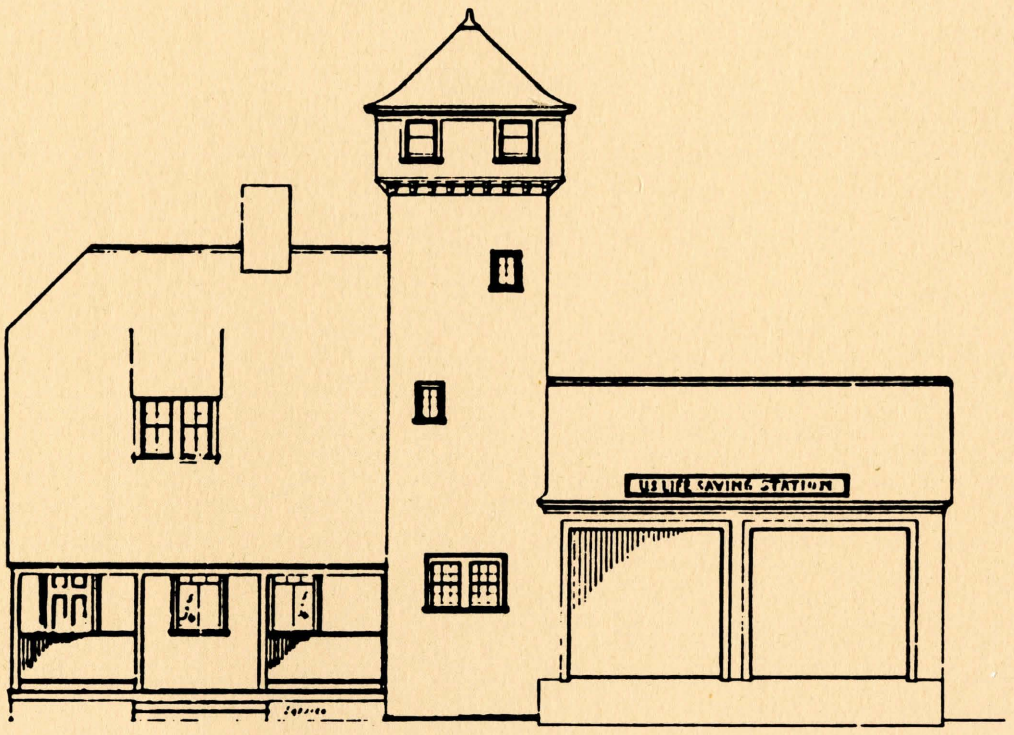
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OLD HARBOR LIFE-SAVING STATION

Cape Cod National Seashore



Historic Structure Report

OLD HARBOR LIFE-SAVING STATION
Provincetown, Massachusetts

HISTORIC STRUCTURE REPORT

Cape Cod National Seashore
South Wellfleet, Massachusetts

By

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LIST OF ABBREVIATIONS

CACO:	Cape Cod National Seashore
CRC:	Cultural Resources Center (formerly the NAHPC--see below)
NAHPC:	North Atlantic Historic Preservation Center
NAR:	North Atlantic Region
NPS:	National Park Service
RG:	Record Group
USCG:	United States Coast Guard
USLSS:	United States Life-Saving Service

PREFACE

The primary significance of the Old Harbor Life-Saving Station as a cultural resource derives from its original role as part of the U.S. Life-Saving Service. It is ironic that this structure, built to serve men who saved lives, itself needed to be saved. By the early 1970's, the Atlantic Ocean around Cape Cod was severely eroding Nauset (North) Beach in Chatham, where the lifesaving station stood. The National Park Service purchased the property in 1973 from private individuals, in order to save it. Four years later, the service moved the station by barge to a new site on Race Point Beach in Provincetown, at the northern tip of Cape Cod. The building is now maintained and operated by the Cape Cod National Seashore, part of the North Atlantic Region of the National Park Service.

The quest to save and restore the station to its original appearance has lasted more than a decade, and it is not over yet. The effort has involved various groups of concerned citizens and several branches of the National Park Service: the Cape Cod National Seashore, the North Atlantic Region, and the Cultural Resources Center. The participating organizations remained the same over the years, but the cast of employees changed. The majority of documentary research for the historic structure report was conducted by the late Ricardo Torres-Reyes while he was Regional Historian for the North Atlantic Region. Additional research was performed by three employees of the Cultural Resources Center (then North Atlantic Historic Preservation Center). These were Marsha L. Fader, Historical Architect, who also was the initial Project Supervisor for the relocation and restoration work; Andrea M. Gilmore, Architectural Conservator, who produced the paint analysis for this report, and who assumed the duties of Project Supervisor after the relocation of the structure was completed, and after the first phase of restoration had begun; and Peggy A. Albee, Architectural Conservator, who was assigned to the project after the second phase of restoration was completed, and solely for the purpose of preparing this historic structure report.

In reading through the report, one might note several apparent inconsistencies in terminology. First, although the term "lifesaving" is today used as one word, it was generally hyphenated during the late 19th century. Thus, the word is hyphenated when used as part of a proper name dating from that time (e.g., Old Harbor Life-Saving Station, United States Life-Saving Service), but not hyphenated otherwise.

Another potential point of confusion is the terminology used to refer to the area below the first floor of the lifesaving station. This area is called the "cellar" prior to the relocation of the station, since that is what the early documents called

it. After the move, the area is called the "basement," reflecting the construction of a new, modern foundation for the structure.

Finally, it is important to keep in mind that the orientation of the structure was altered, from facing eastward to facing northward, when it was relocated to Race Point Beach in Provincetown. To reduce confusion, all compass directions in this report will pertain to the current orientation, facing north, unless otherwise specified. One major exception to this rule is found in the finishes analysis (Appendix N), where all directions relate to the original orientation.

The restoration of the Old Harbor Life-Saving Station remains incomplete. Vandals have destroyed some of the completed interior work on the first floor, and the majority of work on the second floor was never begun. This historic structure report is meant to provide the impetus and establish the guidelines for repairing the vandalism and completing the restoration.

This report was prepared by the Building Conservation Branch of the Cultural Resources Center (CRC), for the Cape Cod National Seashore. The Cultural Resources Center is part of the Office of Planning and Resource Preservation, North Atlantic Region. It contains laboratories and analytical equipment, and is staffed by architectural conservators, historical architects, and preservation specialists who provide technical support to the parks primarily within the North Atlantic Region. The document presented here was edited and prepared for publication by CRC Technical Editor Sharon K. Ofenstein.

I. ADMINISTRATIVE DATA

THE STRUCTURE

The Old Harbor Life-Saving Station, built in 1897-98, is now situated on the stretch of shoreline known as Race Point at the northern tip of Cape Cod. This location is approximately 2 1/2 miles from the center of Provincetown, Massachusetts. (All of Cape Cod lies within Barnstable County.) The site is listed on the National Register of Historic Places; it is owned by the United States Government, and managed by the National Park Service as part of the Cape Cod National Seashore.

The List of Classified Structures has assigned the number 07495 to the Old Harbor Life-Saving Station, and has placed it in Management Category A - "Must Be Preserved." No official treatment has been approved. The generally accepted proposed use for the structure is for visitor interpretation. The Master Plan of 1970 states, "Lighthouses and Coast Guard Stations should be acquired when and if they become available, for use in the interpretive program."[1] The Historic Resource Study of 1979 states that the station, "...could be used to interpret the history of the [Life Saving] service to the maritime activity along the Cape Cod coast."[2] This course of action would require stabilization and some restoration.

The use of Old Harbor for interpretive purposes is justified not only by the station's architecture, but also by its historical significance. Out of a total of 13 lifesaving stations once serving Cape Cod, only two remain. One is the Cahoon's Hollow station, which has sustained "considerable alterations" and which is now privately owned and used as a restaurant.[3] The other is Old Harbor. Furthermore, while the Old Harbor station was "...not confronted with the number of disasters that the [original] Race Point and Peaked Hill Bars stations encountered, Old Harbor exemplifies the Life Saving Service on Cape Cod" in both design and operation.[4] Nothing uncovered during the preparation of this historic structure report contradicts the use of the Old Harbor Life-Saving Station by the National Park Service for visitor interpretation.

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[1] Master Plan, Cape Cod National Seashore, p. 54.

[2] Berle Clemensen, Historic Resource Study, Cape Cod National Seashore, Massachusetts, 1979, p. 48.

[3] Ibid., p. 46.

[4] Ibid.

THE SITE

Old Harbor Life-Saving Station is accessed by following the two-lane Race Point Road north from Route U.S. 6 to its end. The road terminates at the Race Point Beach parking lot, about a mile past the Province Lands Visitor Center, and immediately after the entrance to the Provincetown Municipal Airport (fig. 1). The parking lot is bordered on its northwest by the former Race Point Coast Guard Station, now used as administrative offices by the National Park Service, and on its northeast by a cluster of three buildings that provide bathhouse and sanitary facilities to visitors. A boardwalk originating at the bathhouse complex extends in a northerly direction over the sand dunes, leading to wooden steps that access Race Point Beach. An easterly spur to this pedestrian boardwalk, approximately 100 feet long, provides a direct connection to the west-elevation Boat Room doorway of Old Harbor station. The boardwalk, although enlarged for visitor congregation at the southwest corner of the building, does not surround or connect to the structure anywhere except at the west-elevation Boat Room doorway.

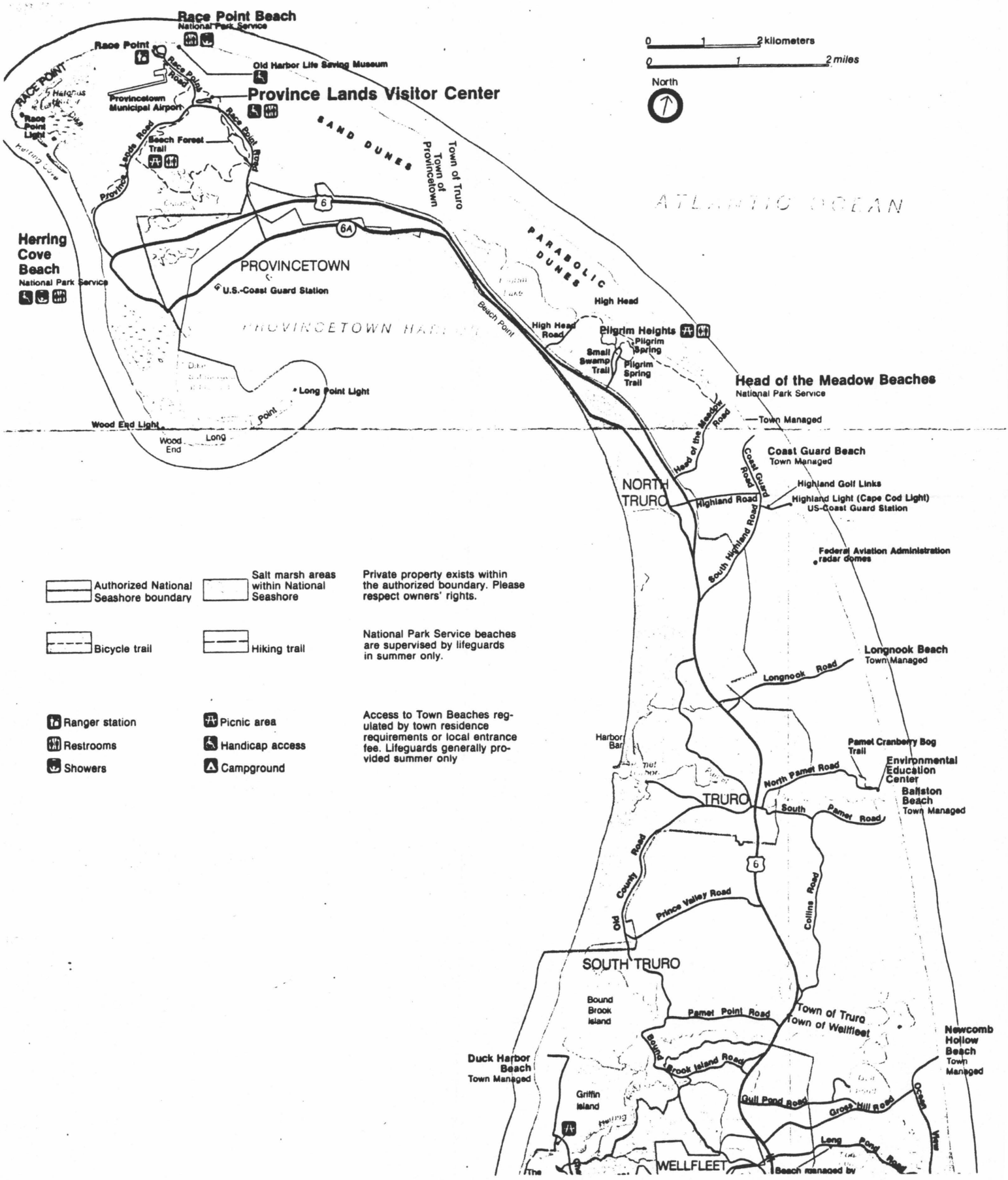


Illustration 1. Current Location of Old Harbor Life-Saving Station on Cape Cod.

