CAMP REYNOLDS, QUARTERMASTER STOREHOUSE
(Camp Reynolds, Building No. 84)
Angel Island State Park
Angel Island
Marin County
California

HABS No. CA-1841-H

HABS
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HISTORIC AMERICAN BUILDINGS SURVEY
National Park Service
U.S. Department of the Interior
1849 C St. NW
Washington, DC 20240

HISTORIC AMERICAN BUILDINGS SURVEY

CAMP REYNOLDS, QUARTERMASTER STOREHOUSE
(Camp Reynolds, Building No. 84)

HABS No. CA-1841-H

Location:	Angel Island, Marin County, California
Present Owner:	State of California, Department of Parks and Recreation
Present Occupant:	Angel Island State Park
Present Use:	Lodging for overnight recreation programs
Significance:	The Quartermaster Storehouse is a remarkably intact example of army storehouse construction from the first decade of the twentieth century. Built as a storehouse for the Signal Corps at Camp Reynolds, this structure was soon shifted to use by the post Quartermaster. The form and materials of this building are typical of warehouses at the turn of the twentieth century. Although essentially an utilitarian structure, the storehouse was designed with regular proportions and careful exterior detailing, probably because of its prominent location at the base of the parade grounds.

I. HISTORICAL INFORMATION

A. Physical History:

1. Date of erection: 1908
2. Architect: Office of the Constructing Quartermaster, San Francisco
3. Original owner: U. S. Army, 1908 -1946
   Subsequent owners: U. S. Department of the Interior, 1948-63
   California State Parks, 1963-present
4. Builder: C. Coghill, San Francisco

5. Original plans and construction:

The Quartermaster Storehouse was built as the Signal Corps Storehouse in 1908 and has been changed very little. Construction blueprints for this building were found in RG 92, Records of the Quartermaster General's Office, at the Washington, D.C. branch of the National Archives. These drawings were prepared in January 1908 by A. H. Flourny for the Office of the Constructing Quartermaster, San Francisco, George Williamson, Major and Quartermaster, Constructing Quartermaster. Flourny was probably a draftsman and not a primary designer. These blueprints illustrate the present three-story brick storehouse building with a gable roof. The storehouse is three bays wide and eight bays long. Originally the large, continuous interior spaces on each floor were only interrupted by two rows of supporting piers and a lift in the bay directly east of the center piers. The form and materials of this building are typical of warehouses at the turn of the twentieth century.

6. Alterations and additions:

The exterior of the storehouse has not been altered except for the addition of the east chimney c. 1929. In 1990 seismic retrofitting was done to allow use of the building for park programs. Interior partitions across the side bays at the center of the building and an additional layer of plywood flooring on the second and third floors were added. In addition steel framing was added to the east and west walls of the third floor and metal joist laps were added at the north and south walls on the second and third floor. The staircase in the southwest corner of the first floor was demolished to prevent overnight groups from accessing the upper floors. The center shaft for the lift was closed and the partition walls for two offices on the west end of the second floor demolished.

B. Historical Context:

The Quartermaster Storehouse was originally built for a Signal Corps unit stationed at Camp Reynolds. The Army Signal Corps was responsible for all types of military communication, from signal flags and telegraph to later technology such as radio and radar. The Signal Corps also created the federal Weather Service in the nineteenth century and fostered the development of military aviation in the twentieth. After waning importance in the 1890s, the Signal Corps was enlarged and invigorated by its role in the Spanish-American War. The Signal Corps continued to grow, along with the rest of the

army, with the new international role of American troops in the first decade of the twentieth century.[1] Prior to construction of the storehouse at Camp Reynolds, there was discussion of converting all of Camp Reynolds to a Signal Corps post. This discussion highlighted the site's limitations as an infantry post:

> In this connection it is believed that the feasibility of constructing an exclusively Signal Corps post on Angel Island is worthy of consideration. The reservation referred to is eminently unsuited to the purpose of an infantry post, there being practically no level ground, and the hillsides being so very steep. No drills except company drills in close order, can be held. This would not be a disadvantage for a Signal Corps post, while the considerable size of the reservation, 640 acres, with its varied terrain, would be of advantage in certain Signal Corps work, especially visual signaling. Fort McDowell, on Angel Island, the buildings of which are very old and in bad repair, could be rebuilt into a Signal Corps post, or it could be utilized as a recruit depot, a Signal Corps post being constructed on the site of the present Depot of Recruits and Casuals.[2]

By October 1907, the infantry presence at Fort McDowell had actually increased, ending discussion of turning the entire island into a Signal Corps Post.[3] However the training advantages of the island's topography must have influenced stationing at least one Signal Corps company there because early in 1908 plans were prepared for the Signal Corps Storehouse to be located near the wharf at the base of the West Garrison parade ground.

