conquest of California, and who died Nov 18, 1880

\*

GO - Army General Order - the authority for naming the fort or battery.

RCW - Report of Completed Works - Seacoast Fortifications

\* - Unofficial name given to interim/ temporary battery in WW II.

Compiled by Alvin H. Grobmeier

---

<<< [Previous](#)

<<< [Contents](#) >>>

[Next](#) >>>

---

cabr/guns-san-diego/hrsab.htm  
Last Updated: 19-Jan-2005

# CABRILLO

## The Guns of San Diego Historic Resource Study



## BIBLIOGRAPHY

### 1. Manuscript Materials

Pacific Southwest Region. National Archives. Record Group 77, Harbor Defenses of San Diego, Los Angeles District, 1895-1918, U S. Army Corps of Engineers.

San Antonio. Postcard, ca. 1913, Ethel Blythe, Fort Rosecrans, to Mrs. George Ruhlen. In possession of Major General George Ruhlen.

San Diego. Cabrillo National Monument. Anonymous, "Historical Sketch, Harbor Defenses of San Diego, 15 September 1945."

\_\_\_\_\_. \_\_\_\_\_. Anonymous, "Point Loma Land Ownership."

\_\_\_\_\_. San Diego Historical Society, [Colonel George Ruhlen], "Fort Rosecrans, California," Fort Rosecrans #2.

\_\_\_\_\_. \_\_\_\_\_. Paul Michael Callaghan. "Fort Rosecrans, California. Master's thesis, University of San Diego, 1980.

\_\_\_\_\_. San Diego Public Library. Robert C. Gerould, "Fort Rosecrans, California: A History." Master's thesis, California Western University, 1966.

San Francisco. California Historical Society. George Walcott Ames, Jr., "San Diego Presidio Site," Registered Landmark No. 59. California Historical Landmarks Series, State of California, Berkeley 1937.

\_\_\_\_\_. \_\_\_\_\_. George Walcott Ames, Jr., "Site of Fort Guijarros," Registered Landmark No. 69. California Historical Landmarks Series, state of California, Berkeley 1936.

\_\_\_\_\_. \_\_\_\_\_. George Tays, "Fort Rosecrans," Registered Landmark No. 62. California Historical Landmarks Series, State of California, Berkeley 1937.

\_\_\_\_\_. \_\_\_\_\_. George Tays, "Fort Stockton," Registered Landmark No. 54. California Historical Landmarks Series, State of California, Berkeley 1937.

\_\_\_\_\_. \_\_\_\_\_. George Tays, "Mission San Diego de Alcala," Registered Landmark No. 242. California Historical Landmarks Series, State of California, Berkeley 1937.

Suitland, Maryland. Washington National Records Center. Record Group 77, Office of the Chief of Engineers, Harbor Defense Files, San Diego.

Washington, D.C. National Archives. Record Group 77. Office of the Chief of Engineers, Letters Received (A File), 1867-1870.



\_\_\_\_\_. \_\_\_\_\_. \_\_\_\_\_. Board on Fortifications (Endicott Board), Miscellaneous Papers, 1885-1887.

\_\_\_\_\_. \_\_\_\_\_. \_\_\_\_\_. Cartographic Archives Division, Office of the Chief of Engineers, Fortifications File.

\_\_\_\_\_. \_\_\_\_\_. Record Group 177. Records of the Chief of Arms, Office of the Chief of Coast Artillery, 1918-1942.

\_\_\_\_\_. Record Group 392. Records of the U.S. Army Commands, San Diego Coast Defense Document File, 1910-1917.

\_\_\_\_\_. \_\_\_\_\_. Record Group 407. The Adjutant General's Office, Special Projects. Harbor Defense, 1929-1948. San Diego.

\_\_\_\_\_. \_\_\_\_\_. Microcopy 617. Returns from U.S. Military Posts, 1800-1916. San Diego Barracks and Fort Rosecrans.

\_\_\_\_\_. U. S. Army Center of Military History. "History of the Western Defense Command," 5 vols., and "History of the Southern California Sector, Western Defense Command."

## 2. Periodicals

Carter, Charles Franklin, trans. "Duhaut-Cilly's Account of California in the Years 1827-28," California Historical Society 8 (September 1929): 218.

Frazer, Robert W. "Military Posts in San Diego, 1852," The Journal of San Diego History 20 (Summer 1974): 44-52.

Holland, Francis R., Jr. "A Short History of Cabrillo National Monument," The Western Explorer 2 (August 1962): 26-36.

Hudson, James J. "California National Guard and the Mexican Border, 1914-16," California Historical Society Quarterly 34 (1955): 157-171.

Kirchner, D.P. and Lewis, E.R. "American Harbor Defenses: The Final Era," United States Naval Institute Proceedings 94 (January 1968): 84-98.

May, Ronald V. "The Guns of Point Loma: America's First Sea Coast Artillery Defense in San Diego," in Cabrillo Festival Historical Seminar, The Military on Point Loma (Cabrillo Historical Association 1985), pp. 26-36.

Ranson, Edward. "The Endicott Board of 1885-86 and the Coast Defenses," Military Affairs 31 (Summer 1967): 74-84.

Ruhlen, George. "San Diego Barracks," San Diego Historical Society Quarterly 1 (April 1955): 15-23.

\_\_\_\_\_. "Fort Rosecrans, California," San Diego Historical Society Quarterly 5 (October 1959): 60-68.

\_\_\_\_\_. "San Diego in the Civil War," San Diego Historical Society Quarterly 7 (April 1961): 17-22.

\_\_\_\_\_. "Fort Rosecrans, California," The Western Explorer 2 (February 1962): 1-9.

Treutlein, Theodore E. "The Portola Expedition of 1769-1770," California Historical Quarterly 47 (December 1968): 291-313.

U.S. Navy. "Pictorial, The San Diego Naval Complex," United States Naval Institute Proceedings 94 (June 1968): 95-108.

Wagner, Henry R. "Spanish Voyages to the Northwest Coast in the Sixteenth Century, Chapter IV, The Voyage of Juan Rodrigues Cabrillo," California Historical Society Quarterly 7 (March 1928): 20-77.

Weber, Francis J. "California's Caminito Real," California Historical Society Quarterly 54 (Spring 1975): 63-75.

Yurtinus, John F. "The Mormon Volunteers: The Recruitment and Service of a Unique Military Company," The Journal of San Diego History 25 (Summer 1979): 242-261.

### **3. Books**

Anderson, Bern. Surveyor of the Sea, The Life and Voyages of Captain George Vancouver. Toronto: University of Toronto, 1960.

The Army Almanac, A Book of Facts Concerning the United States Army. Harrisburg, PA: Stackpole, 1959.

Bancroft, Hubert Howe. History of California. 7 vols. San Francisco: The History Company, 1884-1890.

Bearss, Edwin C. Historic Structure Report, Fort Point, Historic Data Section, Fort Point National Historic Site, California. Denver: National Park Service, 1973.

Bolton, Herbert Eugene. Spanish Exploration in the Southwest, 1542-1706. New York: Charles Scribners Sons, 1916.

Brown, Joseph E. Cabrillo National Monument. Cabrillo Historical Association, 1981.

Cabrillo Historical Association. Fort Guijarros, Tenth Annual Cabrillo Festival Historic Seminar. 1982.

\_\_\_\_\_. The Military on Point Loma. Cabrillo Historical Association, 1985.

Conn, Stetson; Engleman, Rose C.; and Fairchild, Byron. Guarding the United States and Its Outposts. U.S. Army in World War II: The Western Hemisphere. Washington: Department of the Army, 1964.

Conn, Stetson and Fairchild, Byron. The Framework of Hemisphere Defense. United States Army in World War. The Western Hemisphere. Washington: U.S. Government Printing Office, 1960. Reprinted 1970.

Cullum, George W. Biographical Register of the Officers and Graduates of the U.S. Military Academy, At West Point, New York, Since 1802. Supplement, vol. 5, 1900-1910; Supplement, vol 6-A, 1910-1920; Supplement 8, 1930-1940; and Supplement 9, 1940-1950.

Dana, Richard Henry, Jr. Two Years Before the Mast, A Personal Narrative of Life at Sea.

Cleveland: World Publishing, 1946.

Edwards, Malcolm, ed. The California Diary of General E. D. Townsend. Ward Ritchie Press, 1970.

Emory, W. H. Lieutenant Emory Reports. Albuquerque: University of New Mexico Press, reprint 1951.

Flower, Douglas and Roth, Linda. Cultural Resource Inventory. Archaeology/History/Architecture. Navy and Coast Guard Lands, Point Loma, San Diego, California. San Diego, 1982.

Floyd, Dale E. United States Coast Defense. 1775-1950: A Bibliography. Washington: U.S. Corps of Engineers, U.S. Army, 1985.

Frazer, Robert W. Forts of the West to 1898. Norman: University of Oklahoma Press, 1965.

\_\_\_\_\_. Mansfield on the Condition of the Western Forts, 1853-54. Norman: University of Oklahoma Press, 1963.

Grivas, Theodore. Military Governments in California, 1846-1850. Glendale: The Arthur H. Clark Company, 1963.

Gudde, Erwin G. California Place Names. The Origin and Etymology of Current Geographical Names. Berkeley: University of California Press, 1969.

Heitman, Francis B. Historical Register and Dictionary of the United States Army 1789-1903. 2 vols. Washington: Government Printing Office, 1903.

Heizer, Robert F., ad. California. Vol 8 of Handbook of North American Indians. Edited by William C. Sturtevant. Washington: Smithsonian Institution, 1978.

Holland, F. Ross, Jr. and Law, Henry G. Historic Structure Report, The Old Point Loma Lighthouse, Cabrillo National Monument, San Diego, California. Denver. National Park Service, 1981.

Holland, Francis Ross, Jr. America's Lighthouses, Their Illustrated History Since 1716. Brattleboro, VT: The Stephen Greene Press, 1972.

James, George Wharton. In and Out of the Old Missions of California.... Boston: Little, Brown, 1910.

Kelsey, Harry. Juan Rodriguez Cabrillo. San Marino: Huntington Library, 1986.

Kocher, Paul H. California's Old Missions. The Story of the Founding of the 21 Franciscan Missions in Spanish Alta California. 1769-1823. Chicago: Franciscan Herald Press, 1976.

Lehmann, Susan Collins. An Embarrassment of Riches, The Administrative History of Cabrillo National Monument. Cabrillo Historical Association, 1987.

Lewis, Emanuel Raymond. Seacoast Fortifications of the United States: An Introductory History. Washington: Smithsonian Institution Press, 1970.

McHenry, Robert, ed. Webster's American Military Biographies. Springfield, MA: G. & C. Merriam, 1978.

McKeever, Michael. A Short History of San Diego. San Francisco: Lexikos, 1985.

Millett, Allan R. Semper Fidelis. The History of the United States Marines. New York: Macmillan, 1980.

Mills, Walter. American Military Thought. Indianapolis: Bobbs-Merrill, 1966.

Moriarty, James Robert. The Cabrillo National Monument. A Physical and Cultural Overview. National Park Service, 1977.

Morison, Samuel Eliot. The European Discovery of America. the Southern Voyages, A. D. 1492-1616. New York: Oxford University Press, 1974.

Morris, Richard B. Encyclopedia of American History, 2 vols. New York: Harper & Brothers, 1953.

Pourade, Richard F. The History of San Diego. The Explorers. San Diego: Union-Tribune, 1960.

Thompson, Erwin N. Historic Resource Study. Seacoast Fortifications. San Francisco Harbor. Golden Gate National Recreation Area California. Denver: National Park Service, n.d.

Turhollow, Anthony F. A History of the Los Angeles District, U.S. Army Corps of Engineers, 1898-1965. Los Angeles: U.S. Army Corps of Engineers, Los Angeles District, 1975.

U.S. Congress House Executive Document 17. 31st Cong, 1st sess. 1850. Serial 573. U.S. Congress. Engineers' Report, vol. 2, pt. 1, 1875-1876. 44th Cong., 1st sess."

U.S. Congress. House. "Post and Harbor Defenses, Near San Diego. House Executive Document 14. 52nd Cong., 1st sess., 1891.

U.S. Congress. House. Reports of the War Department, 1899. Engineers, Pt. 1. House Documents, vol. 8, no. 2. 56th Cong., 1st sess.

U.S. Congress. Senate. Medal of Honor. 1863-1968, "In the Name of the Congress of the United States." 90th Cong., 2nd sess. Washington: U.S. Government Printing Office, 1968.

Wagner, Henry R. Juan Rodriguez Cabrillo. Discoverer of the Coast of California. San Francisco: California Historical Society, 1941 Special Publication No. 17.

Weigley, Russell F. History of the United States Army. New York: Macmillan, 1967.

\_\_\_\_\_. The American Way of War. A History of United States Military Strategy and Policy. New York: Macmillan, 1973.

#### **4. Newspapers**

Evening Tribune (San Diego).

Los Angeles Times.

Rosecrans Cannon Report, 1942-1944.

The San Diego Union.

The Sun (San Diego).

**5. Miscellaneous**

Institute of Heraldry, U.S. Army. "Historical Data — Post, Camp, Station or Air Field." An Army form concerning Fort Rosecrans. Files, Cabrillo N.M.

McGlothlin, Master Sergeant George H. Oral interview at Cabrillo N.M., December 5, 1984. Files, Cabrillo N.M. Sergeant McGlothlin was a member of Battery E, 19th Coast Artillery Regiment and was assigned to Battery Point Loma.

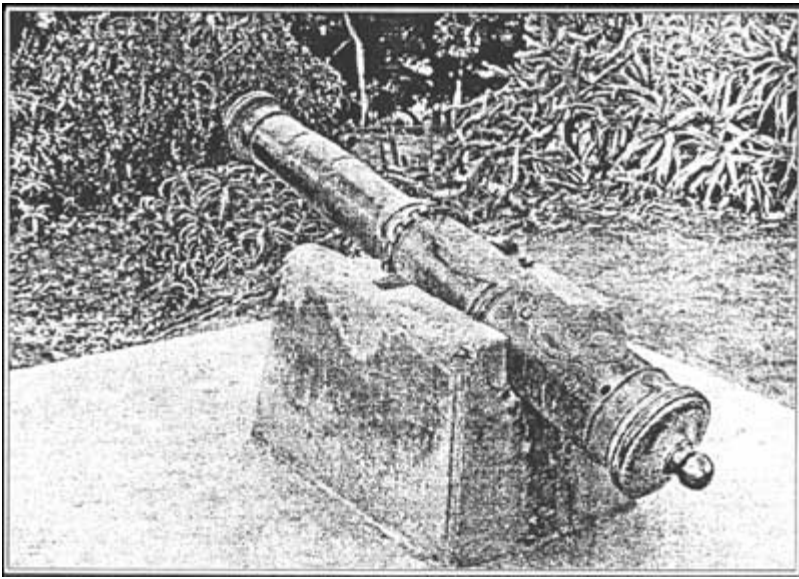
U. S. Veterans Administration. "Fort Rosecrans National Cemetery, San Diego, California." Pamphlet, 1976.