CHAIN OF TITLE

As early as 1876, the U.S. Government sought the right to locate a lifesaving station on Nauset (North) Beach in Chatham. At that time, the Town of Chatham thought that it owned Nauset Beach, and granted the U.S. Life-Saving Service permission to move the old Chatham station to the site.[5] Eleven years earlier, Frances H. Crowell, as guardian of Frances H. Crowell, minor child of John Crowell, had sold a parcel of land three-quarters of a mile south of the relocated Chatham station site to Samuel H. Young.[6] Confusion over ownership probably arose because this deed was not filed until January 12, 1925. The parcel of land that Samuel Young bought was the same on which the Old Harbor Life-Saving Station was later constructed. The government may have assumed that it owned the land since the Chatham station had occupied a nearby site.

The Chatham station was moved back to its original site ca. 1880. Almost 20 years later, the U.S. Life-Saving Service decided to build a new station--Old Harbor--on Nauset Beach, near the abandoned site of the Chatham station. As will be described in Chapter II, "THE UNITED STATES LIFE-SAVING SERVICE PERIOD (1897-1915)," Section B, the government did not attempt to gain title to the site at this time, either, relying instead on the 1876 approval from the Town of Chatham. In any case, there is no record of any individual or the Town of Chatham having protested the construction of the Old Harbor station.

The records do show that in 1925--when the station was a fully active unit of the U.S. Coast Guard--Erwin A. Hale, son-in-law to Samuel Young and heir to the property, sold the land to Oscar C. Nickerson.[7] This deed was recorded seven days after the Crowell-Young deed was filed, evidently in an attempt to insure legal title to the land. This last deed specifically mentions "five certain parcels of land located on Nauset Beach so called, in said Chatham, and being the land upon which five buildings now stand, said buildings being now or formerly owned by the Treasury Department, United States Coast Guard, the said buildings being designated as follows: - one life-boat station dwelling, one boat house, one garage, one work shop, and one oil-shed."

When the Coast Guard prepared to sell the site's buildings in 1946, their research concluded that the Town of Chatham still

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[5] Letter, Superintendent, Second Life-Saving District, to Secretary of the Treasury, November 2, 1876. Correspondence of the USLSS, RG 26, National Archives.

[6] Barnstable County Registry of Deeds, Book 411, p. 547.

[7] Ibid., Book 408, p. 480.

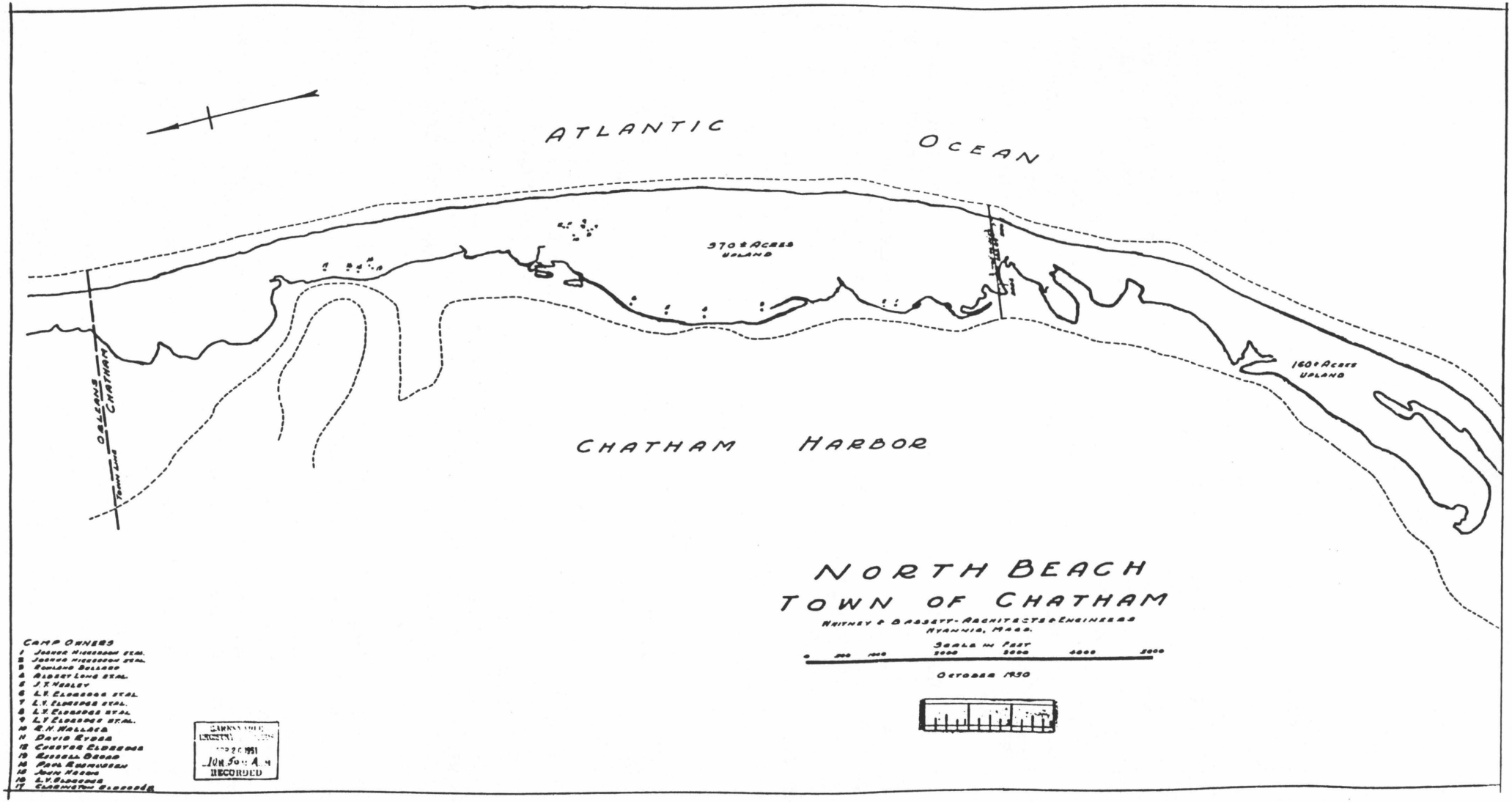


Illustration 2. "North Beach, Town of Chatham," October 1950.

owned the land.[8] The record of deeds suggests otherwise. One month after Jonathan Eldridge and Edwin Taylor purchased the structures in September 1946, they purchased the land on which they stood from Oscar Nickerson.[9] The Coast Guard filed an official Declaration of Abandonment on February 10, 1947.[10]

Almost two years passed before Eldridge and Taylor sold the property to Albert N. Long.[11] This transaction occurred on August 30, 1948, and was recorded on September 2, 1948. Long's possession of the property is reflected in a plan entitled "North Beach, Town of Chatham," dated October 1950 and filed with the Barnstable County Registry of Deeds (fig. 2).[12]

Apparently the whole of Nauset Beach fell into property dispute, because on October 15, 1958, a Final Decree was entered by the Superior Court of Massachusetts. This decree, along with a series of Quitclaim Deeds, was filed with the Barnstable County Registry of Deeds, the former reflected in Book 1022, page 532, the latter in Book 1022, pages 534 through 559. Because of its importance, the Final Decree is included in this text verbatim:

Commonwealth of Massachusetts

Barnstable S.S. Superior Court in Equity

Joshua A. Nickerson v. Roland K. Bullard et al. No. 23476
George S. Bearse v. Howard J. Rose et ali [sic] No. 23334
George S. Bearse v. Joshua A. Nickerson et ali [sic] No.23894

> This cause came on to be further heard and was argued by counsel; and thereupon, upon consideration thereof it is ordered adjudged and decreed that:
>
> 1. The Master's Report be and is hereby confirmed.
>
> 2. Oscar C. Nickerson and those claiming under him have been in open, notorious, exclusive and continuous possession for more than twenty years prior to the filing of this petition of the whole of that part of

---

[8] Letter, Admiral, U.S. Coast Guard, to Secretary of the Treasury, February 4, 1947. Correspondence of the USLSS, RG 26, National Archives.

[9] Registry of Deeds, Book 658, p. 291.

[10] Ibid., Book 667, p. 373.

[11] Ibid., Book 702, p. 62.

[12] Ibid., Plan Book 98, p. 97.

Nauset Beach, sometimes called North Beach and sometimes called Outer Beach, which lies Southerly of the line between the Towns of Chatham and Orleans, without the approval, permission or consent of any person other than that conferred by virtue of a certain deed from Erwin A. Hale to Oscar A. Nickerson dated January 19, 1925, and recorded in Barnstable Registry of Deeds on April 14, 1925 in Book 408 Page 480 which deed included within the description of the land conveyed all of said beach south of the Orleans-Chatham line, and under which deed the said Oscar A. Nickerson and his successors have claimed ownership.

3. By virtue of said adverse possession title to the following described lands is confirmed in Oscar C. Nickerson and his successors in title:

The land in Chatham, Barnstable County, Massachusetts bounded and described

Northerly	by the Orleans-Chatham town line
Easterly	by the Atlantic Ocean
Southerly	by land conveyed by Joshua A. Nickerson to the town of Chatham by deed dated May 19, 1951, recorded said Barnstable Registry of Deeds in Book 784 Page 364
Westerly	by Chatham Harbor

Subject to an easement of way created by grant of Oscar C. Nickerson to the inhabitants of the Town of Chatham dated December 16, 1952 and recorded with said Barnstable Registry of Deeds in Book 836 Page 424 and to three leases given by Joshua A. Nickerson to one J. Thomas Haley dated January 2, 1951, recorded said Deeds in Book 774, Page 403; one to E. Nelson Webster and Albert N. Long dated January 2, 1951, recorded said Deeds Book 774, page 405; and one to Charles Daniko dated May 1, 1956 recorded Barnstable Registry of Deeds May 22, 1956.

By order of Court Entered October 15, 1958
Rec. November 17, 1958

This decree suggests that Oscar C. Nickerson, and Erwin Hale before him, obtained the parcels of Nauset Beach property unlawfully; it seems likely that the Town of Chatham did own the property in the 19th century. However, Nickerson eventually acquired title to the land through his "adverse possession" of it, which was not contested by the town within the prescribed period of time.