On January 30, 1908 Constructing Quartermaster Major George Williamson, stationed at Fort Mason in San Francisco, submitted a detailed set of plans and an explanatory letter to the Quartermaster General's office in Washington, D.C.. Williamson noted both the practicality of the planned structure and the careful site selection:

> The idea is that the completed storehouse will be 180 feet long, the plan being drawn for a storehouse 90 feet long, just one-half of what it will eventually be....No shelving, lockers, or separate rooms

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[1]"Foreword," in *The Story of the U.S. Army Signal Corps*. Lt. Col. Max L. Marshall, ed. (New York: Franklin Watts, Inc., 1965), xi; "The Signal Corps in the Spanish-American War," *The Story of the U.S. Army Signal Corps*, 136-141.

[2]Memorandum, (5 June 1906), NARA, RG92, Entry 89, Box 5319, File No. 226034.

[3]Memorandum, (3 October 1907), NARA, RG92, Entry 89, Box 5319, File No. 226034.

> have been provided, because it is desired to keep the cost down as much as possible, and it is considered that after it is occupied, or just before, the Signal Corps can construct better the shelving it is necessary for them to have....The location was determined upon after looking over the ground in company with the Chief Signal Officer of the Department of California, and after consultation with the Commanding Officer of Fort McDowell, and is without a doubt the best location available.[4]

The location was currently occupied by Building No. 13, an old guardhouse and storehouse that had "already been condemned." On April 7th, Williamson entered into a contract with C. Coghill, a builder from San Francisco, for all material and labor necessary to complete the brick storehouse according to specifications. Coghill received $14,240 for construction of the building and another $260 for providing and installing plumbing.[5] Williamson explained in his letter to the Quartermaster General the rationale behind specifying a brick building:

> The selection of a brick building was made because it was found during the earthquake, that a well constructed brick building of a moderate height, withstood the shock equally as well as a reinforced concrete building. Brick in San Francisco is now comparatively cheap, being about $9.00 per thousand for common, $15.00 per thousand for facing, and a brick building can be constructed for less money and in far less time than a reinforced concrete one.[6]

Because of the shift to large scale reinforced concrete construction at the East Garrison just a few years after this, the storehouse and the 1904-05 hospital (See HABS No. CA-1841-G) are the only substantial brick masonry structures at Angel Island.

C. Coghill received an additional contract on June 9, 1908 for $1348 to construct a railroad track from the wharf and along the south side of the storehouse. Construction proceeded rapidly, although delays did shift the completion date from the scheduled

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[4]Letter from George Williamson, Constructing Quartermaster, to Quartermaster General (30 January 1908), NARA, RG92, Entry 89, Box 5319, File No. 226034.

[5]"Construction Blank," (7 April 1908), NARA, RG92, Entry 89, Box 5931, File No. 242803.

[6]Letter from Williamson to Quartermaster General (30 January 1908).

September 14, 1908 to the end of October.[7]

When this storehouse was constructed, the Quartermaster was using an assortment of older wood buildings for storage, including the original 1869 hospital inconveniently located at the top of the ridge above the barracks.[8] By 1916, less than a decade after construction, the storehouse was being used by the Quartermaster Corps. Presumably the Signal Corps shifted their operations to the more modern structures at the East Garrison, allowing the Quartermaster to utilize an improved storehouse structure. This structure remained a Quartermaster storehouse until Fort McDowell was decommissioned in 1946.

II. ARCHITECTURAL INFORMATION

C. General statement:

1. Architectural character: Quartermaster Storehouse is a brick structure eight bays long and three bays wide with a gable roof. The form, materials, and construction techniques utilized for this building are typical of warehouses at the turn of the twentieth century. Although essentially an utilitarian structure, the storehouse was designed with regular proportions and careful exterior detailing, probably because of its prominent location at the base of the parade ground.