---

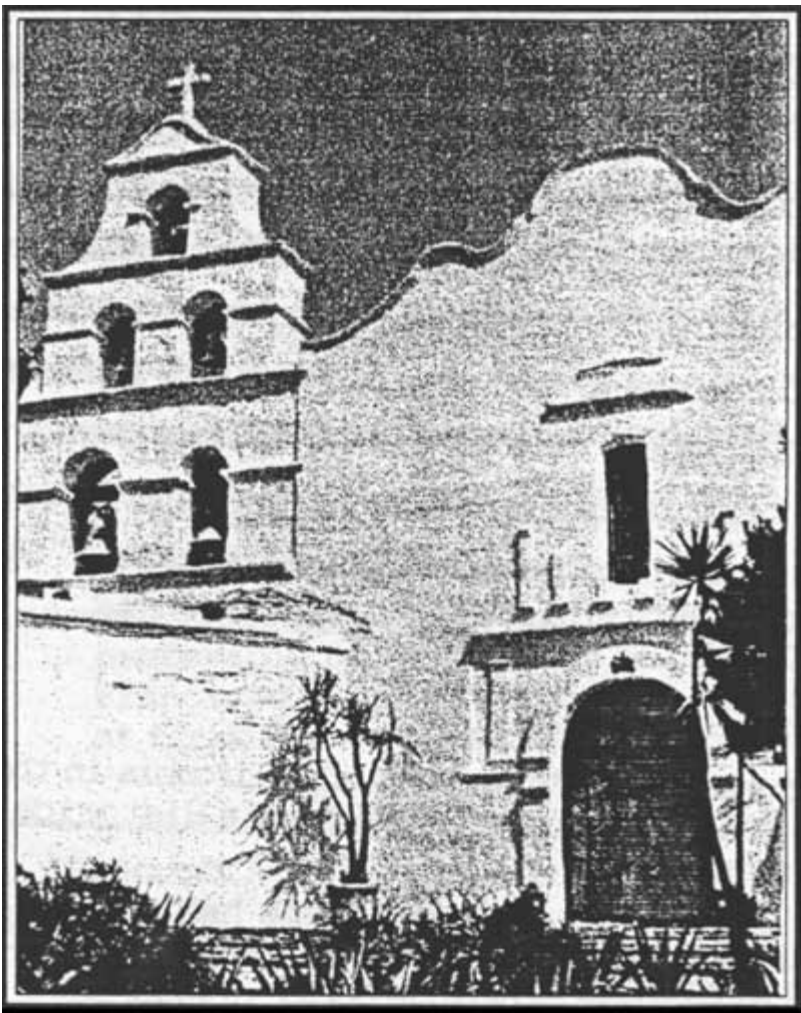
<<< [Previous](#) <<< [Contents](#) >>>



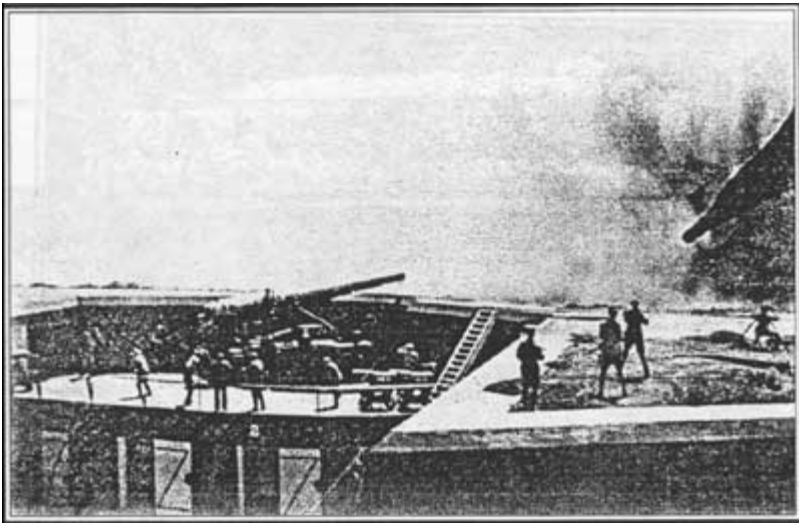


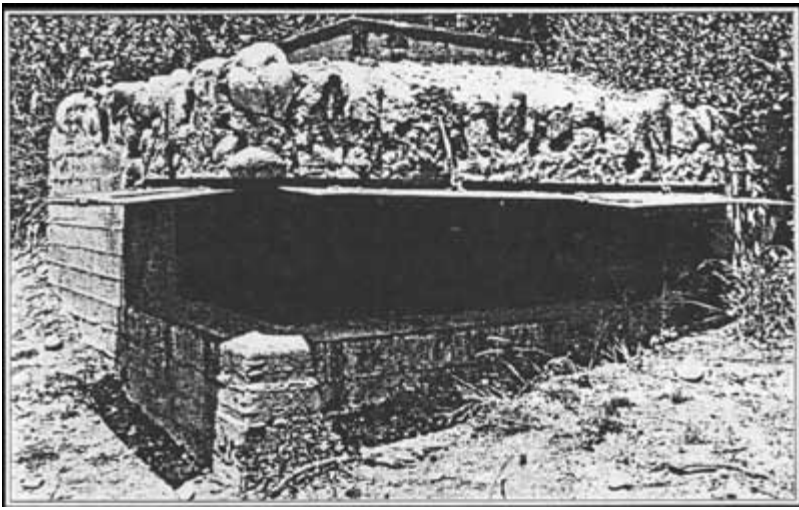




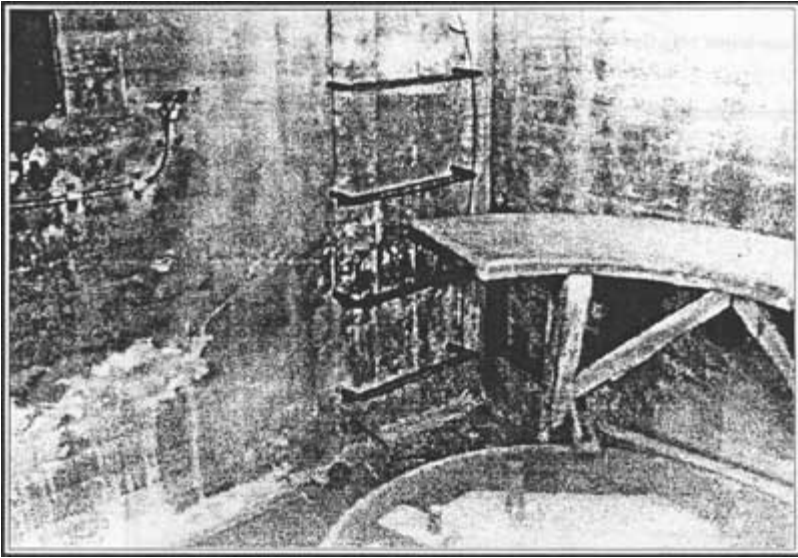


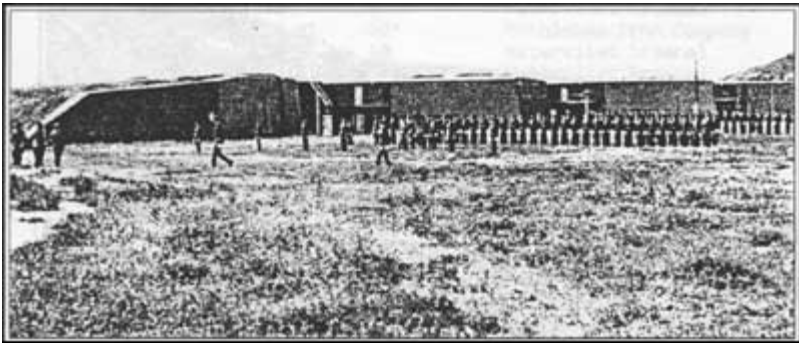


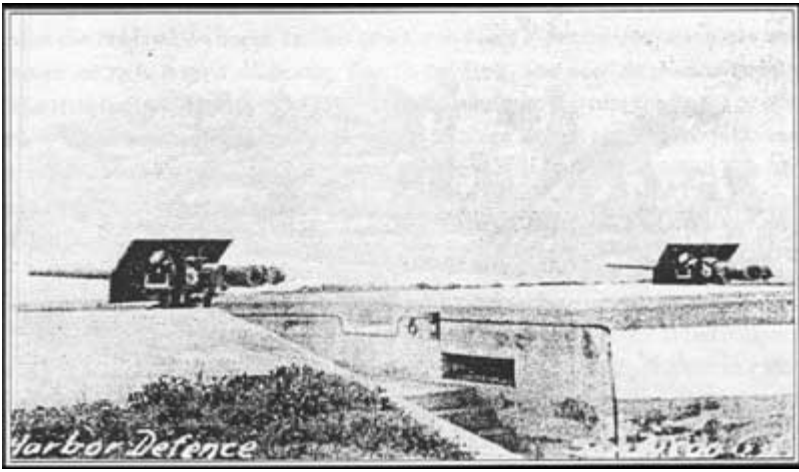




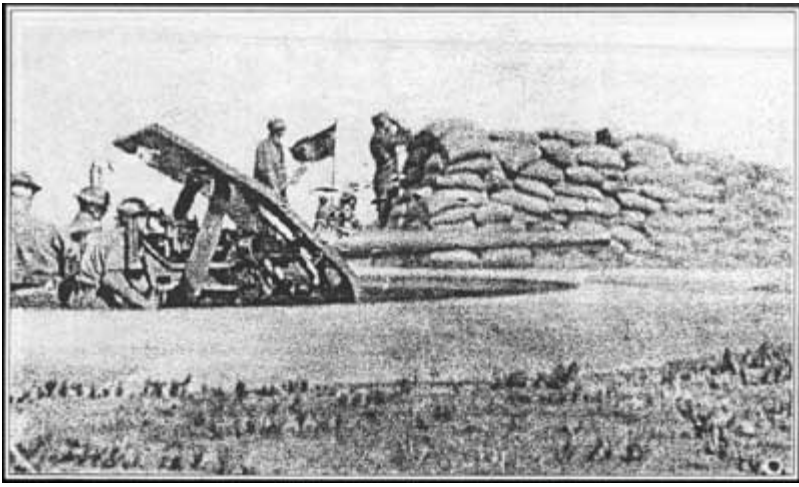


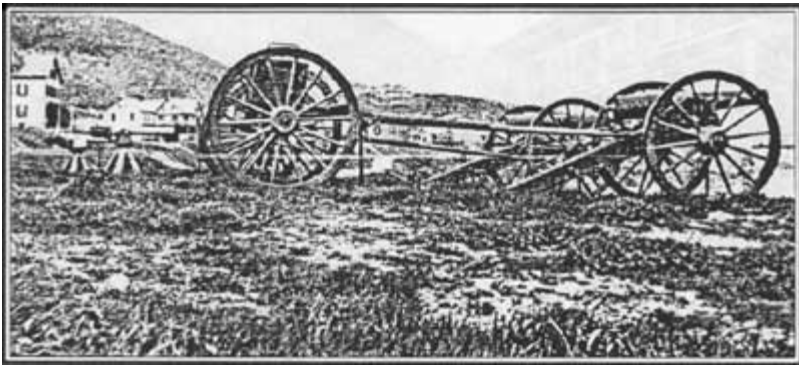










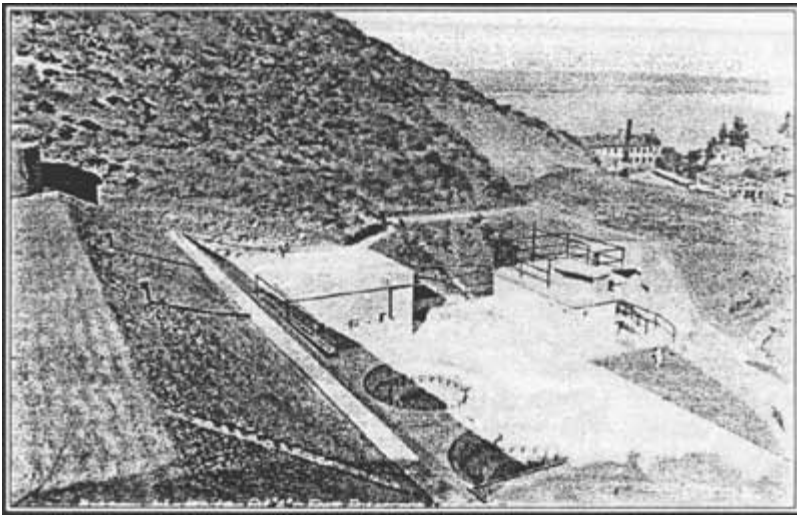


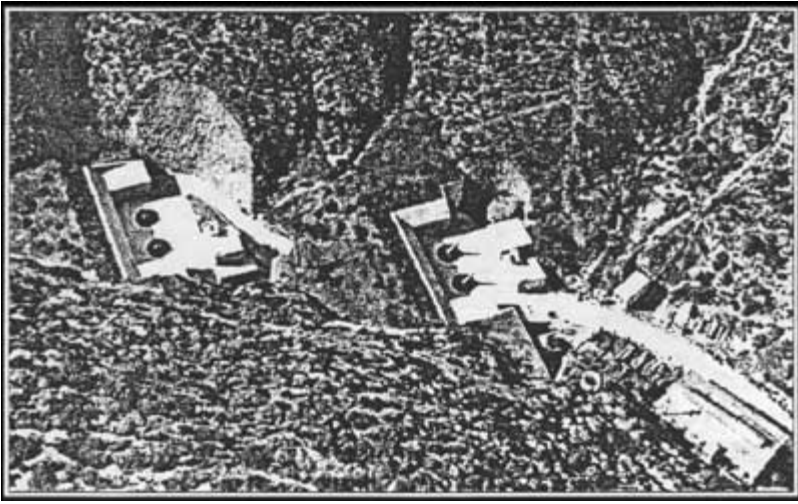




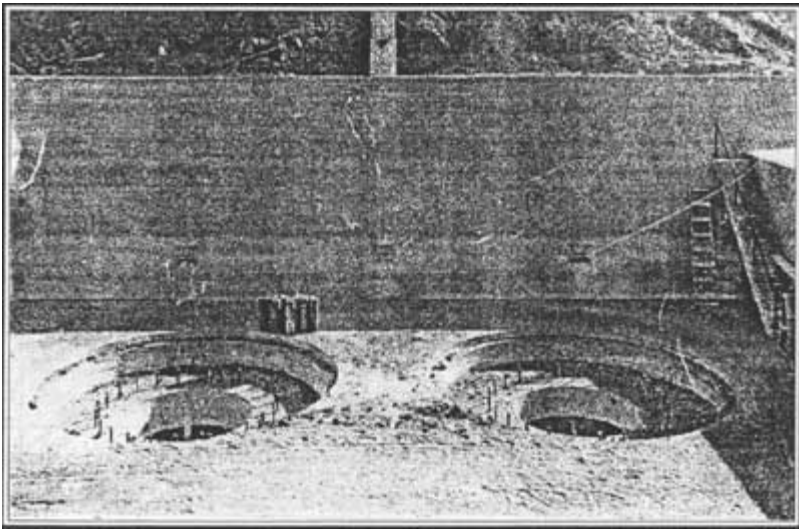




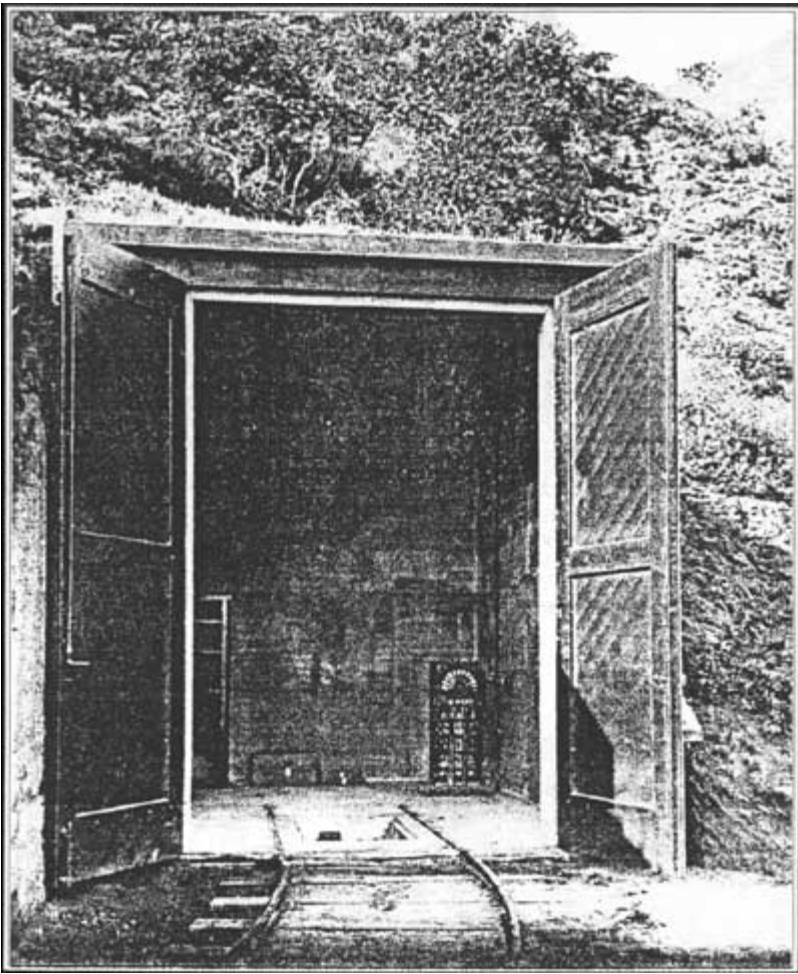


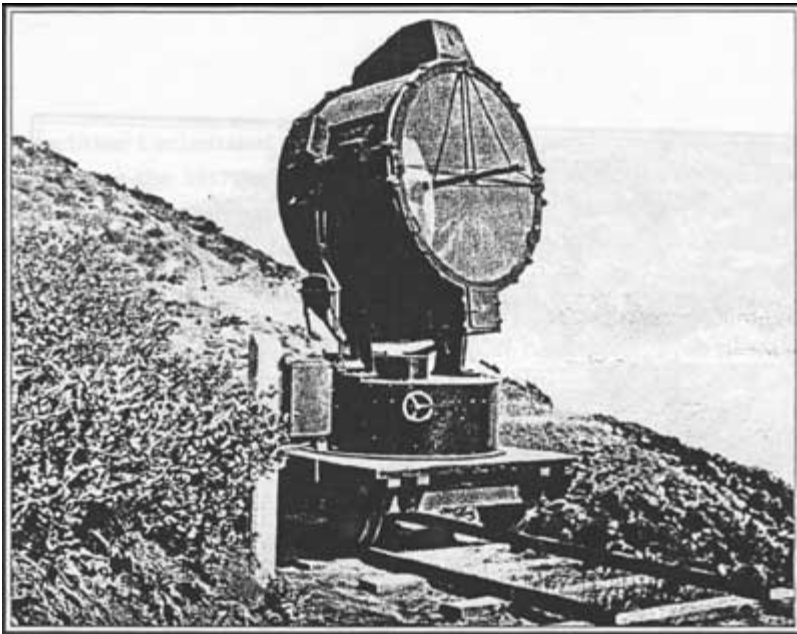


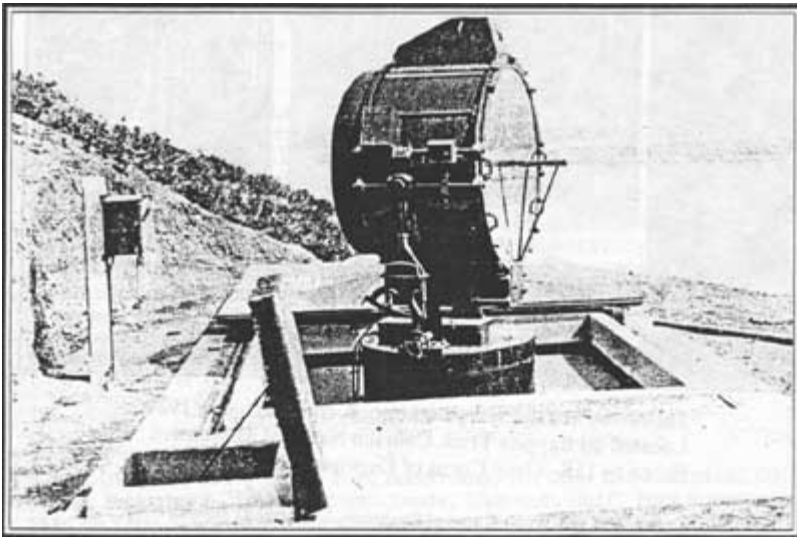


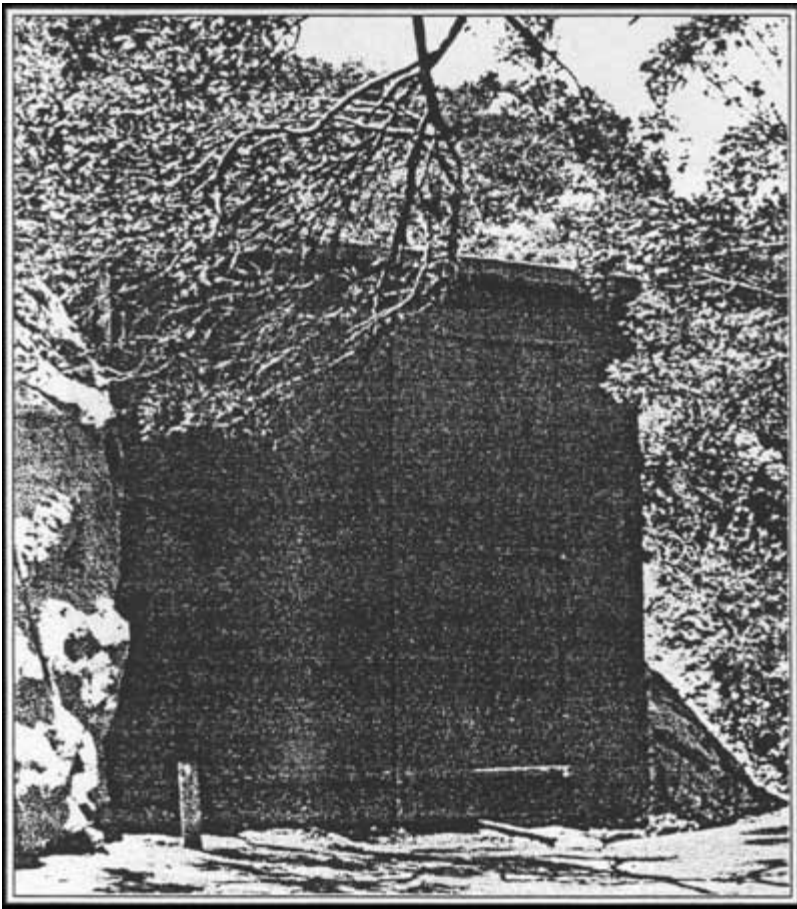


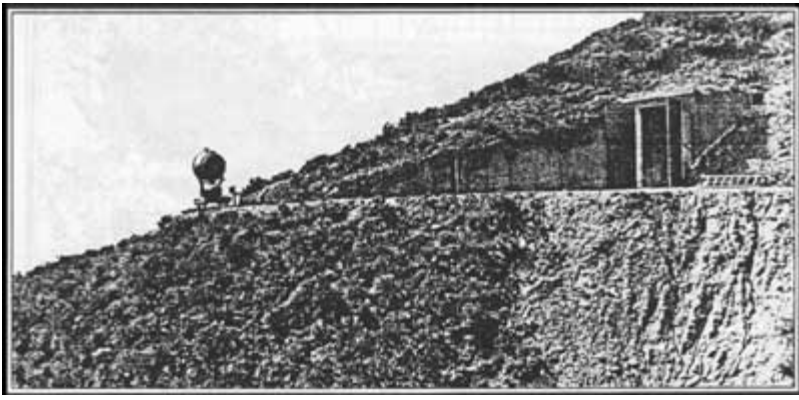




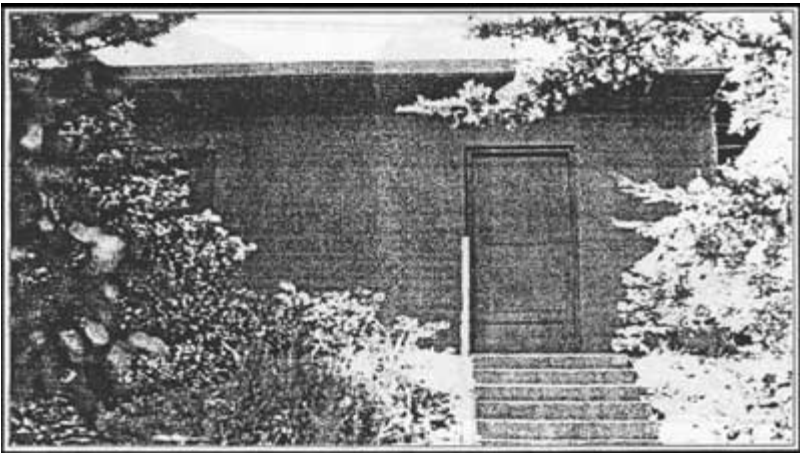




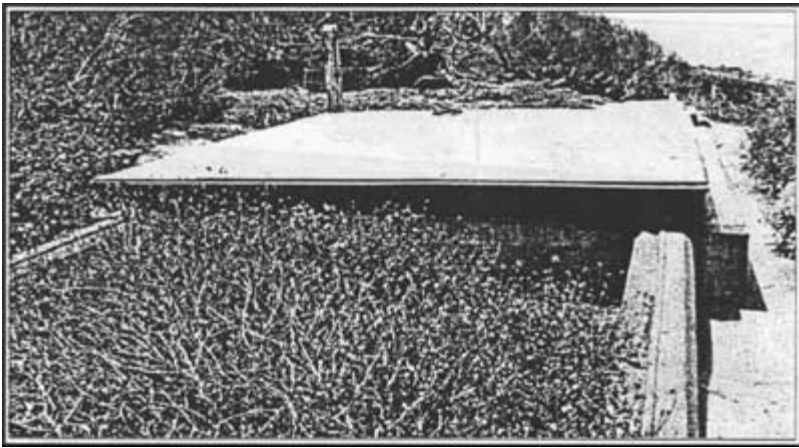


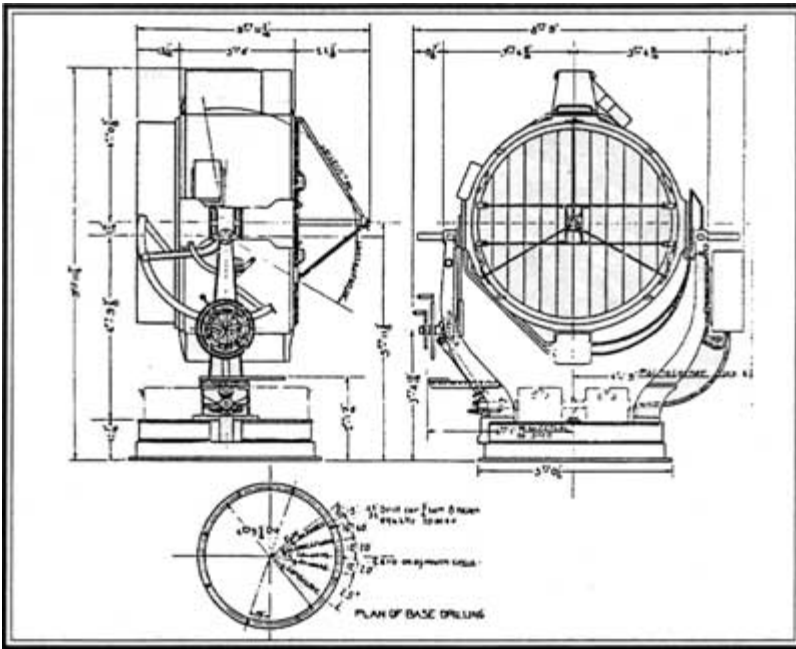


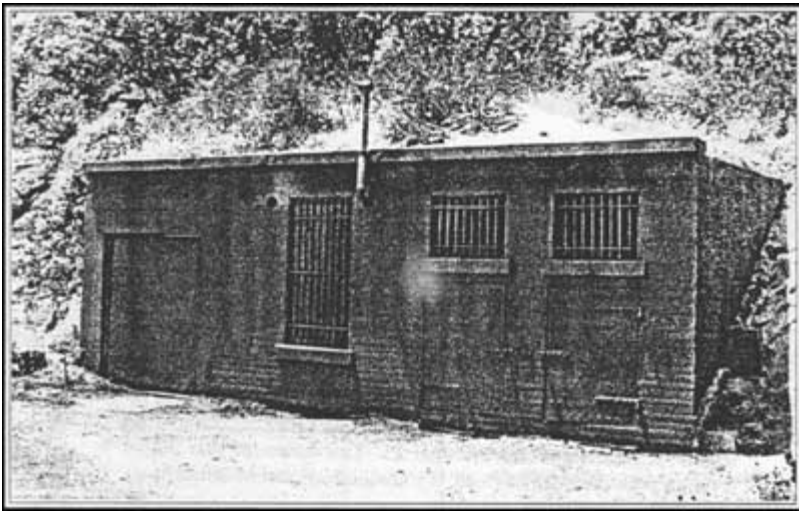




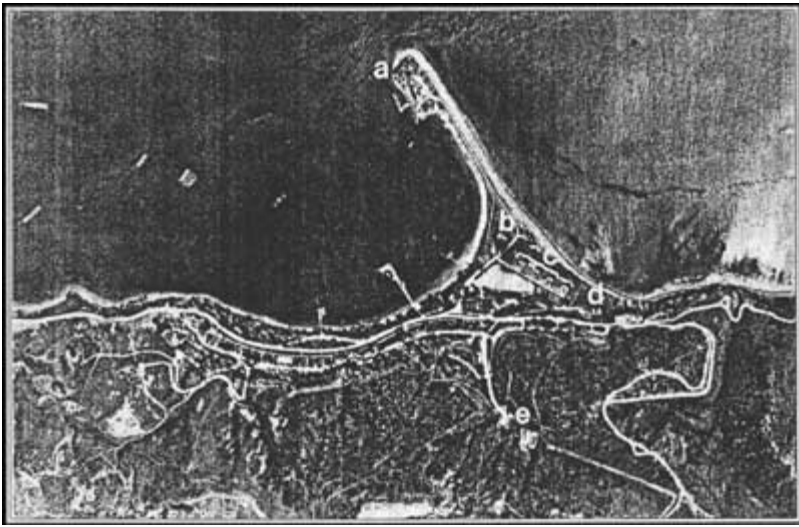




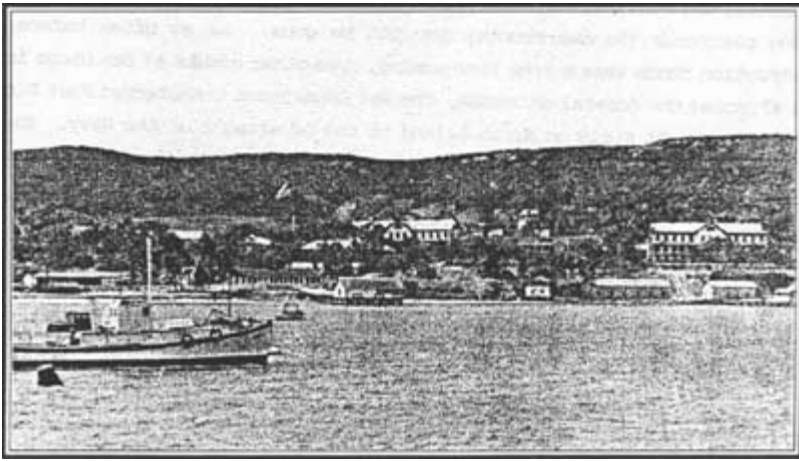








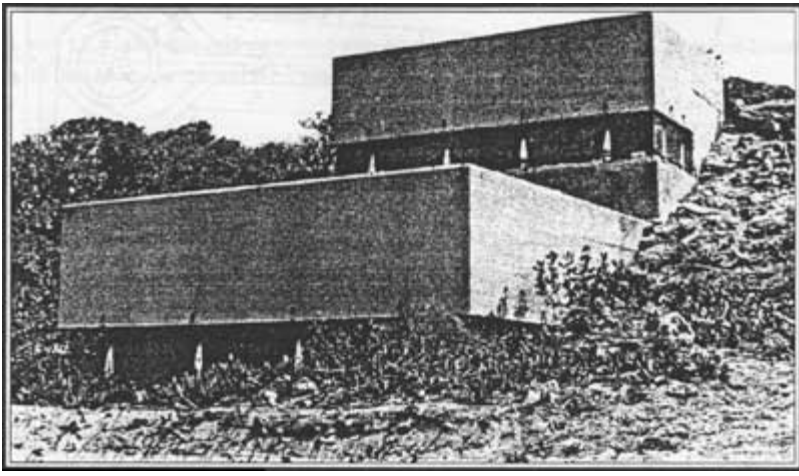




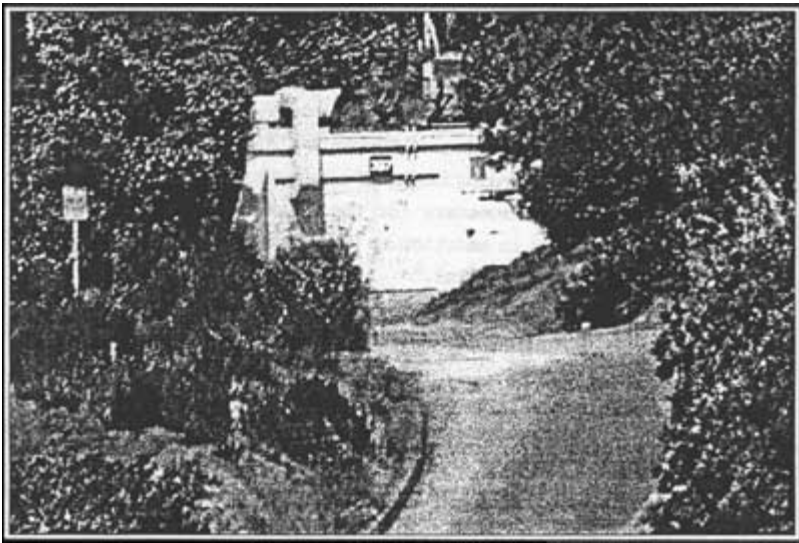


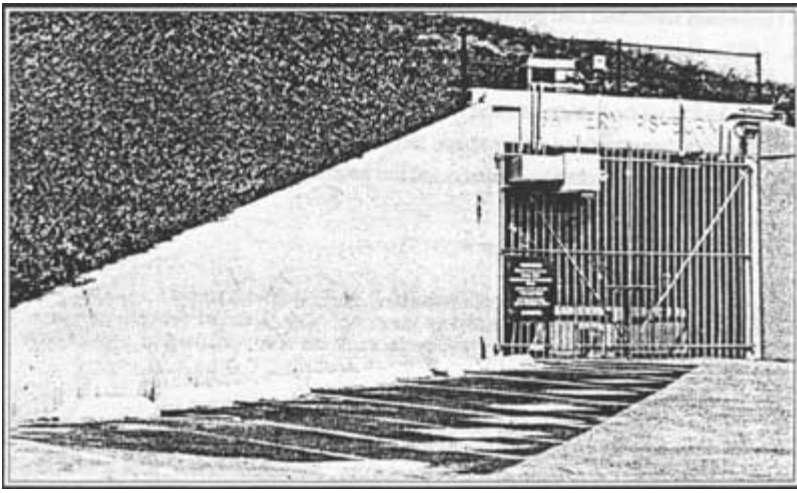


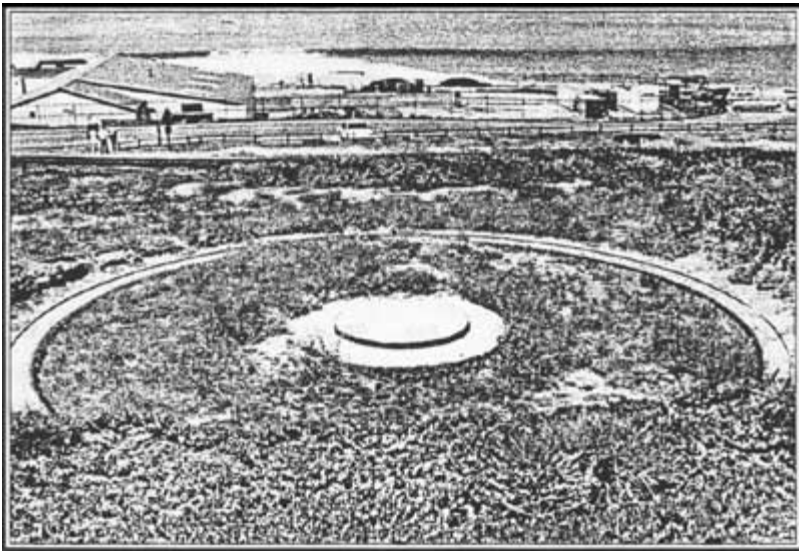




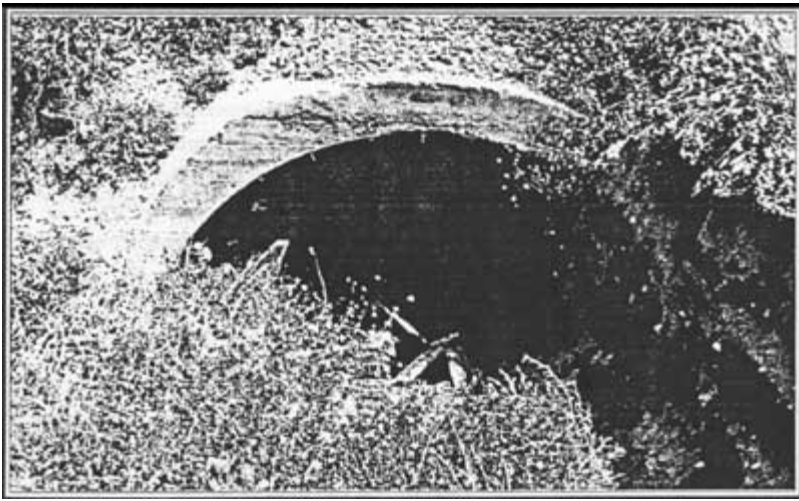


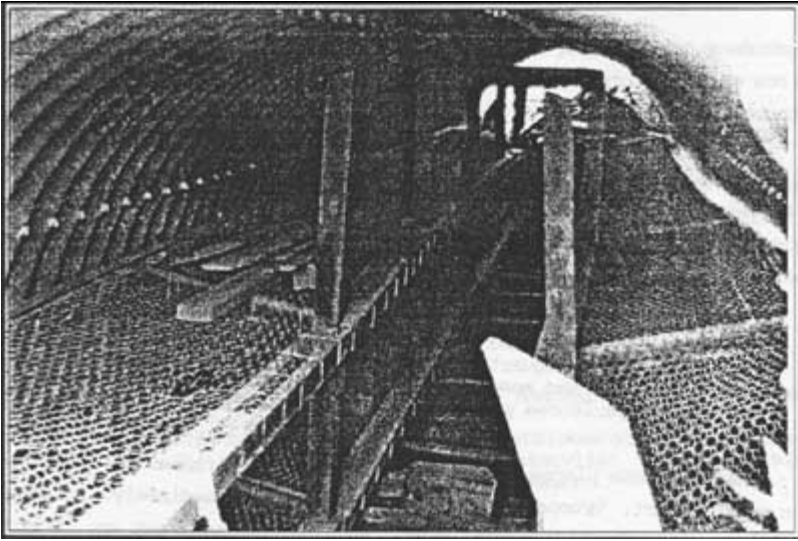


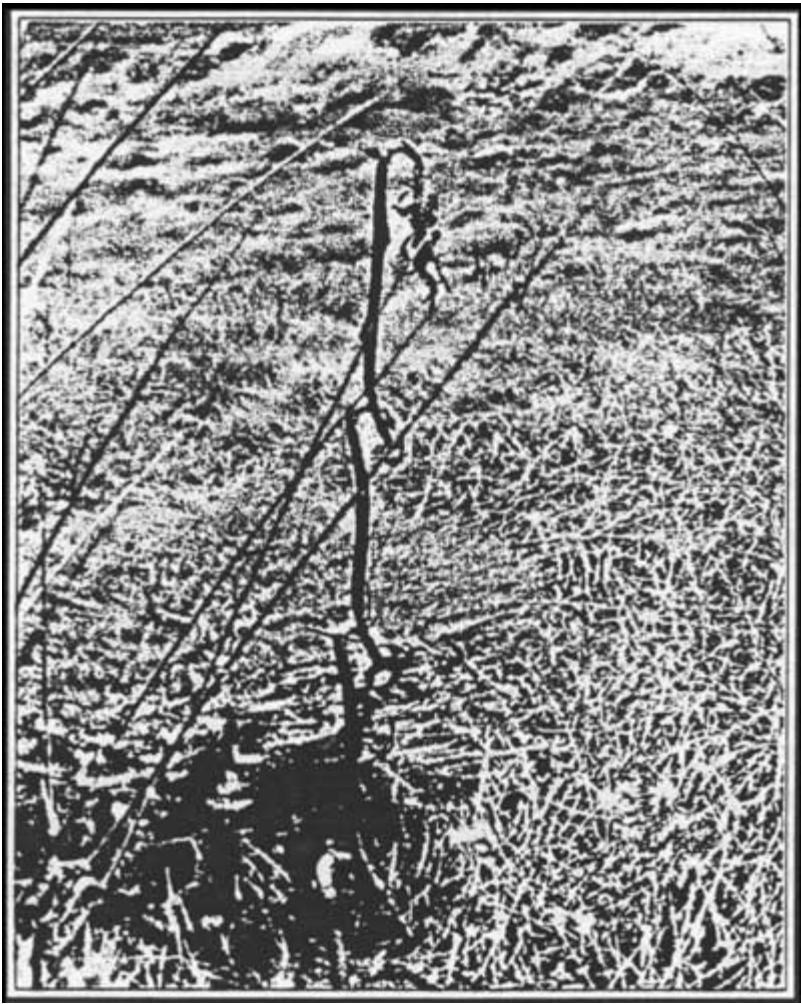


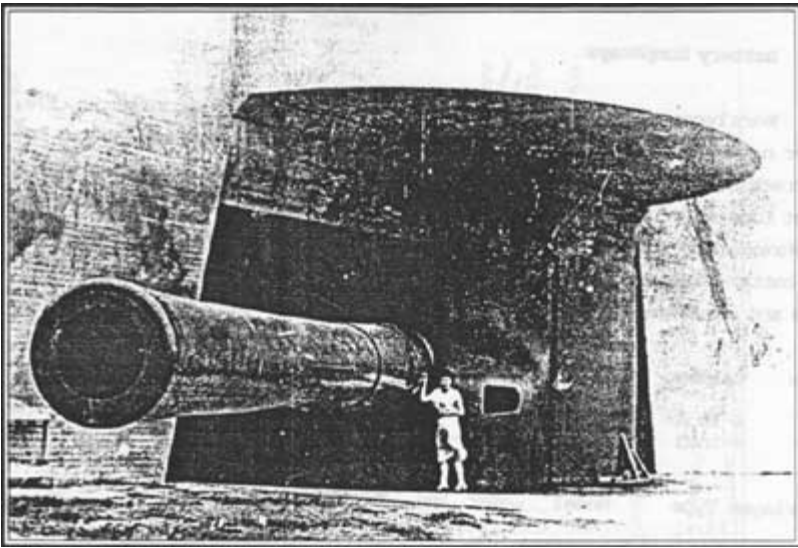


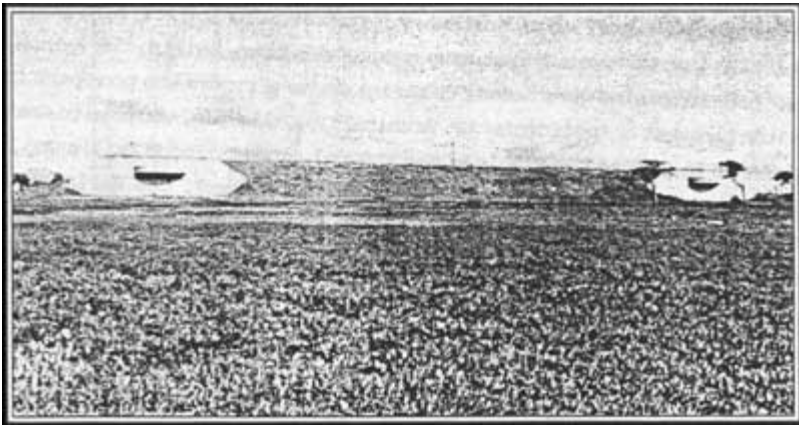


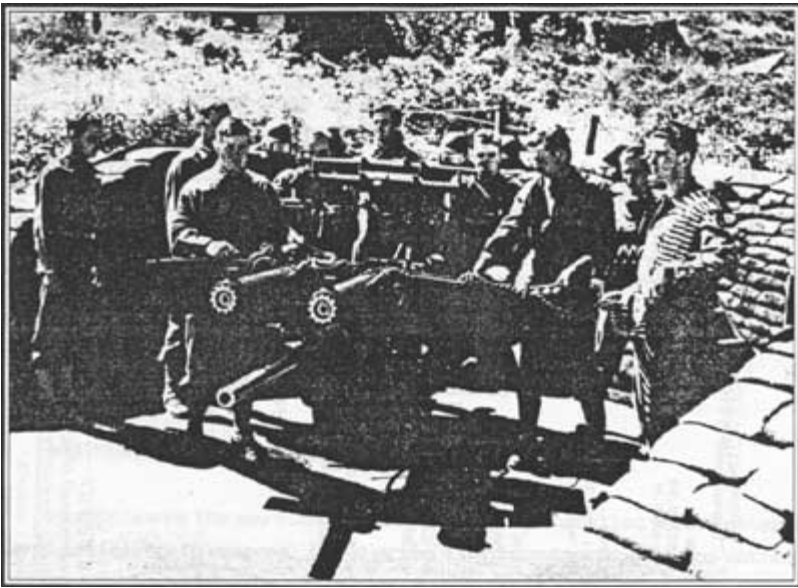




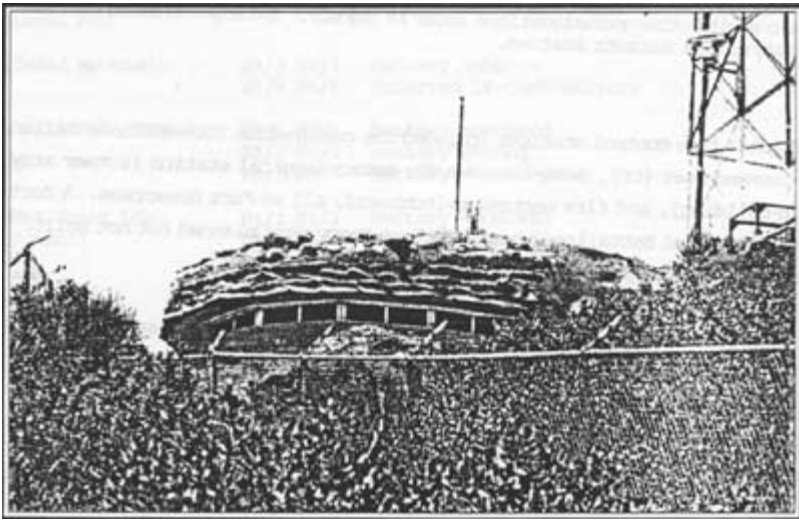
















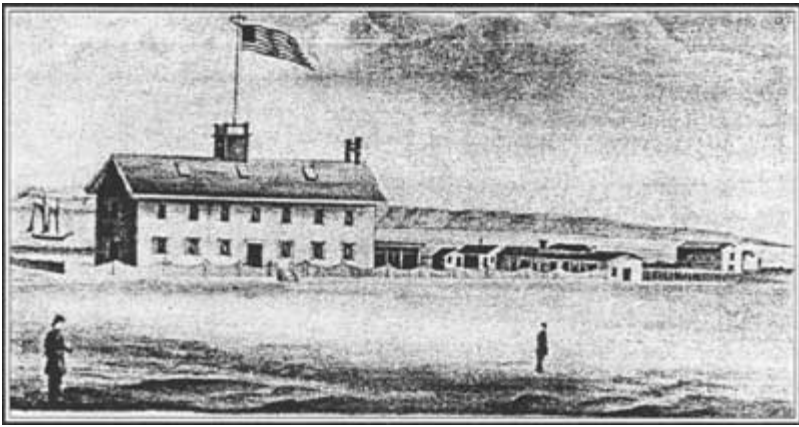


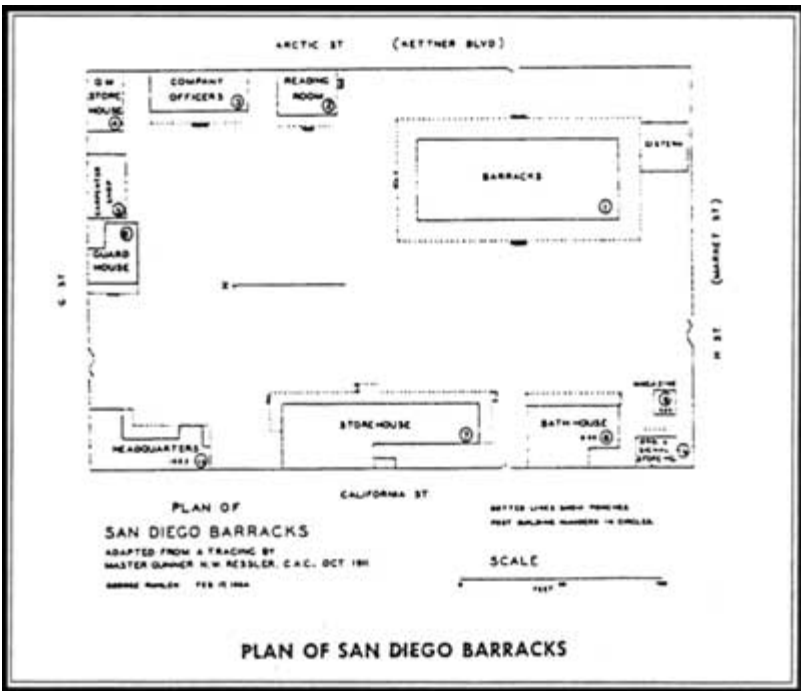


163 36

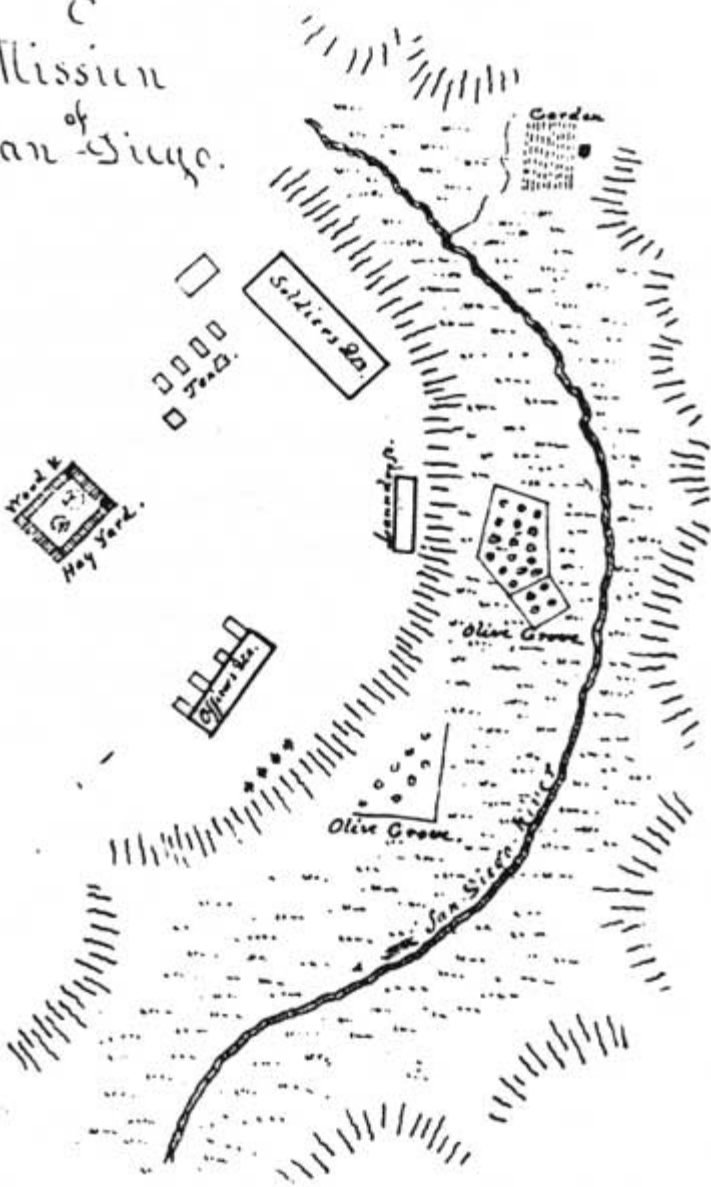
PHOTOREVISED 1975  
DMA 2549 II NW-SERIES V895

25



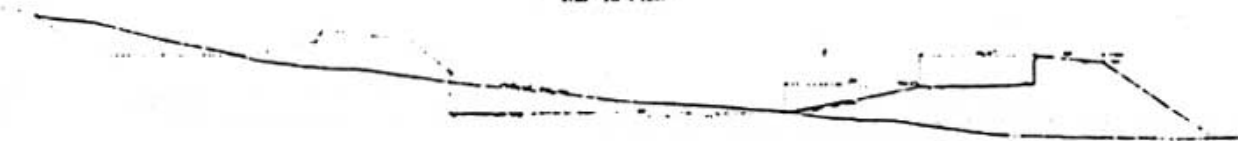


C  
Mission  
of  
San Diego.

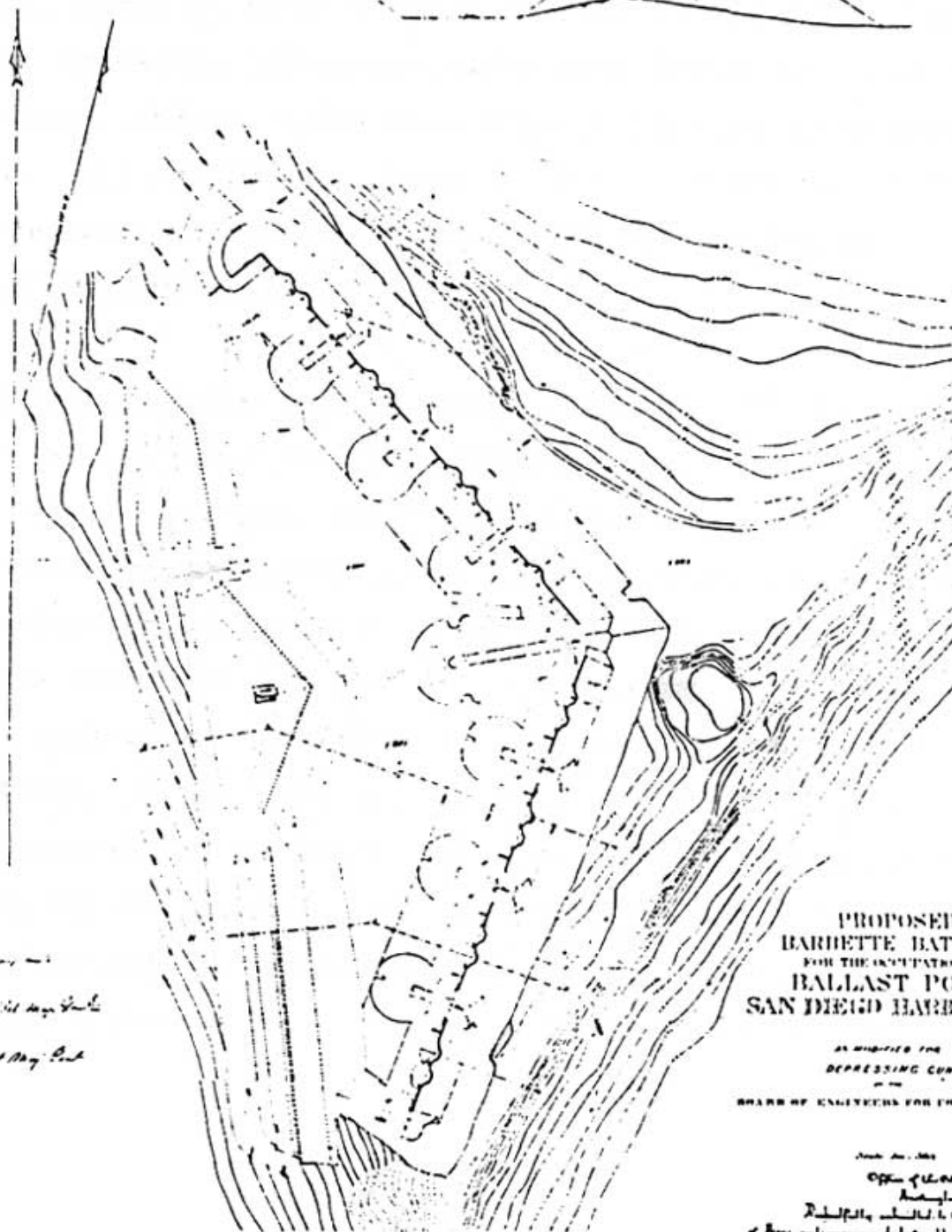
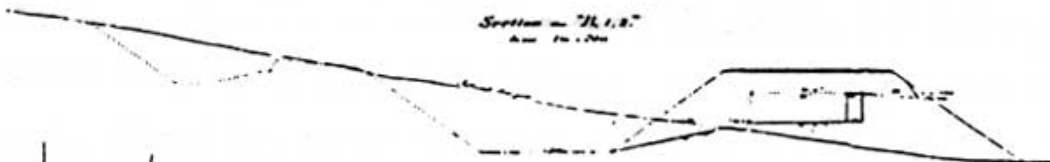


C?

Section No. "1, 1, 2, & 4."  
Scale 1/4" = 100'



Section No. "1, 1, 2."  
Scale 1/4" = 100'



PROPOSED  
BARRIETTE BATTERY  
FOR THE INSTALLATION OF  
BALLAST POINT  
SAN DIEGO HARBOR, CAL.

AS MODIFIED FOR  
DEPRESSING CURVE  
ON THE  
SHORE OF ENGINEERS FOR THIRTIETH ANNUAL

Scale 1/4" = 100'

Office of the Chief of Engineers,  
Washington, D.C., 1898

Respectfully submitted to the U.S. Army  
of Engineers, and recommended for approval

By the Chief of Engineers

Approved, subject to such changes as directed by  
the Chief of Engineers, and the necessary construction work  
and materials

*W. M. D. Bishop*

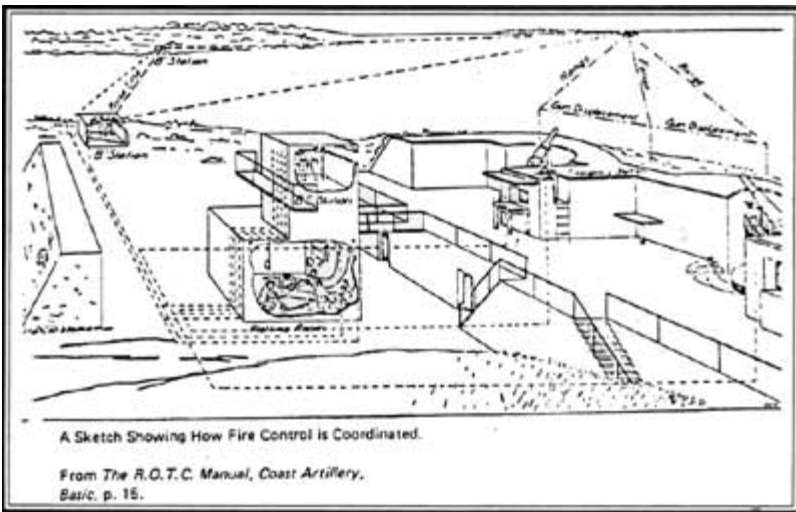
Copy of the map deposited  
in the Library of the  
Department of the Interior  
at the National Archives  
at College Park, Md.

San Diego Harbor, 1898  
and Ballast Point

San Diego Harbor  
and Ballast Point  
A. G. Mearns  
Chief of Eng. 1st Regt. Art.

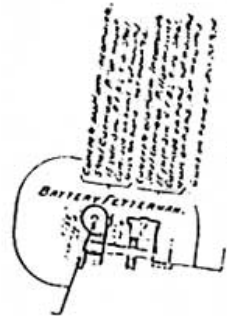






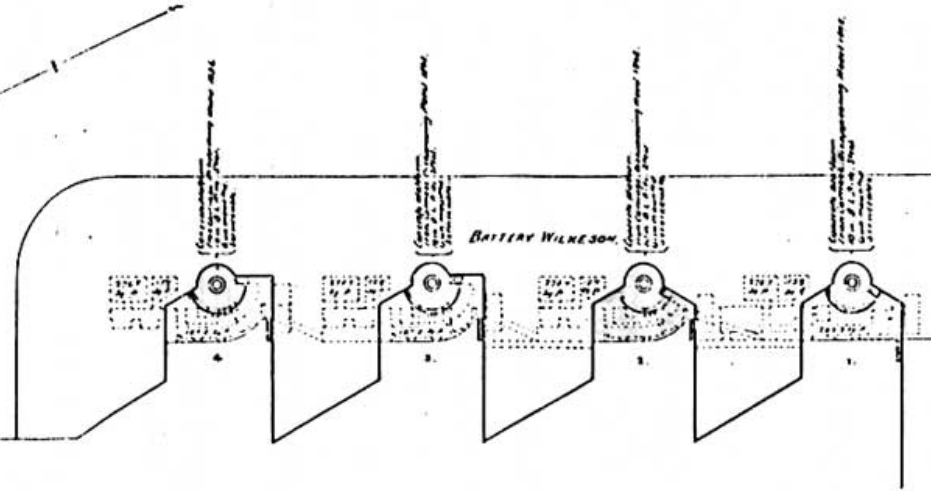
A Sketch Showing How Fire Control is Coordinated.

From *The R.O.T.C. Manual, Coast Artillery,*  
*Basic*, p. 15.



San Diego Office, San Diego, Cal. December 30, 1902  
Respectfully forwarded with Report of Assignment

*Edwin Fisher*  
Captain, Corps of Engineers, U.S.A.

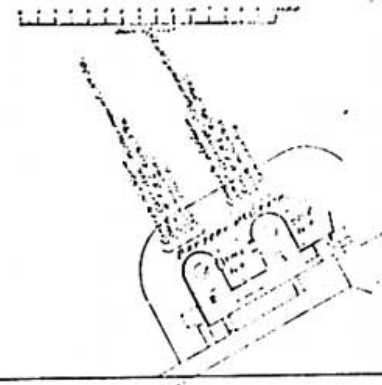


# FORT ROSECRANS.

SAN DIEGO HARBOR CAL.

1902

To accompany Report of Assignment.



# MAP

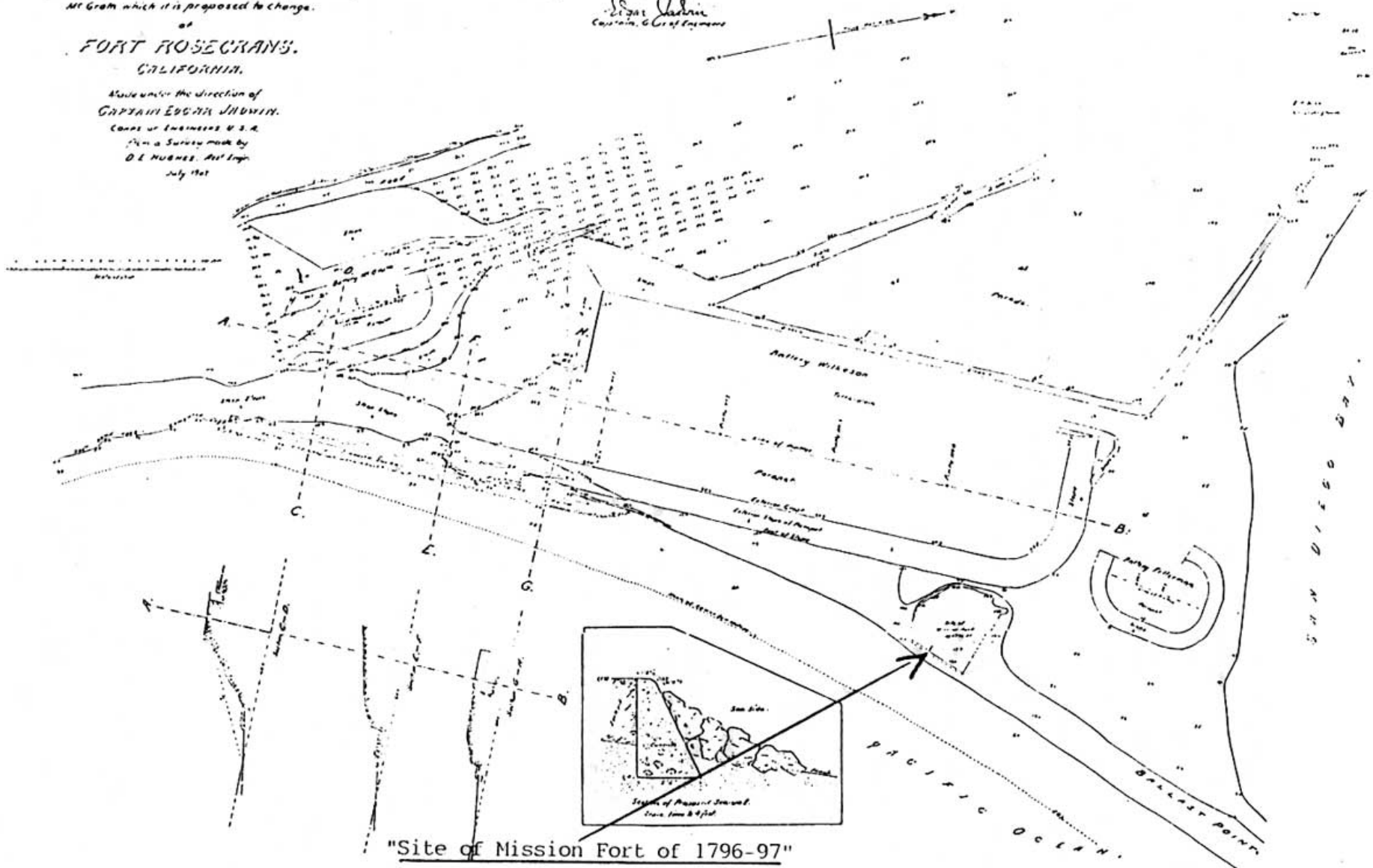
showing the proposed SEAWALL, and the ROAD from Battery  
Mc Gram which it is proposed to change.