The Master's Report to which the decree refers was not found, but it probably suggested partitioning the property in an equi-

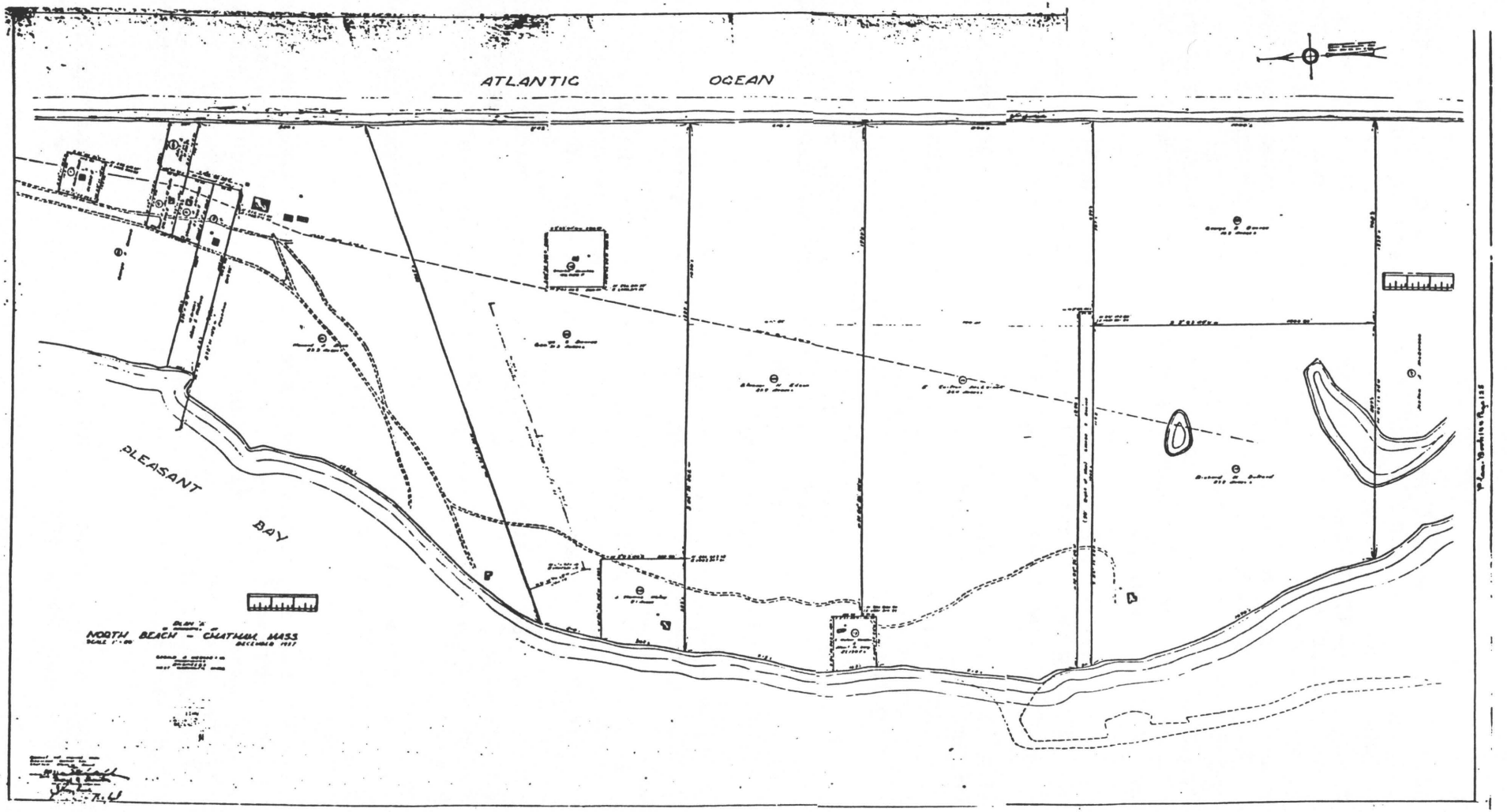


Illustration 3. "Plan 'A' of Properties at North Beach - Chatham, Mass., December 1957."

table manner. The series of Quitclaim Deeds that follow the Final Decree in the deed register suggest that the property on which the Old Harbor station stood was transferred from Albert N. Long to George S. Bearse,[13] and then to Howard J. Rose.[14] Rose's parcel is reflected in a plan filed with the Barnstable County Registry of Deeds,[15] entitled "Plan 'A' of Properties at North Beach - Chatham, Mass.," dated December 1957 and drawn by Gerald A. Mercer and Co., Inc. (fig. 3).

Howard J. Rose filed for joint ownership of the property to include himself, his wife Alicia, and his two daughters, Judith Ashkin [sic] and Patricia Schwartz, on August 6, 1959.[16] In order to save the historically significant Old Harbor Life-Saving Station, the Federal Government--on behalf of the National Park Service--purchased the property from the Roses for $44,935. The deed was filed on April 23, 1973, and recorded on June 22, 1973.[17] The Rose family was given the right to use the property for five years for "non-commercial residential use." They obviously later relinquished that right, because the station was moved off of North Beach on November 30, 1977.[18]

The Race Point site to which the Old Harbor station was relocated had been in Federal ownership since the 19th century. Old Harbor is now situated not far from the site of the 1872 Race Point Life-Saving Station (now demolished), and approximately one-quarter of a mile east of the former Race Point Coast Guard Station.

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[13] Ibid., Book 1022, p. 534.

[14] Ibid., p. 550.

[15] Ibid., Plan Book 144, p. 125.

[16] Ibid., Book 1054, p. 599.

[17] Ibid., Book 1884, p. 201.

[18] "Saving the Life of a Life-Saving Station," The New York Times, January 27, 1978.

II. ARCHITECTURAL HISTORY

THE UNITED STATES LIFE-SAVING SERVICE PERIOD (1897-1915)

A. Formation of the Life-Saving Service

Old Harbor Life-Saving Station recalls an era when maritime activity was great and advanced mechanization outside the factory was generally limited to experimental stages. The United States Life-Saving Service, of which Old Harbor was a part, was organized to help save lives and property involved in shipwrecks along American coastlines. The service did this using mainly human resources and few technological accouterments.

The New England precedent for the Life-Saving Service was the Massachusetts Humane Society, founded in 1786 and incorporated in 1791.[19] A volunteer organization, the Massachusetts Humane Society helped promote "organized relief for shipwrecked seafarers."[20] The Federal Government realized the need for navigational support along the nation's coasts to prevent shipwrecks, and passed enabling legislation for a lighthouse system as early as 1789.[21] The first lighthouse on Cape Cod, Highland Light, was constructed on land sold to the U.S. Government by the town of Truro in 1797.[22]

The Humane Society's first activity involved the construction of huts along the coast to be used as temporary shelters for stranded sailors.[23] In 1802, the society published the locations of these huts for distribution to seamen.[24] The society also built lifeboat stations. The first lifeboat station was built in Cohasset, Massachusetts, in 1807 and manned completely by a volunteer crew.[25] By 1845, the society had 18 lifeboat stations,

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[19] Clemensen, Historic Resource Study, p. 42.

[20] J.W. Dalton, The Life Savers of Cape Cod, p. 23.

[21] Carole L. Perrault, Historic Structure Report, Architectural Data Section, The Fire Island Lighthouse and Keeper's Dwelling, Vol. 1, Part 1, p. 12.

[22] Dalton, Life Savers, p. 23.

[23] Clemensen, Historic Resource Study, p. 42.

[24] Ibid., p. 43.

[25] Dalton, Life Savers, p. 23.

in addition to its temporary shelters scattered along the coast of Massachusetts.[26]

In 1847, the United States Congress appropriated $5,000 that eventually assisted the Humane Society in building and equipping new stations.[27] In the three years that followed, Congress appropriated an additional $50,000 to build new stations along the nation's coasts.[28] By 1854, a total of 137 lifeboats were in use along U.S. shores.[29] That same year, a national superintendent was appointed and paid an annual salary of $1,500. Permanent station keepers also began to receive an annual salary of $200, to oversee the otherwise still-volunteer system.[30] It was not until 1869 that Congress passed a bill to employ paid crews of surfmen, and then only at alternate stations.[31]

Three events occurred between 1871 and 1872 that precipitated the establishment of the U.S. Life-Saving Service. Congress appropriated $200,000 and authorized the Secretary of the Treasury to employ crews of surfmen as he saw fit. Also, Sumner I. Kimball was placed in charge of the Revenue Marine Service, under which jurisdiction the new Life-Saving Service was to be administered. In addition, an inspection of existing lifesaving facilities was conducted by Captain John Faunce, an officer in the Revenue Cutter Service.[32] The sequence in which these events occurred is not entirely clear. However, the results of Faunce's inspection revealed many inadequacies, including inoperative or missing equipment, and incompetent keepers who often were political appointees with no concern for their responsibilities.[33]

In 1872, an act of Congress reorganized the Life-Saving Service. Districts overseen by superintendents were established, and accountable keepers were to administer discipline over paid,

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[26] Ibid., p. 24.

[27] Ibid., p. 25.

[28] Ibid.

[29] Ibid.

[30] Ibid., p. 27.

[31] Ibid.

[32] Dennis Noble and T. Michael O'Brien, "The Saga of the U.S. Coast Guard," American History Illustrated, Vol. XII, No. 3, The National Historical Society (June 1977), p. 7.

[33] Ibid.

experienced surfmen.[34] In 1878, the Life-Saving Service became an independent division of the Treasury Department, headed by Sumner Kimball.[35] Its jurisdiction included the East Coast and the Great Lakes.

Nine new lifesaving stations were ordered for Cape Cod on June 10, 1872.[36] These identically designed structures replaced the Humane Society's earlier huts, and were completed and manned by the winter of 1872.[37] Their locations stretched from Provincetown to Monomoy Island along the eastern edge of the Cape.[38] Between 1883 and 1902, four new stations were added to Cape Cod's network: High Head (1883) in North Truro, Wood End (1896-97) in Provincetown, Old Harbor (1897-98) in Chatham, and Monomoy Point (ca. 1900) on Monomoy Island.[39] (See figure 4.)

Day-to-day life at the lifesaving stations was regimented. All stations retained a full-time keeper, while six or seven surfmen were employed from August 1 to June 1.[40] An additional man known as the "winter man" was added for the storm-ridden winter months and began his tour of duty on December 1.[41] (These statistics reflect employment at the Cape Cod stations). In 1902, a year-round keeper was paid an annual salary of $900, while a surfman was paid $65 a month.[42] Each surfman was ranked according to his ability and past performance.[43]

In addition to patrols and the watch, certain duties were slotted for each day of the week. Mondays were spent putting the station in order; Saturdays were wash days; and Tuesdays through Fridays were devoted to specific drills for specific days.[44]

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[34] Dalton, Life Savers, p. 29.

[35] Noble and O'Brien, "Saga," p. 7.

[36] Clemensen, Historic Resource Study, pp. 44-45.

[37] Dalton, Life Savers, p. 30.

[38] Ibid.

[39] Clemensen, Historic Resource Study, p. 45.

[40] Dalton, Life Savers, pp. 31, 52.

[41] Ibid.

[42] Ibid., p. 33.

[43] Ibid.

[44] Ibid., p. 32.

Sundays were allocated for religious practice.[45] Every week, each man was allowed off one day from sunrise to sunset.[46]

The beaches were patrolled each night and during the day in bad weather. Since the stations might only be 5 miles apart, men on patrol from adjacent stations would meet at a halfway point and exchange official checks. This proved that they were fulfilling their responsibilities; it also provided a method for reporting a detained patrolman who might be addressing an emergency.[47] Some halfway points had a patrol house. This usually contained a telephone connected to the station; it also was used as a place of temporary refuge and warmth for victims of shipwrecks, and for surfmen before they returned to their respective points of origin.[48] Other patrols were regulated by watchmen's time clocks, with a turnkey, attached to a post at the end of the patrol.[49] On clear days, the watch was conducted from the station tower, providing an unobstructed vantage point from which to survey the coast. On Cape Cod, the stations also were connected by telephone to the District Superintendent's home, in order to inform him of disasters.[50] (The superintendent's home was in East Orleans when Old Harbor station opened; it was in Provincetown after 1905.)

In addition to surfboats, a station's equipment might have included carriages to haul the boats down to the shoreline, and possibly a horse to pull such a carriage or other equipment.[51] A Coston signal was a type of flare carried by all men on patrol; it was used to warn ships that they were approaching dangerous waters, or that assistance was at hand, depending upon the situation.[52] A Lyle gun was used to propel rescue lines from shore to ship, from which a breeches-buoy or life-car might be suspended.[53] The breeches-buoy was designed to rescue one person at a time from the ship, but two people could fit into the

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[45] Ibid.

[46] Ibid., p. 33.

[47] Ibid., p. 34.

[48] Ibid.