2. Condition of fabric: Good. The Quartermaster Storehouse is a remarkably intact example of Army storehouse construction from the first decade of the twentieth century.

D. Description of Exterior:

1. Overall dimensions: 90 feet, 11 inches by 35 feet, 11 inches
2. Foundations: This building has a low, poured concrete foundation.

3. Walls: The storehouse has red brick walls laid in a five to one common bond. There is a string course of headers between the first and second floors. Each gable end has pilasters at either edge one brick deep. These pilasters rise two stories from a thin sandstone base that forms part of the string course. Round tie-rod anchors correspond to the interior

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[7]Construction Blank and Plan of Railroad Track at Fort McDowell, Cal., NARA, RG92, Entry 89, Box 5931, File No. 242803; "Construction Blank," (7 April 1908); Building Record, Building No. 52, Signal Corps Storehouse, (1 March 1909), NARA, RG92, Entry 89, Box 4891, File No. 216218.

[8]Camp Reynolds site plan, July 1907, NARA, Cartographic, RG 92, Blueprint File, Angel Island, California, sheet 3.

joists and girders, although the interior rods have been removed. Three levels of these anchors appear on the gable ends and two on the eave sides. There is a rectangular inset panel in the brick between the second and third floor windows.

4. Structural system: The storehouse has load-bearing brick walls and a wood frame structural system, now reinforced with some steel members on the third floor for seismic retrofitting. The supporting columns are seventeen inch square brick piers on the first floor, ten inch square wood posts with bolsters on the second floor and a modified queen post truss on the third. The brick piers have a rectangular block of sandstone at the center and top. They are supported by concrete footings. The main structural girders are formed by several wood planks. These girders are ten by fourteen inches in the first floor and ten by twelve inches on the second. The roof is supported by eight by eight inch purlins.

5. Porches, stoops: Both entrances on the south elevation have a set of two wide shallow concrete steps.

6. Chimneys: There are two internal chimneys, one at each gable end on the north slope on the roof. The west one retains its brick exterior section. The east one was added c. 1929. Originally an open brick chimney similar to the west one, the east chimney was later capped by a metal stove pipe.

7. Openings:
   a. Doorways and doors: The north and south elevations each have two sets of double doors, one at the third and one at the sixth bay. Each opening has a segmental brick arch and a six light horizontal transom. The door sills are granite. The wood doors each have four horizontal rectangular recessed panels. The west elevation has a single door at the center bay with a segmental brick arch opening, three light transom, and four panel door. The third floor center bay on each gable end has a double door with a round arch opening and semicircular transom with five irregularly sized lights. There is a cathead for hauling supplies up to this level above the doorway on the west elevation.

b. Windows: The typical window is a six over six double hung sash with a small ogee curve at the bottom corners of the upper sash. Each window opening has a Colusa sandstone sill and varies in size and shape at each story. The largest windows are on the first floor. These windows have a segmental relieving arch in the brick and a series of original vertical iron bars. The second floor windows have a jack arched opening. On the third floor the eave side windows are smaller rectangular openings with a narrower jack arch. On the gable ends round arch windows flank the center doors.

8. Roof:

a. Shape, covering: The Quartermaster Storehouse has a gable roof covered with slate shingles. The ridge is covered with galvanized iron.

b. Cornice, eaves: The storehouse roof sits on a flat wood cornice. The eaves are open and the exposed rafter ends have a notched curve design. This rafter design also appears on several East Garrison buildings constructed during the 1910s in the Mission Revival mode.

E. Description of Interior:

1. Floor plans: See measured drawings HAS No. CA-1841-H for complete plans of the Quartermaster Storehouse. All three floors were originally open except for two rows of supporting columns and a lift one bay east of the center of the building. The west end of the second floor originally had a small clerk's room, office, and toilet. Some evidence of these rooms still remains. A partial concrete block wall extending from the exterior walls to the supporting columns was placed in the center of the building for seismic retrofitting. Another wood partition is located on the first floor east of the lift.