## at FORT ROSECRANS, CALIFORNIA.

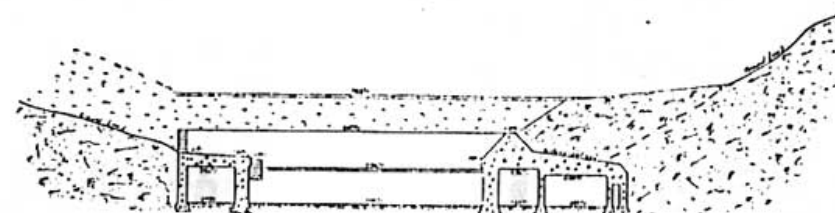
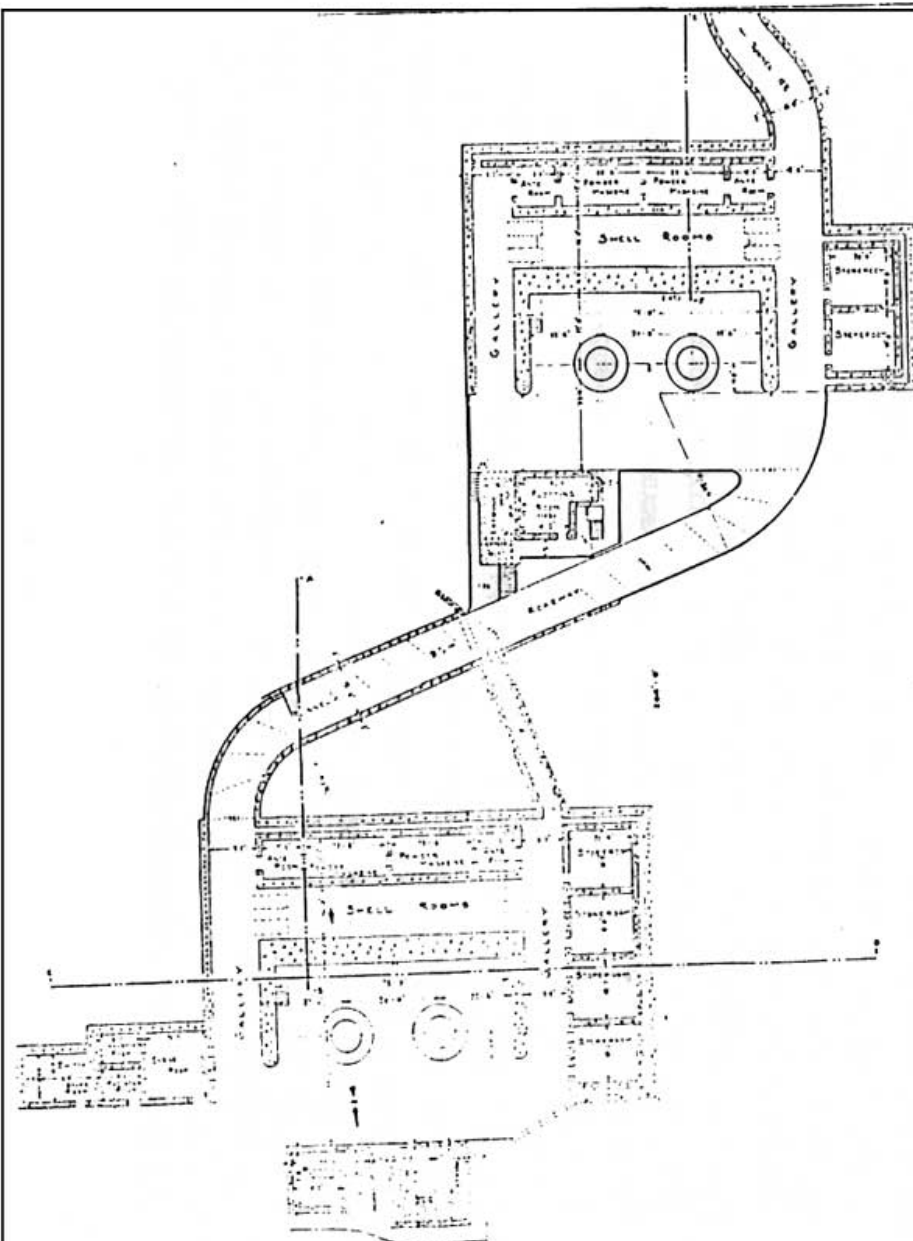
Made under the direction of  
CAPTAIN EDGAR J. JONES.  
Corps of Engineers U. S. A.  
From a Survey made by  
D. E. HUGHES, Art. Engr.  
July 1902

U. S. Engineer Office, San Diego Cal. August 18, 1902.  
Recommending letter dated August 18, 1902.

*E. J. Jones*  
Captain, Corps of Engineers



"Site of Mission Fort of 1796-97"



CROSS SECTION C-B



SECTION 5-1



SECTION A-B



ELEVATION REAR - PUTTING ROOM  
WALL OF

Office Chief of Engineers,  
U S Army  
Nov 10, 1913  
Submitted to the Secretary of War,  
approval recommended  
E. H. [Signature]  
Chief of Engineers

War Department  
Nov 26 1913  
Approved and recommended  
B. C. Cavanaugh,  
Chief of Coast Artillery

War Department Dec 1, 1915  
Approved  
By order of the Secretary of War  
J. C. [Signature]  
Major General of Staff

Group in the morning 1.5 hours  
Field Office in Washington, DC  
Jan 3, 96  
Revised in accordance with [ ]  
file 9431/33

*A. H. A. L.*  
1st Lt., Corps of Engineers, U.S. Army.

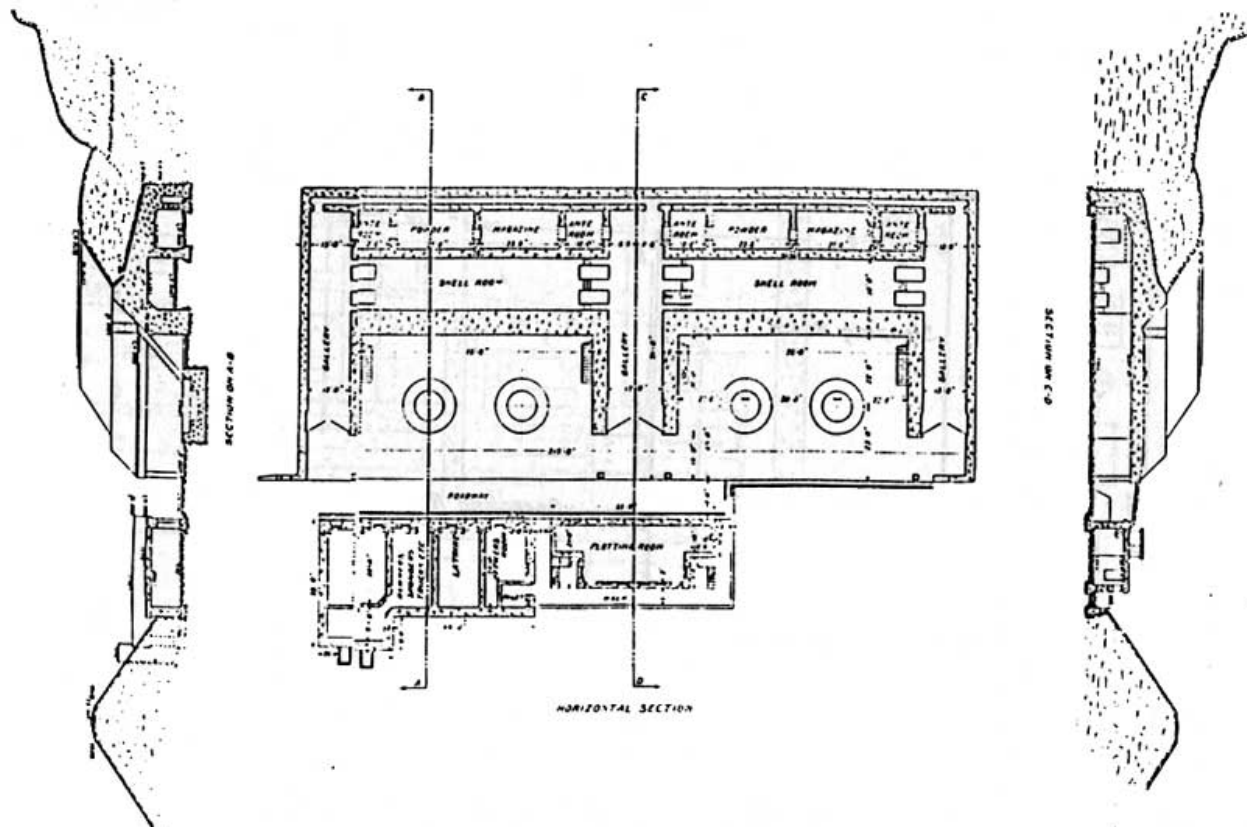
U.S. Army, 2nd Lt.  
600 Avenue C  
Jan - 75

Approved by me, Capt.  
Jan 3, 1975. [Signature]  
Major, U.S. Army

USENORTH CORPS  
LAW OFFICES  
JAN 11 1945  
Approval recommended for and in  
the absence of Major Raymond.  
A.H. Archer  
Lt Col. Corps: Commanding Officer

MORTAR BATTERY  
I POWER HOUSE CAÑON  
FORT ROSECRANS, CAL.

$$S_{\text{total}} = S_{\text{in}} + S_{\text{out}} + S_{\text{loss}}$$



Office Chief of Engineers  
U.S. Army  
January 25, 1915  
Submitted to the Secretary of War  
approval recommended  
J. B. [Signature]  
Chief of Engineers

War Department,  
Feb. 12, 1915  
Approval recommended  
J. B. [Signature]  
Chief of Coast Artillery

War Department, Feb. 17, 1915  
Approved  
By order of the Secretary of War  
J. B. [Signature]  
Brigadier General, Chief of Staff

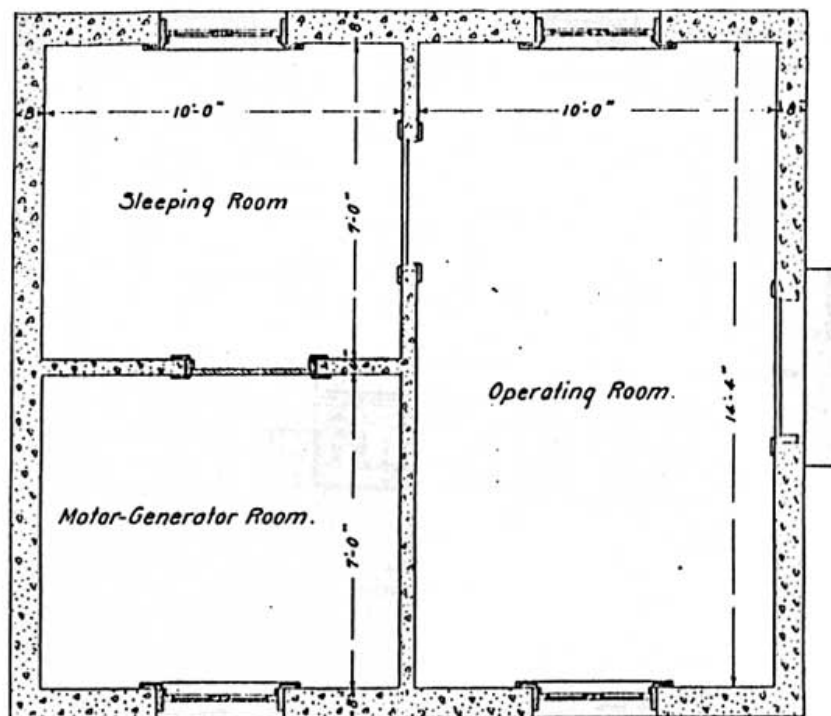
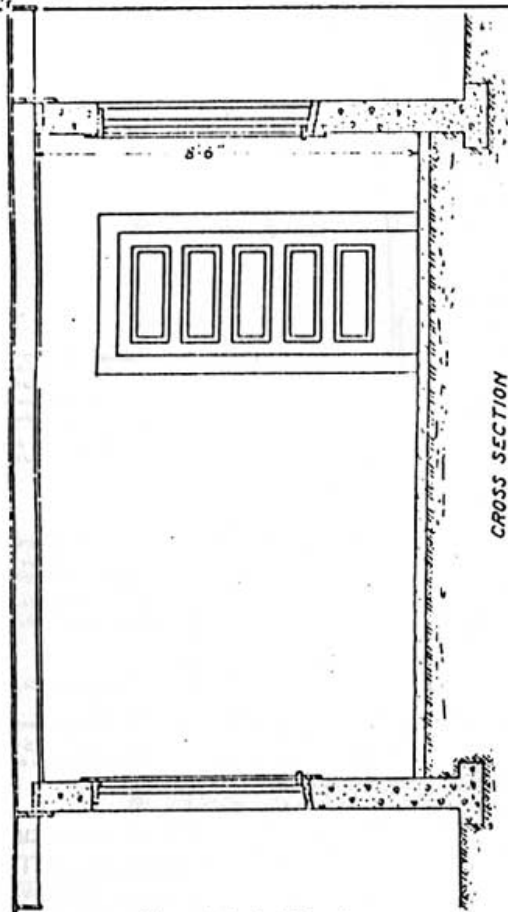
PROPOSED  
MORTAR BATTERY  
NAVAL RESERVATION  
FORT ROSECRANS, CAL.

U.S. Engineer Office  
Los Angeles, Cal.  
Dec 5, 1914  
Respectfully submitted to the Chief of  
Engineers, approval recommended

Scale of Feet  
0 10 20 30 40 50 60 70 80 90 100

[Signature]  
Major, Corps of Engineers, U.S. Army

Sheet 2 of 2



Office Chief of Engineers,  
U.S. Army.  
May 14, 1917.

Submitted to the Secretary of War; Approval recommended.  
approval recommended.

*[Signature]*  
Chief of Engineers.

War Department,  
May 23, 1917.

*[Signature]*  
Chief of Coast Artillery.

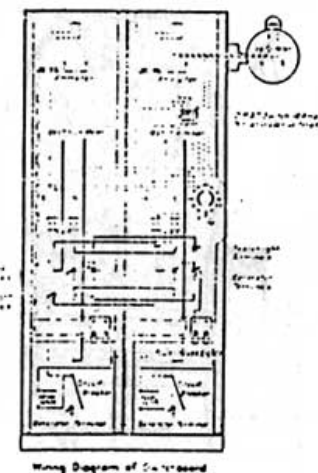
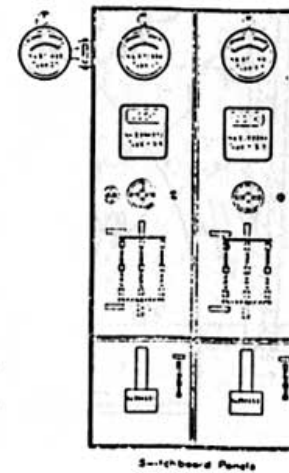
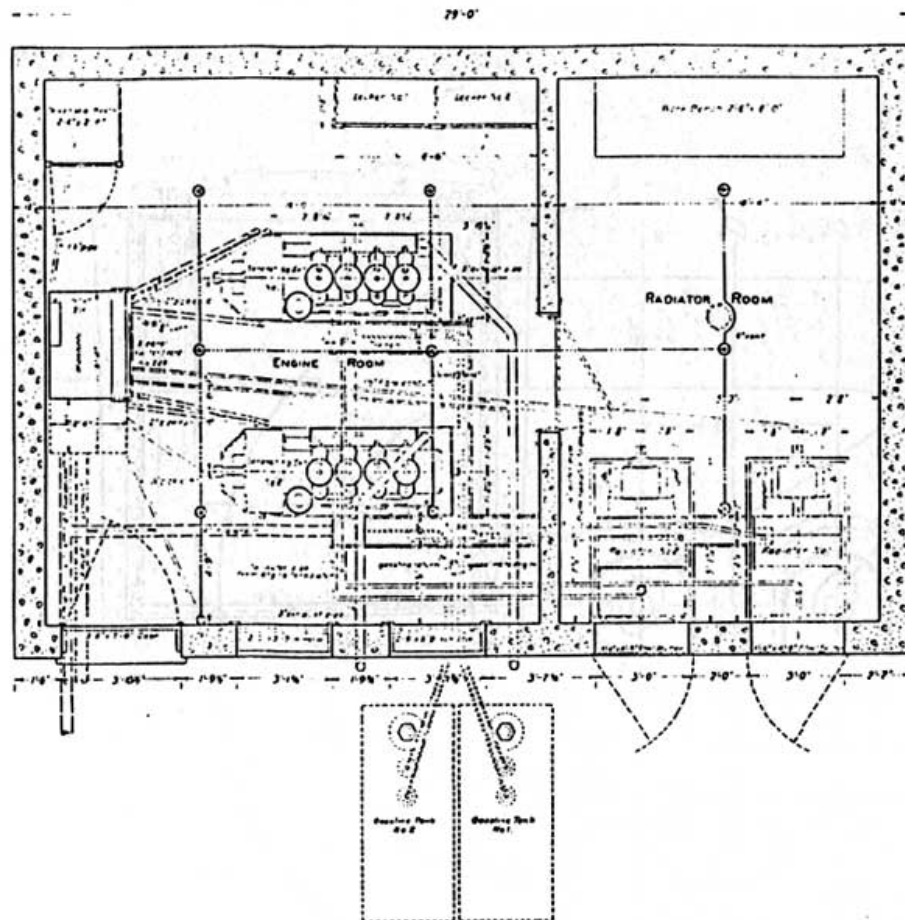
War Department, May 24, 1917.  
Approved.  
By order of the Secretary of War:

*[Signature]*  
Maj Gen Chief of Staff.

RADIO STATION  
FORT ROSECRANS, CAL.

In 1 sheet  
Scale of feet  
Scale  $\frac{1}{32}$   
U.S. Engineer Office, Los Angeles, Cal.  
Approval recommended.  
Major, Corps of Engineers.

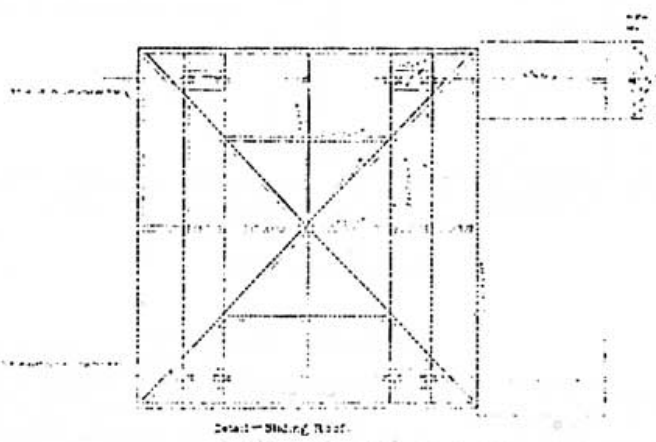
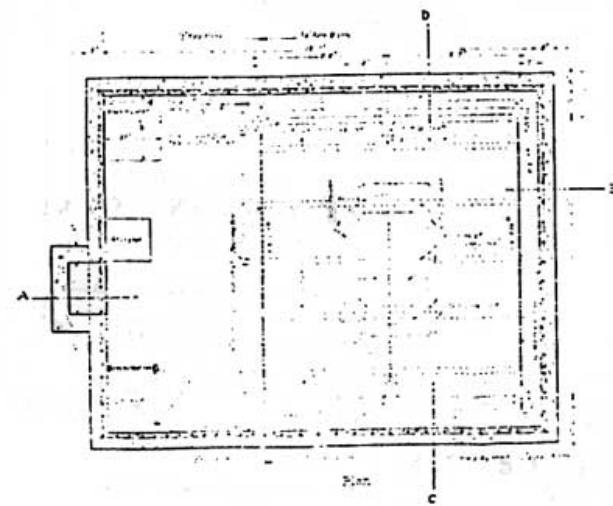
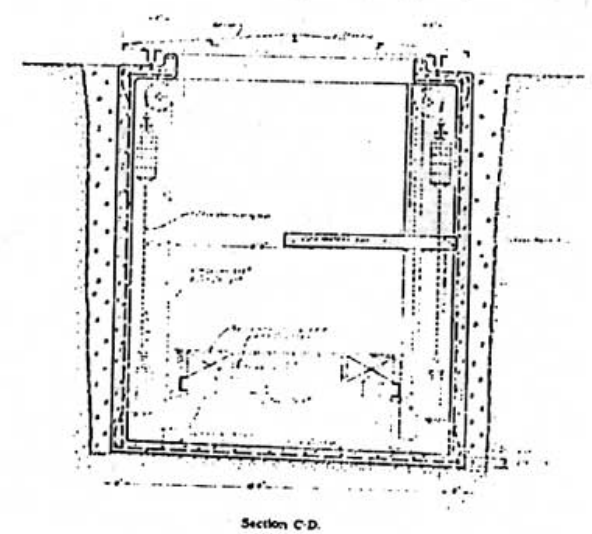
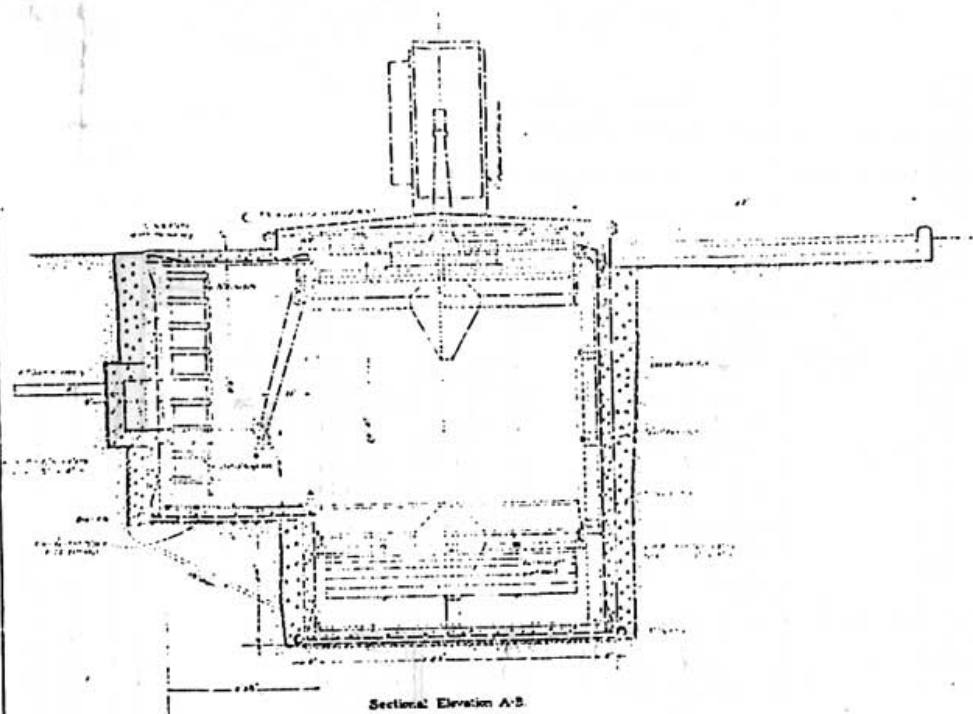
Drawn by CCH. File No 15-1-5 Transmitted with letter date 1 Aug 4 '16



# POWER HOUSE FOR SEARCHLIGHTS 5 AND 6 FORT ROSECRANS, CAL.

Project: \_\_\_\_\_ Scale: \_\_\_\_\_  
 U.S. Engineer Office, Los Angeles, Cal. \_\_\_\_\_  
 Approved: \_\_\_\_\_  
 Checked: \_\_\_\_\_  
 Drawn: \_\_\_\_\_





SHelters for Semiautomatics  
Nos. 1-2-4-6.  
FORT ROSECRANS, CALIF.

U.S. Engineer Office and District Engineer  
Approved for construction  
by the District Engineer  
and the District Engineer  
at Fort Rosecrans, Calif.  
Approved for construction  
by the District Engineer  
at Fort Rosecrans, Calif.

10-34-40

REPORT OF COMPLETED WORKS - SEACOAST FORTIFICATIONS.  
BATTERY PLAN.  
CORRECTED TO MARCH 27, 1919.

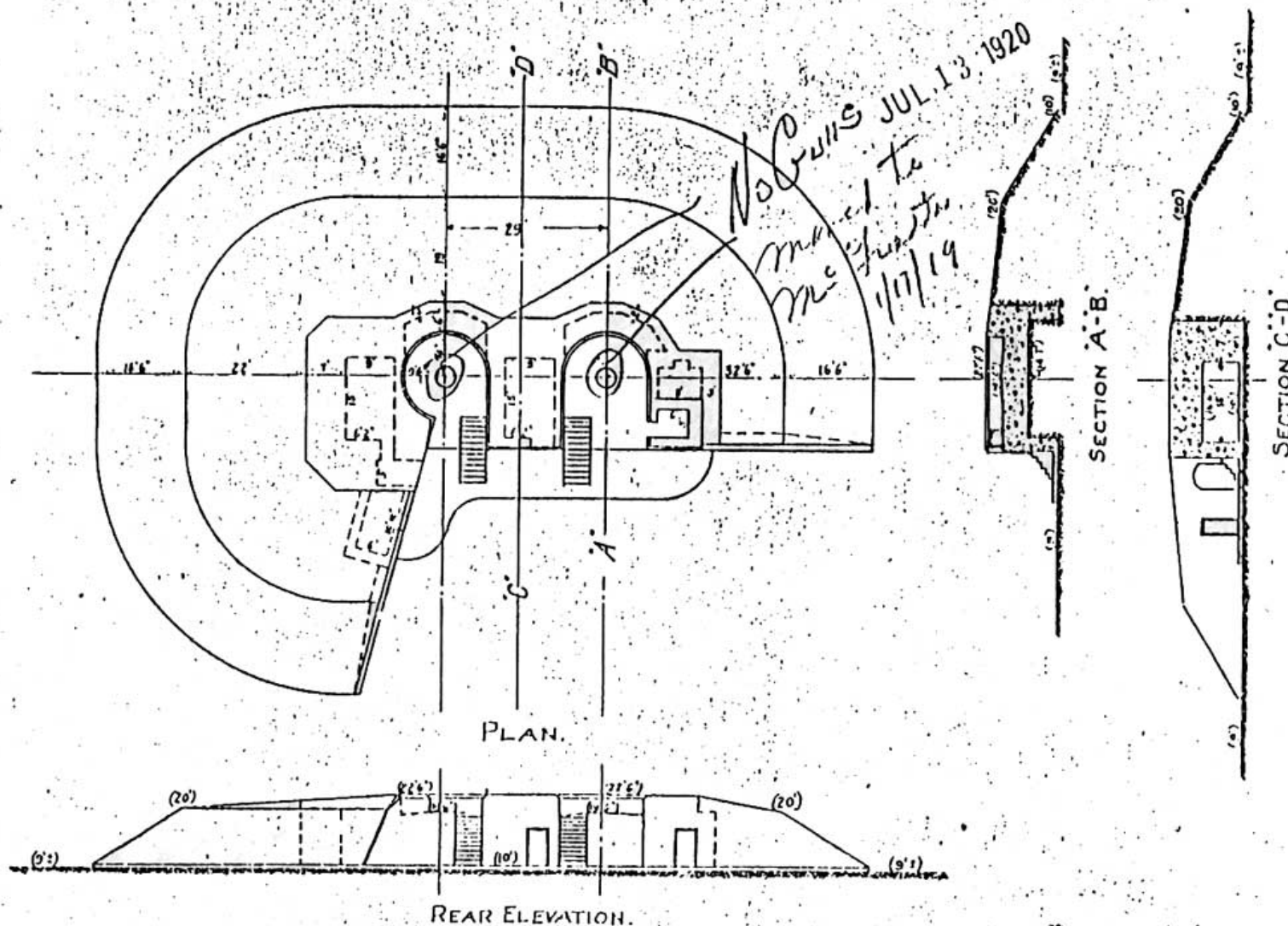
FORM 7.

COAST DEFENSES OF SAN DIEGO, CALIF.  
FORT PIO PICO, CAL.  
BATTERY MEED.

No. OF GUNS NONE. CALIBER

CARRIAGE

Scale =  $\frac{1}{360}$



Resubmitted 11/2/25  
Submitted June 21, 1919.

160 (San Diego) CM 30,536  
REPORT OF COMPLETED WORKS - SEACOAST FORTIFICATIONS  
(Fire control or torpedo structures)

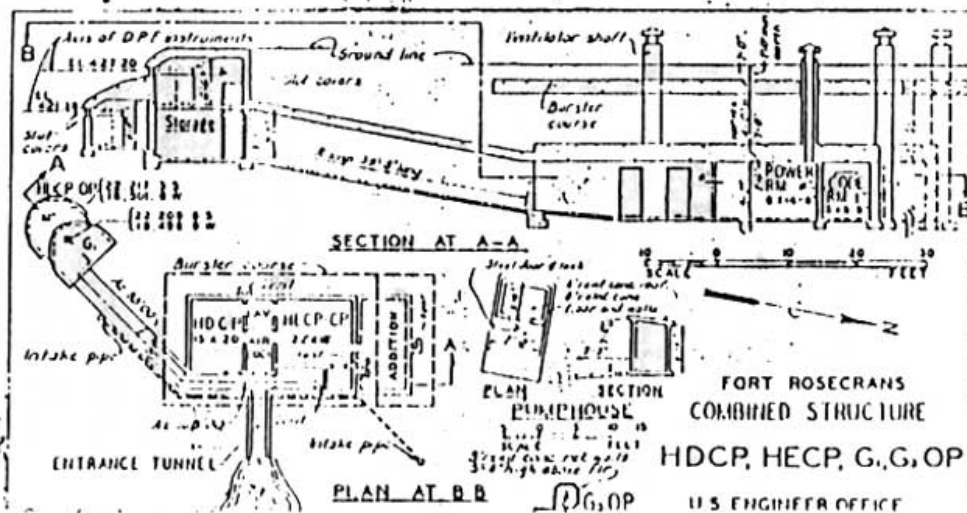
Form 2  
30536

Corrected to January 20, 1943

HARBOR DEFENSES OF SAN DIEGO, CALIFORNIA  
FORT ROSECRANS  
STRUCTURE: HARBOR DEFENSE COMMAND POST,  
HARBOR ENTRANCE CONTROL COMMAND POST  
GROUP 1 COMMAND POST  
GROUP 3 OBSERVATION POST  
\* Army-Navy Joint Base

STRUCTURE:  
Location : Cemetery Bluff, Point Loma  
Date of transfer : October 12, 1942  
Cost to that date : \$38,668.94  
Type of construction :  
(a) Roof : Reinforced concrete  
(b) Remainder of building : Reinforced concrete  
How concealed : Earth cover and native growth  
How protected : Earth cover and burster slab,  
: steel door and slot covers  
Height above concealment : 6 feet (at observation stations)  
Height above protection : 6 feet (at observation stations)  
Conspicuous at 100 yards :  
ELECTRIC CURRENT:  
Source of : Commercial power and stand-by  
: generator (8 kv.-a)  
Kilowatts required : 3.7  
Type of lighting fixtures : Benjamin #26805 - 200 w.  
HEAT:  
How heated : Not heated  
WATER AND SEWER:  
Connected to water mains : Yes  
Connected to sewer : Yes (septic tank)  
Type of latrine : Frostproof - syphon jet  
Permanent or temporary instln. : Permanent  
Present condition : Good  
REFERENCE:  
Reference of site : S. 22,209.8 - W. 18,496.9  
: (to upper level D.P.F.)  
Reference of instrument axis : Elevation 421.36 & 427.20  
Type and capacity of crane : None  
Max. dim. of reel handled : None

INSTRUMENTS AND EQUIPMENT:  
Type of observing instrument : 1 D.P.F. instrument in each  
: level  
Type of plotting board : None  
DATA TRANSMISSION:  
Type of : Telephone (installed by  
: Signal Corps)  
Date of transfer : Not transferred (Signal  
: Corps)  
Cost of data trans. equip. : Unknown (Signal Corps)  
REMARKS:  
Elevations are in feet above  
: mean lower low water.  
Origin of U.S.E.D. local  
: coordinates is U.S.C. &  
: G.S. station "Old Town."  
See Revisions on reverse side



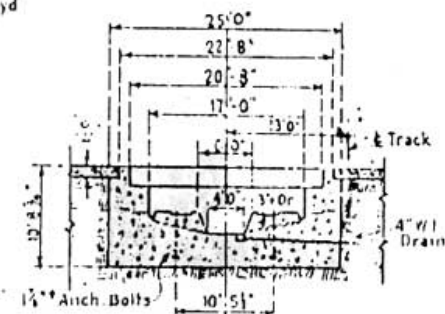
DECLASSIFIED PER EXECUTIVE ORDER 12356, Section 3.3, 735036  
By VSW  
NARA, Date 11/2/88

FORM 7

Corrected to July 21, 1942

REPRODUCED AT THE NATIONAL ARCHIVES  
**8-INCH BATTERY STRONG**  
No. of guns-TWO; Caliber-8 INCH. Carriage-BARBETTE.  
0 10 20 30 40 50 60 70 80 90 100  
SCALE - FEET  
(PLAN)

NOTE:  
Origin of coord. is U.S.C. & G.S. Sta.  
"Old Town".  
Datum is Mean Lower Low Water.  
Elev. top base ring 341.312.



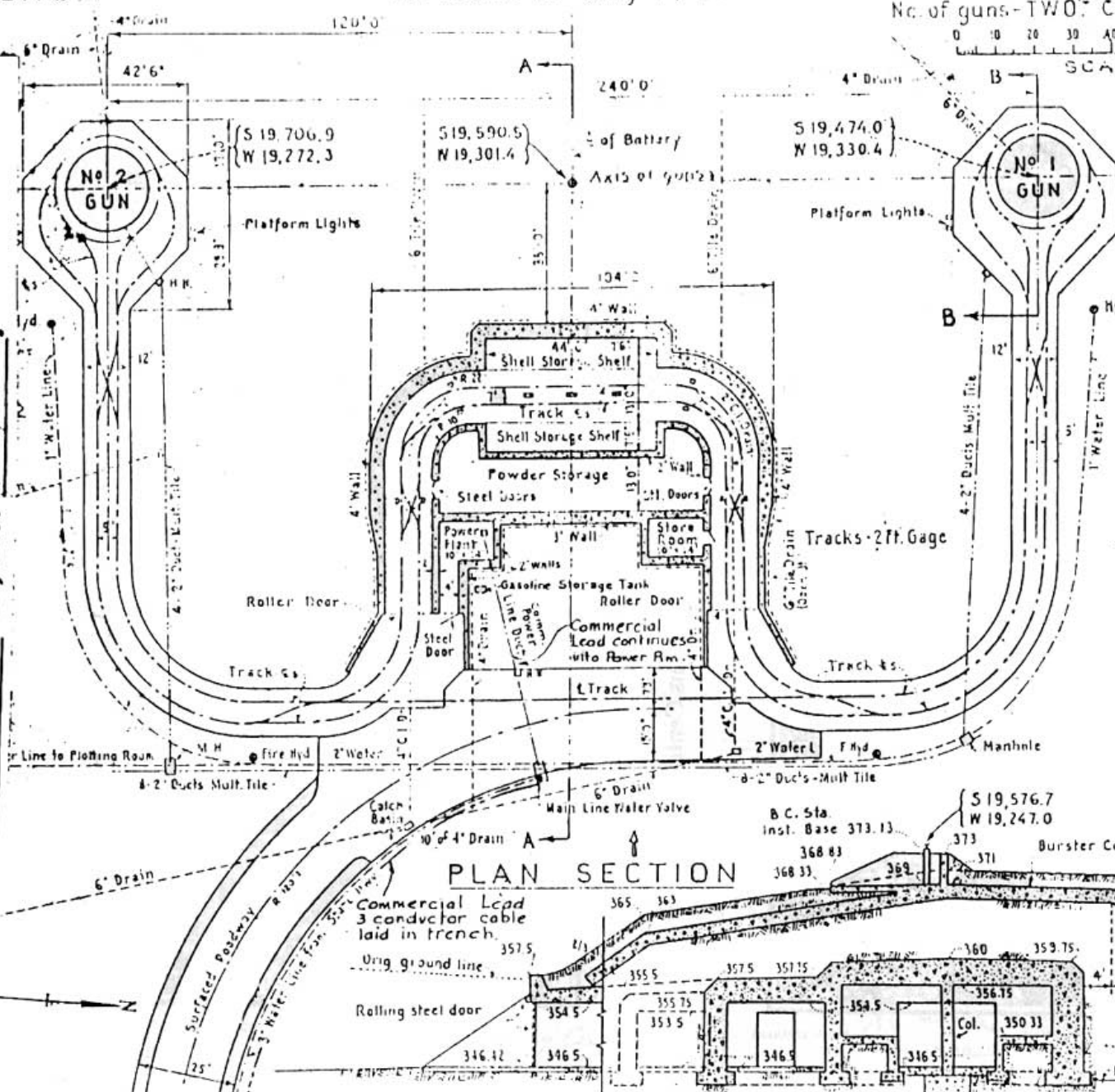
SECTION B-B

0 10 20  
SCALE - FEET

SECTION A-A

0 10 20  
SCALE - FEET

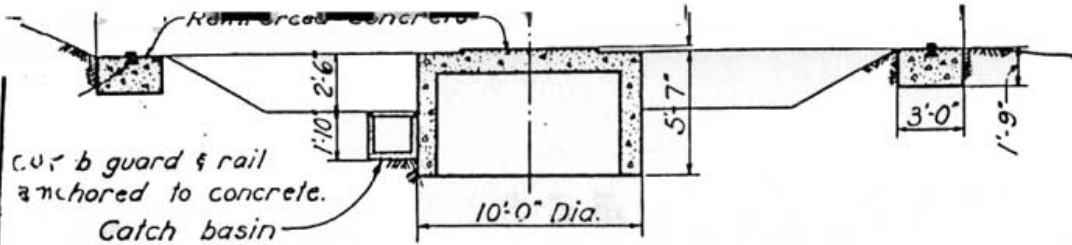
PLAN SECTION



Original ground line  
Elev. of top of gun platform 341.312

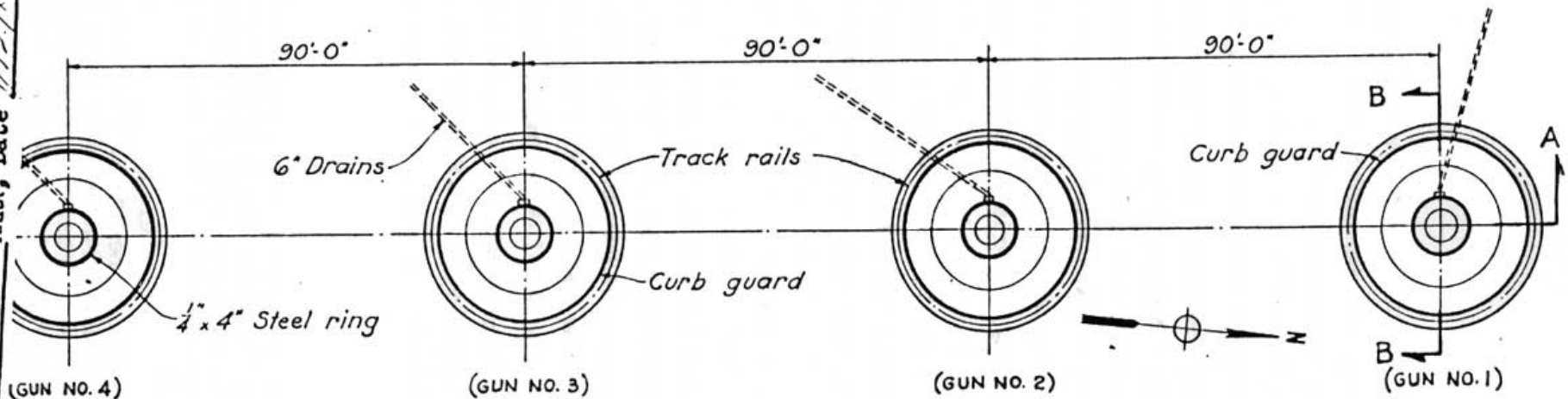
**FORT ROSECRANS**  
**155 MM GUN EMPLACEMENTS**  
 U.S. Engineer Office, Los Angeles, Calif.  
 July 1942

**BATTERY POINT LOMA**



**TYPICAL SECTION B-B**

SCALE:  $\frac{1}{8}$  IN. = 1 FT.



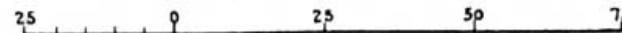
**PLAN**

SCALE: 1 IN. = 30 FT.