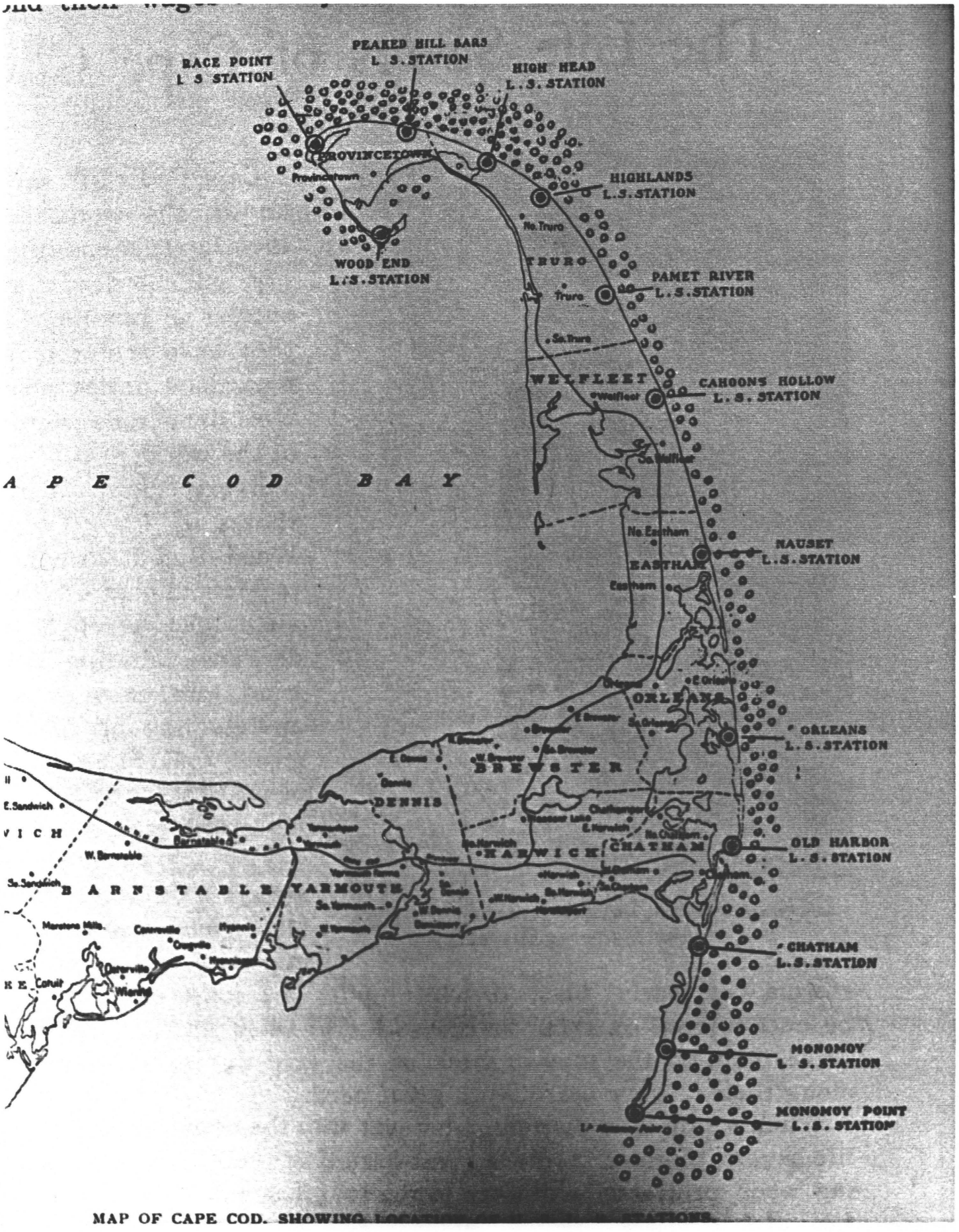
[49] Ibid., pp. 34-35.

[50] Ibid., p. 32.

[51] Ibid., p. 33.

[52] Ibid., p. 34.

[53] Ibid., pp. 38-41.



MAP OF CAPE COD. SHOWING LOCA[illegible] STATIONS.

Illustration 4. Locations of U.S. Life-Saving Stations on Cape Cod, 1902.

apparatus if necessary.[54] The life-car could carry several people at once, but was used infrequently, because it was so heavy.[55]

Each rescue procedure was delineated in a Service Manual. Inspectors were assigned the task of rating each station and individuals on how well they performed in operational drills based on the manual.[56] An example of an inspection report from Old Harbor is included as figure 5.

B. Construction of the Old Harbor Life-Saving Station

The present Old Harbor Life-Saving Station was built in 1897-98. However, its original location, on Nauset (North) Beach in Chatham, was occupied by a lifesaving station as early as 1876. In that year, the Chatham station--one of the original nine stations on Cape Cod, built in 1872--was moved to Nauset Beach from its original site at the north end of Monomoy Island.[57]

Several years later, the Life-Saving Service moved the old Chatham station back to its original site.[58] It did this because it intended for a new station to be built on Nauset Beach. The Assistant Inspector for the First and Second Life-Saving Districts wrote in 1897:

> The District Superintendent informs me that a station was authorized for this locality by Act of Congress, some years ago, and that the ground was looked over by the Chief Clerk of the Treasury Department at that time, and yourself, but we could find no record of it.[59]

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[54] Ibid., pp. 41, 44.

[55] Ibid., p. 43.

[56] Ibid., p. 36.

[57] Ibid., p. 117.

[58] Ibid.

[59] Letter, Superintendent of Life-Saving Stations, Second District, to Secretary of the Treasury, November 2, 1876. Correspondence of the USLSS, RG 26, National Archives.

(Later research performed for the 1947 Declaration of Abandonment revealed that the site for Old-Harbor Life-Saving Station had been authorized by an Act of Congress on June 19, 1886.[60])

However, nothing more was done until the winter of 1896-97. On December 24, the schooner Calvin B. Orcutt was wrecked on the coast between the Orleans station to the north and the Chatham station to the south. The Assistant Inspector for the First and Second Districts investigated the accident and reported his findings in a lengthy letter dated February 1, 1897, to the General Superintendent.[61] Included in the report was the statement of fact that 9 miles existed between the two stations; in the Assistant Inspector's opinion, the distance was too great for surfmen to perform their lifesaving duties adequately. He recommended that a new station be built "in the vicinity of the abandoned site of the Chatham station."[62]

The General Superintendent obviously agreed with the Inspector's recommendation, because by June 7, 1897, two telegrams were sent to the General Superintendent concerning the Nauset Beach site. The first telegram, from the Inspector, explained that the beach site of the old Chatham station had changed since it was abandoned, and therefore might not be the best site for a new station.[63] The second telegram, from the District Superintendent, stated that the Town of Chatham owned the property.[64]

These telegrams give little hint of the myriad of problems associated with establishing clear title to the land on which Old Harbor was built. As indicated in Chapter I, "CHAIN OF TITLE," private individuals were buying and selling parcels of land on Nauset Beach at least as early as 1865. However, when the Life-Saving Service sought to move the Chatham station to Nauset Beach in 1876, both the Service and the Town of Chatham thought that the town owned the prospective site. The Superintendent of the Second

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[60] Declaration of Abandonment, February 10, 1947. Barnstable County Registry of Deeds, Book 667, Page 373.

[61] Letter, Assistant Inspector for the First and Second Districts, to General Superintendent, February 1, 1897. Correspondence of the USLSS, RG 26, Site File, Old Harbor Life-Saving Station, National Archives.

[62] Ibid.

[63] Telegram, Assistant Inspector for the First and Second Districts, to General Inspector, June 7, 1897. Correspondence of the USLSS, RG 26, National Archives.

[64] Telegram, Superintendent of Life-Saving Stations, Second District, to General Inspector, June 7, 1897. Correspondence of the USLSS, RG 26, National Archives.

REPORT of Inspection Old Harbor Life-Saving Station,
2d District, May 26, 1899

No.	NAMES.	DATE OF BIRTH.	YEARS IN SERVICE.	BOAT PRACTICE.	BEACH APPARATUS. Recitation.	BEACH APPARATUS. Practice.	RESUSCITATION. Recitation.	RESUSCITATION. Practice.	SIGNALS. Recitation.	SIGNALS. Practice.
	KEEPER.		As keeper:	*	*	*	*	*	*	*
	H. T. Doane	Sept. 7 1845	5 As surfman: 13	9	10	9.5	10	9.5	10	9
	SURFMEN.									
1	R. T. Pierce	July 6 1866	9	9	10	9.5	10	9.5	10	9
2	J. E. Jones	Oct. 7 1866	1	9	10	9.5	10	9.5	10	9
3	E. P. Ellis	Oct. 22 1857	8	9	10	9.5	10	9.5	10	9
4	G. T. Kenrick	Sept. 20 1861	3	9	10	9.5	10	9.5	10	9
5	B. O. Eldredge	July 10 1878	1	9	10	9.5	10	9.5	10	8
6	O. C. Eldredge	June 9 1856	4	9	10	9.5	10	9.5	10	9
7										
8										

* Mark proficiency on scale of 10, which denotes perfection.

Weather? Clear.
Wind? Fresh, S.W.
Surf? Mod.
Elevation of gun (degrees)—approximate? 22
Charge of powder (ounces)? 1
Line, No. and kind used? 7, laid
Distance of shot—approximate? 191 yds.
(Indicate by another arrow, thus: ⇗ or thus: ⇗)
Direction of wind as to line of fire { ⇗ (Line of Fire.) }?

Accuracy of aim? Good
Distance of sand anchor from wreck spar? 75 yds
Time, from word action to landing of man at crotch? 3 min.
Kind of boat used in drill? Monomoy
Police of station? Good
Condition of apparatus? Good
Is journal kept up to date? Yes.
Were keeper and crew dressed in prescribed uniform? Yes.

STATE KIND AND CONDITION OF BOATS AT STATION.

KIND.	CONDITION.
Monomoy, (Jenkins)	Good
Monomoy (Jenkins)	"

STATE YEAR OF MANUFACTURE AND CONDITION OF EACH LYLE GUN AT STATION.

YEAR.	CONDITION.
1883	Good
1894	"

C. B. L.

REMARKS AND SUGGESTIONS.

Under this head the wants of the station should be set forth, with any suggestions that the Inspecting Officer may chose to submit. The Inspecting Officer should at once notify the Superintendent of the District when any repairs, supplies, equipments, etc., are necessary (see paragraph 55, "Revised Regulations, Life-Saving Service, 1894"). Reporting in letter of transmittal or other form of the information covered by the foregoing questions and the answers thereto should be avoided. When any regular member of the crew is absent, the cause thereof, as "on liberty," "sick," etc., should be stated.

Needs.
- One set of 4 roller skids. Cost $30.00, freight extra from New Bedford.
- One Swampscott dory, with centerboard, sails, etc. Cost $35.00
- 4 rubber buckets for boats.
- 2 brass stencils, with name of station, etc., to mark jumpers + storm hats. Price $1.00

This station needs a cellar, stable and workshop.

Illustration 5. Report of Inspection, Old Harbor Life-Saving Station, May 26, 1899.

District of the Life-Saving Service thus sought and received approval from the Chatham Board of Selectmen in 1876:

> to move the station wherever it is desirable and that the next town meeting will call for instructions from the town of Chatham whether or not to put any price upon the land. The land is held to be of such small [?] as regards value that they do not deem it advisable to call a meeting for that purpose alone.[65]

When plans were made to build the Old Harbor station in the same general area more than 20 years later, the government apparently did not seek additional approval or titled rights to the site. (There is no documentation for such an effort.) Apparently, the Federal Government never acquired title to the property.[66]

The District Superintendent suggested the name "Old Harbor" for the new station. He felt that although the site was located in North Chatham, the similar name could be confused with the Chatham station,

> but as the P.O. neighborhood of North Chatham is, in referring to different parts of the town of Chatham, has from time immemorial been called "Old Harbor." I cannot suggest a name more independent of other stations or of older origin.[67]

He had considered borrowing two other names of local areas, but did not recommend them, because "Mud Hole" was "characteristic but not desirable," and "Strong Island" was "less generally known."[68]

The bids for construction of the station were opened June 21, 1897.[69] The contract was awarded to J.S. Randall of Portland,

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[65] Letter, November 2, 1876.

[66] Letter, Admiral, U.S. Coast Guard, to Secretary of the Treasury, February 4, 1947. Correspondence of the USCG, RG 26, National Archives.

[67] Letter, Superintendent of Life-Saving Stations, Second District, to General Superintendent, June 24, 1897. Correspondence of the USLSS, RG 26, National Archives.

[68] Ibid.

[69] Letter, Acting Secretary, to James H. Cox et al., June 19, 1897. Correspondence of the USLSS, RG 26, Letters Received, Vol. 61, p. 133, National Archives.

Maine, for $4,437.[70] The selection of the new site was reported to the General Superintendent on July 26, 1897, to be "on Nauset Beach at a point about five miles South of the Orleans station, and about 3/4 of a mile south of the former site of the Chatham station...."[71] The location was staked out (without benefit of a surveyor) as follows:

> Beginning at a stake on the inner beach at mean water mark of Chatham Harbor, the steeple of the Methodist Church, Chatham, bearing West 25° South and Nickerson's Point bearing North 50° West, and running thence East 29° South 350 feet to a stake at mean high water mark on the sea beach, thence Southerly along said mean high water mark a distance of 600 feet to a stake, thence West 29° North 400 feet to a stake at high water mark of Chatham Harbor,and thence Northerly along the shore of Chatham Harbor a distance of 600 feet to the place of beginning.[72]

Neither the Town of Chatham nor any private individuals protested the siting of the station.