2. Stairways: An L-shaped stairway was located in the southwest corner of the first floor. It has been demolished to prevent recreation groups from accessing the upper floors. Access from the second to the third floor was via a ladder hatch near the west end of the building.

3. Flooring: The floors are two by six inch tongue and groove unpainted

wood planks. On the first floor the wood is laid on a six inch concrete slab. Sheets of plywood have been placed over the tongue and groove floors on the second and third floors for seismic retrofitting.

4. Wall and ceiling finish: Given the use of this building for storage, there is little interior finish. Exposed joists form the ceilings and the interior brick walls may have previously been whitewashed.

5. Openings:
   a. Doorways and doors: There are no solely interior doorways in the storehouse. The inside of the exterior doorways matches the outside except for there is no segmental relieving arch on the first floor doors.

   b. Windows: The windows have a plain wood frame painted blue. All of the windows have segmental relieving arches on the interior except for the round arch windows at the third floor gable ends.

6. Hardware: There are some historic door handles and window hardware intact.

7. Mechanical equipment:
   a. Heating, ventilation: The storehouse was heated by coal burning stoves; there is no modern central heating system.

   b. Lighting: Originally lit with mineral oil lamps, electric wiring and fixtures were installed in the Quartermaster Storehouse in 1918.[9]

   c. Plumbing: The storehouse originally had one water closet and wash basin. In 1936 a bathtub and new toilet were installed. Currently the building does not have running water.

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[9]Building Record, Building No. 52, Signal Corps Storehouse, (1 March 1909); Historical Record of Public Buildings, Fort McDowell, Angel Island, Building No. 84, Quartermaster Storehouse, NARA, RG 77, Entry 393, Box 142, Folder 5. Includes c. 1929 plans of second and third floor (labeled first and second) and 1929 photograph. This document provided many of the details and estimated dates found in this building description.

d. Elevator: A open lift was located in the first bay east of the center. It originally had a 1500 pound capacity. The shaft has now been closed.

F. Site:

1. Historic landscape design: This was a utilitarian structure surrounded by older wood storage buildings and flanked by a railroad track leading from the wharf. All of these features have been removed.

III. SOURCES OF INFORMATION

A. Architectural drawings: A complete set of construction blueprints dated January 1908 was found in the Washington, D.C. branch of the National Archives. This set includes plans, elevations, sections, and details. They are located in Record Group 92, Records of the Quartermaster General's Office, Entry 89, Box 5931, File No. 242803. The first, second and third floor are referred to as basement, first and second. See notes above for reference to c. 1929 plans of the second and third floors.

B. Early Views: Several early twentieth century photographs including the Quartermaster Storehouse are available in the Angel Island State Park files. One is a copy of a photograph from the National Archives, Still Picture Branch in College Park, MD (111-SC-82442, Box 623).

C. Bibliography:

See notes for a listing of relevant archival materials from Record Groups 92 and 77 at the National Archives and Records Administration in Washington, DC and College Park, Maryland.

Marshall, Lt. Col. Max L., ed., *The Story of the U.S. Army Signal Corps*. New York: Franklin Watts, Inc., 1965.

Soennichsen, John *Miwoks to Missiles: A History of Angel Island*. Tiburon, CA: Angel Island Association, 2001.

IV. PROJECT INFORMATION

Camp Reynolds was documented by the Historic American Buildings Survey (HABS, Paul Dolinsky, Chief) (U.S. Department of the Interior, National Park Service, HAS/HAER/HALS Division, E. Blaine Cliver, Chief) during summer and fall 2002. The project was sponsored by

the State of California Department of Parks and Recreation, Rusty Areias, Director; and by Angel Island State Park, Nick Franco, Superintendent. Field recording and measured drawings were completed by Mark Schara, HAS Architect and Project Supervisor; HABS Architect Kathy Falwell; and Architects Paul Davidson (Pratt Institute) and Jonathan Eggert (University of Michigan). HABS Historian Lisa Pfueller Davidson served as project historian. HABS Photographer James Rosenthal completed large format photographs during fall 2002. Assistance was provided by the Staff of Angel Island State Park and Marin District Historian Marianne Hurley. See related documentation, HABS No. CA-2721, Fort McDowell, for information about the East Garrison portion of the island.