**SECTION A-A**

SCALE: 1 IN. = 30 FT.



Battery Point Loma, four 155mm guns. Archeologists have excavated

DECLASSIFIED PER EXECUTIVE ORDER 12356, Section 3.3,  
 By *VSU* NARA, Date *11/2/88*

735036





DECLASSIFIED PER EXECUTIVE ORDER 12356, Section 3.3, 735036

By *NSW* NARA, Date *11/2/88*

~~CONFIDENTIAL~~

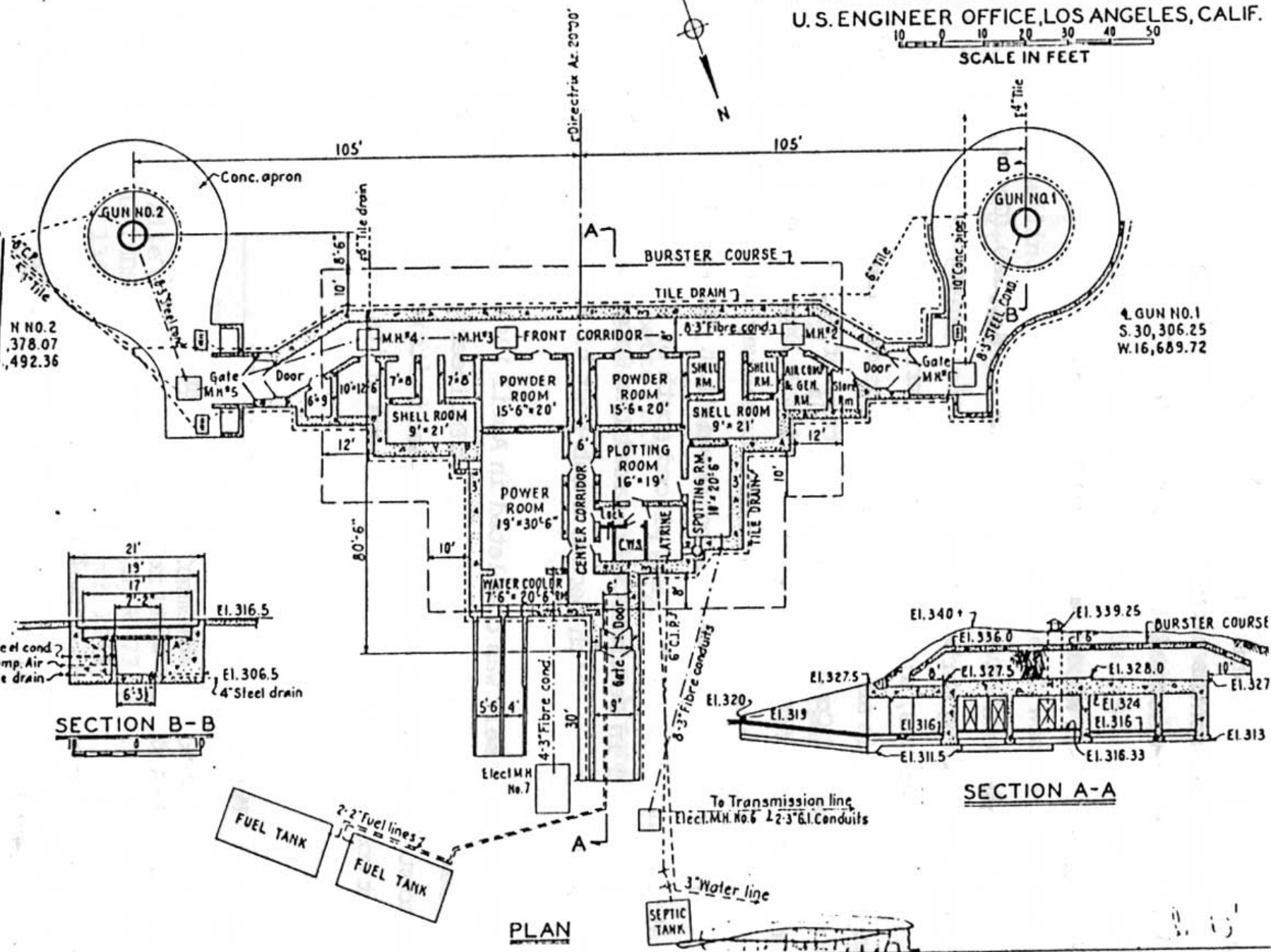
REPRODUCED AT THE NATIONAL ARCHIVES

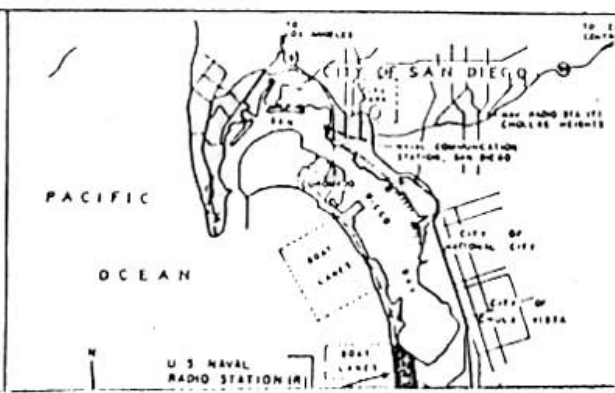
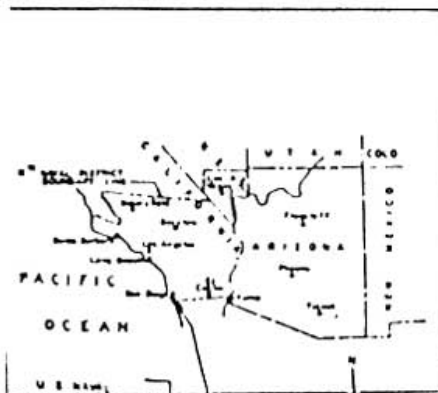
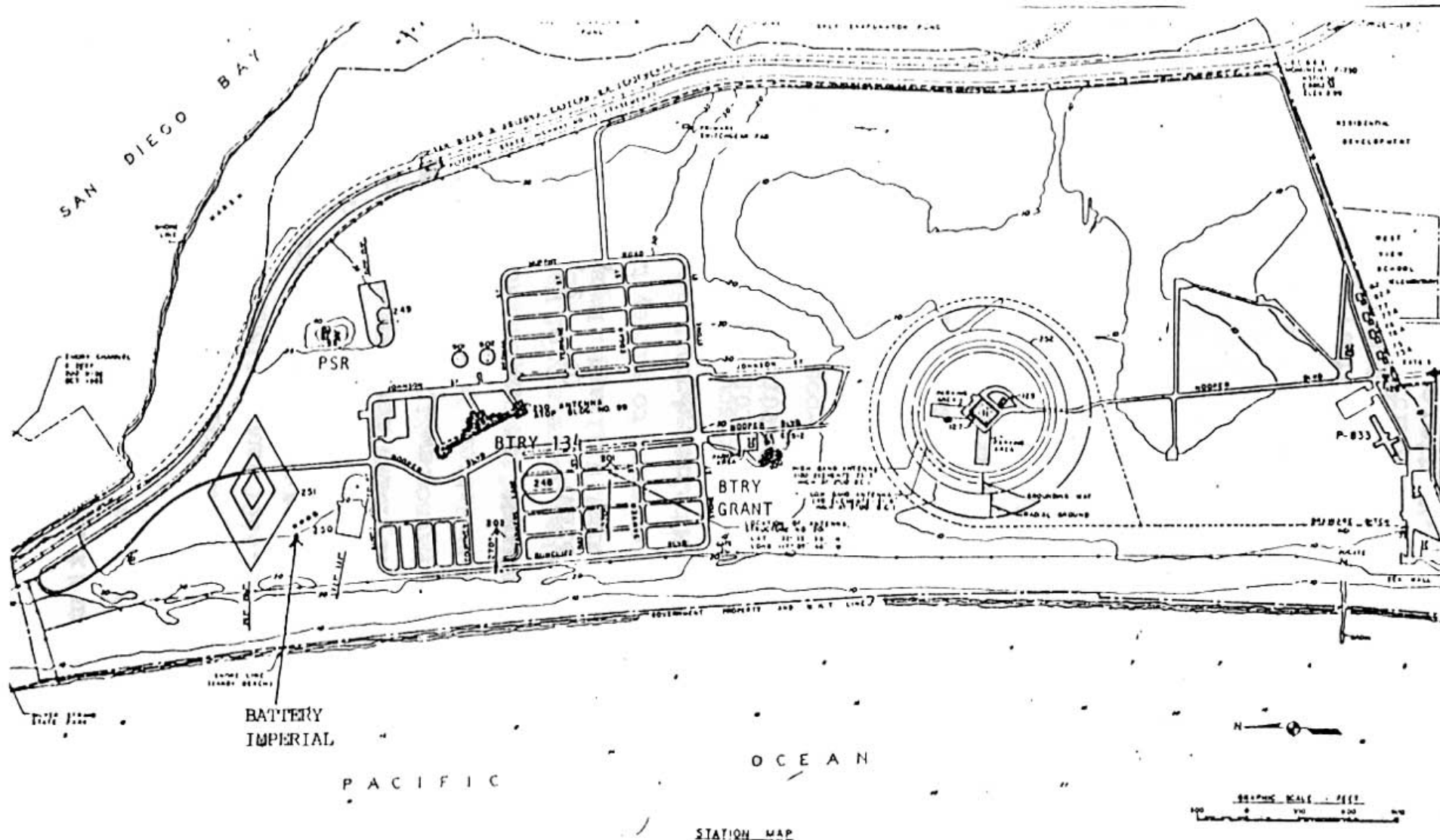
# BATTERY HUMPHREYS

6-INCH (CONSTRUCTION NO. 238)

U.S. ENGINEER OFFICE, LOS ANGELES, CALIF.

10 0 10 20 30 40 50  
SCALE IN FEET





# **NAVAL RADIO RECEIVING FACILITY IMPERIAL BEACH (FORMERLY FORT EMORY)**

## **LEGEND**

## **GENERAL NOTES**

1. EXISTING BUILDING OR STRUCTURE
  2. EXISTING BUILDING OR STRUCTURE UNDERGROUND
  3. EXISTING ROAD OR DRIVEWAY ON PLANT ACCOUNT
  4. EXISTING FENCE
  5. EXISTING PAVEMENT ON PLANT ACCOUNT
  6. DRIVE LINE
  7. HIGHWAY AND OR EASEMENT LINE
  8. STATION BOUNDARY LINE
  9. EXISTING RAILROAD
  10. MAIN STATION ENTRANCE
  11. DRAINAGE FLOW
1. END VIEW AND COORDINATE VALUES SHOWN HEREON CORRESPOND WITH OLD TOWN PLANT HORIZONTAL CONTROL SYSTEM
  2. DRAWING OF OLD TOWN PLANT
  3. UNLESS OTHERWISE NOTED THE PLANNED USE OF EXISTING BUILDINGS AND/OR STRUCTURES ARE THE SAME AS THE CURRENT USE
  4. THIS BUILDING AND/OR STRUCTURE IS OWNED ON PROPRITY RECORD CARDS OF THE PUBLIC WORKS CENTER, U.S. NAVAL STATION, SAN DIEGO
  5. DRAINAGE DITCHES ARE LOCATED LOW WATER TO BE
  6. FOR REAL ESTATE BOUNDARY MAP - SEE U.S.D. AND NO. 103444
  7. WATER SEPTIC ARE IN 1957
  8. STRUCTURES AND POL. FOR 2ND, 3RD, 4TH AND 5TH ARE P.E.D. ANTENNAE FOR NAVAL ELECTRONICS LABORATORY CENTER

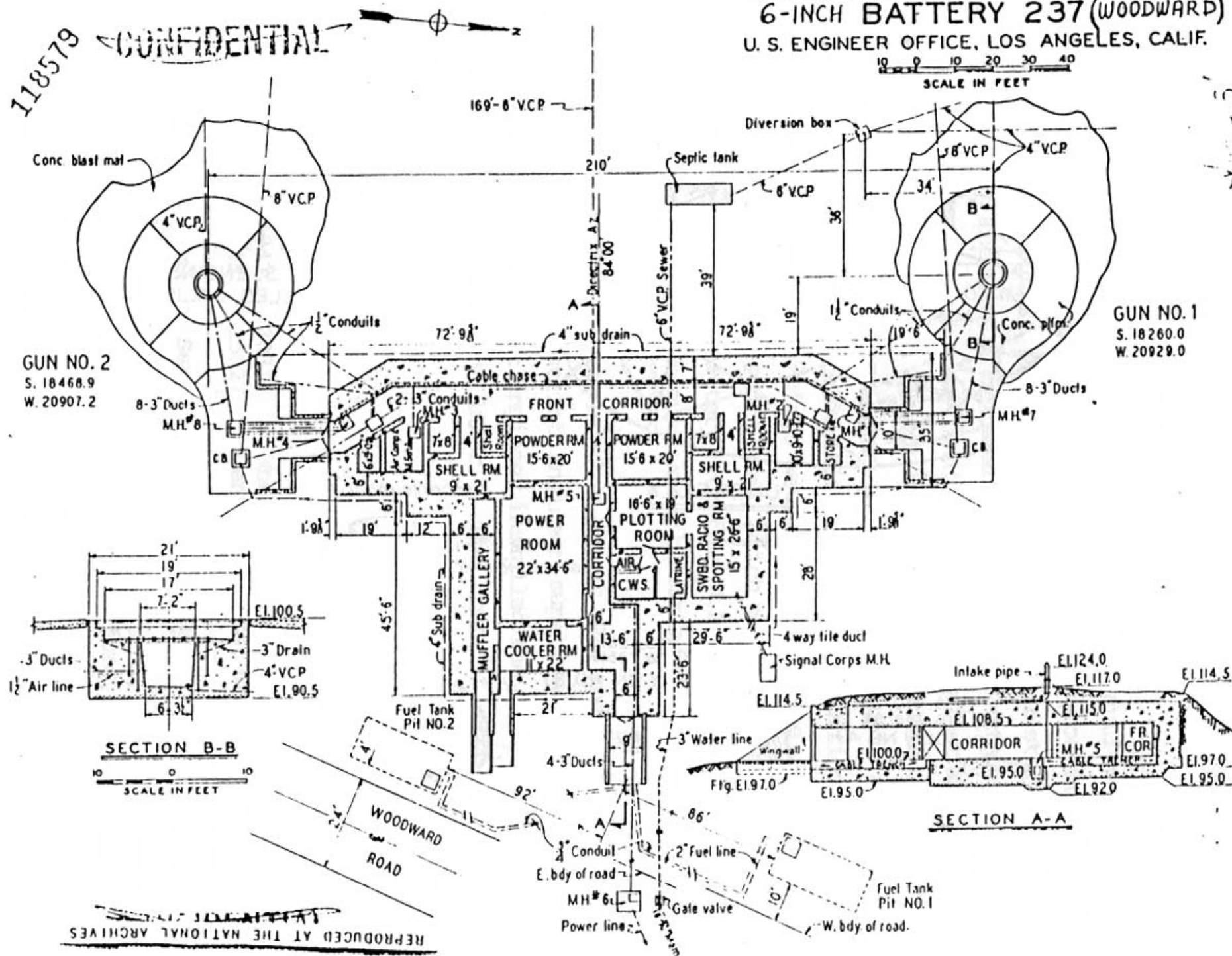




~~CONFIDENTIAL~~



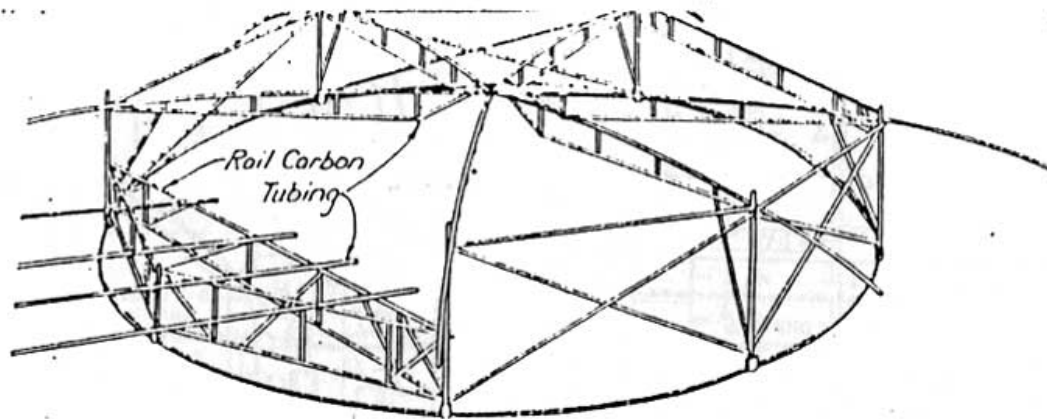
10 0 10 20 30 40  
SCALE IN FEET





# BATTERY IMPERIAL

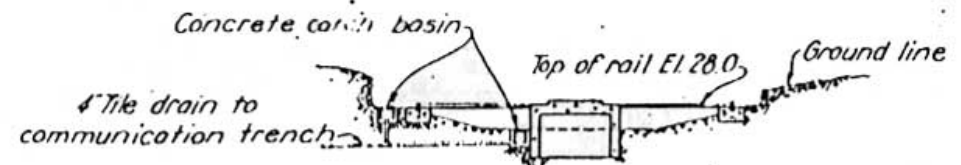
U. S. ENGINEER OFFICE,  
LOS ANGELES, CALIF., DECEMBER, 1942



## TUBULAR STEEL "UMBRELLA"

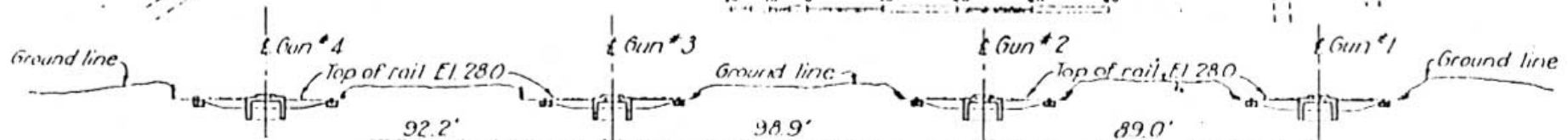
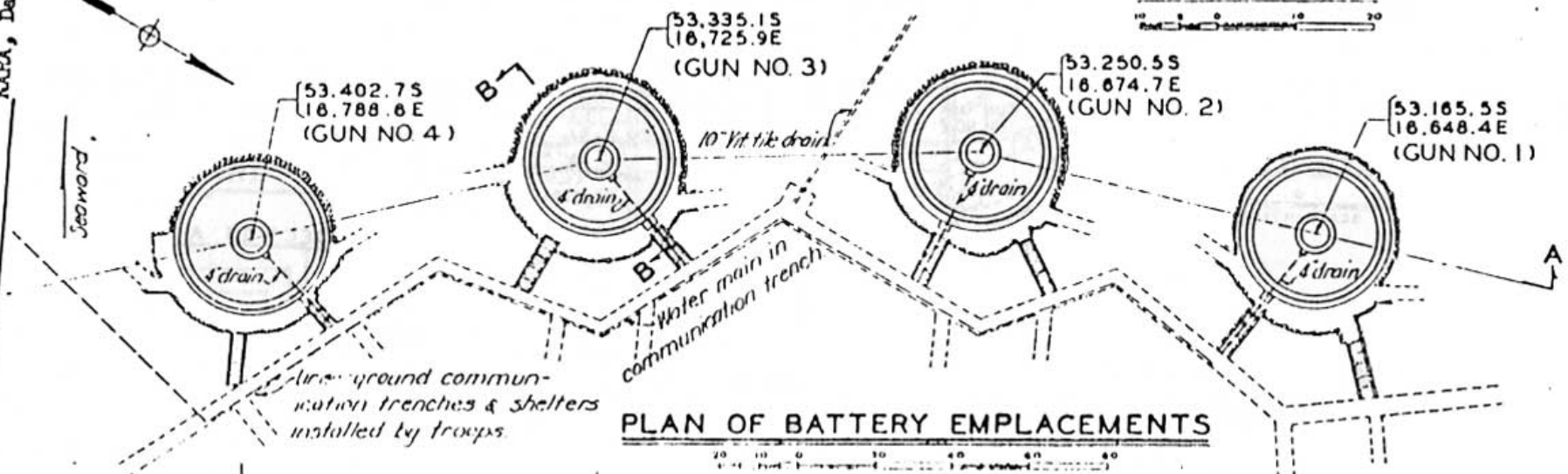
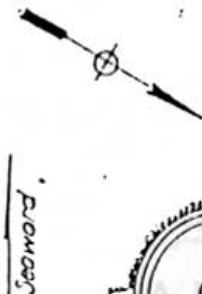
### CAMOUFLAGE SUPPORT

4 INSTALLED



### SECTION B-B

0 10 20 30



DECLASSIFIED PER EXECUTIVE ORDER 12356, Section 3.3, 735036  
By VLSW  
NARA, Date 11/2/87



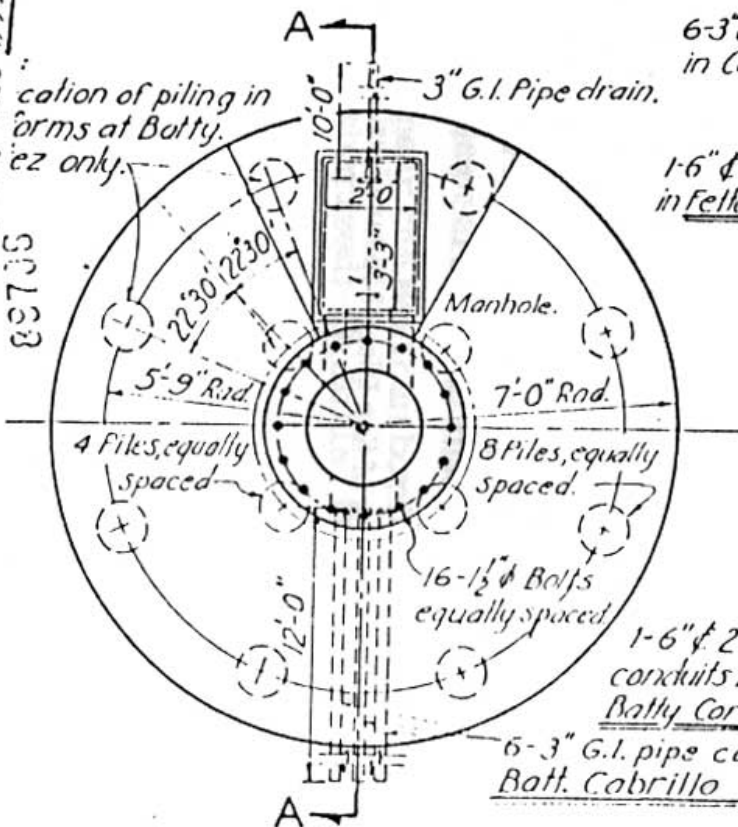
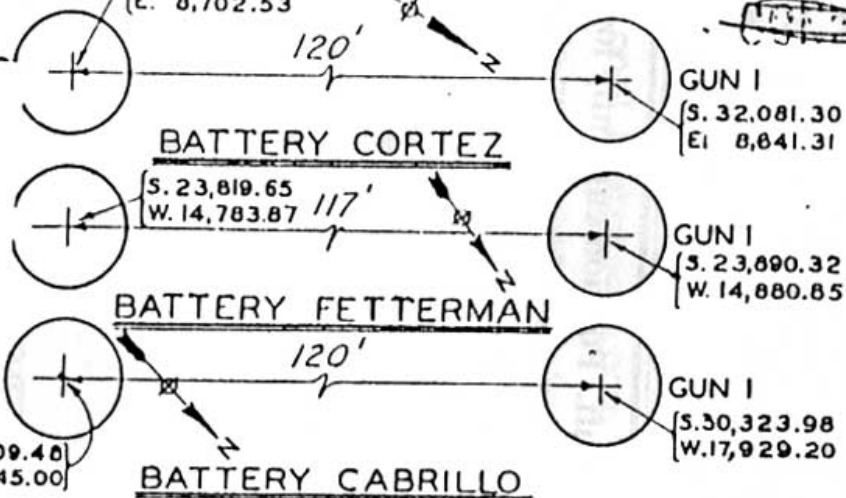
By *VSW*

NARA, Date *11/2/87*

83705

PART VII

E. 8,702.53

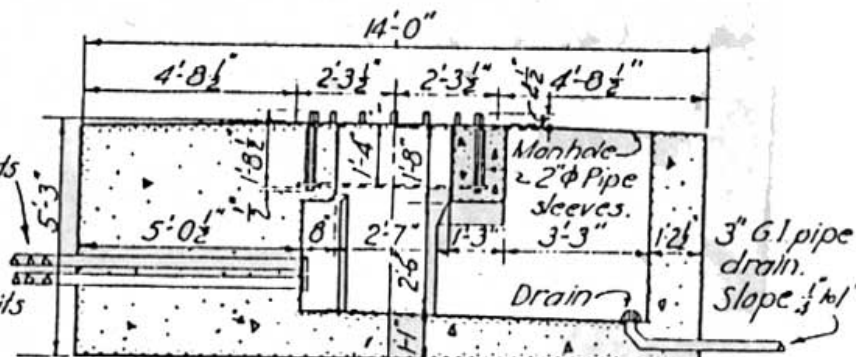


PLAN OF FIRING PLATFORM

6-3" G.I. pipe conduits in Cabrillo plims.

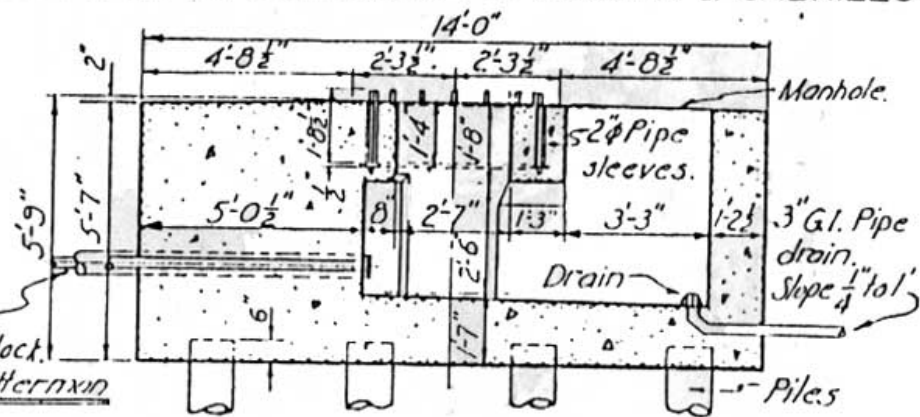
1-6" & 2-3" G.I. conduits in Fetterman plims.

1-6" & 2-3" G.I. conduits in each block. Batty Cortez & Fetterman only.



SECTION A-A

PLATFORMS AT BATTERIES FETTERMAN & CABRILLO.



SECTION A-A

PLATFORM AT BATTERY CORTEZ

REPRODUCED AT THE NATIONAL ARCHIVES

AMTB BATTERIES

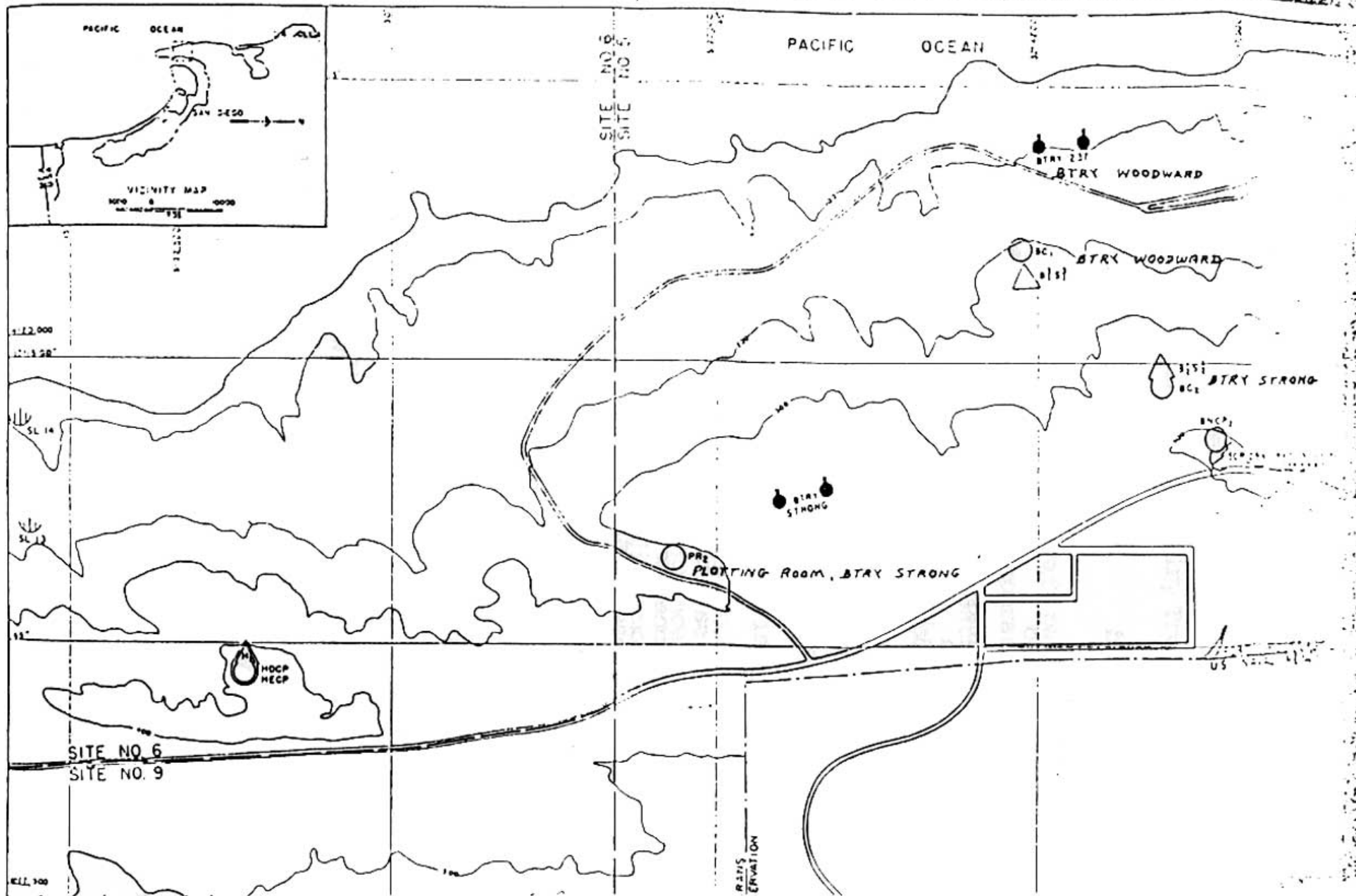
CABRILLO, FETTERMAN & CORTEZ

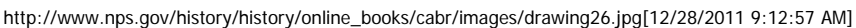
U.S. ENGINEER OFFICE, LOS ANGELES, CALIF.

1 0 5 10

SCALE IN FEET

JOB NO: SAN DIEGO FS-1, DIR. CONSEC. NO FS-1025







# CABRILLO

## The Guns of San Diego Historic Resource Study



### CHAPTER 1: ENDNOTES

1. Samuel Eliot Morison, The European Discovery of America, the Southern Voyages, A.D. 1492-1616 (New York: Oxford University Press, 1974), pp. 621-623.
2. For hundreds of years historians concluded Cabrillo was Portuguese. Many still do. This belief is based on the earliest (1601) published account of his expedition. The royal historian Antonio de Herrera wrote that the viceroy "named as their captain Juan Rodríguez Cabrillo, Portuguese, a person very skilled in seamanship." In recent years some historians have concluded that Cabrillo was Spanish. The most thoroughly researched book reaching this conclusion is Harry Kelsey, Juan Rodríguez Cabrillo (San Marino: Huntington Library, 1986), pp. 3-21. In Portuguese his name is currently spelled Joao Rodrigues Cabrilho.
3. Morison, European Discovery, p. 628.
4. Kelsey, Cabrillo, p. 107, states that a third vessel sailed in the voyage, the small launch San Miguel.
5. Herbert Eugene Bolton, Spanish Exploration in the Southwest, 1542-1706 (New York: Charles Scribner's Sons, 1916), pp. 5-39. Kelsey, Cabrillo, p. 143, writes that in addition to the feast day (actually September 29), the bay was named for the San Miguel.
6. Henry R. Wagner, Juan Rodríguez Cabrillo. Discoverer of the Coast of California (San Francisco: California Historical Society, 1941), pp. 10, 16, and 30-32; Bolton, Spanish Exploration, pp. 5-39; Morison, European Discovery, pp. 628-631; Hubert Howe Bancroft, History of California, 7 vols. (San Francisco: The History Company, 1884-1890), 1:69-77; McKeever, pp. 11-17. Kelsey, Cabrillo, p. 156-158.
7. Morrison, European Discovery, pp. 493-495; Bolton, Spanish Exploration, p. 43; McKeever, San Diego, p. 21. Until 1804 Upper and Lower (Alta and Baja) California were considered one province. That year they were divided; the official names being Nueva and Antigua California. Bancroft, California, 2:20.
8. Erwin G. Gudde, California Place Names, The Origin and Etymology of Current Geographical Names (Berkeley: University of California Press, 1969), p. 282.
9. Bolton, Spanish Explorations, pp. 80-81.
10. Bancroft, California, 1:98-104; Gudde, California Place Names, p. 181. "Loma" means a low, long elevation or hill; McKeever, San Diego, p. 23.
11. McKeever, San Diego, pp. 24-27 and 32-33; George Tays, "Mission San Diego de Alcalá," Registered Landmark No. 242, California Historical Landmarks Series, ed. by Vernon Aubrey Neasham, Berkeley 1937. In 1862, President Abraham Lincoln caused the

church and twenty-two acres of land to be returned to the Catholic Church. In recent times the church has been reconstructed and serves an active parish today.

12. Bancroft, California, 1:204.

13. Bancroft, California, 1:199, p. 3, and p. 204; Francis J. Weber, "California's Caminito Real," California Historical Quarterly, 54:67; George Walcott Ames, Jr., "San Diego Presidio Site, " Registered Landmark No. 59, California Historical Landmarks Series, ed. by Vernon Aubrey Neasham, Berkeley 1936. Spain established four major presidios in Alta California: San Diego, Monterey, San Francisco, and Santa Barbara.

14. Bancroft, California, 1:649-651.

15. Bancroft, California, 1:512-514, 534-535, and 645-651.

16. Bancroft, California, 3:162-163; "Duhaut-Cilly's Account of California in the Years 1827-28," translated by Charles Franklin Carter, California Historical Society Quarterly 8 (September 1929): 218.

17. Richard Henry Dana, Jr., Two Years Before the Mast, A Personal Narrative of Life at Sea (Cleveland: World Publishing, 1946), p. 134.

18. Bancroft, California, 2:10-14; This encounter later became known as "The Battle of San Diego Bay."

19. Bancroft, California, 3:132-133.

20. "Duhaut—Cilly's Account of California, " California Historical Society Quarterly 8 (September 1929): 217-218.

21. Douglas Flower and Linda Roth, Cultural Resource Inventory, Archaeology/History/Architecture, Navy and Coast Guard Lands, Point Loma, San Diego, California (San Diego, 1982), pp. 147-157; James Robert Morriarty, The Cabrillo National Monument, A Physical and Cultural Overview (National Park Service, 1977), p. 168; Cabrillo Historical Seminar (1982), pp. 3-72; Bancroft, California, 1:649 and 2:10-13; Robert W. Frazer, Forts of the West. (Norman: University of Oklahoma Press, 1965), pp. 23-24; Captain Edgar Jadwin, CE, "Map showing the proposed Seawall at Fort Rosecrans, July 1902," Western Regional Office, National Park Service, San Francisco, California.

---

<<< [Previous](#)

<<< [Contents](#) >>>

[Next](#) >>>

# CABRILLO

## The Guns of San Diego Historic Resource Study



### CHAPTER 2: ENDNOTES

---

1. Theodore Grivas, Military Governments in California, 1846-1850 (Glendale: Arthur H. Clark, 1963), pp. 55-58.
2. An earthwork existed on Presidio Hill prior to the Americans' arrival. Californians had constructed it during a time of internal unrest when San Diego anticipated an attack from Los Angeles. See Frazer, Forts of the West, pp. 31-32; Bancroft, California, 5:326-328; George Tays, "Fort Stockton," Registered Landmark No. 54, ed. by Vernon Aubrey Neasham, State of California, Department of Natural Resources, Division of Parks, Berkeley, 1937. A few traces of the earthwork remain. In 1940 a memorial to the Mormon Battalion was erected on the site. A Spanish cannon, "El Jupiter," manufactured in Manila in 1783 is mounted there.
3. Grivas, Military Governments, pp. 58-67; Bancroft, California, 5:336-356.
4. W. H. Emory, Lieutenant Emory Reports. Introduction by Ross Calvin (Albuquerque: University of New Mexico Press, reprint 1951), p. 175.
5. John F. Yurtinus, "The Mormon Volunteers: The Recruitment and Service of a Unique Military Company," The Journal of San Diego History 25 (Summer 1979): 243-250; Bancroft, California, 5:473-487.
6. U.S. Congress, 31st Cong., 1st sess., House Executive Document 17, 1850, pp. 891-893.
7. Post Returns, San Diego Barracks, April 1849-December 1860, Returns from U.S. Military Posts, 1800-1916, Roll 1096, Microcopy 617, National Archives, hereinafter cited as NA, Washington, D. C. Although Mission of San Diego and San Diego Barracks maintained separate post returns, they were microfilmed together.
8. Ibid; and Francis B. Heitman, Historical Register and Dictionary of the United States Army... 1789 to 1903. Vol. 1. (Washington: Government Printing Office, 1903).
9. Post Return, January 1854, San Diego Barracks, Roll 1096, Microcopy 617, NA; Robert W. Frazier, "Military Posts in San Diego, 1852," The Journal of San Diego History 20 (Summer 1974): 49-50; George Wharton James, In and Out of the Old Missions of California (Boston: Little, Brown, 1910), p. 115; Robert W. Frazer, ed., Mansfield on the Condition of the Western Forts, 1853-54 (Norman: University of Oklahoma Press, 1963), p. 106; n. 37. In 1853 Mansfield drew a sketch of the military structures at the mission including the officers' quarters and the enlisted barracks. The church itself is not shown. By 1930 the mission was practically in ruins. Reconstruction of the church began in 1931. Since then a long portico has been added. In 1975 the church was raised in rank to a minor basilica.
10. The San Diego Union, May 1, 1873.

11. George Ruhlen, "San Diego Barracks, " San Diego Historical Society Quarterly 1 (April 1955): 15; Map, "Plan of San Diego Barracks, California, 1879," Drawer 102, Sheet 14, Cartographic Archives Division, NA.

12. Ruhlen, "San Diego Barracks," San Diego Historical Society Quarterly 1:16; Frazer, ed., Mansfield, p. 105, n. 35 and p. 225.

13. The common name "San Diego Barracks" did not come into use until January 1876.

14. Post Returns, San Diego Barracks, July 1858 - August 1865, Rolls 1906-1097, Microcopy 617, NA.

15. It was fitting that Company D became the first unit to occupy Fort Rosecrans. It was the last company to garrison the Mission of San Diego, in 1858. See George Ruhlen, "Fort Rosecrans, California," San Diego Historical Society Quarterly 5 (October 1959): 63.

16. Ibid.

17. In 1901 a new Corps of Artillery, in which coast artillery and field artillery were partially separated, was organized. The former regimental system was abolished and the 126 companies of coast artillery were identified by number. Emanuel Raymond Lewis, Seacoast Fortifications of the United States: An Introductory History (Washington: Smithsonian Institution Press, 1970), p. 95.

18. In 1909, the War Department gave Block 39 to the Treasury Department in exchange for Lots E and F in Block 44 and all of Block 156. The Army did not use these and they were later sold. Post Returns, San Diego Barracks, January 1876-September 1903, Rolls 1098-1100, Microcopy 617, NA; George Ruhlen, "San Diego Barracks," San Diego Historical Society Quarterly 1 (April 1955): 15.