In August 1897, the Superintendent of Construction for Life-Saving Stations requested from the General Superintendent of the Life-Saving Service two sets of construction drawings with full-size details. One set was for the Old Harbor station, while the other was for a station at Salisbury Beach, Massachusetts.[73] The drawings were for the so-called "Duluth" style of station, which had been designed in 1893 by George R. Tolman (Appendix A). This design, consisting of a two-story, Shingle-style structure with four-story tower, was used for at least 27 other stations within the Life-Saving Service besides Old Harbor (Appendix C). These stations were built on the Atlantic coast from Maine to North Carolina, and on Lakes Superior and Michigan.[74] Six of them were constructed in Massachusetts. At least 14 of the stations were

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[70] Letter to J.S. Randall, June 21, 1897. Correspondence of the USLSS, RG 26, Letters Received, Vol. 61, p. 164, National Archives.

[71] Letter, Captain, U.S. Reserve Cutter Service (Superintendent of Construction), to General Superintendent, July 26, 1897. Correspondence of the USLSS, RG 26, National Archives.

[72] Ibid.

[73] Letter, Captain, U.S. Reserve Cutter Service (Superintendent of Construction), to General Superintendent, August 12, 1897. Correspondence of the USLSS, RG 26, National Archives.

[74] Eugene S. York, "The Architecture of the United States Life-Saving Stations," pp. 51, 224-25.

still standing in 1983; two of these, including Old Harbor, are owned by the National Park Service.

The majority of Cape Cod's lifesaving stations were built before 1893, and so were not of the Duluth style. Neither was the last station, Monomoy Point, built ca. 1900. Only the Wood End station (1896-97) and Old Harbor (1897-98) reflect the Duluth design.[75]

Two extra drawings were included in the set of original plans ordered for Old Harbor (Appendix A). These included the design for an outbuilding, which contained the privy and space for coal, wood, and oil storage; and for the cistern that was to be attached to the main building. The original specifications (Appendix B) references these two structures, as well as a flagstaff.

Construction of Old Harbor most likely had begun by October 1897, when the General Superintendent wrote to both the Assistant Inspector of the First and Second Life-Saving Districts, and the Superintendent of the Second Life-Saving District, asking them to confer and nominate keepers for the Salisbury Beach and Old Harbor stations.[76] The earliest surviving documentation relating to the latter nomination is dated February 23, 1898, which stated that Hezekiah F. Doane was transferred and appointed keeper of the Old Harbor station effective November 23, 1897.[77] Doane had been keeper of the Chatham station since 1893, and had been a surfman there for 13 years prior to that.[78] This new appointment officially transferred him to a new station.

A letter from an Assistant to Superintendents of Construction, sent to the Superintendents of Construction, disclosed that the Old Harbor station was officially completed on February 18, 1898.[79] On March 4 of the same year, the General Superintendent directed the Superintendent of the Second Life-Saving District to staff the station "with a crew of seven surfmen, as soon as it is

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[75] Clemensen, Historic Resource Study, p. 45.

[76] Letter, General Superintendent, to Assistant Inspector, First and Second Life-Saving Districts, October 18, 1897, and to Superintendent, Second Life-Saving District, October 18, 1897. Correspondence of the USLSS, RG 26, National Archives.

[77] Letter, General Superintendent, to Superintendent, Second Life-Saving District, February 18, 1898. Correspondence of the USLSS, RG 26, National Archives.

[78] Dalton, Life Savers, p. 115.

[79] Letter, Assistant to Superintendents of Construction, to Superintendents of Construction, February 18, 1898. Correspondence of the USLSS, RG 26, National Archives.

sufficiently equipped...."[80] Old Harbor's journal (log book) shows that the station was being stocked with supplies (including a telephone) through March and April, and that instructions were received on April 23 to go on active duty with a crew of six.[81] The station was put into commission on May 1.[82] Apparently, the hiring process went more slowly than anticipated: on June 9, the station received subsequent "instructions to go upon duty with a crew of four." Two more men were added by July 21.[83] Since the station was newly built, perhaps the usual employment period of September 1-June 1 was extended in order to ready the building and staff for September 1898. Alternatively, perhaps the orders in the summer of 1898 to hire surfmen applied only to hiring, with actual employment being delayed to the following September.

Whichever the case, the station was undoubtedly fully equipped and operational by the beginning of the 1898 season. Structures on the site at that time consisted of the main building with attached Boat Room and cistern, and one small outbuilding that contained the privy and storage space for coal, wood, and oil.

C. Alterations Made by the Life-Saving Service

The earliest subsequent correspondence dates to January 1899, when one of the service's telephone linemen requested from the General Superintendent approval to install a telephone line in each of the two patrol houses located at either end of the patrol from the Old Harbor station.[84] By January 18, both lines were installed and connected to "the main Cape Cod telephone line of this Service...."[85] These patrol houses may have already existed at the time the station was built, or they may have been con-

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[80] Letter, General Superintendent, to Superintendent, Second Life-Saving District, March 4, 1898. Correspondence of the USLSS, RG 26, National Archives.

[81] Old Harbor Journal (Log Book), entries from March 1, 2, 8, and 22, and April 4 and 23, 1898. Correspondence of the USLSS, RG 26, National Archives.

[82] Ibid., entry from May 2, 1898.

[83] Ibid., entry from June 9, 1898.

[84] Letter, Telephone Lineman, to General Superintendent, January 5, 1899. Correspondence of the USLSS, RG 26, National Archives.

[85] Letter, Telephone Lineman, to General Superintendent, January 19, 1899. Correspondence of the USLSS, RG 26, National Archives.

structed at the same time. (They were not included in the original drawings or specifications.) Their appearance and design are also unknown. However, correspondence from 1902 indicates that the patrol houses were owned by the surfmen, and were worth only $20 each.[86] Considering their low assessed value, even for 1902, one could assume they were probably no more than shacks.

The first documentation of changes to the station itself is found in the station's journal. Beginning in March 1899 and continuing through May of that same year, entries indicated that the crew was painting the interior of the station.[87] No official correspondence has been uncovered that documents a request for paint at Old Harbor at this time. Given the rigid control over requests for purchases demonstrated in other correspondence, this could mean one of two things: (a) that the paint was included in the authorization to construct the station, but was late in being applied; or (b) that the interior of the station needed repainting, and the crew purchased the paint with their own funds. It seems unlikely that the interior of the station would have needed repainting so soon after construction. It is more likely that no or only part of the painting was completed in 1897-98, and that the work was finished in 1899.

The paint evidence indicates that the plaster walls of the station were not finished in accordance with the original specifications (Appendix B). Paint analysis conducted at Old Harbor showed that the original plaster was not tinted, but left in its natural state prior to its first coat of paint (Appendix N). From this evidence, one might conclude that: (a) it was the untinted, unpainted plaster walls that were painted during the spring of 1899; and (b) that the first wall-paint schemes could date to this time.

Keeper Doane reported to his District Superintendent in April 1899 that the ash-wood treads of one of the stairs at the station were splintering and slivering. It is not known if this stair was an interior or exterior stair. The District Superintendent in turn wrote to the General Superintendent requesting authorization to purchase "20 lb. of 'yellow sheet metal'" to rectify the situation. More than a month later, a recommendation came down through the proper channels to smooth down the rough edges of the treads, and to oil or paint the treads to stop the splintering. Keeper Doane reported on May 22, 1899, that the stair had been

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[86] Letter, First Lieutenant, First and Second Districts, to General Superintendent, March 11, 1902. Correspondence of the USLSS, RG 26, National Archives.

[87] Old Harbor Journal, entries from March 15 and 20; April 17 and 24; and May 5, 15, and 22, 1898. Correspondence of the USLSS, RG 26, National Archives.

treated as recommended.[88] Paint analysis confirmed that at least the first tread of the main interior stair had an original finish of varnish or oil. (The original finish is deteriorated and is therefore difficult to ascertain.) No paint was applied to the tread until the present olive-green color in the 1970's.

A report of inspection dated May 26, 1899 (fig. 5), indicated that the Old Harbor station needed a cellar, a stable, and a workshop. A report of examination of conditions of several stations filed on December 3, 1899, recommended that Old Harbor needed a 9-foot-square cellar for vegetables and provisions; a window to light and ventilate the Keeper's Office; a building to house a stable, carriage room, and workshop; and a boat house three-quarters of a mile from the station, where the surfboat was being kept close to the water but unprotected.[89] Handwritten notes, or "indorsements," added to the provided estimates indicate that the cellar and outbuilding were not to be approved upon receipt of the letter. It is interesting to note, however, that the estimates for the cellar specified brick and Rosendale cement.

On April 11, 1900, the General Superintendent authorized the construction of everything except the separate building housing the stable, the carriage room, and the workshop.[90] Bid documents were issued in August 1900 for the boat house and 9-foot-square cellar, and both projects were to be finished in the following September.[91] (The surviving proposals and specifications for both projects are included as Appendix E.) The documents do not pinpoint the cellar's location under the building, but do suggest that it was accessed through an exterior bulkhead. The only exterior bulkhead seen in the earliest photograph of the station (fig. 6, circa 1902) is on the north wall of the tower. Thus, it seems likely that the provisions cellar was located under the tower.

No bid documents exist for the window created in the Keeper's Office, and neither the 1910 plans nor the 1916 plans show this opening. However, this is not unusual: the first set of plans were prepared specifically for the installation of the heating

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[88] Letter with "Indorsements," Office of the Superintendent, Second Life-Saving District, to General Superintendent, April 11, 1899. Correspondence of the USLSS, RG 26, National Archives.

[89] Letter, Assistant to Superintendents of Construction, to Superintendents of Construction, December 3, 1899. Correspondence of the USLSS, RG 26, National Archives.

[90] Letter, Acting General Superintendent, to Superintendents of Construction, April 11, 1900.

[91] Letter, Assistant to Superintendents of Construction, to Superintendents of Construction, August 19, 1900. Correspondence of the USLSS, RG 26, National Archives.

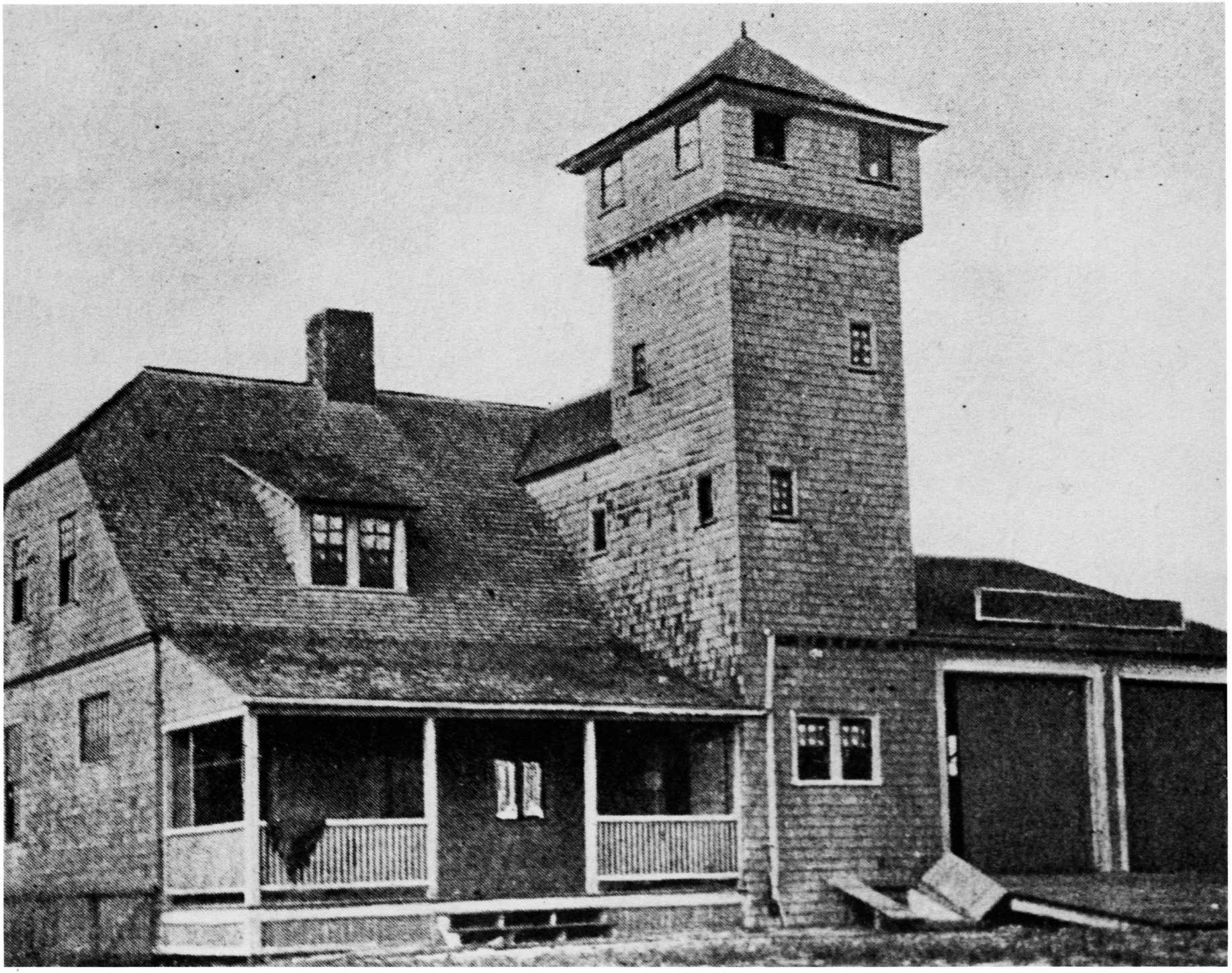


Illustration 6. Exterior View of Old Harbor Life-Saving Station, ca. 1902.

system, and the second set is very crude. The window does appear in the ca.-1927 plans, being located in the wall between the Keeper's Office and the Boat Room. It also can be seen clearly in figure 7, a photograph taken after the Boat Room was removed for the 1977-78 move of the structure.

The only other request from 1900 came from an Assistant Inspector, asking that two long and two short bolts for boat-room doors be sent to three stations, including Old Harbor. The next day, September 21, the bolts were reportedly shipped.[92]

Only 2 1/2 years after its completion, the floor of the coal bin in the outbuilding had failed and was in need of repair.[93] The authorization for repairs took 10 months, and was finally approved in April 1901.[94] Authorization was not always that slow. When the new boat house was endangered by a gale and the encroaching sea, it took only 4 days from the date of request (November 25, 1901) for the General Superintendent to telegraph his approval to move the structure.[95]

A barn apparently was built close to the station by 1902: Dalton recorded it in his chronicle of Cape Cod lifesavers.[96] There is no official documentation for its construction.

On May 15, 1903, authority was given to an Inspector to order 60 gallons of mixed paint for the Old Harbor station. The request for the purchase 4 days earlier specified the contractor to be Harrison Brothers and Company of New York, who had a contract with the Life-Saving Service for "Town and Country" ready-mixed paint.[97] The Inspector requested #332 paint, probably referring to a

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[92] Letter, Assistant Inspector, to General Superintendent, September 20, 1900; and letter, Acting General Superintendent, to Inspector, Life-Saving Stations, September 21, 1900. Correspondence of the USLSS, RG 26, National Archives.

[93] Letter, Superintendent, Second Life-Saving District, to General Superintendent, June 5, 1900. Correspondence of the USLSS, RG 26, National Archives.

[94] Letter, General Superintendent, to Superintendent, Second Life-Saving District, April 23, 1901. Correspondence of the USLSS, RG 26, National Archives.

[95] Telegram, Superintendent, Second Life-Saving District, to General Superintendent, November 29, 1901. Correspondence of the USLSS, RG 26, National Archives.

[96] Dalton, Life Savers, p. 114.

[97] Letter, Harrison Brothers and Company, Inc., to Superintendent, Third Lighthouse District, April 2, 1903. Correspondence of the USLSS, RG 26, National Archives.

certain color that was not otherwise documented.[98] Entries into the station's journal indicate that the crew painted "the trimmings of the station and outbuildings" on 2 days in September and in December of the same year,[99] possibly putting the remainder of the 60 gallons in storage. Notations in the station journal indicate that the crew painted the interior of the station during 8 days in May 1904.[100] No request for additional paint was submitted, so the paint may have come from the existing supply.

The Boat Room platform and the tracks for the sliding Boat Room doors needed repairing in 1904. A request was made and approved in November to purchase 300 feet of 3 by 6 spruce, 10 pounds of 20d nails, and 43 feet of iron railing.[101] When compared to the original specifications (Appendix B), no direct correlation could be made for the spruce and the iron railing. The exact nature of the repairs is therefore unknown.

The sea endangered the freestanding boat house for a second time in January 1905. Authorization to move it took only 2 days this time, instead of the 4 days required in 1901. The fast communication was achieved by the use of telegrams in both directions.[102]

By 1905, a concern must have arisen over the safety of the trap doors in the towers of several of the lifesaving stations. The Superintendent of the Second District requested on September 2 that each of the trap doors be protected by a railing made of galvanized pipe.[103] This action was required of all stations within the district, except those at Nahant and City Point. The keeper of Old Harbor passed on his requirements, but had to revise

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[98] Letter, Inspector, Life-Saving Stations, to General Superintendent, May 11, 1903. Correspondence of the USLSS, RG 26, National Archives.

[99] Old Harbor Journal, entries from September 15 and 28, and December 1, 1903.

[100] Ibid., entries from May 14, 21, 23, 25-28, and 30, 1904.

[101] Letter, Superintendent, Second Life-Saving District, to General Superintendent, November 4, 1904; and letter, General Superintendent, to Superintendent, Second Life-Saving District, November 12, 1904. Correspondence of the USLSS, RG 26, National Archives.

[102] Telegrams between Superintendent, Second Life-Saving District, and General Superintendent, January 4 and 5, 1905. Correspondence of the USLSS, RG 26, National Archives.

[103] Letter, Superintendent, Second Life-Saving District, to General Superintendent, September 2, 1905. Correspondence of the USLSS, RG 26, National Archives.

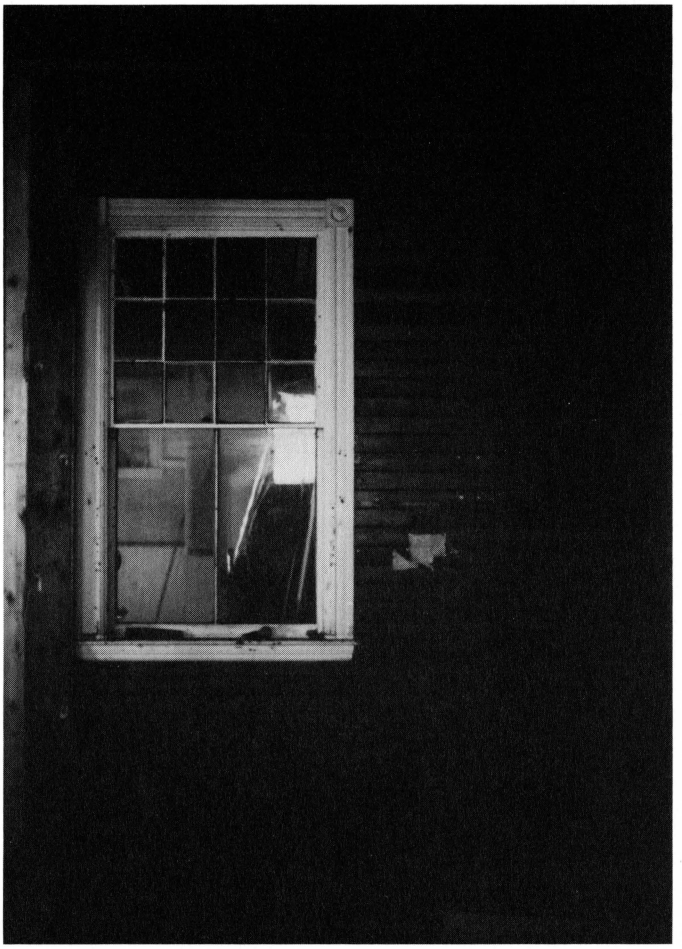


Illustration 7. Window Added in 1900 Between Keeper's Office and Boat Room.

them when asked to send an accompanying plan (fig. 8). His final submittal included:

> Four rails 6 ft. 10 inches
> Two rails 2 ft. 5-1/2 inches
> Four posts 3 ft. each around the hatch way.
> Two rails comes [sic] down the stair way.
> One each side. 6 ft. - 4 inches each.
> Two posts 2 ft. one each side on floor below
> Complete number of floor plates 8.
> Complete number of floor elbows 8.
> One inch gal. iron railing and posts[104]

Authorization came from the General Superintendent on October 3 to construct the railing, which was to run from the third floor up to the fourth floor.[105] Due to the old linoleum that is presently glued down on the third and fourth floors of the tower, no evidence for screw holes from the railing was found in the floors.

In April 1905, Keeper Doane requested approval from his District Superintendent to build new boardwalks.[106] Authorization came from the General Superintendent 6 days later.[107] Three months later, a second request to build a workshop was submitted to the General Superintendent's office.[108] Even though the station's crew would have performed the actual construction, the station was asked to wait until the following fiscal year, if possible.[109] On

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[104] Letter, Keeper, Old Harbor Life-Saving Station, to Superintendent, Second Life-Saving District, September 26, 1905. Correspondence of the USLSS, RG 26, National Archives.

[105] Letter, General Superintendent, to Superintendent, Second Life-Saving District, October 3, 1905. Correspondence of the USLSS, RG 26, National Archives.

[106] Letter, Keeper, Old Harbor Life-Saving Station, to Superintendent, Second Life-Saving District, April 5, 1905. Correspondence of the USLSS, RG 26, National Archives.

[107] Letter, General Superintendent, to Superintendent, April 11, 1905. Correspondence of the USLSS, RG 26, National Archives.

[108] Letter, Superintendent, Second Life-Saving District, to General Superintendent, July 18, 1905. Correspondence of the USLSS, RG 26, National Archives.

[109] Ibid., 5th "indorsement" (November 28, 1905).

August 6, 1906, authorization was given to build a workshop measuring 18 by 30 feet.[110]

Beginning in 1906, an Assistant to the Superintendents of Construction examined the Old Harbor station and made a series of recommendations. These specified that ceilings of first- and third-floor rooms, and of the Stair Hall and Locker Room on the second floor, should be plastered. They also recommended that the Spare Room and Quarters on the second floor should be wainscotted and plastered. Additional recommendations included sheathing the Boat Room, changing the Boat Room doorways from sliding to swinging doors, repairing the "veranda" (front porch?), and renewing the floors in the Mess Room and Kitchen.[111] The General Superintendent stated, in the second "indorsement" of the same letter, that other districts' needs made it impossible for the work to be done that year.

In 1907, two additional entries into the station's journal indicate that the crew was again painting the station.[112] The first entry does not specify exterior or interior application; the second specifies interior work. Once again, no official requests for purchases of paint were found, nor were names or specific locations of paint noted.

In May 1908, the General Superintendent's office returned the 1906 request to the Superintendent of the Second District for a resubmittal of the recommendations. After the request passed through the proper channels, the Assistant to Superintendents of Construction suggested that $2,428.68 worth of repairs be made at Old Harbor, and authorization for this was granted on August 21, 1909.[113] An abbreviated list of those repairs is as follows:

Changing 8 swinging sash in tower to sliding sash
Weather stripping over tower windows
New treads to watch room stepladder
Renewing 10 treads of main stairway
Replacing flashing and shingles at east window of crew's quarters

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[110] Letter, Acting General Superintendent, to Superintendent, Second Life-Saving District, August 6, 1906. Correspondence of the USLSS, RG 26, National Archives.

[111] Letter, Assistant to Superintendents of Construction, to Superintendents of Construction, July 28, 1906. Correspondence of the USLSS, RG 26, National Archives.

[112] Old Harbor Journal, entries from March 25 and May 2, 1907.

[113] Letter, General Superintendent, to Superintendents of Construction, August 21, 1909. Correspondence of the USLSS, RG 26, National Archives.

L. R 71579 "0/160

LIFE-SAVING SERVICE,
2D DISTRICT,

Old Harbor STATION,

Sept 18, 1905.

H. F. Daane
Keeper.

SUBJECT:

Stairway

SUPERINTENDENT
RECEIVED
SEP 19 1905
2d DR. 673
2d LIFE-SAVING DISTRICT

OVER

No. of Inclosures,

UNITED STATES
RECEIVED
SEP 30 1905
LIFE-SAVING SERVICE

1st Endorsement.
LIFE-SAVING SERVICE;
Office of Sup't 2d District;
Provincetown, Mass. Sep. 19, 1905.

Respectfully returned to the Keeper of Old Harbor Station, who will state hereon the number of feet of piping, giving lengths, the number of galvanized elbows, and floor plates, etc., required for the railing mentioned. He will also furnish a plan of the railing. The estimate submitted is greatly in excess of similar furnished stations in this vicinity.

Geo. W. Bowley

Superintendent,
2d Life-Saving District.