---

[<<< Previous](#)

[<<< Contents >>>](#)

[Next >>>](#)

# CABRILLO

## The Guns of San Diego Historic Resource Study



### CHAPTER 3: ENDNOTES

1. The Board of Engineers, New York, January 16, 1895, to Brig. Gen. Thomas L. Casey, Ch. of Engrs., File LA660.2, Box 0-3852, Harbor Defenses of San Diego, Los Angeles District (hereinafter cited as HDSD, LAD), Record Group 77 (hereinafter cited as RG), NA, Pacific Southwest Region; Erwin N. Thompson, Historic Resource Study, Seacoast Fortifications San Francisco Harbor, Golden Gate National Recreation Area, California (Denver: National Park Service, n. d.), pp. 17-23; George Tays, "Fort Rosecrans," Registered Landmark No. 62, California Historical Landmarks Series, ed. by Vernon Aubrey Neasham, State of California, Department of Natural Resources, Division of Parks, Berkeley, 1937.
2. "Point Loma Land Ownership," History files, Cabrillo National Monument, San Diego; Ruhlen, "Fort Rosecrans," San Diego Historical Society Quarterly 5:60; The San Diego Union, January 1, 1969. The City of San Diego disputed the federal government's claim to the reservation, but in 1872 the Secretary of the Interior declared it a federal reserve.
3. The Board of Engineers, New York, January 16, 1895, to Brig. Gen. Thomas L. Casey, quoting from a report by Colonel Totten, May 26, 1860, Folder LA660. 2, Box 0-3852, HDSD, LAD, NA, Pacific Southwest Region.
4. Point Loma's first lighthouse, an important historic resource at Cabrillo National Monument, has been thoroughly discussed in F. Ross Holland, Jr., and Henry G. Law, Historic Structure Report, The Old Point Loma Lighthouse, Cabrillo National Monument, San Diego, California (Denver: National Park Service, 1981). Only an outline of its early history is given here. Later, its role in the World War II defenses of San Diego will be introduced.
5. For additional details on the history of the old Point Loma lighthouse, see: Francis Ross Holland, Jr., America's Lighthouses, Their Illustrated History Since 1716 (Brattleboro, VT: Stephen Greene Press, 1972); and Joseph E. Brown, Cabrillo National Monument (Cabrillo Historical Association, 1981). In 1911 a San Diego citizen, Ernest Rall, applied to the War Department for permission to operate "a first class restaurant or cafe" at the old lighthouse. The Secretary of War turned down the idea. Ernest Rall, San Diego, November 21, 1911, to Secretary of the War H.L. Stimson and accompanying papers, F63, vol. 2, Box 34, Point Loma Reservation, RG 77, NA, Pacific Southwest Region.
6. Lewis, Seacoast Fortifications of the United States, p. 70; Board of Fortifications, New York, report on the proper profile for barbette batteries, August 14, 1868, Letters Received (A File), 1867-1870, Office of the Chief of Engineers (hereinafter cited as OCE), RG 77, NA.
7. Thompson, Seacoast Fortifications, San Francisco, pp. 68-69; Paul Michael Callaghan, "Fort Rosecrans, California," MA Thesis, University of San Diego, 1980; McKeever, Short History of San Diego, p. 80.

8. Plan, "Proposed Barbette Battery for the Occupation of Ballast Point, San Diego Harbor," 1871, Drawer 102, Sheet 7, RG 77, Fortifications File, NA. San Diego did not get a railroad, the Santa Fe, until 1885.

9. Plan, "Proposed Barbette Battery Ballast Point as Modified," December 1872; and Plan, "Proposed Barbette Battery Ballast Point as Modified for Depressed Guns," no date, but approved by the Secretary of War, March 26, 1873, Drawer 102, Sheets 9 and 10, RG 77, Fortifications File, NA. A similarly designed battery, Battery Cavallo, was constructed at this same time on the north side of San Francisco Bay. It survives as the best example of those post-war batteries on the West Coast. Thompson, Seacoast Fortifications, San Francisco, pp. 92-93.

10. The San Diego Union, April 24 and May 22, 1873; Robert C. Gerould, "Fort Rosecrans, California: A History," MA Thesis, California Western University, 1966, p. 7; Maj. Frederick B. Downing, CE, October 2, 1919, to the Chief of Engineers, File 662B (San Diego) I, February 1918-December 1938, Box 133, RG 77, OCE, Washington National Records Center, Suitland, MD (hereinafter cited as WNRC); Callaghan, "Fort Rosecrans," p. 19; Thompson, Seacoast Fortifications, San Francisco, p. 115; Map, "Site of Proposed Battery of 4-10 in. B.L. Rifles at Ballast Point Sept.-Oct. 1896," Drawer 102, Sheet 20-1, RG 77, Fortifications File, NA.

---

[<<< Previous](#)

[<<< Contents >>>](#)

[Next >>>](#)

# CABRILLO

## The Guns of San Diego Historic Resource Study



### CHAPTER 4:

## **FORT ROSECRANS, 1898-1920** (continued)

---

### **C. Mining the Harbor Entrance, 1898**

The U.S. Army had perfected a system of electrically controlled submarine mines, then called torpedoes, for mining harbor entrances in the 1880s. These mines required a bombproof mining casemate, or control room, from which cables ran out into the water and from which an operator sent the impulse to explode the mines. In 1897, 1st. Lt. Meyler supervised the construction of such a casemate located one-eighth of a mile north of Battery Wilkeson. A concrete cable tank and a mine storehouse soon followed. At the outbreak of the Spanish-American War, in the national defense appropriations act of March and subsequent acts, a sum of almost \$2 million was set aside for mine defenses. On the West Coast, army engineers at both San Francisco and San Diego prepared to mine the harbors. [[13](#)]

In April 1898, 1st. Lt. Meyler received orders to mine the harbor entrance with the unusual addendum to secure the help of a "corps of 120 patriotic citizens" to lay the mines. The lieutenant succeeded in organizing a volunteer company of eighty citizens: electricians, civil engineers, surveyors, telegrapher, boilermakers, steam engineers, mechanics, carpenters, divers, and laborers. Cable, explosives, and other supplies arrived by steamer from San Francisco. On May 11, five engineer enlisted men, trained in mine laying, came to add a touch of professionalism to the undertaking, "The volunteers, while willing and anxious to do their best, were constantly showing their lack of experience, which in some cases resulted in considerable delay to the work at hand. The five engineer soldiers, who had had previous experience in this kind of work, were of the greatest assistance. They not only did much of the work of loading the mine torpedoes, but they also watched over all the work done by the volunteers." Meyler succeeded in planting fifteen mines in the entrance channel, leaving a safe passage for friendly commerce. Two smoothbore cannon, model 1863, protected the minefield. Although there was no danger of a Spanish attack on the harbor, the mines remained planted until September. [[14](#)]

### **D. Fort Rosecrans Established, 1898-1917**

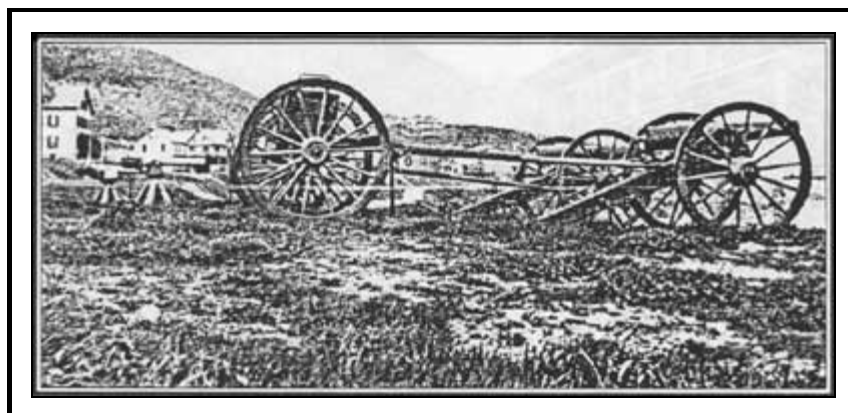
In February 1898, Capt. Charles Humphreys, commanding officer of San Diego Barracks, dispatched Lt. George T. Patterson and twenty-two enlisted men of Company D, 3rd Artillery Regiment to Ballast Point to camp. Thus, the military reservation at Point Loma was finally occupied by artillerymen. The following month Humphreys led the remainder of the company to the new camp. While Humphreys soon returned to his headquarters office, the company remained at Ballast Point throughout the summer, returning to the Barracks in August. A detachment remained at Ballast Point during the following months to occupy and guard the new battery. [[15](#)]



The War Department named the reservation Fort Rosecrans in General Orders 134, July 22, 1899, in honor of Maj. Gen. William Starke Rosecrans who had died in 1898. Rosecrans graduated from the U.S. Military Academy in 1842 and accepted an appointment as lieutenant in the Corps of Engineers. He resigned from the Army in 1854 to enter the oil industry in Pennsylvania. He returned to active duty on the outbreak of the Civil War. Rosecrans rose rapidly in rank, becoming a major general of volunteers in 1862. At first successful against Confederate forces, he was defeated by Gen. Braxton Bragg at Chickamauga in 1863. Following the war, he resigned again to serve as U.S. minister to Mexico. Later he engaged in mining and railroad operations in Mexico and California and was well-known in San Diego. From 1881 to 1885 he served as a member of the U.S. House of Representatives for California. In 1889 he returned to active duty for a few days with the rank of brigadier general in the Regular Army. [16]

When the 30th Company, Coast Artillery, arrived from duty in the Philippines in 1901, it occupied both San Diego Barracks and Fort Rosecrans. Maj. Anthony W. Vodges, Artillery Corps, commanded both posts. A month later, the 115th Company, Coast Artillery, was formed. For the next two years, one company was stationed at Fort Rosecrans and one at the Barracks. They rotated monthly so that both could engage in target practice at the batteries (the company in San Diego carried out infantry and signal drills). Troop transfers were usually by water by means of the steam-propelled launch General DeRussy and the motor launch Lieutenant George M. Harris. On occasion, the companies marched overland 8.7 miles. Finally, on August 6, 1903, Fort Rosecrans was organized as a separate post and both companies were permanently stationed there. Capt. Adrian S. Fleming, Artillery Corps, became the commanding officer of both Fort Rosecrans and the Artillery District of San Diego. The garrison consisted of five officers and 192 enlisted men. To celebrate their new arrangements, the troops held a field day on August 22. The post returns show that the companies were becoming proficient at Batteries Wilkeson, McGrath, Fetterman, and James Meed. The 30th Company had eight 1st class and sixteen 2nd class gunners; while the 115th Company had fourteen and eleven respectively. [17]

The early history of Fort Rosecrans witnessed a wide array of events, some of which are recounted here with no attempt at continuity of subject. In September 1903, Maj. Gen. Arthur MacArthur, commanding the Department of California, made a two-day inspection of the post. In addition to the companies, the fort had a sizable group of non-commissioned officers, the men who really operated the Army at the time: a sergeant major, two ordnance sergeants, commissary sergeant, two post quartermaster sergeants, electrical sergeant, and a first class sergeant in the Hospital Corps. The 30th Company transferred to Fort Worden, Washington, in June 1904, and was not replaced until July 1905 when the 28th Company arrived. That same month the boilers of the gunboat USS Bennington blew up in San Diego Harbor. The Army turned over the buildings at San Diego Barracks for the use of survivors. The post surgeon and his staff went to the Barracks to care for the wounded. Forty-nine of Bennington's dead sailors were buried in the Fort Rosecrans cemetery.





12 Lb Napoleon and Limber. Saluting cannon at left. Circa early 1900s, Fort Rosecrans. *Photo courtesy of Point Loma Camera, San Diego, California.*



28th Company, Coast Artillery Corps, Fort Rosecrans, circa early 1900s. *Photo courtesy of Point Loma Camera historic photo collection.*

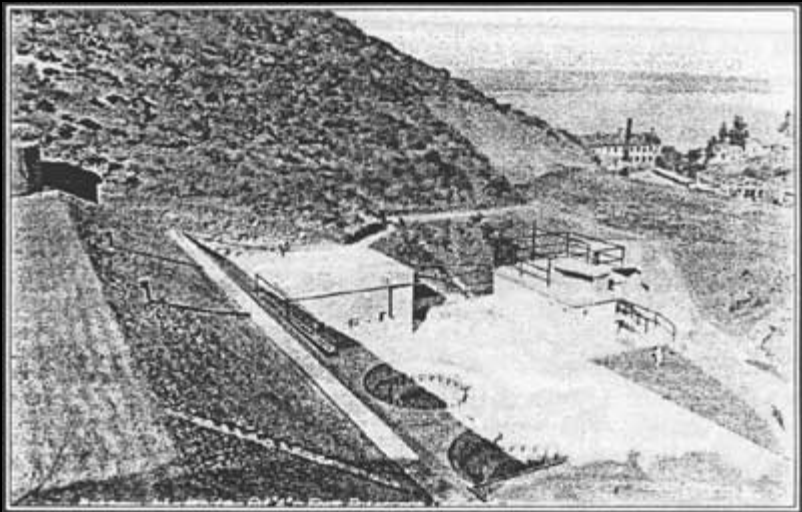


115th Company, Coast Artillery Corps, Fort Rosecrans, circa early 1900s. *Photo courtesy of Point Loma Camera historic photo collection.*

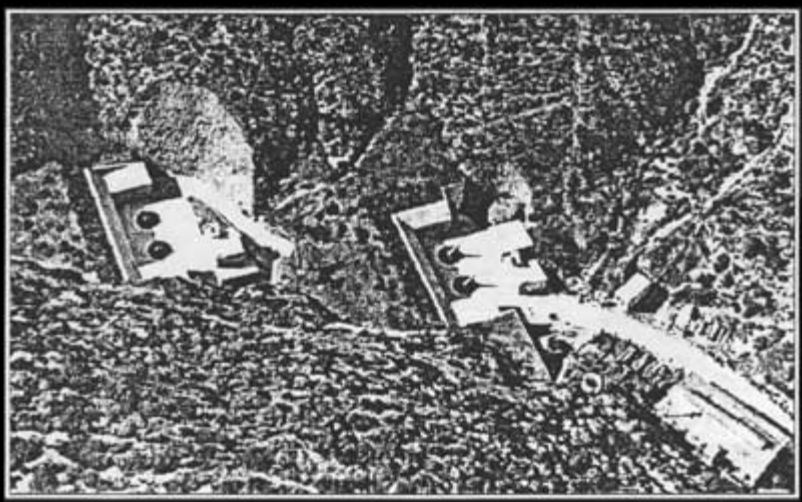




A unit of Coast Artillery Corps in WWI uniform. *Photo courtesy of Point Loma Camera historic photo collection.*



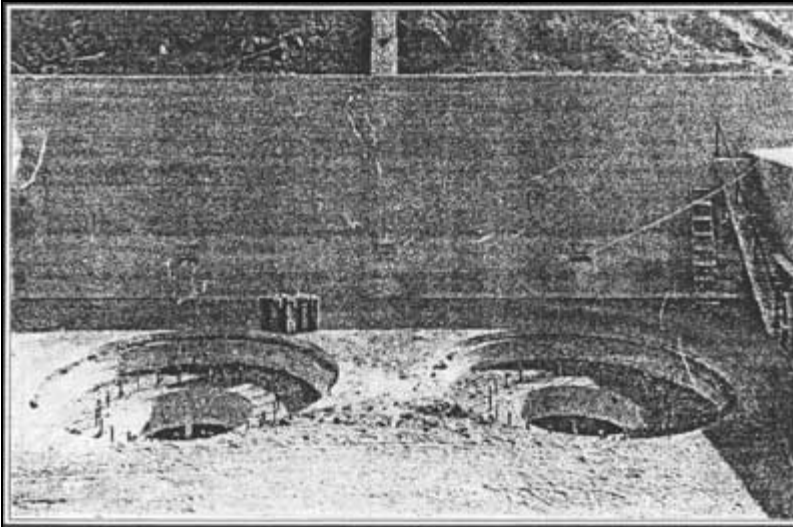
Battery White, October 25, 1916. This Endicott Mortar position is currently located on the Naval Submarine Base. *Photo courtesy of Cabrillo National Monument.*



Battery White, aerial photo circa 1922. *Photo courtesy of National Archives.*



Construction of Battery Whistler. Photo taken looking south, Battery Whistler currently located on Naval Ocean Systems Center property. *Photo courtesy of Cabrillo National Monument.*



Battery Whistler, October 25, 1916. *Photo courtesy of Cabrillo National Monument.*

In August 1905, the Italian cruiser Umbria visited San Diego. Undoubtedly, the fort's salute gun welcomed the vessel. Lt. Col. John McClellan, commanding the post, visited the cruiser. The ship's captain, his officers, and twenty sailors visited the post two days later and placed a large wreath of flowers on the graves of Bennington's dead. Inspecting officers came and went with a certain regularity, such as Brig. Gen. Frederick Funston who stopped by in October 1905. A month later Battery Fetterman saluted German cruiser Folke and again the post's commanding officer visited the ship. In April 1906 the new post commander, Maj. Charles G. Woodward, visited USS Chicago, the flagship of the Pacific Squadron, and cruiser USS Marblehead. The admiral and his staff returned the visit to the post and cemetery. Not to be outdone by its European neighbors, French cruiser Catinat entered San Diego Harbor in July 1906. The usual salutes and visits were exchanged. At this same time, Maj. Gen. Adolphus W. Greely inspected the troops and fortifications. The post returns for July 1907 noted the twelve-day annual "Joint Army and Militia Coast Defense" exercises had been completed. The militia this year consisted of over 200 personnel from the 5th Infantry,

California National Guard. [18]

The routine was broken in January 1911 when a detachment of officers and men was dispatched to Calexico on the Mexican border "for the purpose of aiding in the enforcement of the neutrality laws of the United States." Mexico was in the throes of a revolution. By the end of February, detachments had moved to Calexico, Tijuana, Campo, Tecate, and Jacumba Spring. The department commander, Brig. Gen. Tasker H. Bliss, visited the post regularly during this period. A climax of sorts occurred in June 1911 when a detachment from the fort went to Tijuana to bring back 105 "insurrecto" prisoners who had crossed over to the American side of the border. The Army interned them at the post where it discovered that two of them were deserters from the 28th Company. These two men were confined to the guardhouse, while the Mexican rebels occupied the post gymnasium. Later, five others turned out to be deserters from the U.S. Navy and Marines. The Army turned them over to the Pacific Fleet. On June 25 all but five of the insurgents were released. Of the five, two remained in the post hospital and the other three were turned over to U.S. Marshal H. V. Place on warrants issued by the U.S. Commissioner in San Diego.

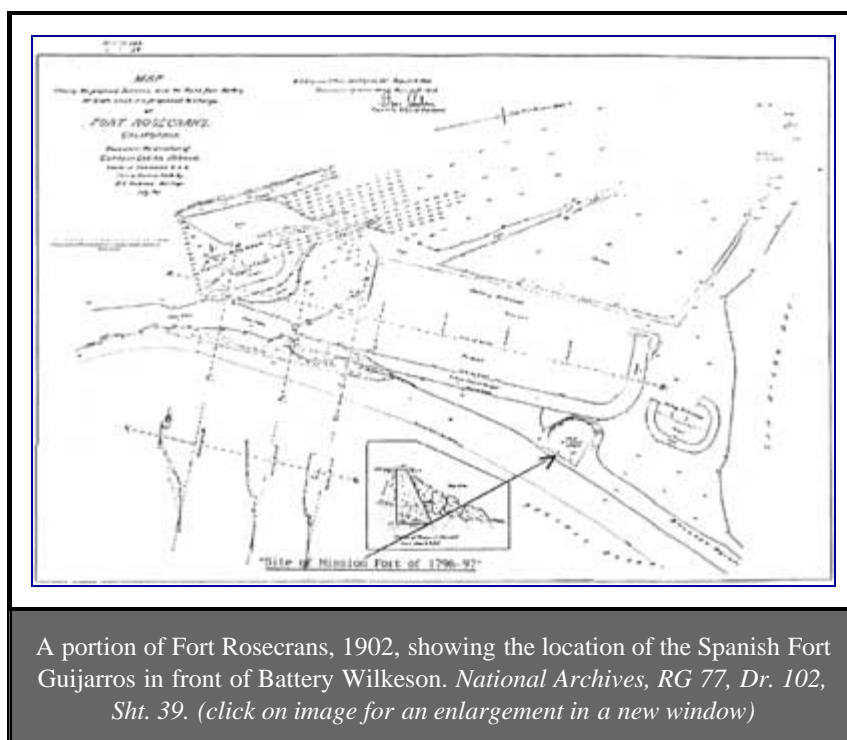
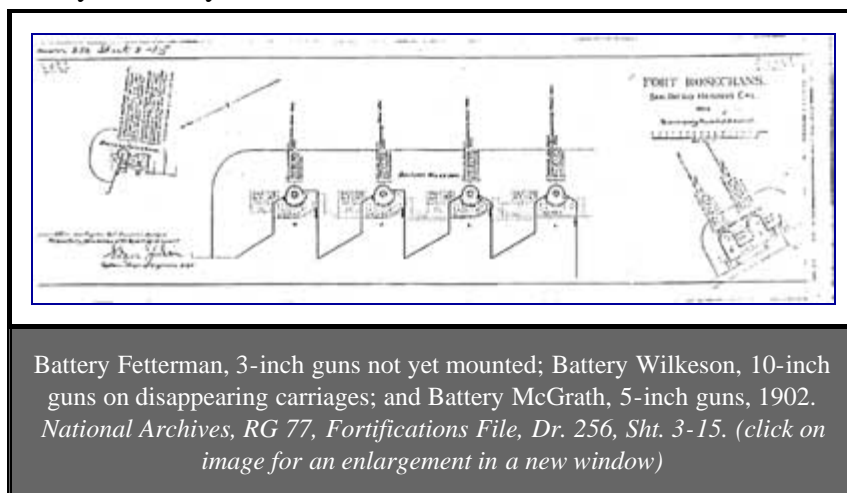
The name Lt. George Ruhlen, Jr., first appeared in Fort Rosecrans post returns in January 1911, when he was assigned to the 28th Company. He was to have a long association with the post both directly and indirectly. In February he led one of the detachments to the Mexican border. By May 1912 he had become the commanding officer of the 28th Company. He and the company participated in the Memorial Day Parade in San Diego on May 30. In August he transferred to the Coast Artillery School at Fort Monroe, Virginia. Several years later, in 1918, Maj. Ruhlen returned to Fort Rosecrans temporarily to act as umpire for practice at the 10-inch rifles. From 1927 to 1931, he was stationed in San Diego as a coast artillery instructor for the California National Guard. He served as commanding officer of Fort Rosecrans from 1933 to 1935. After retirement from the Army in 1944, Col. Ruhlen settled in San Diego where he became president of the San Diego Historical Society. His many publications on the history of the military in San Diego have been cited herein. [19]

Another incident related to the United States-Mexico boundary occurred in April 1913. Acting upon instructions from the Western Department in San Francisco, a small guard from Fort Rosecrans crossed the harbor to San Diego. There, it apprehended Gen. Pedro Ojeda, three lieutenant colonels, a paymaster, three captains, nine lieutenants, a telegrapher, and an enlisted man of the Mexican "Federales." The group was interned in the post exchange building until the Western Department ordered their release. They left the port by steamer. [20]

On the whole, the artillerymen found Fort Rosecrans to be an agreeable station. Despite the marches to the border, they had ample time for intensive training. The schedule of instructions for 1915-1916 illustrated the thoroughness of their projects:

March 1915	gunners' examination post and garrison school work one week on water and mine practice
April-June	drill and instruction one week per month on water and mine practice
June 15-July 31	service gun practice mine practice
August	militia encampment and militia service practice
September	infantry field training and exercises mine practice
October	aiming and sighting drills gallery practice

	small arms, machine gun, and field gun practice mine practice
November	complete target practice mine practice post and garrison school work
December	drill and instruction one week on water and mine practice small arms target practice post and garrison school work
January-February	drill and instruction <a href="#">[21]</a>



Troubled Mexico caused more marches to the Mexican border in the years before World War I. But more pleasant marches occurred in September 1913 when San Diego celebrated "Carnival Cabrillo." The three-day carnival celebrated the 400th anniversary of discovery of the Pacific Ocean by Balboa, the 371st anniversary of Cabrillo's discovery of San Diego Bay, and the 144th anniversary of the founding of the California missions by Father Serra. The purpose of the celebration was to draw attention to San Diego, whose Panama-California International Exposition was to open in 1915. On September 25 Fort Rosecrans' battalion of

coast artillery marched to the old lighthouse on Point Loma where dedication ceremonies were held for a proposed 150-foot statue of Cabrillo that was to be erected there. The next day the battalion marched in a street parade in San Diego in connection with the dedication of the site where a Balboa monument was to be built. On the third day, the 28th Company took part in the unveiling of a large cross that honored Father Serra on Presidio Hill. [[22](#)]

The year 1913 brought the highest-ranking brass ever to visit the fort. Secretary of War Lindley M. Garrison arrived to inspect the post. Accompanying the Secretary were Maj. Gen. Leonard Wood, Chief of the Quartermaster Corps, and Brig. Gen. Erasmus M. Weaver, Chief of the Coast Artillery. Unfortunately, the results of the inspection have not been found. [[23](#)]

The U.S. Corps of Engineers completed the Panama Canal in 1914, and San Diego planned to celebrate. Despite the training schedule, the companies at Fort Rosecrans played an important role in the Panama-California International Exposition throughout 1915. In addition to the regular garrison (28th and 115th Companies), the 30th and 160th Companies arrived from Washington State for temporary duty. Another important element in the celebration was the 13th Coast Artillery Corps band which came from Fort DuPont, Delaware. Time after time, officials requested the presence of troops on the exposition grounds. The companies paraded for the visit of the Los Angeles Chamber of Commerce, in the Spanish-American War Veterans parade, for U.S. Vice President Thomas R. Marshall's arrival, and many other occasions. In return, the exposition gave annual passes to all the army wives at the fort. On two occasions, the commanding officer was directed to fire the 10-inch guns for the benefit of visiting congressmen. [[24](#)]

The border troubles with Mexico climaxed in 1916 when President Woodrow Wilson ordered Maj. Gen. John J. Pershing to head a punitive expedition of 15,000 men to pursue freebooter Pancho Villa into Mexico and called out 150, 000 National Guard to guard the border. Between this activity and World War I raging in Europe, Fort Rosecrans tightened security. Vessels entering the harbor were required to identify themselves. The coming of war brought a sense of urgency regarding San Diego's coastal defenses. [[25](#)]

---

<<< [Previous](#)

<<< [Contents](#) >>>

[Next](#) >>>



# CABRILLO

## The Guns of San Diego Historic Resource Study



### CHAPTER 4: ENDNOTES

---

1. Thompson, Seacoast Fortifications, San Francisco, p. 115.
2. Lewis, Seacoast Fortifications, pp. 75-77; Edwin C. Bearss, Historic Structure Report, Fort Point, Historic Data Section, Fort Point National Historic Site, California (Denver: National Park Service, 1973), pp. 285-287.
3. Board on Fortifications, Miscellaneous Papers, 1885-1887, OCE, RG 77, NA; Board of Engineers, New York, January 16, 1895, to Brig. Gen. Thomas L. Casey, File LA 660.2, Box 0-3852, HDSD, LAD, RG 77, NA, Pacific Southwest Region. Another list drawn up at this time placed San Diego 21st of 27 ports. Callaghan, "Fort Rosecrans," p. 22.
4. Ranson, "The Endicott Board of 1885-86," Military Affairs 31:77-78; Russell F. Weigley, History of the United States Army (New York: Macmillan, 1967), p. 283.
5. Board of Engineers, New York, January 16, 1895, to Brig. Gen. Thomas L. Casey, File LA 660.2, Box 0-3852, HDSD, LAD, RG 77, NA, Pacific Southwest Region. The 8-inch converted rifle was the 10-inch Rodman smoothbore with an inserted, rifled 8-inch sleeve.
6. Acting Secretary of War L.A. Grant, December 19, 1891, "Post and Harbor Defenses, Near San Diego," Document No. 14, House of Representatives, 1st sess., 52nd Congress.
7. Board of Officers, New York, January 16, 1895, to Brig. Gen. Thomas L. Casey, File LA 660.2, Box 0-3852, HDSD, LAD, RG 77, NA, Pacific Southwest Region.
8. Until the end of 1898 Meyler reported to the Pacific Division Engineer in San Francisco. On December 31 the Los Angeles District Engineer Office was established to oversee military construction and civil works in Southern California.
9. Col. Charles R. Suter, November 4, 1897, to Brig. Gen. John M. Wilson, Ch. of Engineers, File LA 660.2, Box 0-3852, HDSD, LAD, RG 77, NA, Pacific Southwest Region. 1st. Lt. Meyler oversaw construction of the first four batteries, but unexpectedly died in December 1901, still a young man. Heitman, Historical Register, 1:707.
10. Col. G. L. Gillespie, Board of Engineers, New York, December 1, 1897, to Brig. Gen. John M. Wilson, Ch. of Engineers, File 660.2, Box 0-3852, HDSD, LAD, RG 77, NA, Pacific Southwest Region. Besides "The Island," the Army also called its western end Zuniga Shoal, North Island, and Fort Pio Pico, this last in honor of the last Mexican governor of California.
11. Reports of the War Department, 1899, Engineers, Part 1, House Documents, vol. 8, no 2, 56th Congress, 1st sess., 1899-1900; George Ruhlen, "Fort Rosecrans, California," The Western Explorer 2 (February 1962) 3; Ronald V May, "The Guns of Point Loma: America's

First Sea Coast Artillery Defense in San Diego," in Cabrillo Festival Historic Seminar, The Military on Point Loma (Cabrillo Historical Association, 1985), p. 24; Heitman, Historical Register, 1:274 and 1036; Callaghan, "Fort Rosecrans," pp. 34-53; Batteries Wilkeson and Calef, F16, Box 26, Civil Works Projects, 1899-1935, OCE, RG 77, NA, Pacific Southwest Region.

12. Ruhlen, "Fort Rosecrans," Western Explorer 2:5; Callaghan, "Fort Rosecrans," pp. 42, 56, and 65; Heitman, Historical Register 1:418, 667, and 701; Thompson, Seacoast Fortifications, pp. 165-166. Fort Pio Pico, established in 1906 and abandoned in 1919, was demolished in 1941 as a result of widening the ship channel.

13. Thompson, Seacoast Fortifications, p. 173, where it is erroneously stated that only San Francisco was mined; Reports of the War Department, 1899, Engineers, Part I, House Documents, vol. 8, no. 2, 56th Congress, 1st sess., 1899-1900, p. 34. The mining casemate was demolished in 1988 to make space available for bachelor quarters on the Naval Submarine Base.

14. Capt. James J. Meyler, CE, April 27, 1901, to Brig. Gen. John M. Wilson, Ch. of Engineers, Box 15, San Diego Coast Defense, Records of U.S. Army Commands., RG 392, NA; Callaghan, "Fort Rosecrans," p. 40. The guns probably came from San Diego Barracks which had two field guns in the 1890s. Meyler became a captain in July 1898.

15. Post Returns, San Diego Barracks, February 1898 - July 1900, Roll 1100, Microcopy 617, NA. It is recalled that the 10-inch guns were proof-fired in November 1899.

16. Heitman, Historical Register, 1:846; Robert McHenry, ed., Webster's American Military Biographies (Springfield: G&C Merriam, 1978), pp. 361-362; Callaghan, "Fort Rosecrans," p. 50.

17. Post Returns, San Diego Barracks and Fort Rosecrans, July 1900 - August 1903, Rolls 1100 and 1043, Microcopy 617, NA. The post buildings at Fort Rosecrans, located near Ballast Point, were constructed between 1901 and 1904. Leveling hills and building roads were performed by the firm of Babcock, Goodbody and Roesner. The twenty-five foot road from the northern boundary to Ballast Point was greatly improved at this time. The San Diego Union, September 19, 1902. The army vessels were named for Bvt. Brig. Gen. Rene E. DeRussy who served in the Corps of Engineers constructing fortifications for harbors on both coasts, and Lieutenant George M. Harris who died from wounds suffered in the Modoc War, 1873. Heitman, Historical Register, pp. 369 and 503.

18. Post Returns, Fort Rosecrans, 1903-1907, Roll 1043, Microcopy 617, NA.

19. Post Returns, Fort Rosecrans, 1911-1912, Roll 1043, Microcopy 617, NA; George W. Cullum, Biographical Register of the Officers and Graduates of the U.S. Military Academy.... Supplement, Volume 5. 1900-1910, ed. Charles Braden (Saginaw, Michigan: Seemen and Peters, 1910), p. 189; Maj. Gen. George Ruhlen, Texas, December 20, 1987, to writer.

20. Post Returns, Fort Rosecrans, April 1913, Roll 1043, Microcopy 617, NA.

21. Col. William C. Davis, CO, Coast Defenses of San Diego (hereinafter cited as CDSD), March 19, 1915, to CO, PCAD, Box 6, San Diego Coastal Defense, 1910-1917, U.S. Army Commands, RG 392, NA

22. Post Returns, Fort Rosecrans, September 1913, Roll 1043, Microcopy 617, HA; Susan Collins Lehmann, An Embarrassment of Riches. The Administrative History of Cabrillo National Monument (Cabrillo Historical Association, 1987), pp. 20-27. The old lighthouse



was to be torn down and the statue was to be placed on the site. The 1/2 acre became Cabrillo National Monument on October 14, 1913.

23. Post Returns, Fort Rosecrans, July 1913, Roll 1034, Microcopy 617, NA.

24. Headquarters, Eastern Department, Governor's Island, New York, Special Orders No. 278, November 30, 1914; Col. William C. Davis, CO, CDS, March 20, 1914; Davis, March 20, 1915, to CG, Western Department; Carl T. Worst, Panama - California Exposition, January 7, 1915, to Davis; G.A. Davidson, Panama - California Exposition, July 16, 1915, to Davis, all in Box 5, San Diego Coastal Defense, 1910-1917, U.S. Army Commands, RG 392, NA.

25. Richard B. Morris, Encyclopedia of American History, 2 vols. (New York: Harper & Brothers, 1953) 1304-305; Callaghan, "Fort Rosecrans," p. 151.

26. Lewis, Seacoast Fortifications, pp. 89 and 93.

27. The committee consisted of Maj. Gen. John P. Story, Ch. of Artillery; Brig. Gen. Alexander MacKenzie, Ch. of Engineers; Col. Samuel M. Mills, Artillery Corps; Maj. George W. Goethals, CE; and Col. William H. Heuer, Division Engineer, Pacific Division. Post Returns, Fort Rosecrans, September 1905, Roll 1043, Microcopy 617, NA.

28. Stephen R. Van Wormer and Linda Roth, "Guns on Point Loma: A History of Fort Rosecrans and the Defense of San Diego Harbor," in Cabrillo Historical Association, The Military on Point Loma (Cabrillo Historical Association, 1985), p. 6. The searchlight had had its own 10kw direct current set previously.

29. The fort commander was responsible for the condition of the armament, ammunition, etc., and for training and discipline. During action he assigned targets to the fire commanders. His station was a position-finding station that had an unobstructed view of the whole scene of action. He was in direct communication with his fire commanders. A fire commander was responsible to the fort commander. His duties in action were to carry out the orders of the fort commander. He was in direct communication with the fort commander and with each gun group and position finder in his command. His station was a position-finding station that had a clear view of the water area covered by his guns. A fort was organized into one or more fire commands, the size of which was governed by the character of the area to be defended and by the number of guns of one kind that it was possible for one officer to direct in action. Thompson, Seacoast Fortifications, San Francisco, pp. 180-184; Maj. Edward Burr, October 27, 1906, to Ch. of Engineers, Box 22; Col. F.V. Abbot, OCE, November 10, 1906, to Capt. Amos A. Fries, LAD, Box 21; LAD, July 20, 1914, Estimate of Cost of Fire Control Installations at San Diego, Box 22; Col. E. B. Babbitt, Ordnance Department, January 19, 1917, to Ch. of Engineers, Box 21, all in Civil Works Projects, 1899-1935, Records of the Corps of Engineers, RG 77, NA, Pacific Southwest Region; Maj. William C. Davis, Fort Rosecrans, June 10, 1913, to CG, PCAD, Box 1, San Diego Coast Defenses, 1910-1917, U.S. Army Commands, RG 392, NA. In this letter, Davis recommended the division of Battery Wilkeson to improve its efficiency. About 1913, the "Artillery District of San Diego" was renamed the "Coast Defenses of San Diego" (CDS).

30. Brig. Gen. E. Winslow, Ch. of Engineers, 15th Indorsement, October 19, 1918, to Ch. of Coast Artillery, and accompanying papers, File 665 (San Diego), Box 134, OCE, RG 77, WNRC, Suitland; Map, "Location of Fire Control Stations and Searchlights, Fort Pio Pico, September 19, 1918," Drawer 102-33-48, Fortifications File, RG 77, NA. In the fire control stations, azimuth instruments were emplaced on tall posts while depression finding instruments were mounted on flat, octagonal, concrete bases.

31. Col. Edwin Landon, CO, Fort Rosecrans, Certificate of Works received from the Corps of Engineers, January 16, February 24, and November 9, 1920, and May 19, 1921; and Capt. Charles T. Leeds, LAD, August 30, 1918, to Ch. of Engineers, File 665 (San Diego) I Serials 1-90, Box 134, OCE, RG 77, WNRC. About this time the coast artillery wanted electricity installed in the more remote stations, but both the Chiefs of Engineers and Coast Artillery disapproved, saying that oil lanterns were sufficient.

32. Davis, May 22, 1913, to the Adj. General, San Diego Coast Defenses, 1910-1917, Box 1, U.S. Army Commands, RG 392, NA.

33. Maj. "R.R.R.", January 11 and May 25, 1915, to Ch. of Engineers, File LA 660.2, Box 0-3852, HDSD, LAD, RG77, NA, Pacific Southwest Region; W.M. Wright, AG, October 27, 1915, to CG, Western Department, Box 8, San Diego Coastal Defense, 1910-1917, U.S. Army Commands, RG 392, NA.

34. Maj. Charles T. Leeds, LAD, December 2, 1918, to CG, Western Department; and Col. Edwin Landon, Fort Rosecrans, August 19, 1919, Certificates of Works received, both in Box 133, File 662B (San Diego) I, February 1918-December 1938, OCE, RG 77, WNRC; Callaghan, "Fort Rosecrans," p. 125; Heitman, Historical Register, 1:1026 and 1028; Report of Completed Works, Harbor Defenses of San Diego, File 600.914, Box 129, OCE, RG 77, WNRC.

35. Maj. Gen. Peyton C. Marsh, Report of a Board of Officers, April 2, 1918, File 662B (San Diego) I, February 1918-December 1938, Box 133, OCE, RG77, WNRC; Lt. Col. W.F. Hase, Memorandum for the Board, February 4, 1918, F32, Box 31, OCE, RG 77, NA, Pacific Southwest Region.

36. Lt. Col. W.F. Hase, Memorandum for the Board, February 4, 1918, F32, Box 31, OCE, RG 77, NA, Pacific Southwest Region; and Memorandum for the Board, February 23, 1918, File 662. B (San Diego) I, February 1918-December 1938, Box 13311, OCE, RG 77, WNRC.

37. LAD, July 28, 1917, to CO, Fort Rosecrans; Lt. Col. H.S. Kerrick, CO, Fort Rosecrans, February 6, 1918, to Capt. Leeds, LAD; C.C. Huff, Fort Rosecrans, May 22, 1918 to LAD; "Proposed Radio Station," all in F5R, Box 23, OCE, RG 77, NA, Pacific Southwest Region; Col. J. R. Pourie, CO Fort Rosecrans, File 665.4 (San Diego), Box 134, OCE, RG 77, WNRC.

38. Plans and estimates for searchlight installation, Fort Rosecrans, August 23, 1916; Capt. A.H. Aches, Construction Officer, Fort Rosecrans, June 6, 1916, to LAD; and Capt. Charles T. Leeds, LAD; October 4, 1918, to Ch. of Engineers, all in F-7E, Box 23, Civil Works Projects, 1899-1935, LAD, RG 77, NA, Pacific Southwest Region. Maj. Charles T. Leeds, LAD, December 21, 1918, to Ch. of Engineers, File 675.4 (San Diego), Box 134, OCE, RG 77, WNRC. Searchlights 5 and 6 and their powerhouse are within the boundaries of Cabrillo NM. They are HS 5, 7, and 6 respectively.

39. C. F. Fullam, USS Pueblo, January 15, 1917, to Commander, CDSD; Lt. Col. G. T. Patterson, January 18, 1917, to Commander, Reserve Force, U.S. Pacific Fleet, Box 11, San Diego Coastal Defense, 1910-1917, U.S. Army Commands, RG 392, NA.

40. Joseph Daniel, Sect. of Navy, April 24, 1917, to Sect. of War; R. K. Cravens, AG, October 9, 1917, to CG, South Pacific Coast Artillery District (hereinafter cited as SPCAD), both in Box 12; and Lt. J. E. Lewis, 12th Naval District, July 6, 1917, to CG, SPCAD, Box 15; all in San Diego Coastal Defense, 1910-1917, U.S. Army Commands, RG 392, NA.

41. Lt. Col. P.M. Kessler, CO, Fort Rosecrans, August 31, 1917, to CG Western Department

and accompanying papers, Box 12, San Diego Coastal Defense, 1910-1917, U.S. Army Commands, RG 392, NA.

42. Col. P.M. Kessler, December 1, 1917; and Lt. Col. H.S. Kerrick, CO, CDSD, January 17, 1918, both to CO, SPCAD, San Francisco, Box 14, San Diego Coastal Defense, 1910-1917, U.S. Army Commands, RG 392, NA; Ruhlen, "Fort Rosecrans," San Diego Historical Society Quarterly 5:64.

43. Report of conference between commanding officers at Army and Navy Shore Stations, San Diego, June 10, 1918, Box 15, San Diego Coastal Defenses, 1910-1917, U.S. Army Commands, RG 392, NA.

---

<<< [Previous](#)

<<< [Contents](#) >>>

[Next](#) >>>

---

cabr/guns-san-diego/hrs4n.htm  
Last Updated: 19-Jan-2005

# CABRILLO

## The Guns of San Diego Historic Resource Study



### CHAPTER 5: ENDNOTES

1. Lt. Col. S.T. Mackall, IG, Inspections of Fort Rosecrans', 1932 and 1933, File 33126 F, Box 217, Records of Chief of Arms, Office of the Chief of Coast Artillery (hereinafter cited as OCA), RG 177, NA. Battery D was stationed at Fort Rosecrans during most of the 1930s. Its strength averaged two officers and forty enlisted men.
2. Maj. Gen. F.W. Coe, Ch. of Coast Artillery, January 3, 1923, to John C. Merriam, Carnegie Institution, and accompanying papers. File 680-421, 26D, Box 724, OCA, 1918-1942, RG 177, NA.
3. Lehmann, An Embarrassment of Riches, p. 46; Lt. Col. George Ruhlen, March 10, 1934, to Maj. G. Ralph Meyer, File 662.1, 26-B, Box 642, OCA, 1918-1942, RG 177, NA.
4. San Diego Union, July 13, 1935.
5. Brig. Gen. C.E. Kilbourne, December 1932, Memorandum for the Chief of Staff; Maj. Gen. H.L. Gilcrest, President of the Board, October 27, 1932, to AG, both in File 662.1, 26A, Box 642, OCA, 1918-1942, RG 177, NA.
6. Proceedings of a Board of Officers, November 2, 1933, file 662.1, 26B, Box 642, OCA, RG 177, NA. Four possible sites for the railroad guns were selected: Otay Valley, vicinity of Nestor, vicinity of Fruitdale, and immediately north of south San Diego, with a site 800 yards northeast of Palm City chosen as indicated in the 1936 HDSD Project.
7. Lt. Col. F.B. Wilby, OCE, February 20, 1935, to LAD, File 660.2, Box 0-3882, LAD, OCE, RG 77, NA, Pacific Southwest Region; Capt. A. McKay, USN, October 15, 1935, to CO, Fort Rosecrans, File 665 (San Diego), Box 134, OCE, RG 77, WNRC, Suitland; San Diego Union, July 11, 1936.

[<<< Previous](#)

[<<< Contents >>>](#)

[Next >>>](#)

# CABRILLO

## The Guns of San Diego Historic Resource Study



### CHAPTER 6: MODERNIZATION, 1936-1941 (continued)

#### C. Batteries for 155mm Guns

The 1936 Annex A called for two 155mm batteries of four guns each, one battery at Fort Rosecrans (later called Battery Point Loma) and one immediately north of Imperial Beach and about 2000 yards south of Coronado Heights (but it was never emplaced). The 155mm gun was a modification of the French "Grande Puissance Filloux" (GPF), a tractor-drawn gun developed in World War I. Early models had a range of 17,000 yards. Battery Point Loma's guns had a distance between gun centers of thirty yards, and each was to be emplaced on a Panama mount. The battery was situated 300 yards north of the new lighthouse at Point Loma. The first plans called for only a 180-degree traverse emplacement. When the post commander protested that in order to obtain full tactical advantage of the emplacements, 360-degree platforms should be installed, the War Department agreed. But many months passed between the arrival of the guns and the availability of funds for construction of the platforms. The 1936 cost estimates for the battery were:

Preparation of site and installation of power plant	\$5,000
Four gun platforms	6,000
Concrete magazine for projectiles	5,000
Concrete magazine for propelling charges	8,500
Battery commander's station	2,000
Road to battery	200
Protective wire fence	3,000
Contingency	1,000
Four sights	14,000

Total cost estimated at \$44,700, of which \$14,000 was ordnance, \$19,000 was engineer material, and \$11,700 was engineer labor. In addition, a plotting trailer would be provided. Dugouts would house first aid, restroom, and latrines. [8]

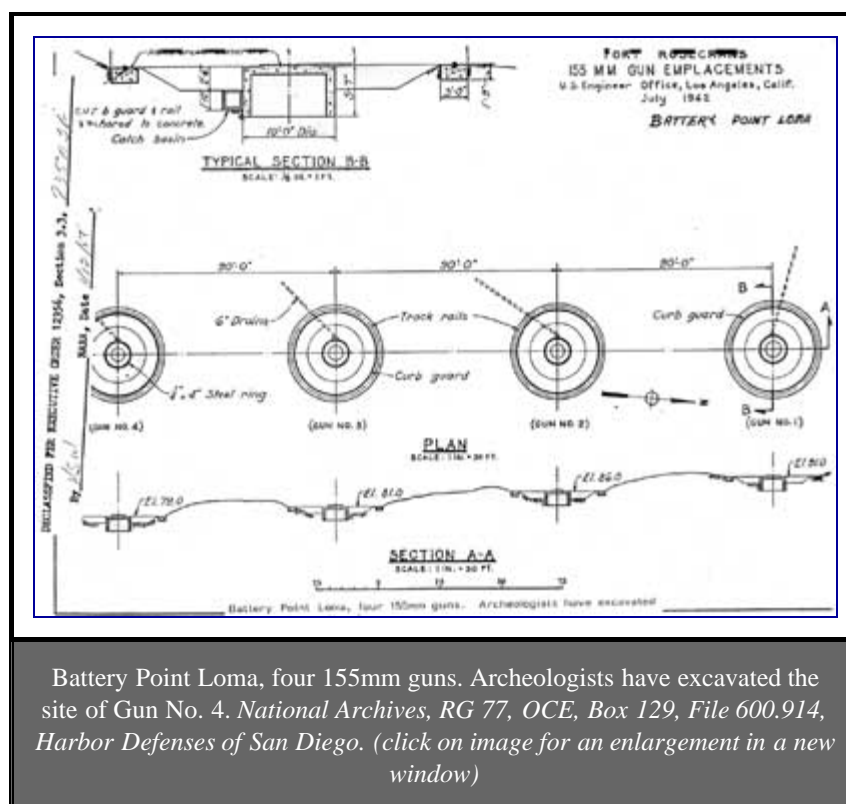
After the Japanese attacked Pearl Harbor, the U. S. Army hastily emplaced 155mm guns along the Pacific Coast, including Alaska and the Aleutians, to supplement the fixed harbor defenses. But at San Diego the Coast Artillery Corps was eager to acquire these batteries long before Pearl Harbor. The arming of Battery Strong, as has been seen, was to take four years. Besides the existing batteries of Whistler and John White, Battery Point Loma was much needed during the interim to cover the water areas to the west and northwest. Its guns (and those for Battery Imperial) reached Fort Rosecrans on June 14, 1939. The guns were emplaced but without platforms, thus their traverse was limited to sixty degrees.

A year later, Col. P. H. Ottosen, commanding San Diego's harbor defenses, requested construction of the platforms. He said that the ammunition was on hand and the sights and mounts (eight sights, quadrant Model 1918, and eight telescopic panoramic sights M6) were about to arrive. He added that until the guns for Battery Strong arrived, the 155mm guns were the only means of effective fire against the types of naval ships normally used in raids. If the \$44,700 were not available, he would settle for \$6,000 in order to build the platforms immediately. [9]

The War Department turned down the request for funds on the grounds that the 155mm guns would be removed when the proposed 6-inch batteries were constructed. Ottosen, supported by Lt. Gen. John L. Dewitt in San Francisco, argued that he would need both the 6-inch and the 155mm works. Washington finally relented, but approved only \$6,000 for the four mounts. [10]

The Los Angeles District Engineer rejected the first bids for constructing the Panama mounts, in March 1941, and readvertised. The second attempt fared no better. The low bid was for \$7,935; the government's estimate, \$6,576. The engineers decided to begin the work themselves immediately with hired labor. While Battery Point Loma was in full operation by September 1941, the Corps of Engineers did not get around to transferring it officially until April 28, 1942. [11]

Battery Point Loma continued to serve through the early months of the war. Then, at the end of 1942 the decision was made to add 90mm anti-motor torpedo boat (AMTB) batteries to the harbor defense. At this time, Battery Point Loma was an anti-submarine battery. Should 90mm AMTB guns be installed, they would have to assume the anti-submarine mission as well as their own, and Battery Point Loma would be put out of commission. The battery's fate was debated for several more months; in the end a four-gun, 90mm AMTB battery was constructed in front of Battery Point Loma. No date has been found for the dismantling of the 155mm guns. It probably was mid-1943 or later. The emplacements themselves continued to be listed in reports. Indeed, they remain at Cabrillo National Monument and are designated HS14 [12] Battery Point Loma replaced by 6-inch Battery Humphreys in 1943.



Battery Imperial's history was quite similar to Point Loma's. The 1936 Annexes had called for the four 155mm guns to be retained at Fort Rosecrans until an "incident of emergency." The emergency came and, on December 9, 1941, they were moved to their permanent position directly north of Imperial Beach on the Coronado Heights Military Reservation, later named Fort Emory. However, this was not the location proposed in the 1936 project. In contrast to the concrete magazines at Point Loma, Imperial's dugouts were splinterproof, earth-covered dugouts of board and timber. As with the other 155s, artillerymen undoubtedly manned Imperial's guns long before the District Engineer got around to transferring them "for the use and care of troops," October 24, 1942. Battery Imperial gave way to 6-inch Battery Grant in 1943. [13]

## D. The Build-up Continued, 1939-1941

Although the 1936 Annexes called for two battalions of antiaircraft artillery, the 3-inch guns were slow in coming to San Diego. In 1937, however, Fort Rosecrans carried out antiaircraft gun practice with machine guns. The San Diego Union announced that air and surface craft must stay clear of the area west of Point Loma between 9 and 11 a. m., each Monday, Tuesday, and Wednesday from August 30 to September 30. The danger area, it said, was a semicircle with a radius of 6,000 feet horizontal and 12,000 feet altitude with a center point 1,000 yards south of the radio towers. The results of this practice have not been determined. [14]

Fort Rosecrans looked forward to acquiring 3-inch AA guns, however. In the spring of 1939, it requested permission to demolish the 3-inch coastal Battery Fetterman at Ballast Point. It was no longer in the defense project and its magazines were unfit for storage. The commander of the harbor defenses wished to use the site for the erection of sheds to protect 3-inch antiaircraft guns, their equipment, and the additional searchlights authorized for the harbor. The War Department was quick to approve. The demolition was completed on May 28, 1940. [15]

With Europe at war in 1939, a build-up of strength at America's harbors was a natural response. Inspectors-general visiting Fort Rosecrans that year noted the presence of the naval destroyer base at San Diego and recommended the garrison be increased to two batteries (6 officers and 233 enlisted men) and that a housing program be initiated. An inspector-general in 1940 remarked on the rapidly expanding airplane manufacturing industry in San Diego and warned that the army was not prepared for the industry's security from domestic disturbance and sabotage. Col. Ottosen reported in September 1940 that units of the 19th Coast Artillery Regiment were being activated at Fort Rosecrans and others would be formed in the near future. He requested additional funds to train the men at Batteries Calef and Wilkeson since the guns for Battery Strong had not yet arrived. Then, in October 1940, the construction quartermaster received orders to erect temporary buildings for an increase in enlisted strength of 2,022 men. To take care of the increase in land use, a dredging project in San Diego Harbor in 1940 resulted in adding about twenty acres of fill to the reservation at Ballast Point to provide a level space for drilling. [16]

The local Harbor Defense Board met in April 1940 to consider the future of the 10-inch Batteries Wilkeson and Calef. While already considered outmoded, they were the only large guns in operation at San Diego at that time. The board recommended they be retained as one battery and made part of the permanent fortifications. It noted that these guns were still valuable for the defense of the outer channel area, particularly in the absence of a submarine mine project. The War Department approved and the four guns were once again one battery, this time called Calef-Wilkeson. [17]



During the months before the United States entry into the war, funds became available for the construction of additional fire control stations particularly for the proposed 16-inch and 6-inch batteries, and the enlargement of existing stations. Of particular concern were the Harbor Defense Command Post (HDCP), the Harbor Entrance Control Post (HECP), and the Navy's signal station.

## **E. HDCP, HECP, and Signal Station**

Engineers constructed the Harbor Defense Command Post adjacent to what later became the northwest corner of Fort Rosecrans National Cemetery in west Fort Rosecrans. The large bombproof structure was buried under a covering of earth with two large concrete and steel observation stations facing the sea. As first constructed, it contained the harbor defense operation post and command post, the harbor defense intelligence center, Group One command post, Group Three command post, and the antiaircraft intelligence center. It became operational in 1941.

In the spring of 1941, the Army and Navy got together to determine a site for the Harbor Entrance Control Post. Gen. George C. Marshall and Adm. H. R. "Dolly" Stark had announced jointly that an officer of the Army and of the Navy continuously manned a HECP. The ideal location was one that commanded a complete view of the harbor approaches and the harbor itself. The ideal housing was in the HDCP. At San Diego, one site that commanded the harbor and its entrance was the old lighthouse on Cabrillo National Monument. But in a March meeting between Col. Ottosen, CAC, and Capt. L. E. Gunther, USN, the decision was reached to place the HECP in the HDCP and not in the old lighthouse because it did not have sufficient room. Three weeks later, the same officers rejected the HDCP and decided on a separate building to be constructed 100 yards south of the old lighthouse. On May 17, 1941, the Secretary of the Interior issued a special use permit to the War Department that turned over Cabrillo National Monument for military use.

Despite the decisions reached earlier, the Los Angeles District Engineer announced in July that he had designed a signal mast in connection with the conversion of the old lighthouse into a HECP and a signal station. He estimated that alterations to the lighthouse would cost \$1,500; the signal mast, \$3,100; a generator, \$500; and office furniture for the lighthouse, \$1,500.

But the issue was not yet a closed subject. In September the Western Defense Command in San Francisco desired a reconsideration of the project, with the view of placing the HECP in the HDCP and using the lighthouse as a watch tower and signal station. The reasons for rejecting the lighthouse were that it was not bombproof, too small, its use would duplicate communication systems already in the HDCP, and it would cause dangerous exposure of important personnel.

Thus ended the debate. The HECP moved into that portion of the HDCP that had been occupied by Group Three command post and the antiaircraft intelligence center. These latter functions eventually moved to the old mine casemate near Ballast Point. The lighthouse now became the signal station and was equipped with a signaling searchlight, an observation instrument, and telephone communication to Battery McGrath, the alert battery, and the alert searchlight. A temporary signal mast was installed along with a set of flags for visual signaling to surface craft. [18]

## **F. Modernization Program, 1941**



By September 1940, the Nazis had overrun Norway, the Netherlands, Belgium, and France. By mid-1941, German troops had invaded Russia. The Battle of Britain had been fought and the Battle of the Atlantic was underway. In North Africa, Gen. Erwin Rommel had begun a counteroffensive, driving the British back into Egypt. Japan had occupied French Indo-China and Japanese credits in the United States had been frozen. It is not a surprise that the local board of the Harbor Defenses of San Diego chose that time to update the modernization project.

A year earlier, the War Department's Harbor Defense Board came forth with a new report that recommended the adoption of the 16-inch gun as the primary weapon and the 6-inch gun as the secondary weapon in seacoast armament. The board proposed for national defense the construction of twenty-seven new 16-inch two-gun batteries and fifty new 6-inch two-gun barbette batteries of a new design having a 15-mile range. The general staff approved this report in September 1940. Now, the local board applied the new program to San Diego's defenses. As has been noted, two 16-inch and three 6-inch batteries had been projected for the harbor. [19]

The board first prepared a list of the existing and authorized seacoast batteries that would remain when the modernization program was completed:

Tactical No.	Battery	Number		Location
		Caliber	Guns	
1.	237 (Woodward)	6-inch	2	North Fort Rosecrans
2.	Strong	8-inch	2	North Fort Rosecrans
3.	126 (Ashburn)	16-inch	2	West Fort Rosecrans
4.	238 (Humphreys)	6-inch	2	South Fort Rosecrans
5.	McGrath	3-inch	2	East Fort Rosecrans
6.	134	16-inch	2	Coronado Heights
7.	239 (Grant)	6-inch	2	Coronado Heights

The 16-inch batteries were to be casemated and the 6-inch guns would be protected by steel shields. The completion of Battery Strong had powerfully reinforced the harbor in the north. Now Battery 238 (Humphreys) received construction priority so as to reinforce the defense of San Diego Bay at its weakest point, toward the south.

A second list named the existing seacoast batteries that were outmoded and would be excluded from the project when all the new batteries were completed:

Tactical No.	Battery	Caliber Guns & Carriages		Location
		Caliber	Guns	
8.	Whistler	12-inch	4 mortars	North Fort Rosecrans
9.	John White	12-inch	4 mortars	East Fort Rosecrans
10.	Point Loma	155mm	4 GPF mobile	West Fort Rosecrans
11.	Calef-Wilkeson	10-inch	4 guns DC	East Fort Rosecrans
12.	Imperial	155mm	4 GPF mobile	Coronado Heights

The War Reserve Allowance of ammunition for the seacoast batteries was shown as follows:

Tactical Type of	<u>Rounds per battery</u>	
	War	Battle

<b>Name</b>	<b>No.</b>	<b>Projectile</b>	<b>Reserve</b>	<b>Allowance</b>	<b>Place of Storage</b>
237 (Woodward)	1 each	105 lb. AP	1080	1080	1,200 rds. of Battle in emplacement; rest in reserve magazine
238 (Humphreys)	4 each	105 lb. HE	360	360	
239 (Grant)	7 each				
126 (Ashburn)	3 each	2340 lb. AP	360	360	200 rds. of Battle in emplacement; rest in reserve magazine.
134 (16- inch)	6 each				
Strong	2	260 lb. AP	450	450	Emplacement
McGrath	5	15 lb. AP	720	720	400 rds. of Battle in emplacement; rest in reserve magazine.
Whistler	8 each	1046 lb. DP	200	200	Emplacement
John White	9 each	700 lb. DP	400	400	Emplacement
Point Loma	10 each	95 lb. HE	1440	720	Entire war reserve in reserve magazine except that placed in improvised dugouts at the battery position
Imperial	12				
Calef- Wilkeson	11	617 lb. AP	648	648	Emplacement

Excess rounds were to be stored in the reserve magazine, including ammunition for twenty-eight antiaircraft machine guns and sixteen antiaircraft 37mm automatic cannon. A site had been selected at the fort for the reserve magazine. It was to be constructed as a tunnel or tunnels with one or more entrances and with lateral tunnels; it was, however, never built.

The permanent batteries were organized into four groups, each with its own command post:

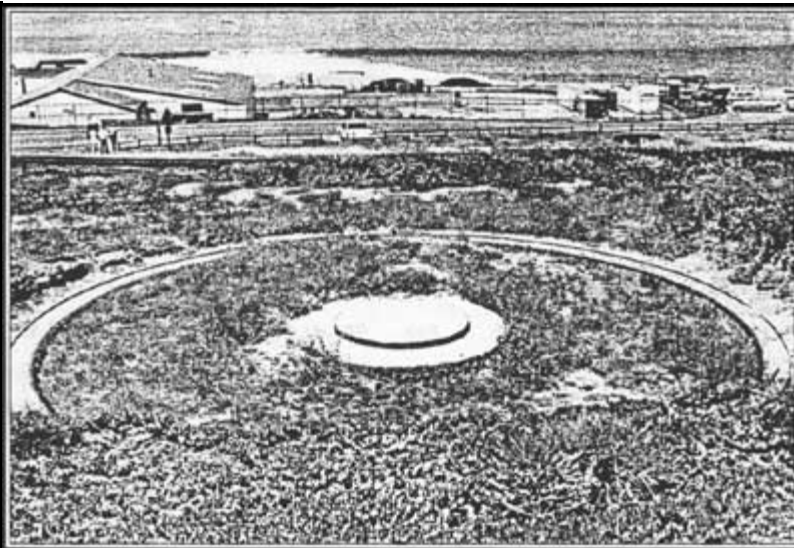
Group One - The two 16-inch batteries. Its command post to be in the top level of the two-level observation station connected with the HDCP (then occupied by the old Group Two CP).

Group Two - Batteries 237 (Woodward) and Strong. Its command post to be located on high ground 650 yards to the south of the north boundary and just west of the highway.

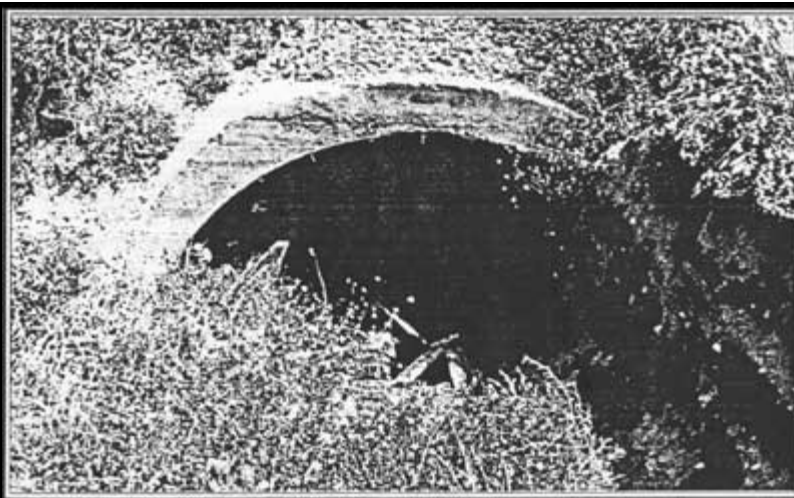
Group Three - The automatic antiaircraft weapons. The command post to be in the old mine casemate.

Group Four - Batteries 238 (Humphreys) and 239 (Grant). Its command post to be an underground concrete structure on Point Loma 135 yards directly south of the old lighthouse. [\[20\]](#)

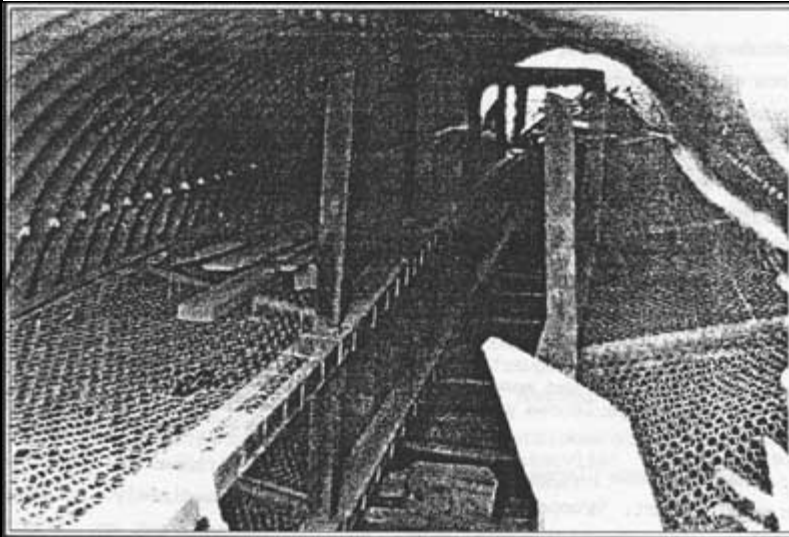




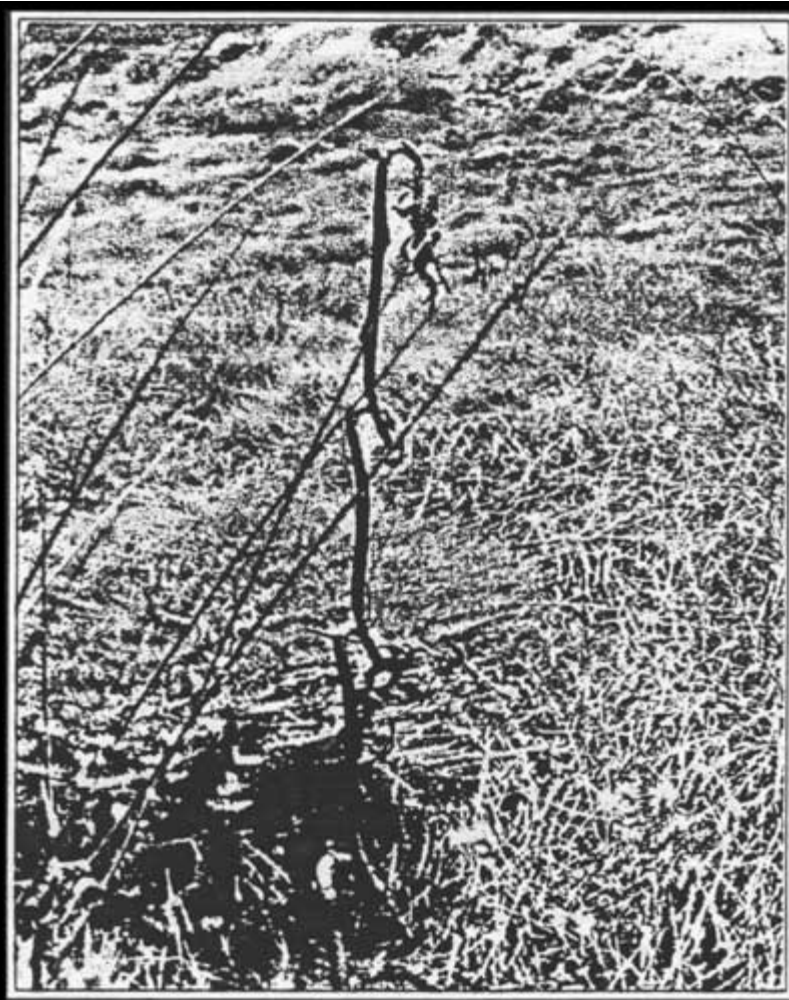
Battery Point Loma number 4 155mm Panama gun mount, currently located at Cabrillo National Monument. *Photo courtesy of George R. Schneider.*



Battery Point Loma ammunition storage. *Photo courtesy of George R. Schneider.*



Battery Point Loma, inside bunk room showing two-tiered bunk frames.  
*Photo courtesy of George R. Schneider.*



Barbed wire fence post establishing the northern perimeter of Battery Point Loma. *Photo courtesy of George R. Schneider.*

<<< [Previous](#)

<<< [Contents](#) >>>

[Next](#) >>>

---

cabr/guns-san-diego/hrs6a.htm  
Last Updated: 19-Jan-2005

# CABRILLO

## The Guns of San Diego Historic Resource Study



### CHAPTER 6: ENDNOTES

---

1. Annexes to Harbor Defense Project, Harbor Defenses of San Diego, Box 114, Special Projects, Harbor Defense 1929-1948, The Adjutant General's Office, RG 407, NA.
2. *Ibid.*, Annex C. Further renumbering during World War II resulted in old 5 and 6 becoming searchlights 18 and 19 respectively. A third searchlight shelter (HS15) within the monument, on the west side of the peninsula, was number 15 during the war.
3. *Ibid.*, Annex E.
4. Callaghan, "Fort Rosecrans," p. 184; Edward L. Nolan, State Labor Commissioner, April 28, 1937, to E B. Fontaine, Fort Rosecrans, and accompanying papers, File 662B (San Diego) I, February 1918-December 1938, Box 133, OCE, RG 77, WNRC. Colonel Wyman later was the controversial Honolulu District Engineer in the early months of World War II.
5. Lt. Col. Chas. A. Walker, Ordnance Office, May 29, 1937, to Ch. of Engineers, and endorsements, File 662B (San Diego) I, February 1918 - December 1938, Box 133, OCE, RG 77, WNRC.
6. AGO, December 16, 1937 to Ch. of Engineers, File 600.05 (San Diego), A-52-87, Box 128, OCE, RG 77, NA; Heitman, Historical Register, 1:932; The Army Almanac, A Book of Facts Concerning the United States Army (Harrisburg, PA: Stackpole, 1959), pp. 90-91, 176, 336, and 691; Cannon Report, Volley 1, Round 15, June 11, 1943 (a Fort Rosecrans newspaper).
7. Maj. T. Wyman, LAD, November 17, 1938, to Ch. of Engineers, and accompanying papers; Brig. Gen. H T. Burgin, Ninth CA District, July 25, 1940, to AG, Washington; Lt. Col. W.W. Warner, Ordnance, August 21, 1940, to Ch. of Engineers; and Lt. Col. Edwin C. Ketton, LAD, April 23, 1941, to Ch. of Engineers, File 662B (San Diego), Boxes 131 and 133, OCE, RG 77, WNRC.
8. Annex A, Seacoast Guns, Annexes to Harbor Defense Project, Harbor Defenses of San Diego, August 21, 1936, Box 114, Harbor Defense 1929-1948, AGO, RG 407, NA.
9. Col. P.H. Ottosen, HDSD, August 17, 1940, to CG, Ninth Corps Area, File 662B (San Diego-Rosecrans), Box 131, OCE, RG 77, WNRC.
10. *Ibid.*, 15th Endorsement, signed by Col. K.T. Blood, WD.
11. Lt. Col. Edwin C. Kelton, LAD, March 13, 1941, to Ch. of Engineers, and accompanying papers, File 662B (San Diego) II 1939-1942, Box 133; Col. P.H. Ottosen, April 28, 1942, to LAD, File 662 (San Diego), Box 130, OCE, RG 77, WNRC; Howard Overton, Cabrillo National Monument, interview with George H. McGlothlin, formerly with Battery E, 19th

Coast Artillery, assigned to Battery Point Loma in November 1941. The Coast Artillery numbered battery emplacements from right to left, thus the most northerly gun at Battery Point Loma was number 1.

12. Col. P.H. Ottosen, Report of a Board of Officers, November 23, 1942; Col. C.E. Cotter, OCE, February 11, 1943, to Asst. Ch. of Staff, WD, both in File 662, Box 130, Harbor Defense Files, San Diego, OCE, RG 77, WNRC; Supplement to the Harbor Defense Project, Harbor Defenses of San Diego, 1945, Box 118, Harbor Defense 1929-1948, RG 407, NA.

13. Annex A, Seacoast Guns, 1936, Annexes to Harbor Defense Project, Harbor Defenses of San Diego, Box 114; Harbor Defense Projects for Harbor Defenses Included in the San Diego-San Pedro Area, ca. 1943, Box 118, both in Harbor Defense 1924-1948, AGO, RG 407, NA; Guy B. Bebout, LAD, October 8, 1942, to Ch. of Engineers, File 662 (San Diego), Box 130, OCE, RG 77, WNRC.

14. San Diego Union, August 26, 1937.

15. Col. R.E. Guthrie, CO, HDSD, May 26, 1939, to CG, 9th Coast Artillery District, File 662B (San Diego — Rosecrans), Box 131; and Guthrie, December 13, 1939, to CG, Ninth Corps Area, File 662.B (San Diego), II, Box 133, both in OCE, RG 77, WNRC.

16. Col. J.A. Green, March 22, 1939, to IG; Lt. Col. E.J. Dwan, October 7-10, 1940, IG inspection; File 331.26 F, L, N-S, Box 217, OCA, RG 177, NA; Col. P. H. Ottosen, HDSD, September 30, 1940, to CG, Ninth Corps Area, File 662B (San Diego) II, Box 133; and Capt. William A. Davis, QMC, October 16, 1940, to Construction QM, March Field, CA, File 683 (San Diego), Box 134, OCE, RG 77, WNRC; San Diego Union, June 12, 1940.

17. Proceedings of the Local Harbor Defense Board, San Diego-San Pedro Area, April 26, 1940; Adjutant General, WD, 15th Endorsement, October 16, 1940, to CG, Ninth Corps Area, File 665 (San Diego) I, Box 133, OCE, RG 77, WNRC.

18. Col. P.H. Ottosen, CAC, and Capt. L. E. Gunther, USN, Meeting March 14, 1941, and accompanying papers; "Proposal for Installation of HECF, HDCP, Fort Rosecrans, Approved by Local Joint Planning Committee, Southern California Sector, Pacific Coastal Frontier," November 5, 1941, File 665 (San Diego) I, Box 133, OCE, RG 77, WNRC.

19. Thompson, Seacoast Fortifications, San Francisco, p. 358.

20. "Proceedings, Local Board, Harbor Defenses of San Diego, September 15, 1941." Revised October 15, 1941, File "Inclosures Under 662 (San Diego), sub-file," Box 131, OCE, RG 77, WNRC. The War Department did not approve a reserve magazine for San Diego. Ammunition was stored in the magazines at the batteries. After Battery Whistler was abandoned in 1942, its 7,700 square feet of floor space was considered to be an emergency magazine.

---

<<< [Previous](#)

<<< [Contents](#) >>>

[Next](#) >>>



# CABRILLO

## The Guns of San Diego Historic Resource Study



### CHAPTER 7:

## WORLD WAR II AND AFTER, 1941-1948 (continued)

### D. Batteries Grant and Woodward, and Fort Emory

Engineers began work on Battery Construction No. 239 (Grant) in June 1942, the contractor being Herbert Mayson. This 6-inch, two-gun battery was located at Coronado Heights, along with Battery Imperial. A 16-inch gun battery was also scheduled for this area. In view of the concentration of defenses there, the San Diego Chamber of Commerce asked Secretary of War Henry L. Stinson to name it Fort Emory, in honor of Brig. Gen. William H. Emory. Emory had arrived in San Diego in 1846 with the Kearny command to survey the new international boundary. The Chamber of Commerce believed that it was due to Emory's representations that the boundary was placed south of San Diego Bay. The War Department agreed and in December so renamed the Coronado Heights Military Reservation as Fort Emory which became a sub-post of Fort Rosecrans.

Battery Grant itself was completed in April 1943, but the guns did not arrive until December. Meanwhile, the District Engineer gave the Coast Artillery permission to store 6-inch projectiles and powder in its magazines. Construction of the project cost \$219,000. The identifications of its guns and carriages were thus:

Guns Caliber Model Ser. No. Manufacturer				
1	6-inch	1905	24	Watervliet Arsenal
2	6-inch	M-1905	20	Watervliet Arsenal

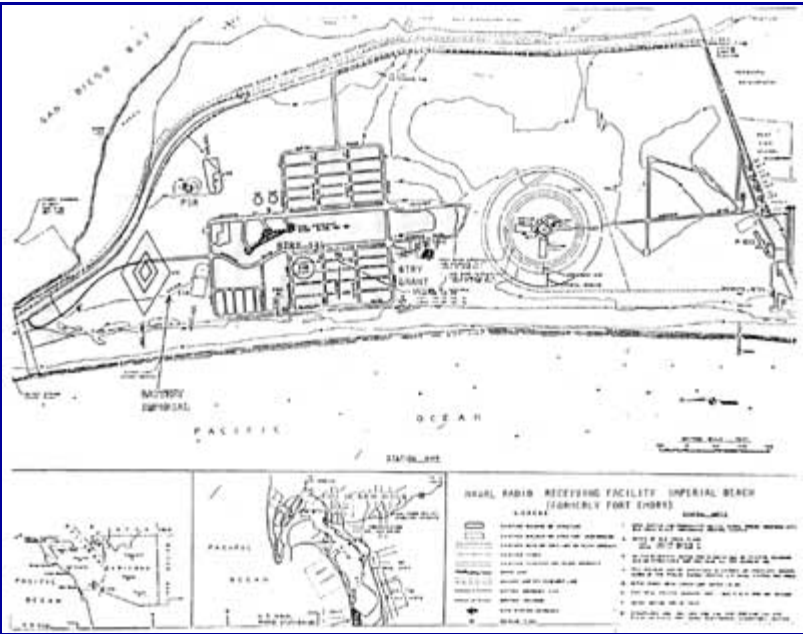
Carriages Type Model Ser. No. Manufacturer				
1	barbette	barbette	56	York Corporation
2	barbette	barbette	57	York Corporation [6]

Battery Woodward, Construction No. 237, was the last of the 6-inch batteries to be commenced, in March 1943, and the Army Engineers did not transfer it to the troops until August 1944. Its cost amounted to \$256,000. Located in northwest Fort Rosecrans, its two guns replaced the Marine batteries Gillespie and Zeilin. It was named for Col. Charles G. Woodward who as a captain had commanded Fort Rosecrans from March 1906 to June 1907. The guns and carriages were identified as follows:

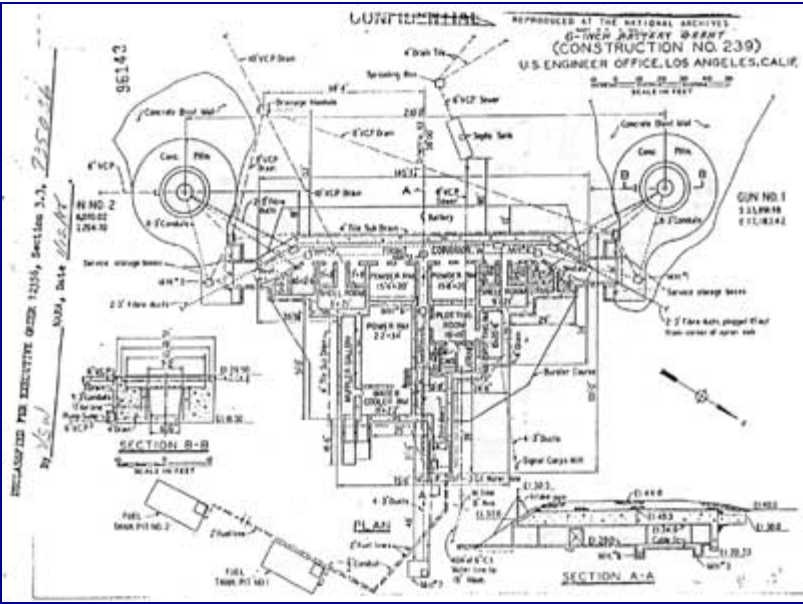
Guns Caliber Model Ser. No. Manufacturer				
1	6-inch	1903A-2	40	Watervliet Arsenal
2	6-inch	1903A-2	55	Watervliet Arsenal



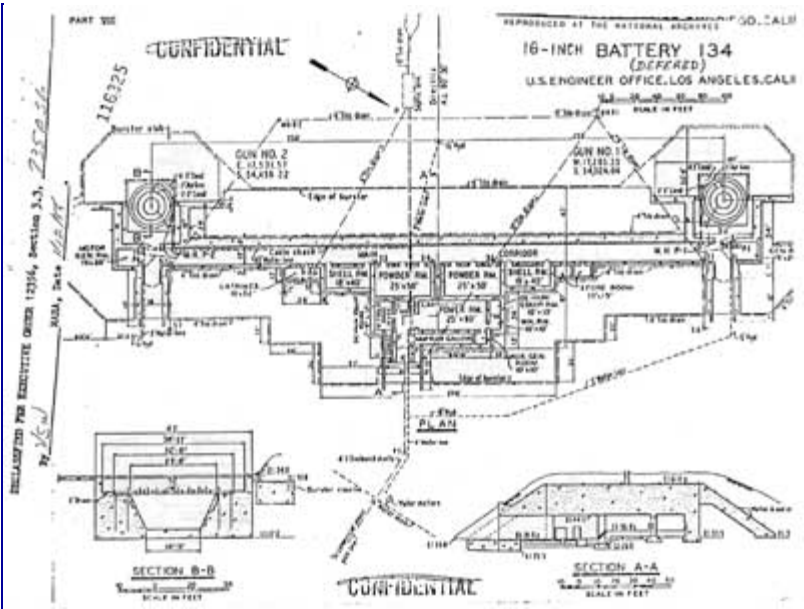
Carriages Type	Model	Ser. No.	Manufacturer
1	barbette barbette	103	Watertown Arsenal
2	barbette barbette	109	Watertown Arsenal [7]



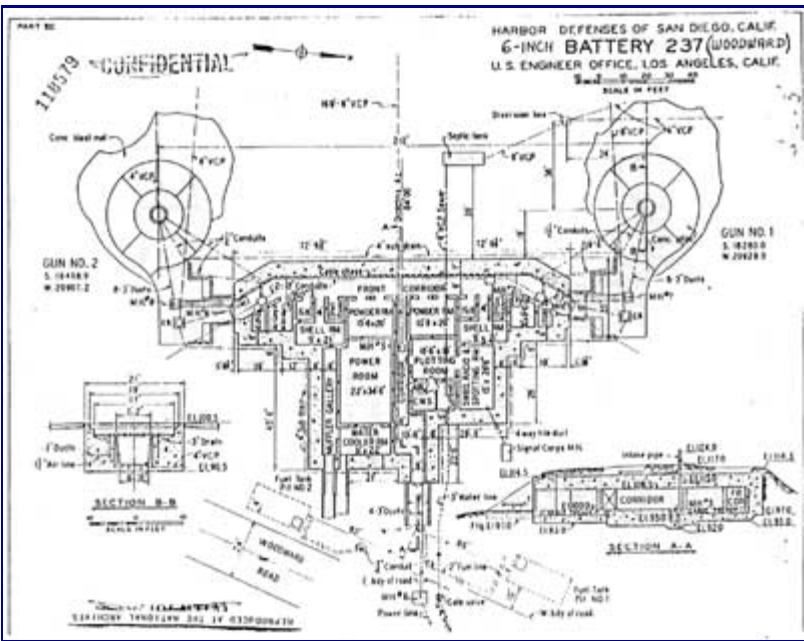
Fort Emory, north of Imperial Beach, San Diego County. (click on image for an enlargement in a new window)