UNITED STATES
RECEIVED
SEP 30 1905
LIFE-SAVING SERVICE

L. S. Service
Office of Old Harbor L. S. Sta.
North Chatham Mass.
Sept. 26-1905-

Respectfully returned to Superintendent 2nd L.S. District Provincetown Mass. With required information

Respectfully
H. F. Daane
Keeper

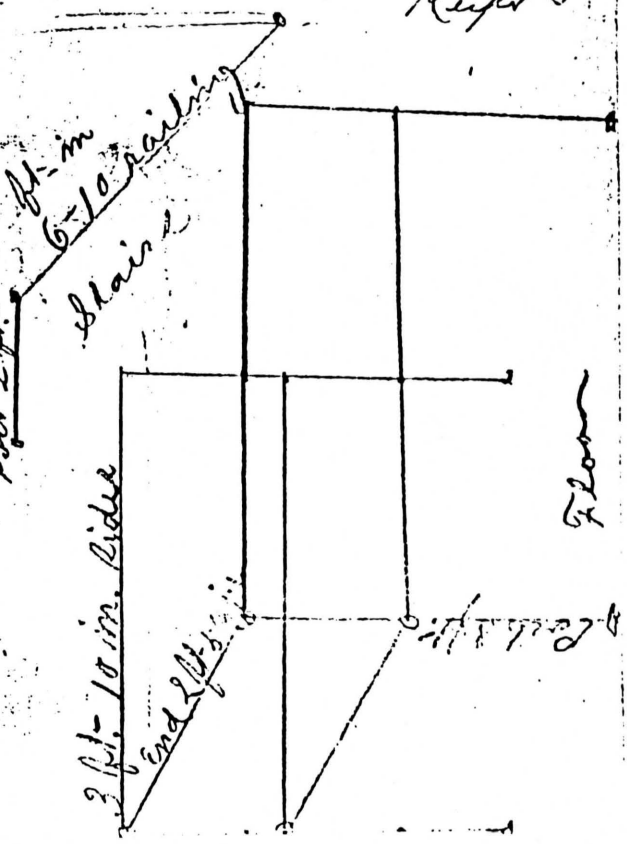


Illustration 8. Diagram of Pipe Railing for Tower Trap Door, Old Harbor Life-Saving Station.

Repairing floors
9 sq. ft. in lookout
21 sq. ft. in Pantry
60 sq. ft. in Messroom
180 board ft. of rift heart Georgia Pine for Kitchen
Renewing 4 thresholds
Plastering ceilings of 1st floor except Keeper's Room, Office, and Staircase Hall.
Plastering in Crew's quarters, except in small room ceiled off from same.
Construction of cellar under dwelling portion with seven windows
Construction of an interior entrance to cellar
Raising chimney three feet
New boatroom ramp in front
Closing side boatroom door
Changing front boatroom doors from sliding to swinging doors
New framing and new floor to front porch
New cover for cistern
Weather boarding around boatroom

The first-floor rooms whose ceilings were plastered appear to have been the Mess Room, the Storm Clothes Room, the Kitchen, the Pantry, and the Rear Entry.

The "plastering in Crew's quarters" included the installation of a lath and plaster ceiling, attached to bridging beams installed between the rafters. Paint evidence suggests that the work in the Quarters also included the construction of the present knee walls along the north and south roof slopes. Paint lines remaining on the rafters and roof sheathing boards (fig. 9) indicate that this room had original north and south knee walls that stood closer to the eaves than the present walls. Presumably, they were covered with the same type of original wainscot still extant on the east and west walls. The paint evidence suggests that some portions of the original north and south knee walls' wainscot was reused on the new knee walls.

Several other items on the 1910 list of repairs merit special note. These include the construction of the full cellar under the main building. (An interior stairway was specified as part of this work.) Also dating from this time was the closure of the west Boat Room doorway, and the alteration of action of the Boat Room's north doors from sliding to swinging. (The original doors may or may not have been reused in this work.) Finally, the "weather boarding around boatroom" probably referred to exterior cladding, because three of the four interior walls of the Boat Room were sheathed with different material two years later.

All of the work on the list of repairs was accomplished by June 13, 1910.[114] However, numerous other alterations also were made at this time. During this major renovation period, the Assistant to the Superintendents of Construction who was overseeing the work realized that the cistern pipes were interfering with the construction of the cellar, and would need to be relocated. His request for authority to move them also included a request for a new kitchen sink, due to the bad condition of the old one.[115] Both items were approved on February 5, 1910.[116] During construction, it also was discovered that the well point (or strainer) had to be replaced before the concrete floor of the cellar was installed.[117] Approval for the replacement was also given, in February of the same year.[118]

Before the renovations were reported as being completed, additional requests were presented to the General Superintendent. A June 6, 1910, letter included requests to: (a) order four iron hooks with staples, to secure the Boat Room doors in an open position; (b) construct a coal bin in the new cellar (the coal bin had previously been located in an outbuilding); (c) to replace the whole top layer of the Mess Room floor (even though 60 square feet of it had just been patched); and (d) to replace worn-out gutters that carried rainwater to the cistern.[119] The construction of the new Mess Room floor called for 2 1/2-inch, matched hard pine. It is not known if this matched the original flooring, because the original specifications omitted the width of the pine flooring to be used. This type of flooring is extant today, but it is not known if it is actually the same floor. The gutter replacement called for 60 feet of #16 galvanized iron leaders (gutters?), 6

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[114] Letter, Assistant to Superintendents of Construction, to Superintendents of Construction, June 18, 1910. Correspondence of the USLSS, RG 26, National Archives.

[115] Letter, Assistant to Superintendents of Construction, to Superintendents of Construction, January 29, 1910. Correspondence of the USLSS, RG 26, National Archives.

[116] Letter, Acting General Superintendent, to Superintendent of Construction, February 5, 1910. Correspondence of the USLSS, RG 26, National Archives.

[117] Letter, Keeper, Old Harbor Life-Saving Station, to Superintendent, Second Life-Saving District, February 9, 1910. Correspondence of the USLSS, RG 26, National Archives.

[118] Letter, Acting General Superintendent, to Superintendent, Second Life-Saving District, February 14, 1910. Correspondence of the USLSS, RG 26, National Archives.

[119] Letter, Superintendents of Construction, to General Superintendent, June 6, 1901. Correspondence of the USLSS, RG 26, National Archives.

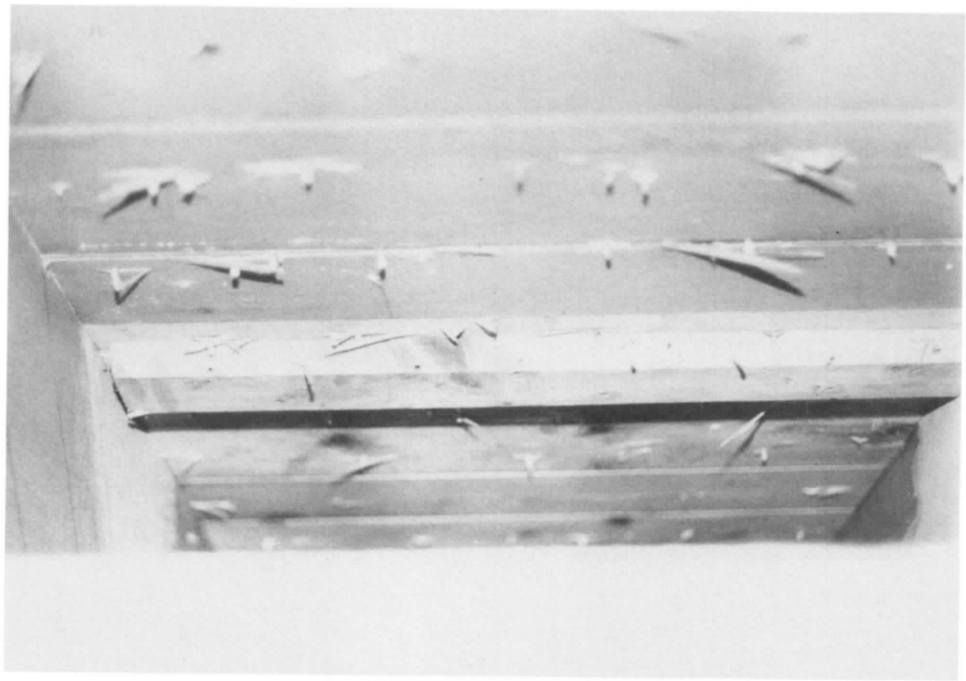


Illustration 9. Ceiling of Quarters, Paint Evidence of 1910 Relocation of Original Knee Wall.

inches wide with hangers, and 25 feet of #16 galvanized iron downspouts, 4 inches wide. No. 26 galvanized iron gutters and downspouts were originally specified for the cistern, but these do not remain today. These repairs were approved on June 18, but apparently not finished until December.[120]

Once the cellar had been completed, thought and approval were given to installing a hot-water heating system in the station, using nine Buffalo standard radiators.[121] An accompanying plan drawn in August 1910 (fig. 10) indicates the placement of only eight radiators, with the boiler in the cellar. This drawing also shows the existence of an interior stair to the full cellar, with a doorway leading to the Kitchen. (No access is apparent from the stair to the Storm Clothes Room itself.)

The 1910 plan also reveals alterations made to the cellar. Two openings are seen: one centered on the north elevation of the tower, and one in the north half of the east elevation. As stated previously, the north-elevation opening was probably originally a bulkhead entrance accessing the 1900 provisions cellar under the tower. The 1910 plan suggests that it had been converted to a window by that time. The east-elevation opening is the bulkhead entrance for the new full cellar. This bulkhead is marginally visible in figure 11.

Aside from this work on the station itself, an addition was made to the barn between 1909 and 1910.[122] Earlier documentation did not record the construction of a barn or stable. In fact, in 1900 the General Superintendent had denied the authorization to build such a structure. Apparently a barn had been built close to the station by 1902, since Dalton recorded it in his book on Cape Cod lifesavers. Also in 1910, new concrete sidewalks were added.[123]

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[120] Letter, Acting General Superintendent, to Superintendents of Construction, June 18, 1910. Correspondence of the USLSS, RG 26, National Archives.

[121] Letter, Assistant to Superintendents of Construction, to Superintendents of Construction, August 24, 1910; and letter, General Superintendent, to Superintendents of Construction, September 22, 1910. Correspondence of the USLSS, RG 26, National Archives.

[122] Letter, General Superintendent, to Superintendents of Construction, August 21, 1909. Correspondence of the USLSS, RG 26, National Archives.

[123] Letter, Acting General Superintendent, to Superintendents of Construction, April 13, 1910. Correspondence of the USLSS, RG 26, National Archives.

Two watch houses were built in 1912.[124] The same year, a request was made to sheathe the interior walls of the Boat Room. Conversely to usual practice, approval was given after the advertisement for bids was issued.[125] A bid for $210 was accepted from a carpenter to sheathe the north, west, and south walls of the room in 3-inch-wide, beaded, clear white spruce, with quarter-round moldings at corners and baseboards. (The east wall, according to the original specifications, was already covered with clapboards.) This sheathing was extant as recently as November 1977 (fig. 12). Today, its nail holes are visible in the studs.