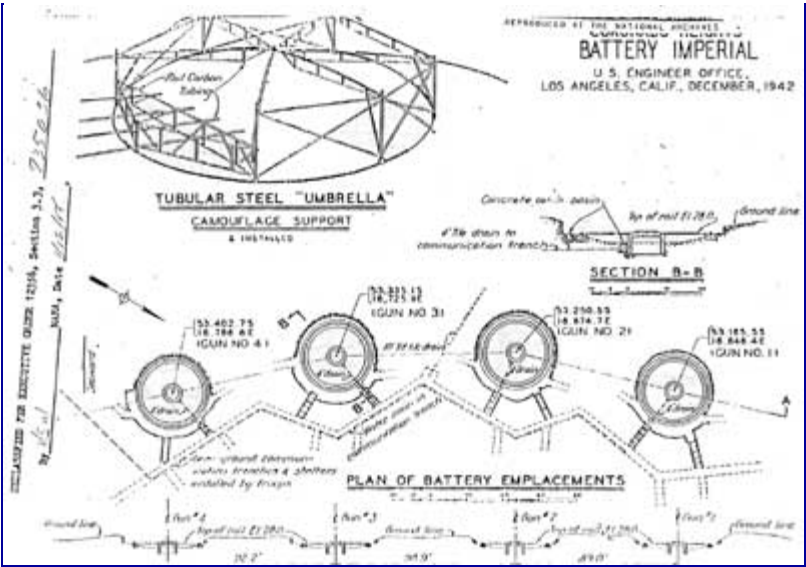
Battery Grant, Fort Emory, two 6-inch guns. National Archives, RG 77, OCE, Box 129, File 600.914, Harbor Defenses of San Diego. (click on image for an enlargement in a new window)



Battery Construction No. 134, Fort Emory. Its 16-inch guns were never mounted. The War Department deferred further construction inasmuch as danger of a Japanese invasion disappeared toward the end of World War II. *National Archives, RG 77, OCE, Box 129, File 600.914, Harbor Defenses of San Diego.* ([click on image for an enlargement in a new window](#))



Plans for Battery Woodward, two 6-inch guns. This World War II battery was built near the north boundary of Fort Rosecrans. *National Archives, RG 77, OCE, Box 129, File 600.914, Harbor Defenses of San Diego.* ([click on image for an enlargement in a new window](#))



Battery Imperial, Fort Emory, four 155mm guns. These guns were not emplaced on the Panama mounts until after Pearl Harbor. *National Archives, RG 77, OCE, Box 129, File 600.914, Harbor Defenses of San Diego.* (click on image for an enlargement in a new window)

[<<< Previous](#)

[<<< Contents >>>](#)

[Next >>>](#)

# CABRILLO

## The Guns of San Diego Historic Resource Study



### CHAPTER 7: ENDNOTES

---

1. Cannon Report, Volley 2, Round 33, December 4, 1942.
2. U. S. Army, "Historical Sketch, Harbor Defenses of San Diego," September 15, 1945, Appendix IIB, "History of the Southern California Sector, Western Defense Command." Box 400, U.S. Army Center of Military History, Washington, D.C. When Battery Point Loma was disarmed, circa 1943, the new Battery Humphreys became the alert/examination battery.
3. Lt. Col. L.L. Davis, OCA, November 27, 1941, to CG, 9th CA District, File 665 (San Diego) I, Box 133, OCE, RG77, WNRC; Callaghan, "Fort Rosecrans," p. 236, n. 87; Heitman, Historical Register, 1:173; U.S. Army, "Report of Completed Works, Harbor Defenses of San Diego," ca. 1945, File 600.914, Box 129, OCE, RG 77, WNRC. Characteristics of a 16-inch gun: Maximum range — 48,000 yards at 47° angle of elevation; Effective range — 44,000 yards at 40°52' angle of elevation; Minimum range — 6,000 yards at 1°45' angle of elevation; Field of fire — 145° (because of casemate); Weight of barrel — 146 tons; Weight of cradle — 39 tons; Weight of base ring — 84 tons; Guns — 500 feet apart.
4. Col. P.H. Ottosen, HDSD, ca. October 1942, to AG, WD, File 600.05 (San Diego), Box 128; Col. Edwin C. Kelton, LAD, March 30, 1942, to Ch. of Engineers, File 662 (San Diego), Box 130; "Report of Completed Works," HDSD, File 6.914, Box 129, OCE, RG 77, WNRC.
5. Col. P.H. Ottosen, HDSD, November 2, 1942, File 662 (San Diego), Box 130, OCE, RG 77, WNRC; Millett, Semper Fidelis, pp. 91-112; Callaghan, "Fort Rosecrans," pp. 214, 221, and 233, n. 59. Both batteries continued to serve until replaced by 6-inch Battery Woodward in 1944.
6. Col. John Harry, HDSD, April 30, 1943, to LAD, File 662 (San Diego), Box 130; John T. Martin, San Diego Chamber of Commerce, October 28, 1942, to Sect. of War Stinson, File 600.05 (San Diego), Box 128; "Report of Completed Works," HDSD, File 600914 (HDSD), Box 129, all in OCE, RG 77, WNRC. The 16-inch battery, Construction No. 134, got underway in March 1943, but work was suspended on the uncompleted work in February 1944, never to be resumed. No armament was installed. The proposed name was Gatchell, for a former Fort Rosecrans CO. A ground-covered concrete plotting and switchboard room (PSR) for 134 was constructed to the north of the battery. The concrete structures of Batteries 134, Grant, and the PSR are now used by the Navy for offices and storage. Battery Grant was named after Col. Homer Blackie Grant, CAC, who died in 1939.
7. Col. P.H. Ottosen, HDSD, August 31, 1944, to LAD; "Report of Completed Works," HDSD, File 600.914 (HDSD), both in Box 129, OCE, RG 77, WNRC; Callaghan, "Fort Rosecrans," pp. 221 and 235, n. 82.

8. Col. P.H. Ottosen, HDSD, Report of a Board of Officers, November 23, 1942; and Capt. F.K. Jones, Jr., WD, December 12, 1942, to CO, HDSD, both in File 662 (San Diego), Box 130; and "Report of Completed Works," HDSD, File 600.914 (HDSD), Box 129, all in OCE, RG 77, WNRC. The guns of Battery Fetterman were first placed on North Island, but were moved to Ballast Point at the request of the U. S. Navy. Nothing remains of the three AMTB batteries, although Battery Fetterman survived until 1986, when it was demolished for a parking lot.
9. "History of the Southern California Sector, Western Defense Command.", Lt. Col. Guido O. Fermi, Western Defense Command, Memorandum for G-4, January 31, 1941, Box 25, Western Defense Command, RG 338, WNRC.
10. Ch. of Engineers, radiogram, January 9, 1943, to LAD, File 662 (San Diego), Box 133, OCE, RG 77, WNRC; Appendices to Supplement to the Harbor Defense Project, HDSD, July 1, 1945, Box 118, Adjutant General's Office, Special Projects, Harbor Defense, 1929-1948, RG 407, NA.
11. Col. P.H. Ottosen, HDSD, January 24, 1942, to CG, Western Defense Command, File 665 (San Diego) I, Box 133; and Ottosen, December 14, 1942, to LAD, File 665 (San Diego) III, Box 132, OCE, RG 77, OCE, WNRC. Some signal functions continued in the old lighthouse.
12. Ottosen, June 9, 1942, to CG, Western Defense Command, File 665 (San Diego) II; Maj. Gen. Roger B. Colton, WD, August 10, 1943, to CG, Western Defense Command, File 665 (San Diego) III, Box 132, OCE, RG 77, WNRC.
13. Supplement to the Harbor Defense Project, HDSD 1945, Annex B, RG 407, NA; Col. P.H. Ottosen, HDSD, October 10, 1942, to Ch. of Engineers, File 662 (San Diego), Box 130, OCE, RG 77, WNRC, Suitland.
14. Except where otherwise cited, this section is taken from U. S. Army, "History of the Southern California Sector, Western Defense Command," ca. 1945, Box 400, U.S. Army Center of Military History, Washington, D.C
15. Stetson Conn and Byron Fairchild, The Framework of Hemisphere Defense, United States Army in World War II, The Western Hemisphere (Washington: U.S. Government Printing Office, 1960), pp. 356-360; U.S. Army, "History of the Western Defense Command," 5 vols., ca. 1945, vol. 2, Ch. 9, pp. 1-2.
16. Stetson Conn, Rose C. Engleman, and Byron Fairchild, Guarding the United States and Its Outposts, The U.S. Army in World War II, The Western Hemisphere (Washington, U.S. Government Printing Office, 1964), p 89.
17. Col. P.H. Ottosen, President, Board of Officers, HDSD, September 10, 1942, and accompanying papers, File 660.113 (San Diego), Box 128, OCE, RG 77, WNRC.
18. Lehmann, Embarrassment of Riches, p. 70.
19. U. S. Army, "Supplement to the Harbor Defense Project, Harbor Defenses of San Diego," 1945, Box 118, The Adjutant General's Office, Special Projects — Harbor Defense, 1929-1948, RG 407, NA.

---

[cabr/guns-san-diego/hrs7n.htm](#)  
Last Updated: 19-Jan-2005



# CABRILLO

## The Guns of San Diego Historic Resource Study



### CHAPTER 8: ENDNOTES

---

1. Holland and Law, The Old Point Loma Lighthouse, pp. 33-34.
2. Col. Charles R. Suter, November 4, 1897, to Ch. of Engineers, File LA 660.2, Box 0-3852, HDSD, LAD, RG 77, NA, Pacific Southwest Region.
3. Capt. Amos A. Fries, February 6, 1908, to Ch. of Engineers; Maj. George H. McManus, CO, Fort Rosecrans, December 11, 1911, to LAD; and Capt. Charles T. Leeds, October 24, 1911, to Ch. of Engineers, all in File 63, vol. 2, Box 34, Point Loma Reservation, OCE, RG 77, NA, Pacific Southwest Region. By 1911, the post itself had one mile of macadam road and one and a half miles of good earth road.
4. Maj. Johnson Hagood, CO, Fort Rosecrans, April 13, 1916, to Junior Engineer, Fort Rosecrans, Box 3, Coastal Defense 1910-1917, U.S. Army Commands, RG 392, NA; Capt. Charles T. Leeds, July 24, 1918, to Junior Engineer, Fort Rosecrans, File 7E, vol. 1, Box 23; and Map of Fort Rosecrans Military Reservation, 1918, File 63, vol. 2, Box 34, Point Loma Reservation, OCE, RG 77, NA, Pacific Southwest Region.
5. George Ruhlen, "Fort Rosecrans," The Western Explorer, 2 (February 1962): 6. Col. Ruhlen and Assistant Superintendent Daniel J. Tobin, Sequoia National Park, were members of the Reception Committee at the opening ceremonies.
6. Lehmann, An Embarrassment of Riches, p. 138; Thomas Tucker, Oral History Interview, September 6, 1985, files, Cabrillo N. M.; Lt. Col. George Ruhlen, letter and map, March 10, 1934, to Maj. G. Ralph Meyer, OCE, File 662.1 26B, Box 642, OCA, RG 177, NA.
7. The Sun, September 30, 1892; The San Diego Union, September 10, 1982.
8. Lehmann, An Embarrassment of Riches, pp. 20-26 and 36.
9. Ibid., pp. 83-86; Joseph E. Brown, Cabrillo National Monument (Cabrillo Historical Association, 1981), pp. 37-39.
10. Francis R. Holland, Jr., "A Short History of Cabrillo National Monument," The Western Explorer, 2 (August 1962): 35.
11. Lehmann, An Embarrassment of Riches, pp. 119-125.
12. Superintendent Gary Cummins, Cabrillo N.M., November 11, 1986, to Regional Director, Western Regional Office, NPS, files, Denver Service Center, NPS. About the only criticism the statue has received appeared in Admiral Samuel Eliot Morison's The European Discovery of America, p. 33: "The Portuguese community at San Diego, perhaps to efface the unflattering image of them in John Steinbeck's Tortilla Flat (1935), caused to be erected a

heroic statue of Cabrillo on Point Loma, which he probably discovered. Unfortunately they have backed him by a finely carved padrao, of the type that Portuguese discoverers set up in Africa to nail down the king's claim to the territory."

13. Ruhlen, "Fort Rosecrans," San Diego Historical Society Quarterly 5:66; U.S. Veterans Administration, "Fort Rosecrans National Cemetery, San Diego, California," pamphlet.

14. U.S. Veterans Administration, "Fort Rosecrans National Cemetery."

15. Maj. Gen. James B. Aleshire, QMG, January 6, 1915, to Ch. Signal Officer of the Army, Box 5, San Diego Coastal Defense, 1910-1917, U.S. Army Commands, RG 392, NA.

16. Lt. Col. W.C. Davis, Fort Rosecrans, September 16, 1915, to AG, U.S. Army, Box 7, San Diego Coastal Defense, 1910-1917, U.S. Army Commands, RG 392, NA.

17. Inspector General Dept., OCA, February 10, 1932, to CG, Ninth Corps Area, and accompanying papers, File 331, Box 217, Office of the Chief of Arms, OCA, RG 177, NA.

18. U.S. Veterans Administration, "Fort Rosecrans National Cemetery."

19. Ibid.

20. The Institute of Heraldry, U.S. Army, "Historical Data - Post, Camp, Station or Air Field" for Fort Rosecrans, files, Cabrillo NM.

21. Flower and Roth, Cultural Inventory, p. 182, quoting the San Diego Evening Tribune, June 29, 1959. In connection with the 1957 transfer, 80.60 acres were transferred to the Department of the Interior for Cabrillo National Monument, and 14.5 acres to the Department of the Treasury for lighthouses. The Navy had already acquired the balance of Fort Rosecrans' original 1,300 acres.

22. Brown, Cabrillo National Monument, pp. 30-32; "Pictorial, The San Diego Naval Complex," United States Naval Institute Proceedings 94 (June 1968): 96-108.

23. Flower and Roth, Cultural Inventory, pp. 196-240.

---

<<< [Previous](#)

<<< [Contents](#) >>>

[Next](#) >>>



# CABRILLO

---

## The Guns of San Diego Historic Resource Study



### CHAPTER 9: ENDNOTES

---

1. Mrs. Ethel Blythe, postcard, ca. 1913, to Mrs. George Ruhlen. Postcard is in the possession of Maj. Gen. George Ruhlen, Texas.
2. No documentary evidence has been found to support the Army's use of the lighthouse as a radio station in the 1920s. The army radio station (HS-2) was completed by 1920.
3. The base end stations HS-8 and HS-9 both served Batteries Wilkeson and Calef but it is not possible to determine which was which.

---

[<<< Previous](#)

[<<< Contents >>>](#)

[Next >>>](#)

---

cabr/guns-san-diego/hrs9n.htm  
Last Updated: 19-Jan-2005

# CABRILLO

## The Guns of San Diego Historic Resource Study



### CHAPTER 4:

## FORT ROSECRANS, 1898-1920 (continued)

---

### E. Advances in Coastal Defense, San Diego Harbor, 1901-1920

Twenty years after the Endicott Board made its report on seacoast fortifications, President Theodore Roosevelt directed Secretary of War William Howard Taft to review the national program and to evaluate recent developments. Among the Taft Board's more important findings were the organizing of coastal searchlights in batteries for illuminating harbor entrances and approaches; the electrification of fortifications, including lighting, communications, and ammunition handling; and a modern system of aiming. Of this last, historian E. Raymond Lewis writes that it was the most significant advance made in harbor defense fire control until the introduction of radar. Until now aiming had been done from individual guns with elementary instruments.

The new system, in contrast, was based on a combination of optical instrumentation of great precision, the rapid processing of mathematical data, and the electrical transmission of target-sighting and gun-pointing information. Of the several methods of fire control devised about the time, the most elaborate and precise made use, for a given battery, of two or more widely spaced sighting structures technically known as base-end stations. From these small buildings simultaneous optical bearings were continuously taken of a moving target, and the angles of sight were communicated repeatedly to a central battery computing room. Here sightings were plotted and future target positions were predicted.... The computed products were then translated into aiming directions which were forwarded electrically to each gun emplacement or mortar pit. [26]

In September 1905, a high-powered committee of officers visited Fort Rosecrans with the mission of revising the Endicott Board's findings regarding San Diego Harbor. [27] The Los Angeles District Engineer had been busy making improvements at San Diego even before the committee's arrival. Among other things, a central power plant had been constructed in "Power House Canyon" behind Battery Wilkeson in 1905. It served all the batteries and a 30-inch coastal searchlight that had been installed near Battery McGrath in 1902. Now the Board recommended the installation of three additional searchlights on Point Loma. [28]

The Taft Board did not recommend any additional artillery for San Diego, but as a result of its findings there was a definite, if gradual improvement in fire control for the existing batteries. The first fire control stations were often temporary in nature and few in number. Gradually, permanent stations were constructed with concrete walls and tar and gravel roofs. But a standard fire control system did not get installed at San Diego until World War I. When first built, these concrete structures were "open type stations." Then, in 1919, the Chief of Engineers directed that roofs be constructed for all of them. The base-end stations at this time received concrete and earth coverings, while the fort commander's and the fire

commander's roofs were flat steel.

Maj. William C. Davis, commanding Fort Rosecrans, noted in 1913 that the completion of the Panama Canal would increase the commercial and strategic importance of San Diego Bay. It was time for the installation of standard fire control equipment. Army Engineers soon began preparing such a plan for Battery Wilkeson that called for two battery commanders' (BC) stations (Wilkeson was soon to be divided into two batteries), two primary stations (B<sup>1</sup>), and two secondary stations (B<sup>2</sup>), the last to be built at Fort Pio Pico across the channel. Also, stations were to be built for the fort and fire commanders. [29]

By the end of World War I eight base-end stations, four on Point Loma and four at Fort Pio Pico, were in operation. Two of these stations, then called B1/3 and B1/4, remain on the east side of Point Loma within Cabrillo National Monument and are on the List of Classified Structures as HS8 and HS9. At that time they were the primary stations for Batteries Wilkeson and Calef. Also by 1918, all of North Island had become federal property, the Navy using the north half for aviation purposes and the Army having established Rockwell Field in the southern half. The Engineers took advantage of this situation and moved four base-end stations from Fort Pio Pico farther east on the newly acquired land, thereby lengthening the base lines by nearly 2,000 feet. (Sufficiently long base lines at Point Loma had long been a problem because of the rugged terrain of the reservation.) In 1917 the Chief of Ordnance notified the Coast Artillery that fourteen Warner and Swasey azimuth instruments, Model 1910, would be sent to Fort Rosecrans for use in the new fire control stations. The position finder instrument in use at that time was the Swasey Depression Range Finder, Type A, Model 1910. [30]

Although the standard fire control system for the defenses of San Diego had not been completed by 1920, the Corps of Engineers turned over a substantial number of stations to the commanding officer that year:

- B 1/1 and BC, primary and battery commander's station, Battery Whistler
- B 2/1 secondary station, Whistler
- B 3/1 tertiary station, Whistler
- B 4/1 base-end station, Whistler, North Island
- B 1/2 primary station, Battery John White
- B 2/2 and BC secondary and battery commander's station John White
- B 3/2 tertiary station, John White
- B 4/2 base-end station, John White, North Island
- B 1/3 primary station, Battery Wilkeson
- B 2/3 secondary station, Wilkeson, North Island
- 8 1/4 primary station, Battery Calef
- B 2/4 secondary station, Calef, North Island
- C fort commander's station
- F 1/1 first fire commander's station
- F 1/2 second fire commander's station
- M1 mine primary station
- meteorological station
- fire control switchboard room, located in Battery John White battery commander's station (BC) [31]

San Diego's Endicott batteries had concentrated on defending the entrance channel. Only

Battery Wilkeson could have participated in a major naval engagement. While batteries had been projected for Point Loma and elsewhere, they had not yet been funded. In 1913, Maj. William C. Davis wrote the Adjutant General of the Army outlining the deficiencies of the defenses. A modern naval power, with its new long-range fighting power and efficiency, could attack and maneuver in the area south of Coronado and far outclass Wilkeson's 10-inch guns. An enemy fleet off Ocean Beach could bombard and take in reverse all the fort's batteries and bombard downtown San Diego and all the inner harbor. [32]

In a similar vein the Los Angeles District Engineer described the defenses: "Only Battery Wilkeson is apt to participate in a naval engagement of serious magnitude, for the other batteries cover the mine fields and the immediate entrance to the harbor only." The weak point in the defenses, he said, was the west side of Point Loma where even enemy gunboats could approach unopposed: "There is no gun of any calibre now available to protect this side of the Point." Before the end of 1915, help was on the way. The commanding general of the Western Department learned that four 12-inch mortars, authorized at the last session of Congress, would be shipped from Fort Morgan in Mobile, Alabama. [33]

The Engineers began work on two mortar batteries, each having four mortars in two pits, at the end of 1915. Battery John White was constructed in a deep ravine (Power House Canyon) behind the post and Battery Whistler was constructed near the northern boundary of the reservation. The first was named in honor of Col. John Vassar White, a graduate of the U.S. Military Academy and a veteran of the Artillery Corps. Battery Whistler honored the memory of Col. Joseph Nelson Garland Whistler, an infantry officer who fought in both the Mexican and Civil Wars. Although the engineers completed construction in 1916, the mortars and their carriages were delayed in arriving. The mortars were not proof-fired until the end of 1918 and the batteries were officially transferred from the Engineers to the commanding officer of the Coast Defenses of San Diego in August 1919.

Engineers emplaced the mortars and carriages as follows:

**Battery Whistler**

Mortars				Caliber	Model	Serial No.	Manufacturer	Mounted
Pit A, 1		12-inch	1890M	76			Watervliet Arsenal	Dec. 31, 1917
Pit A, 2		12-inch	1890M	85			Watervliet Arsenal	Dec. 31, 1917
Pit B, 1		12-inch	1890M	107			Watervliet Arsenal	Dec. 31, 1917
Pit B, 2		12-inch	1890M	127			Watervliet Arsenal	Dec. 31, 1917
Carriages				Model	Serial No.	Manufacturer		
Pit A, 1		1896M	186			American Hoist & Derrick Company		
Pit A, 2		1896M	188			American Hoist & Derrick Company		
Pit B, 1		1896M	189			American Hoist & Derrick Company		
Pit B, 2		1896M	190			American Hoist & Derrick Company		

**Battery John White**

Mortars				Caliber	Model	Serial No.	Manufacturer	Mounted
Pit A, 1		12-inch	1890M	3			BIF, Providence	Dec. 31, 1917
							Rhode Island	
Pit A, 2		12-inch	1890M	27			Bethlehem Iron	Dec. 31, 1917
Pit B, 1		12-inch	1890M	9			BIF, Providence	Dec. 31, 1917
							Rhode Island	

Pit B, 2 12-inch 1890M 4

BIF, Providence, Dec. 31, 1917  
Rhode Island

**Carriages Model Serial No. Manufacturer**

Pit A, 1	1896M 76	R. Poole & Son
Pit A, 2	1896M 83	R. Poole & Son
Pit B, 1	1896M 56	R. Poole & Son
Pit B, 2	1896M 87	R. Poole & Son <a href="#">[34]</a>

At the same time considerable planning took place for adding six 6-inch rapid-fire guns to the harbor's defenses: two at Billy Goat Point on the east side of the peninsula, at elevation 99 feet; two at the south end of Point Loma, one-quarter mile northwest of the new lighthouse, elevation 78 feet; and two on the western side of Point Loma near the north boundary, elevation 128 feet. The estimated cost of the three batteries and the necessary fire control stations came to a grand total of \$842,000. The Secretary of War approved the project in February 1918 and directed that the cost figure be included in the 1920 defense estimates. The Congress did not make funds available and many years passed before 6-inch guns again were considered for San Diego. [\[35\]](#)

Lt. Col. W. F. Hase inspected the Fort Rosecrans batteries early in 1918 and discovered that the sea was undermining 3-inch Battery James Meed at Fort Pio Pico. His recommendation that the guns be dismounted and the battery abandoned was approved. Since the 5-inch guns at Battery McGrath had gone to war, the Engineers modified its emplacements and mounted Meed's guns in their stead in May 1919. [\[36\]](#)

World War I stimulated several developments in San Diego coastal defenses. Among them was the 1917 authorization to construct an army radio station at Fort Rosecrans. Engineers located it 1,000 feet northwest of the old lighthouse with the towers between the two. The building cost approximately \$2,500 and the towers \$1,150. It was operational in 1918 but for some reason it was not turned over to the Coast Artillery until 1919. This did not prevent a "very zealous and enthusiastic radio instructor, Lt. MacFadden" from placing the apparatus in service prematurely. The district engineer demanded an explanation and got an apology. A couple of months later, a naval lieutenant officially tuned in the equipment and the artillery engineer took charge of the station. [\[37\]](#)

The Taft Board's recommendations for batteries of coastal searchlights became a reality on Point Loma between 1918 and 1919. The Chief of Engineers approved plans for eight 60-inch searchlights arranged in four batteries:

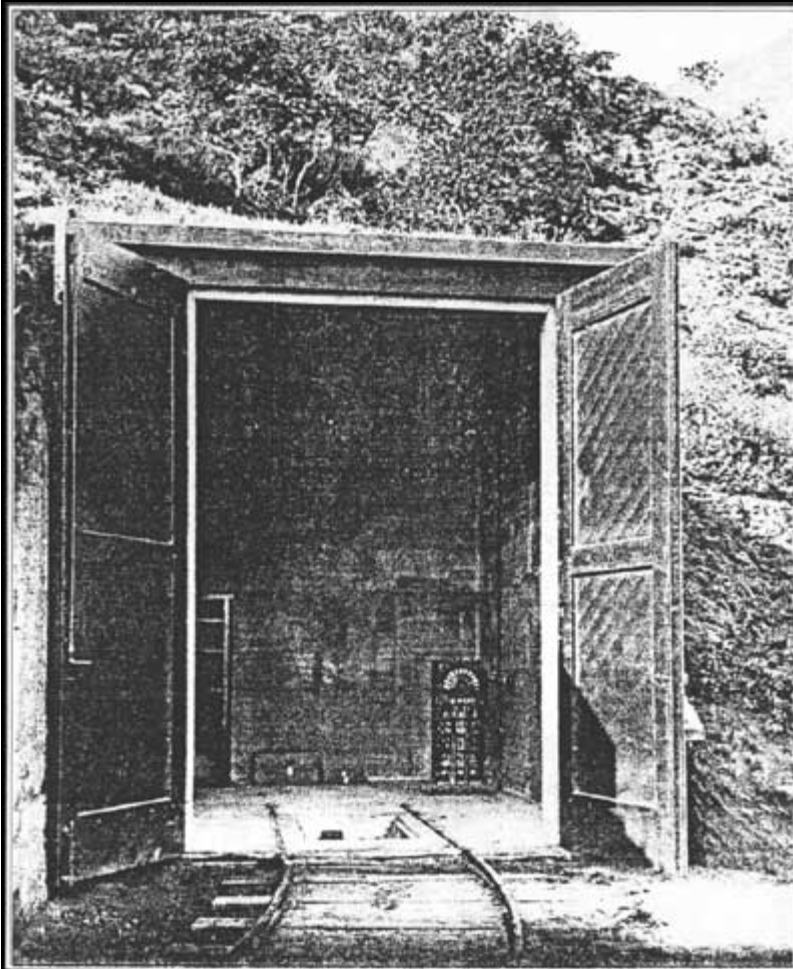
Searchlights 1 and 2 - near the base of a hill on land in the northwest part of the reservation, land that was recently transferred from the naval reservation, at elevations of 190 feet and 97 feet respectively. Both to be new lights on elevating lifts. Power house nearby in a ravine.

Searchlights 3 and 4 - near the extremity of Point Loma, elevations 97 and 285 feet. Number 3 to be in upright shelter and mounted on a track (a reconstruction of an existing installation). Number 4, a new light on an elevating lift. The power house to be a reconstruction of existing house.

Searchlights 5 and 6 - near base of a hill on southeast portion of Point Loma at elevations 218 and 144 feet respectively. Both to be new lights. Number 5 to run on a track between operating position and naturally protected aboveground shelter. Number 6 to be on elevating lift. Power house in a ravine affording partial protection between the two lights.

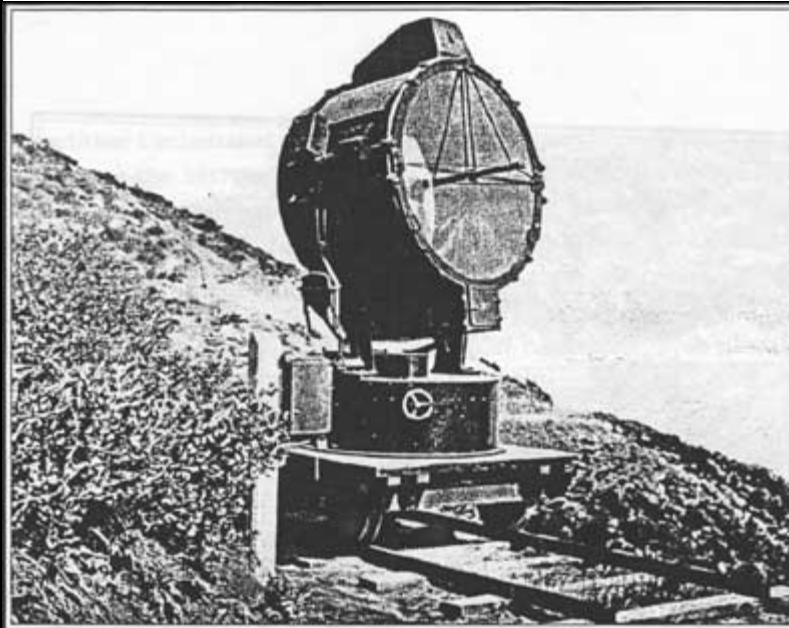
Searchlights 7 and 8 - on a sand spit at Fort Pio Pico. One is the existing 60-inch light, the other, new. Power house to have artificial protection. Lights to be on tilting towers with a sand parapet in front.

The plans called for roads, "mere graded roads without surfacing," to the power house for searchlights 1 and 2 and for searchlights 5 and 6. Because the site selected for Searchlight 6 potentially interfered with the proposed 6-inch battery on Billy Goat Point, it was constructed just to the west at an elevation of 210 feet. Four 25 kw, D.C. generation sets were purchased for searchlights 1, 2, 5, and 6. The Engineers completed shelters for these four searchlights in April 1919, at an approximate cost of those shelters having elevators of \$2,300 each. All shelters were reinforced concrete; those above ground had steel doors; and those underground had sliding steel roofs. [38]

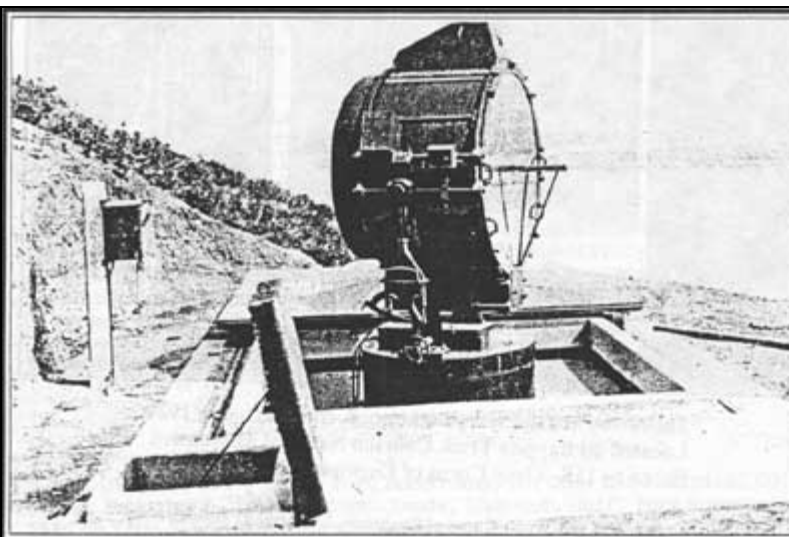


Shelter for coastal searchlight no. 5, constructed in 1920. Located on Bayside Trail, Cabrillo National Monument. Photo by U.S. Army Corps of Engineers, 1920. *Courtesy of U.S. Army Corps of Engineers, Los Angeles District.*

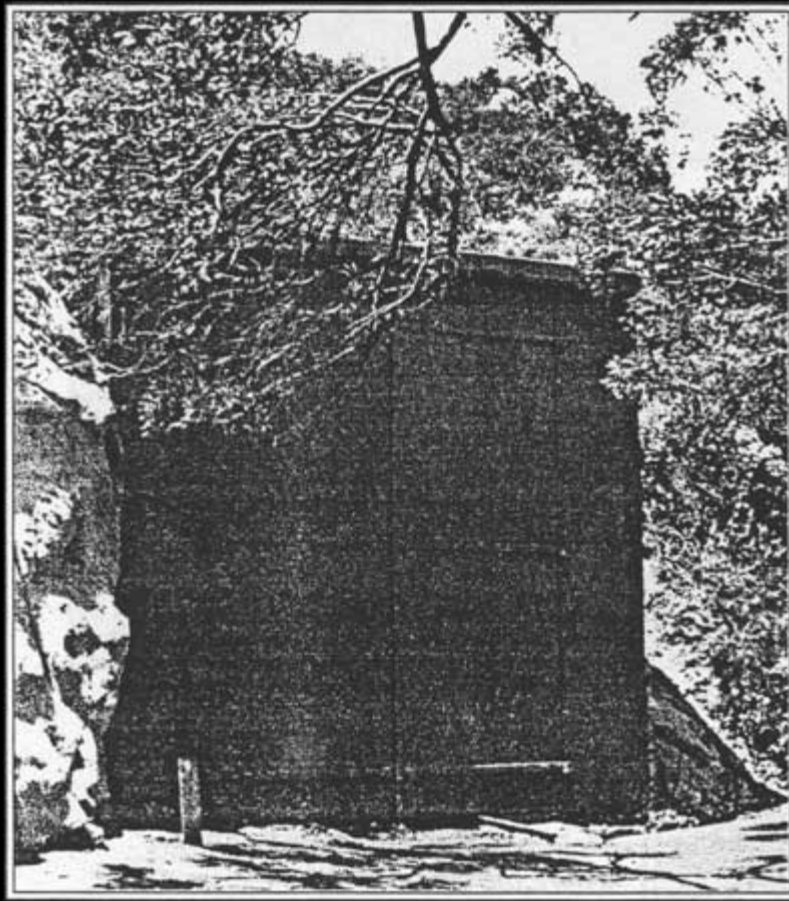




Searchlight Number 5 in operating position, 1920. Searchlight Number 6 is located directly behind and to the north of this searchlight. Photo by U.S. Army Corps of Engineers, 1920. *Photo courtesy of U.S. Army Corps of Engineers, Los Angeles District.*



Searchlight Number 6 in operating position, 1920. Photo by U.S. Army Corps of Engineers, 1920. *Photo courtesy of U.S. Army Corps of Engineers, Los Angeles District.*



Searchlight shelter Number 6 today. Portion of rails still in place. Located on Bayside Trail, Cabrillo National Monument. *Photo courtesy of George R. Schneider.*

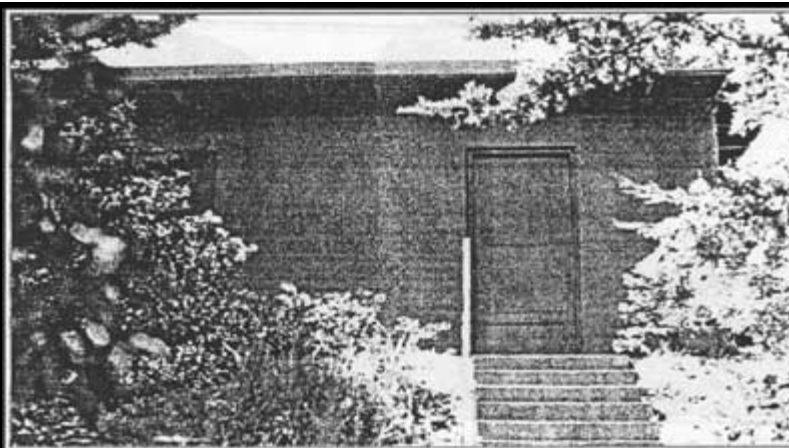


Searchlight Number 5 in operating position. Photo by U.S. Army Corps of Engineers, 1920. *Photo courtesy of U.S. Army Corps of Engineers, Los Angeles District.*



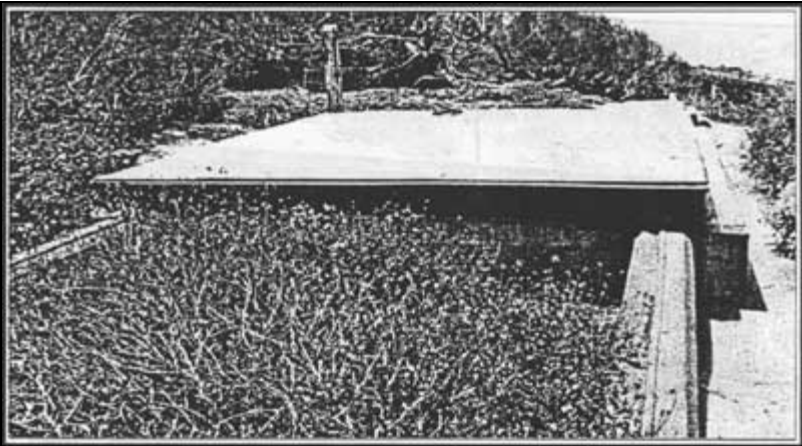


Old Point Loma Lighthouse between 1912 and 1914. The wife of an army noncommissioned officer, who was living in the structure, wrote that since the photo was taken a porch had been built along the front of the building. She also said there was a store where the window was broken and she had her kitchen where the curtains show. *Photo courtesy of Maj. Gen. George Ruhlen, U.S.A. Ret.*

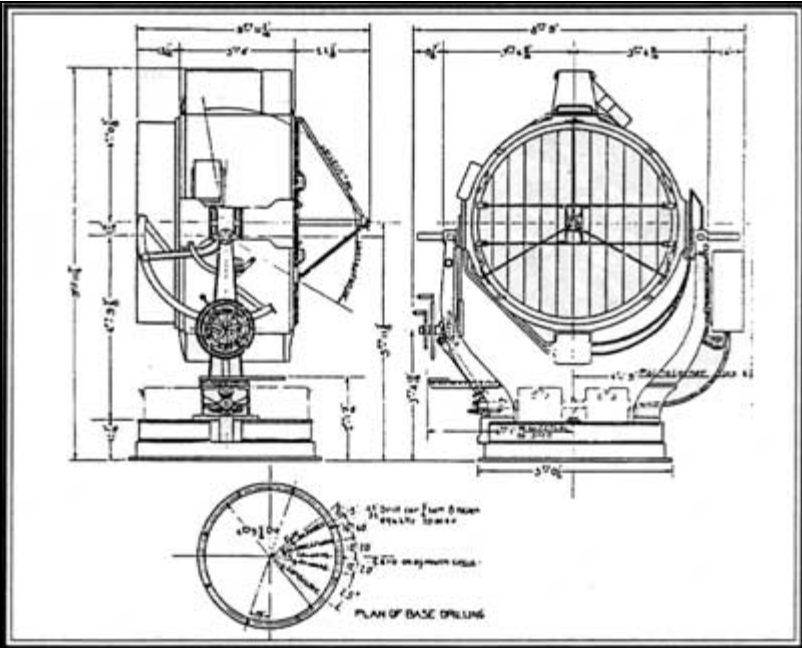


Fort Rosecrans' first army radio station, built in 1918. This structure later

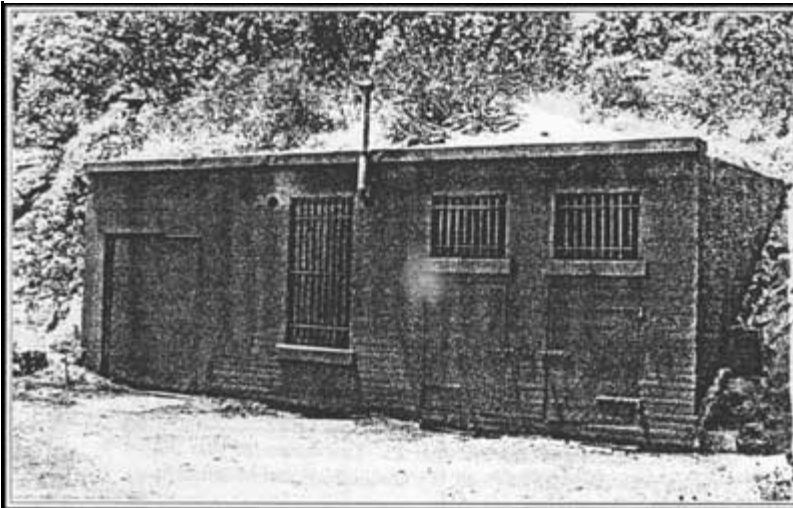
served at the National Park Service's early superintendent's office. It is now a storage building. *Photo by E. Thompson.*



Roof of searchlight shelter Number 15. This oceanside searchlight is found west of Gatchell Road at Cabrillo National Monument. *Photo courtesy of George R. Schneider.*



Sixty-inch coastal searchlight. Three of these were mounted within today's Cabrillo National Monument: Nos. 5, 6, and 15. *Photo courtesy of National Archives, Los Angeles Branch, RG 77, OCE, Box number lost.*



Power plant for searchlights 5 and 6 as it looks today. Located on Bayside Trail, Cabrillo National Monument. *Photo courtesy of George R. Schneider.*



Power plant erected in 1920 on the Bayside Trail to serve coastal searchlights 5 and 6. Photo by U.S. Army Corps of Engineers, 1920. *Photo courtesy of U.S. Army Corps of Engineers, Los Angeles District.*

---

[<<< Previous](#)

[<<< Contents >>>](#)

[Next >>>](#)

# CABRILLO

## The Guns of San Diego Historic Resource Study



### CHAPTER 4:

## FORT ROSECRANS, 1898-1920 (continued)

---

### F. Wartime Fort Rosecrans, 1917-1918

As the United States moved toward war in 1917, the Navy and the Army clashed in an event involving Fort Rosecrans. On January 15 the captain of USS Pueblo, the flagship of the U.S. Pacific Fleet Reserve Force, wrote a sharply worded communication to the commanding officer of Fort Rosecrans. He began by quoting from Naval Instructions as to what the senior naval officer on board a naval vessel should do when entering an American harbor: communicate with the outer group of fortifications and identify himself, where he came from, and the length of his stay. A similar exchange will be made upon leaving a harbor. He said that USS Pueblo called Fort Rosecrans by radio at 9:15 and 9:20 a.m. that day. Since Fort Rosecrans' radio did not reply (Fort Rosecrans did not have a radio station at that time), the message was sent via the Point Loma Naval Radio. At 10:30 a.m. Pueblo came within visual signal distance of Fort Rosecrans and signaled with the wig-wag flag until 10:45. Again, the call was not acknowledged. The post commander, Lt. Col. G. T. Patterson, replied in writing a few days later briefly stating that the incidents were being investigated and the appropriate action would be taken. He deeply regretted the affair. The record fails to show the outcome of the investigation. [39]

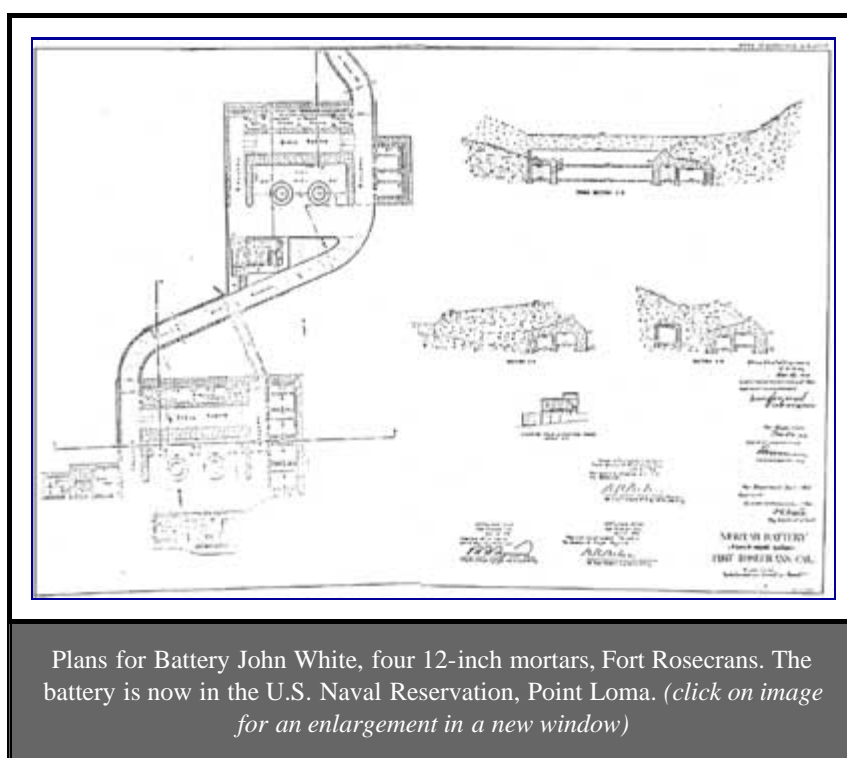
Once the United States was at war, the Army and the Navy cooperated fully. The Secretary of the Navy notified the Army that for the duration of the war, naval ships would not radio coastal defenses because recognition signals were now in effect and, also, it was necessary to reduce radio communication to a minimum. Later that year, Fort Rosecrans was informed to exchange recognition signals no longer unless the identity of the approaching vessel was in doubt. It is not known if the fort had to check any identities, but it was notified in 1917 that an enemy raider had been sighted in the Pacific. [40]

During the war, three coast artillery companies, the 4th, 18th, and 15th, garrisoned Fort Rosecrans. Elsewhere in the San Diego area were the 21st Infantry Regiment and the 14th Aero Squadron, Training. In the summer of 1917, the U. S. Attorney in Los Angeles was ordered to San Diego to arrest and detain enemy aliens. Among the half-dozen or so people arrested were three army privates, all from Rockwell Field: Wilhelm F. Streibart, Erich Rosenhagen, and Johannes W. Grief. They were detained at Fort Rosecrans before being sent to the War Prison Barracks, Fort Douglas, Utah. During that brief period at the fort, Private Streibart was court martialed for assaulting a guard."

One of the important activities at the post during the war was the organizing of antiaircraft batteries for overseas duty. These men were not trained in antiaircraft fire simply because Fort Rosecrans had no antiaircraft guns, except for machine guns. In November 1917, the first battery, two officers and sixty-two men from personnel of the Coast Defense Command, left Fort Rosecrans for France. Early in 1918, Batteries A and B, 2nd Antiaircraft Battalion,

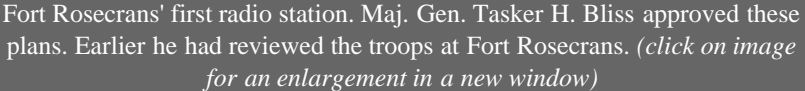
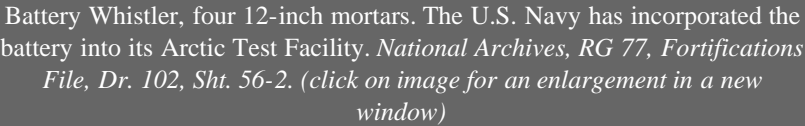
were organized at the post. Other units organized there and sent overseas included the 65th Coast Artillery and the 54th Ammunition Train. [42]

Before the war ended, the commanding officers of the Army and Navy shore stations held a conference in San Diego to discuss the defense of the harbor. Col. James R. Pourie, commanding the Coastal Defenses, and Maj. W. B. Burwell, commanding the Signal Corps Aviation School at Rockwell Field, informed their naval counterparts of steps taken by the Army to defend the harbor. Burwell said that his airplanes could be used for observation purposes, provided they remained within gliding distance of land. Pourie noted that Battery Fetterman's two 3-inch guns were held in readiness for immediate service at all times, and at Battery James Meed, which had not yet been abandoned, a gun detachment was held in readiness at all times. Although the new coastal searchlight project was not yet in place, four searchlights (one 30-inch, one 36-inch, and two 60-inch) were ready for instant service. An operator stood duty at the new radio station from 6:00 a.m. to 10:00 p.m. No submarine mines had been laid but they could be if necessary. Finally, Pourie said, "Constant outlook is kept from Signal Station at old Lighthouse." [43]

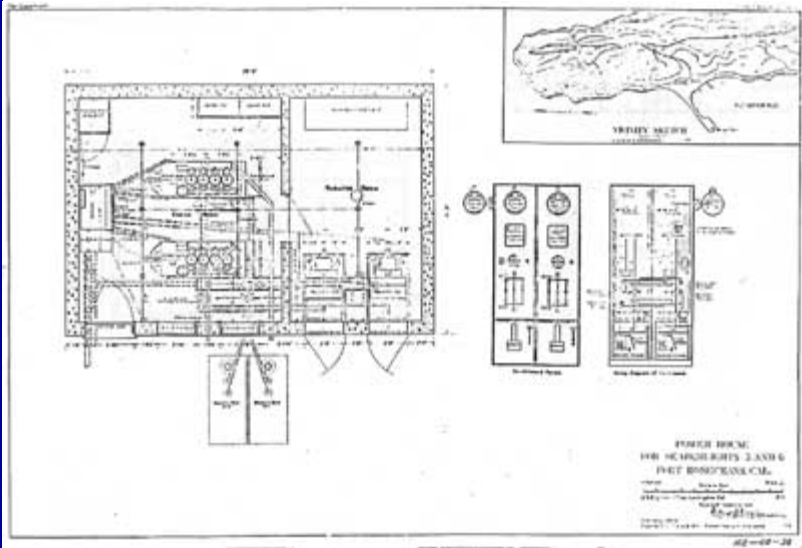


Plans for Battery John White, four 12-inch mortars, Fort Rosecrans. The battery is now in the U.S. Naval Reservation, Point Loma. (*click on image for an enlargement in a new window*)

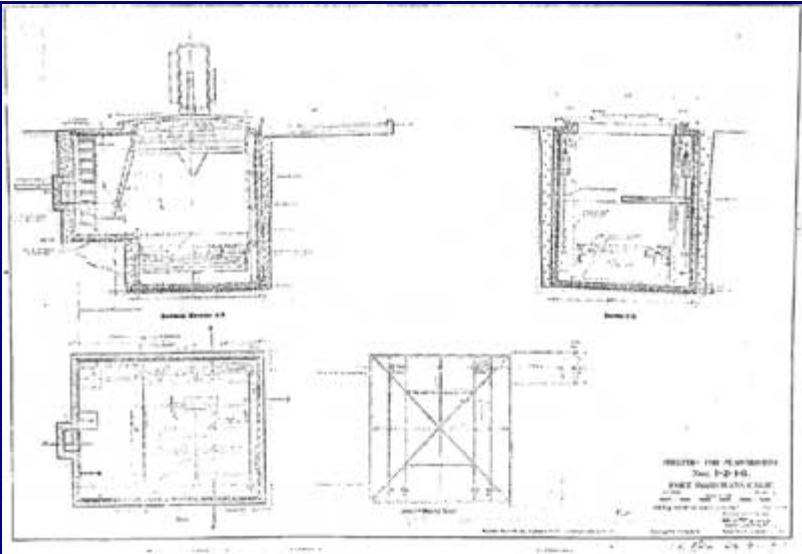




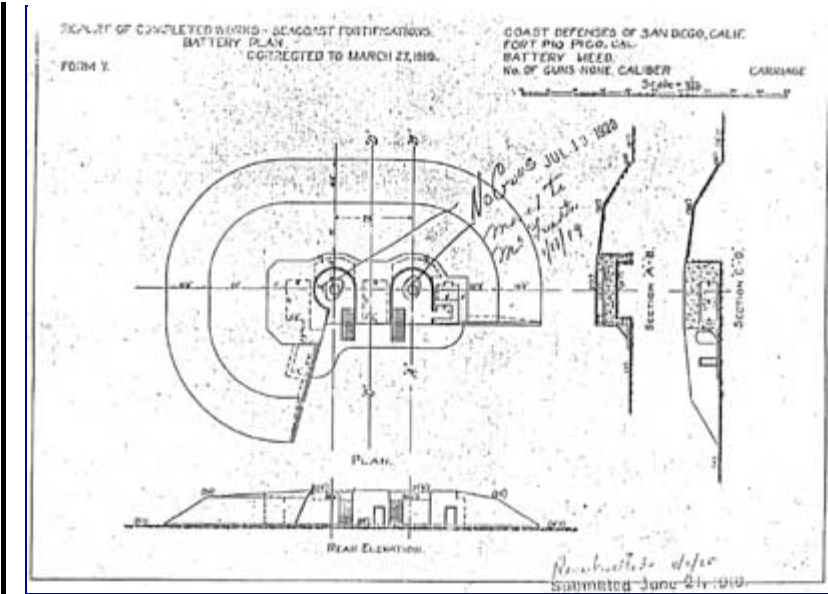




Powerhouse for Coastal Searchlights 5 and 6, on the Bayside Trail. *National Archives, RG 77, Fortifications File, Dr. 102-40-38. (click on image for an enlargement in a new window)*



Plans for the underground shelter for Searchlight No. 6, 1918. Located on the Bayside Trail within Cabrillo National Monument. *(click on image for an enlargement in a new window)*



Report of completed works, seacoast fortifications, battery plan: Fort Pio Pico Battery Meed. (click on image for an enlargement in a new window)

[<<< Previous](#)

[<<< Contents >>>](#)

[Next >>>](#)



# CABRILLO

## The Guns of San Diego Historic Resource Study



### CHAPTER 7:

## WORLD WAR II AND AFTER, 1941-1948 (continued)

### E. Batteries Cabrillo, Fetterman (II), and Cortez

By the fall of 1942, the Army decided to install 90mm anti-motor torpedo boat (AMTB) batteries in the harbor defenses. Each battery consisted of two fixed guns and two mobile guns. (The mobile guns were kept in storage until an emergency occurred.) The mission of these batteries was to attack enemy motor torpedo boats, to defend against enemy landings, to assist against enemy air (the 33rd Coast Artillery (AA), which was not in the Harbor Defenses of San Diego, was primarily responsible against enemy air attacks), and to attack enemy submarines within range. After considerable discussion, the Office of the Chief of Engineers decided that San Diego would receive three four-gun 90mm batteries: Battery Cabrillo at Point Loma, which meant the inactivation of Battery Point Loma's 155mm guns; Battery Fetterman at Ballast Point; and Battery Cortez on the Silver Strand. Two guns would be emplaced and two mobile.

All three batteries were completed in August 1943 and the six guns were mounted in September. The District Engineer supervised construction of concrete emplacements. The post engineer installed the electricity and the troops performed the necessary labor. The cost of each battery was approximately \$20,000.

#### Battery Cabrillo

Guns		Caliber	Model	Ser. No.	Manufacturer
1	90mm	M1-1943	3031		Wheland Company
2	90mm	M1-1943	15327		General Motors, Chevrolet Division

Carriages		Type	Model	Ser. No.	Manufacturer
1	M-3	PA1943ABO	T3-92		General Motors, Fisher Body
2	M-3	PA1943ABO	T3-201		General Motors, Fisher Body

#### Battery Fetterman

Guns		Caliber	Model	Ser. No.	Manufacturer
1	90mm	M1-1943	15329		General Motors, Chevrolet
2	90mm	M1-1943	10806		Watervliet Arsenal

Carriages		Type	Model	Ser. No.	Manufacturer
1	M-3	PA1943ABO	T3-160		General Motors, Fisher Body

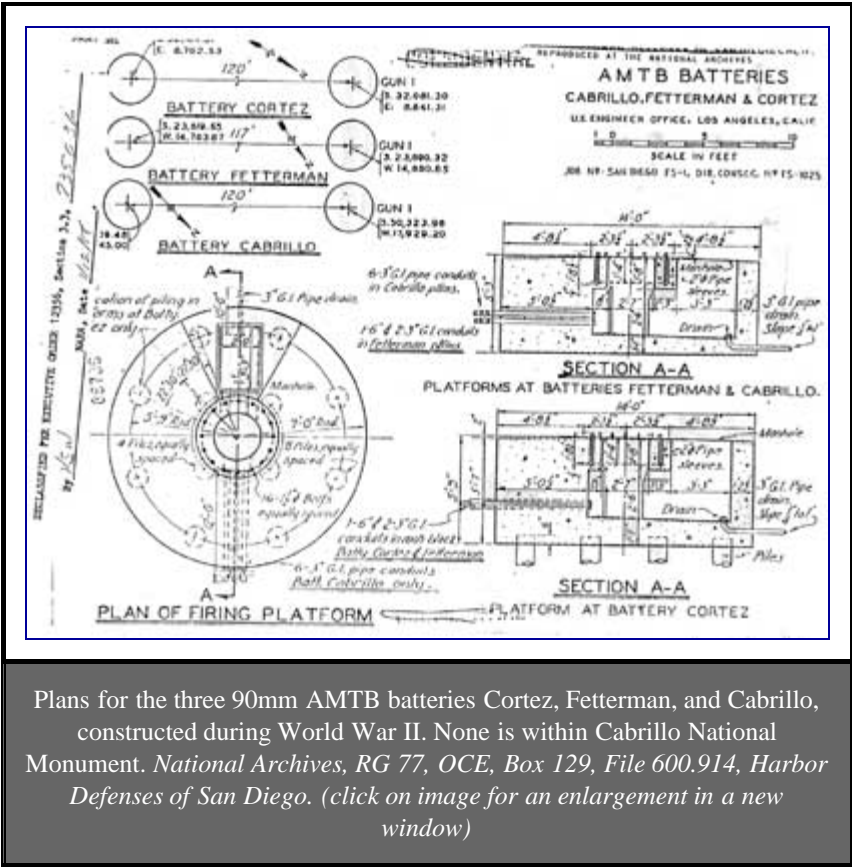
Battery Cortez

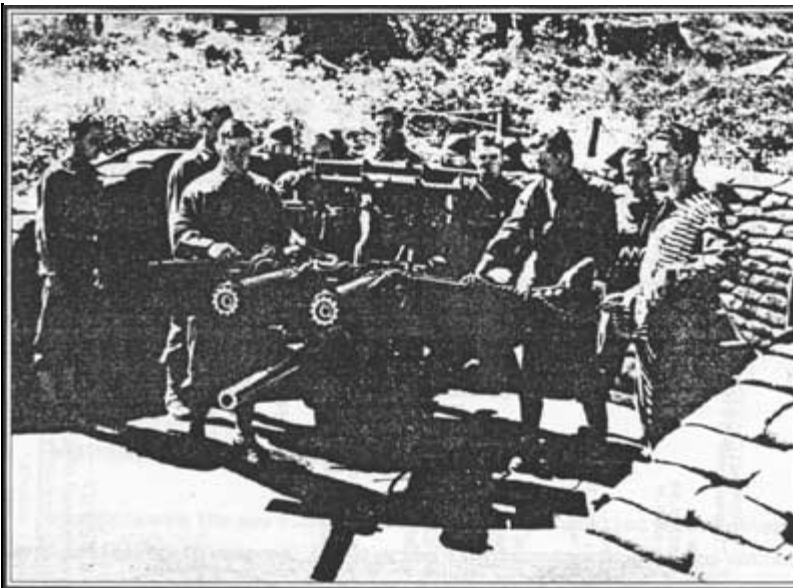
Guns		Caliber	Model	Ser. No.	Manufacturer
1	90mm	M1-1943	15311	General Motors,	Chevrolet
2	90mm	M1-1943	14861	General Motors,	Chevrolet

Carriages		Type	Model	Ser. No.	Manufacturer
1	M-3	PA1943ABO	T3-205	General Motors,	Fisher
2	M-3	PA1943ABO	T3-156	General Motors,	Fisher [8]

F. Additional Defense Measures

To supplement the new 90mm batteries, the Army installed three batteries of 37mm antiaircraft weapons, sited primarily to protect the harbor entrance against motor torpedo boats. Each battery consisted of two 37mm guns with two .50 caliber machine guns mounted on each 37mm carriage: Battery Cliff, immediately above the new lighthouse; Battery Bluff, at Billy Goat Point; and Battery Channel, also on the east side of Fort Rosecrans on Ballast Point adjacent to the U.S. Coast Guard station. Battery Bluff is within Cabrillo National Monument and is recorded as Historic Structure 9. In 1944, the Western Defense Command announced that 40mm antiaircraft guns would replace all 37mm weapons in the command. Although sixteen 40mm guns were authorized, as far as it may be determined the war ended before any of them reached San Diego. [9]





AMTB (Anti-Motor Torpedo Boat), Battery Bluff. Position currently located at Cabrillo National Monument. This battery consisted of two water-cooled 50 caliber machine guns and one 37mm cannon. Three men on right can be seen feeding belts and clips to weapons. *Photo courtesy of San Diego Military Heritage Society.*

In January 1943 the Los Angeles District Engineer learned that the cast armor shields for the guns of 6-inch Battery Humphreys were en route to Fort Rosecrans. Each shield weighed forty-two tons. Ironically, the shields for the 8-inch guns of Battery Strong still had not been installed as late as July 1945. The question remains as to whether they ever did arrive. [[10](#)]

Early in 1942, Col. Ottosen complained that the harbor defense command post was too small for efficient operations, especially for the army and navy radios which had to compete with other activities going on in the same room. Also, the structure needed latrines. He said that the signal station in the old lighthouse was reasonably satisfactory, but not as a permanent installation. As a result of his letter, a radio room was added to the HDCP and a concrete dugout signal station was constructed south of the lighthouse. Another enlargement of the command post occurred in 1943 after Gen. DeWitt, commanding the Western Defense Command, paid a visit to San Diego. At the HDCP he was unhappy in that there was no room wherein senior Army and Navy officers could hold private conferences. The Chief of Engineers promptly made \$11,600 available for the additional bombproof room. [[11](#)]

Coastal radar, SCR296A, was added to the harbor defenses early in 1943. The first three sets were erected near Battery Strong in north Fort Rosecrans, near the new lighthouse at Point Loma, and near the Mexican border. Before the year was out, three additional sets were authorized: La Jolla, Fort Rosecrans, and Fort Emory. [[12](#)]

---

<<< [Previous](#)

<<< [Contents](#) >>>

[Next](#) >>>

# CABRILLO

---

## The Guns of San Diego

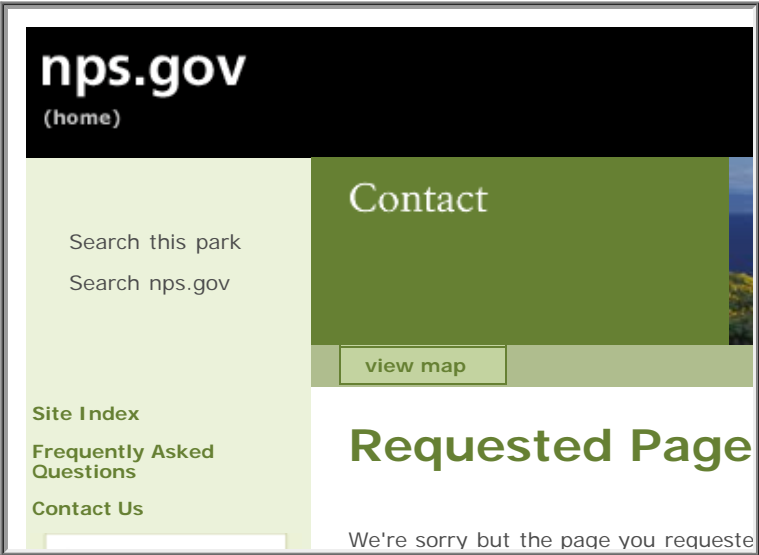
### Historic Resource Study



CHAPTER 7:  
WORLD WAR II AND AFTER

G. Fire Control Stations

The base-end stations built during the war for the batteries were constructed of concrete, and usually had steel roofs camouflaged with rocks cemented on their roofs. The rear of the lower level. Observers often used the rear of the lower level. Although the use of the rear was not authorized as such. Although the use of the rear was bewildering at first glance, there was logic to the use of the rear. The batteries at San Diego were listed in a tactical manual. This is a base-end station for the battery that has the number 5. The upper number "5" indicates that the station is a base-end station.



By July 1945 these stations ranged from Solana Beach (Santa Fe) in the north to the Mexican border:

*Solana Beach (Santa Fe)	B5/3 S5/3**	Battery Ashburn	
Soledad Mountain	B3/3 S3/3 B5/9 S5/9 B5/1 S5/1	Battery Ashburn deferred 16-inch battery Battery Woodward	2-level
La Jolla (Hermosa)	B5/2 S5/2 B5/5 S5/5 B1/1 S1/1 B2/3 S2/3 B4/2 S4/2	Battery Strong Battery Humphreys Battery Woodward Battery Ashburn Battery Strong	2-level 2-level 2-level
West Point Loma (Sunset)	B2/5 S2/5 B4/9 S4/9 B5/10 S5/10 BC2 B1/2 S1/2	Battery Humphreys deferred 16-inch battery Battery Grant Battery Commander, Battery Strong Battery Strong	2-level
*North Fort Rosecrans	BC1 B3/1 S3/1 BC3 B1/3 S1/3 B2/1 S2/1 B4/10	Battery Commander, Battery Woodward Battery Woodward Battery Commander, Battery Ashburn Battery Ashburn Battery Woodward Battery Grant	2-level 2-level 2-level
*South Fort Rosecrans			

(Cabrillo)	S4/10		
	BC5	Battery Commander, Battery Humphreys	
	B1/5 S1/5	Battery Humphreys	
	BC6 B1/6	Battery Commander, Battery McGrath	
(Loma)	BC4	Battery Commander, Battery Cabrillo	
	B2/2 S2/2	Battery Strong	
East Fort Rosecrans	BC7	Battery Commander, Battery Fetterman (II)	
	B3/2 S3/2	Battery Strong	
	B3/5 S3/5	Battery Humphreys	2-level tower
Coronado Beach M.R. (Strand)	B3/9 S3/9	deferred 16-inch battery	
	B3/10 S3/10	Battery Grant	2-level tower
	BC8	Battery Commander, Battery Cortez--not built	
	BC9	Battery Commander, deferred 16-inch	
	B1/9 S1/9	deferred 16-inch battery	2-level tower
Coronado Heights M.R. (Fort Emory)	BC10	Battery Commander, Battery Grant	
	B1/10 S1/10	Battery Grant	2-level tower
	B4/1 S4/1	Battery Woodward	
	B4/5 S4/5	Battery Humphreys	2-level
	B4/3 S4/3	Battery Ashburn	
*Mexican border	B2/10 S2/10	Battery Grant	2-level
	B2/9 S2/9	deferred 16-inch battery	
	B6/2 S6/2	Battery Strong	

\* Extant 1990. \*\* B5/3 S5/3 shifted from Mexican border to Solana Beach (Santa Fe) along with other redesignations later in the war. B=target azimuth station. S=shot/splash azimuth station.

Additional fire control stations included the combination HDCP-HECP, Battalion One Command Post (CP), Battalion Two CP, meteorological station (former army radio building), and fire control switchboard, all at Fort Rosecrans. A fort command post and Battalion Three CP at Fort Emory were planned but not built. [13] Battalions had replaced the former Groups by 1945.

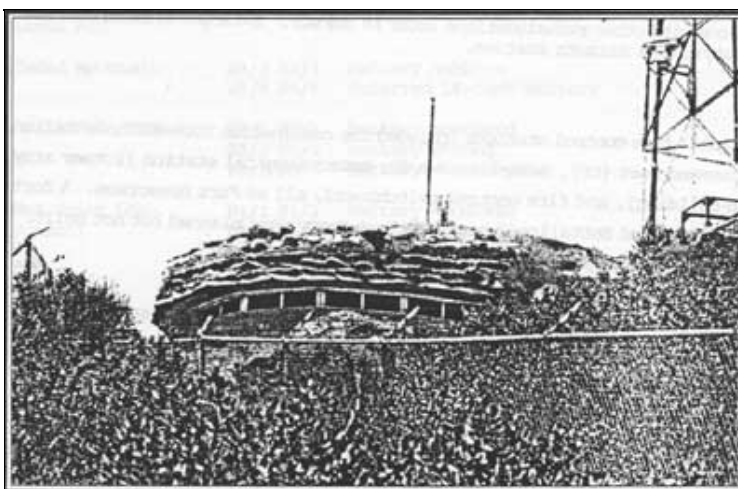
By 1943 several of the older fire control stations were unassigned, their batteries having been abandoned. Among them were the base-end stations for Battery Calef-Wilkeson (HS8 and HS9) that are within the boundaries of Cabrillo National Monument. Three of the two-level, dug-in stations built during the war are also within the monument: BC3-B1/3 S1/3, (HS3) the battery commander's station and a base-end station for 16-inch Battery Ashburn northwest of the old lighthouse and above the army radio station; BC5, B1/5 S1/5, (HS12) the battery commander's station and a base-end station for Battery Humphreys, the higher of the stations below the Whale Overlook; and B2/1 S2/1 — B4/10 S4/10, (HS13) the upper level was a base-end station for Battery Woodward and the lower was a base-end station for Battery Grant; this is the lower station below the Whale Overlook. The older base-end station below the Cabrillo Statue, HS10, was assigned to Battery McGrath as BC6 B1/6.







Battalion 2 command post facing westward over ocean. Located on Naval Ocean Systems Center property. *Photo courtesy of George R. Schneider.*



Battalion 1 command post, located south of Old Point Loma Lighthouse on Naval Ocean Systems property. *Photo courtesy of George R. Schneider.*

## H. Wartime Events [\[14\]](#)

On December 8, 1941, the President of Mexico gave permission for a U.S. Army detachment to enter Baja California to survey the country to determine any enemy activity and to select sites for the installation of aircraft detectors. The first detachment, under Capt. Albert P. Ebright, 11th Cavalry, was stopped at the border by the Mexican Army, the local general not having been informed of the permit. The soldiers returned to Fort Rosecrans. Later a detail of American officers was allowed to enter the country, but Mexico demanded that they be in civilian clothing and unarmed. By the summer of 1942, the United States had erected three radar stations in Baja California: at Punta Salispuedes, twenty miles northwest of Ensenada; Punta San Jacinto, 125 miles south of Ensenada; and Punta Diggs on the northeast coast of the peninsula. American personnel operated the stations at first and taught Mexican soldiers how to operate them. In August 1942 the Mexican Army took over the operations under the provisions of lend-lease. [\[15\]](#)

Throughout the war three organizations composed the Harbor Defenses of San Diego: Headquarters and Headquarters Battery, HDSD; the 19th Coast Artillery Regiment (HD), and the 166th Station Hospital (250 beds). The 19th CA Regiment consisted of a headquarters battery, searchlight battery, and three battalions, each with a headquarters battery and three lettered companies. In addition the 141st Cavalry Reconnaissance Troop was attached to Fort Rosecrans. Elsewhere in the San Diego area a large number of army units, including the

140th and 125th Infantry Regiments, the 33rd Coast Artillery Brigade (AA), and the 770th Military Police Battalion, maintained guard. All these units were under the command of the Southern California Sector which was activated December 8, 1941, under the leadership of Maj. Gen. Joseph Stillwell. During the war the U.S. Navy had fifteen activities at San Diego, including the Naval Repair Base, Destroyer Base, Naval Air Station on North Island, Naval Training Station, Naval Supply Depot, Naval Amphibious Base at Coronado, and naval hospitals.

Between 1941 and 1945 Harbor Defenses experienced sixty-one reports of enemy submarines, unidentified surface vessels, and underwater contacts. In the two years 1942 and 1943, ships and planes went into action twenty-eight times because of these reports. During 1943 alone, 115 depth charges were dropped off San Diego. Later studies, however, have not confirmed any Japanese submarine activity in the vicinity of San Diego.

Three military units were activated at Fort Rosecrans in 1942 and 1943. The 262nd Coast Artillery Battalion, consisting of a headquarters battery and two lettered companies, organized in May 1942 and departed for duty in Alaska in November where the Japanese had occupied Attu and Kiska. Black soldiers formed the second unit, the 77th Chemical Smoke Generator Company in April 1942. This outfit remained in San Diego where it established the smoke generator defense of the area. The third outfit, the 281st CA Battalion, was at Fort Rosecrans from February to May 1943, when it departed for the South Pacific.

In May 1942 the United States learned that Japan had prepared plans for attacks on Midway and Alaska. The War Department anticipated that the Japanese would carry out hit-and-run attacks on West Coast cities at the same time. The Pentagon rushed all possible aid to the coast. Gen. George C. Marshall, Chief of Staff, U.S. Army, paid a visit to San Diego on May 23-24. The attacks did not come. Japan suffered a major defeat at Midway early in June. This was the turning point in the Pacific War, but the harbor defenses remained on guard until Japan surrendered. [16]

The death blow finally came to Fort Rosecrans' first Endicott battery, Calef-Wilkeson, in the fall of 1942 when orders came to salvage the guns and carriages. Along with these 10-inch guns, the mortars of Batteries John White and Whistler were declared obsolete. The fort's adjutant figured out the amount of metal in tons that salvaging would yield:

John White Whistler Calef-Wilkeson			
Lead	--	--	140
Cast iron	120	120	480
Brass & bronze 3/4		3/4	2
Steel	88	88	400 [17]

The Army allowed Superintendent John R. White, of Sequoia National Park, to visit Cabrillo National Monument in 1943. He was not pleased with what he saw. The lighthouse had been painted in camouflage colors and was still being used as part of the signal station. The Army had erected a wooden signal tower on the parking lot south of the tower. The superintendent also caught sight of either one of the concrete fire control stations below the later Whale Overlook or the new concrete signal station south of the parking lot. But the Army would continue to have control of the monument for three more years. [18]

The only serious accident during the war in the harbor defenses occurred on January 29, 1944. A defective fuse in a 6-inch, high-explosive projectile caused a premature detonation at Battery Humphreys. Five soldiers were killed and seven were wounded. Both the tube and the cradle were destroyed and several months passed before a replacement gun arrived.

Starting in January 1944, the number of troops assigned to the San Diego area began to decline. Col. Ottosen, besides commanding the harbor defenses, took over command of the Army's San Diego Sub-Sector and moved its headquarters along with the 115th Cavalry

Reconnaissance Squadron to Fort Rosecrans. In June the cavalry transferred to Louisiana, the sub-sector was deactivated, and two platoons of the 141st Cavalry Troop were attached to the harbor defenses.

During 1944 a number of tank and antiaircraft battalions garrisoned the fort while they trained in amphibious landings for operations in the Pacific. The 19th CA Regiment was deactivated that fall, the 1st Battalion becoming the 19th CA Battalion (HD), and the 2nd Battalion, the 523rd CA Battalion (HD). The downgrading of the harbor defenses speeded up in 1945. Most of the personnel transferred overseas. The Harbor Defense Command Post ceased operations in August, two days before Japan's surrender. In September the two harbor defense battalions were deactivated and the garrison now consisted of a headquarters battery and four lettered batteries. Both the Army and the Navy discontinued their activities at the Harbor Entrance Control Post that same month. The twenty-four-hour alert for almost fifty months had come to an end.

**I. A Final Look at the Defenses**

Army Engineers prepared a "supplement" to the harbor defense project for San Diego and forwarded it to Washington in April 1946, where notations were made on it as late as 1948. Only a few extracts from the supplement are included herein inasmuch as the era of traditional coastal defense was quickly passing into history. [19]

The "Groups" had given way to "Battalion" command posts. Battalion CP1 controlled those elements charged with the defense of the channel entrance to San Diego Bay, that is, the AMTB batteries. Battalion CP2 controlled those elements that could attack enemy naval forces approaching from the north. Battalion CP3, located at Fort Emory, was to have controlled the weapons that could attack an enemy approaching from the south. It was not built. The tactical numbers of the batteries had changed due to the inclusion of the AMTB weapons:

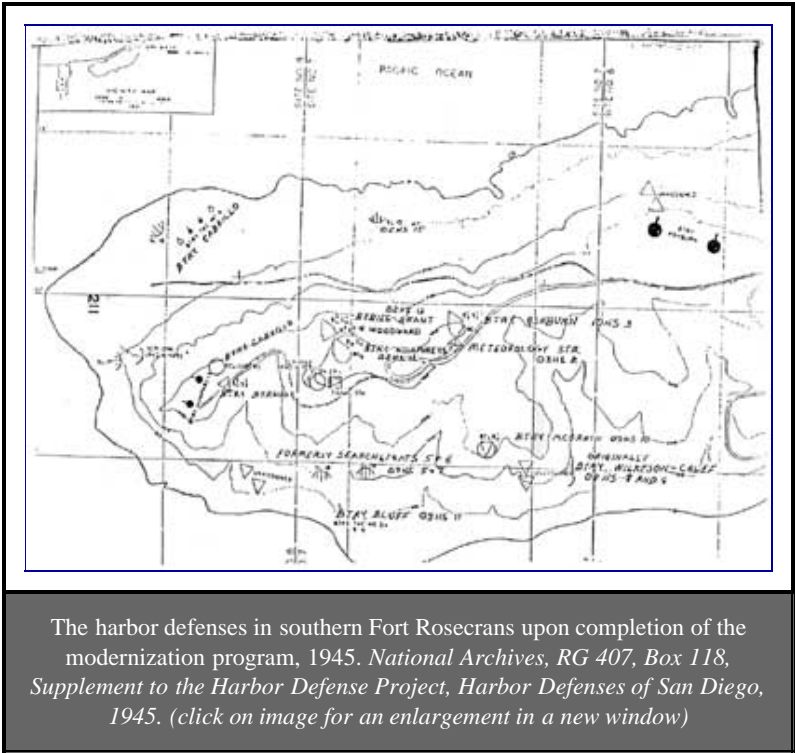
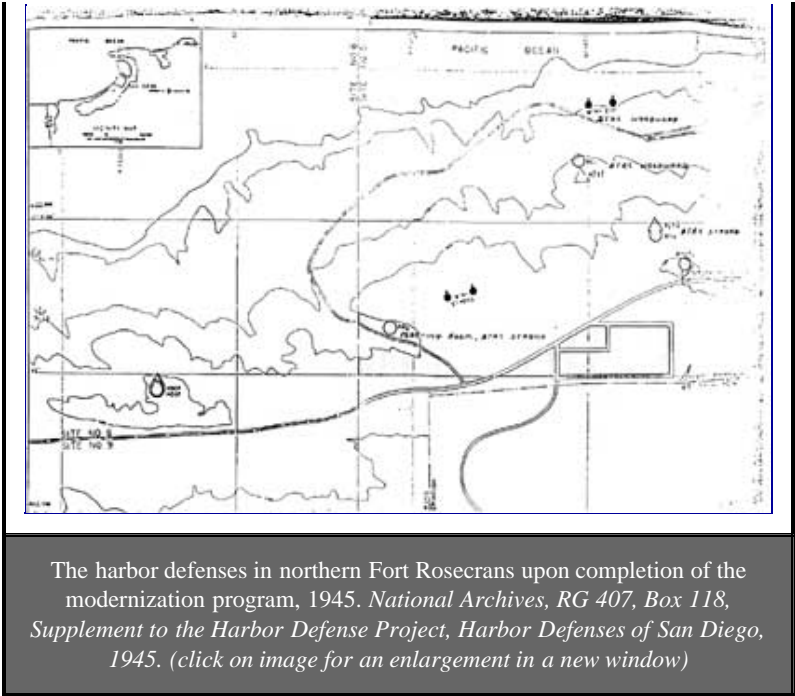
<b>Tactical number</b>	<b>Guns</b>
1. Battery Woodward	2 6-inch
2. Battery Strong	2 8-inch
3. Battery Ashburn	2 16-inch
4. Battery Cabrillo	2 90mm plus 2 mobile 90mm
5. Batteries Humphreys and Bluff	2 6-inch and 2 37mm
6. Battery McGrath	2 3-inch
7. Battery Fetterman (II)	2 90mm plus 2 mobile 90mm
8. Battery Cortez	2 90mm plus 2 mobile 90mm
9. deferred 16-inch battery	-
10. Battery Grant	2 6-inch

An interesting note said that all the cantonment buildings at Fort Emory were constructed as small one- or two-family cottages and were arranged to give the appearance of a defense housing project. The buildings were painted in pastel colors and the roofs were colored red, blue, and green. Lawns, shrubbery, stone walks, and trees heightened the effect.

Notations on the supplement marked the end of the guns of San Diego. Battery Strong's 8-inch guns were eliminated by War Department approval in 1947. Ashburn's 16-inch guns followed in 1948, as did McGrath's 3-inch guns. The record is silent about the 6-inch batteries Woodward, Humphreys, and Grant, but, before long, their weapons had gone to gun heaven too. The harbor defenses of San Diego were no more.







[<<< Previous](#)

[<<< Contents >>>](#)

[Next >>>](#)