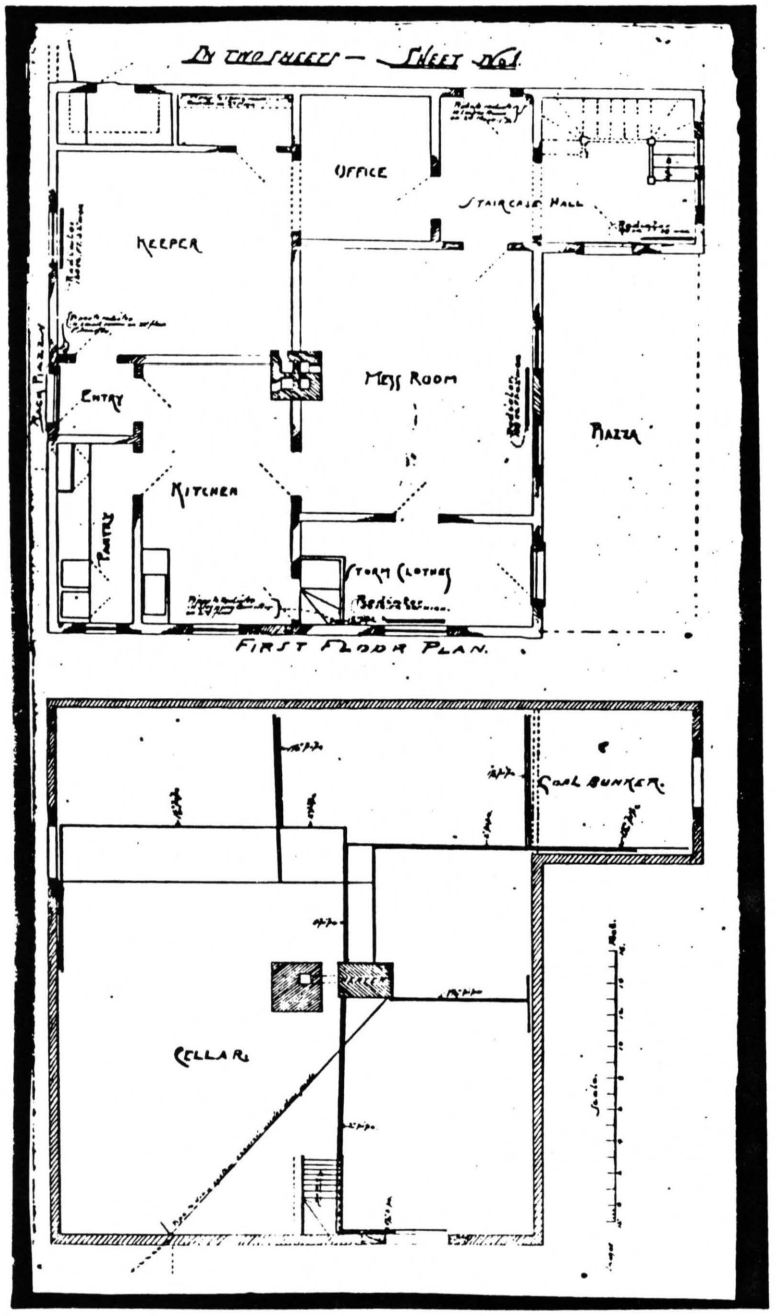
The seacoast environment continued to decay the materials with which the Old Harbor station was built. Figure 13 shows the station in 1914. By that time, the sheathing below the sill board of the Boat Room had rotted, as had the boat ramp in front of the Boat Room's north doors, and the gutter on what is now the east side of the station.[126] Whether or not these items were replaced is unknown; no authorization for repairs was found, but considering the nature of past approvals, repairs probably were authorized and completed.

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[124] Letter, September 26, 1912. Correspondence of the USLSS, RG 26, Decimal File 220, National Archives.

[125] Letters, April 29 and May 10, 1912. Correspondence of the USLSS, RG 26, Decimal File 220, National Archives.

[126] Letter, August 17, 1914. Correspondence of the USLSS, RG 26, Decimal File 220, National Archives.



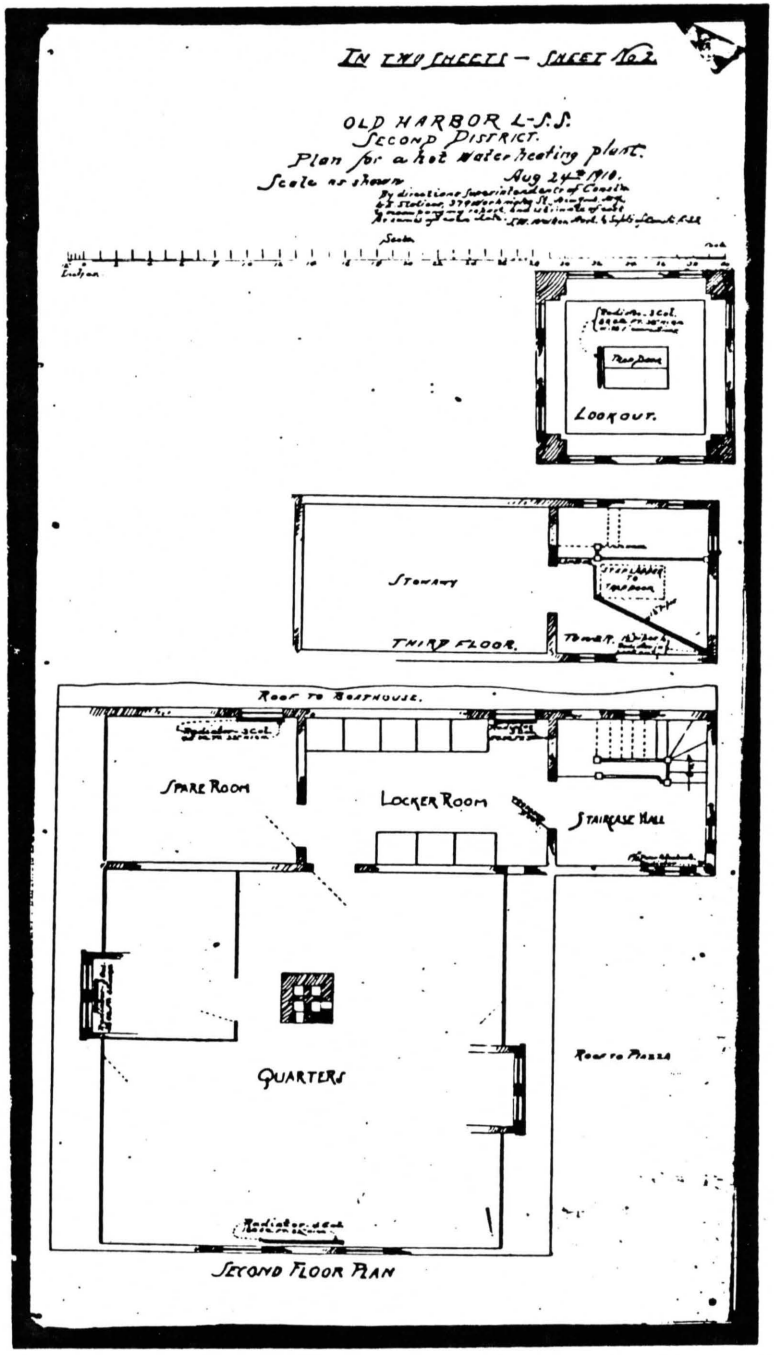


Illustration 10. Plans for a Hot-Water Heating System, Old Harbor Life-Saving Station, August 24, 1910.



Illustration 11. Exterior View of Old Harbor Life-Saving Station, 1910-1915.

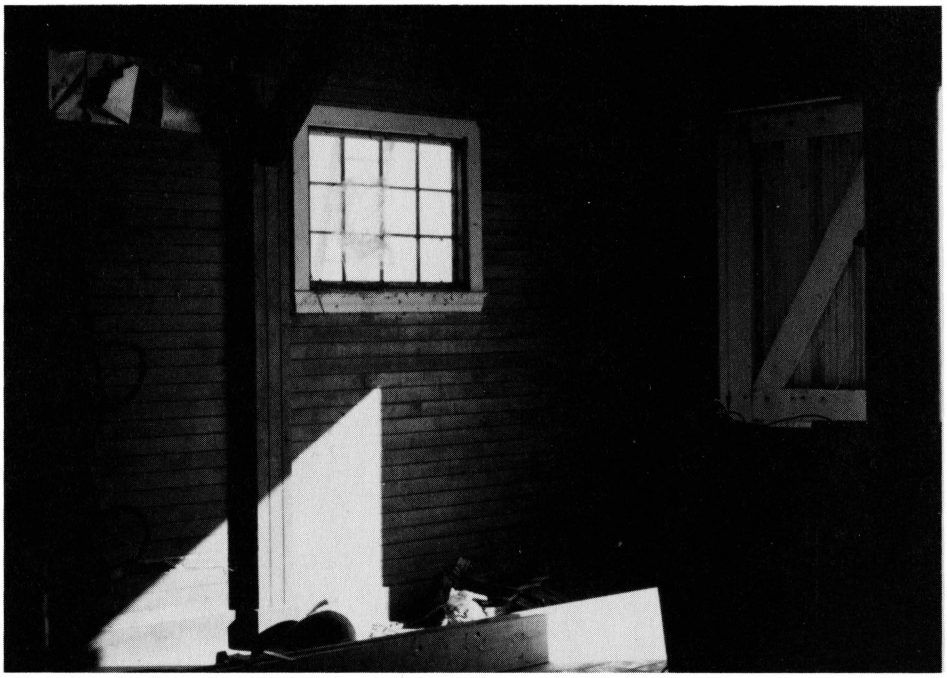


Illustration 12. West Wall of Boat Room, Interior Sheathing Applied in 1912.



Illustration 13. Exterior View of Old Harbor Life-Saving Station, 1914.

THE UNITED STATES COAST GUARD ERA (1915-1947)

A. Formation of the Coast Guard

The Old Harbor Life-Saving Station by 1915 probably consisted of the station building with attached Boat Room; a separate boat house, a workshop, a barn, an outbuilding, and a flagstaff; and two watch houses some distance away. In that year, the U.S. Life-Saving Service and the U.S. Revenue Cutter Service were consolidated to form the U.S. Coast Guard.[127] Over the years, as naval engineering technology improved, the old lifesaving stations were gradually phased out. The first station to be closed on Cape Cod was High Head, in 1916.[128] Three others were closed by the time World War II erupted, and the remaining stations were discontinued after the war ended.[129]

B. Alterations Made by the Coast Guard

Little documentation was found that recorded site changes or daily life at the station after it came under the control of the U.S. Coast Guard. A very crude set of plans signed by Keeper Joseph Kelley (Keeper Doane may have retired by this time) and dated March 10, 1916 (fig. 14), gives some idea of the appearance of the station at the beginning of the Coast Guard period. These plans show the full cellar added in 1910 and its east-elevation bulkhead entrance. They do not include the cellar opening in the north elevation of the tower, seen in the 1910 plans. (The opening may have been left off the 1916 plans because probably had been converted to a window by this time.) The doors of the Boat Room, which were changed from sliding to swinging action in 1910, are depicted as such in the 1916 plans.

The 1910 interior stair from the first floor to the cellar also is seen in figure 14. However, the small room in the southwest corner of the Quarters, visible in the 1910 plan, is not shown. Since this room is present in both the ca.-1927 and 1932 plans, its omission from the 1916 plans is undoubtedly due to the crudeness of those plans.

The first record of any physical changes to the structure during the Coast Guard occupancy is found in the station's

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[127] Clemensen, Historic Resource Study, p. 46.

[128] Ibid.

[129] Ibid.

journal. In September 1917, two entries were found that indicate the crew was painting the Quarters and the "hall" (presumably the Stair Hall), from the tower to the first floor, in "light naval green."[130] Paint analysis showed that the only color in any of the Quarters or Stair Hall samples that could conceivably be called "light naval green" was a blue or light blue found only on the wooden wainscot and other trim (see Appendix N).

A Report of Inspection was filed March 27, 1919, which reported that the floors of the Mess Room, Kitchen, Storm Clothes Room, and Pantry were so worn that they had nearly worn through in places, and that the upper sash of the kitchen window was rotted.[131] Bids were accepted on May 10 of that year for the repairs. Since documentation indicates that the floor of the Mess Room had been replaced 9 years earlier, one must question the accuracy of the later authorizations, or at least the use of the Mess Room. If the Mess Room was the room used most frequently in the station, perhaps the floor could have worn out in 9 years from the constant use by eight or more men.

In 1924, a bid was accepted for materials to sheathe the ceiling of the office and sleeping room of the Officer-in-Charge (apparently the title of the head of the station had been changed between 1916 and 1924). The bid also included asbestos needed for repairs to the heating system.[132]

Three years later, bids were accepted for the first toilet facilities inside the station, to be installed on the first and second floors. The project was to include water-supply and plumbing systems, along with the necessary fixtures in the station, and the construction of a concrete septic tank.[133] An undated plan of Old Harbor (fig. 15) shows the proposed second-floor bathroom, but does not specify the installation of toilets anywhere on the first floor. However, the plan does show proposed modifications to the side-by-side closets between the Keeper's Room and the Boat Room. These modifications would have been consonant with the conversion of one of the closets into a toilet for the Keeper. The closet's original doorway to the Boat Room was closed up, and a new doorway was cut leading to the Keeper's Room; a window was installed in the south wall of the closet.

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[130] Old Harbor Journal, entries from September 25 and 29, 1917.

[131] Report of Inspection, March 27, 1919, included in letter dated May 10, 1919. Correspondence of the USCG, RG 26, Decimal File 220, National Archives.

[132] Correspondence, February 26, 1924. Correspondence of the USCG, RG 26, Decimal File 220, National Archives.

[133] Correspondence, October 16, 1927. Correspondence of the USCG, RG 26, Decimal File 220, National Archives.

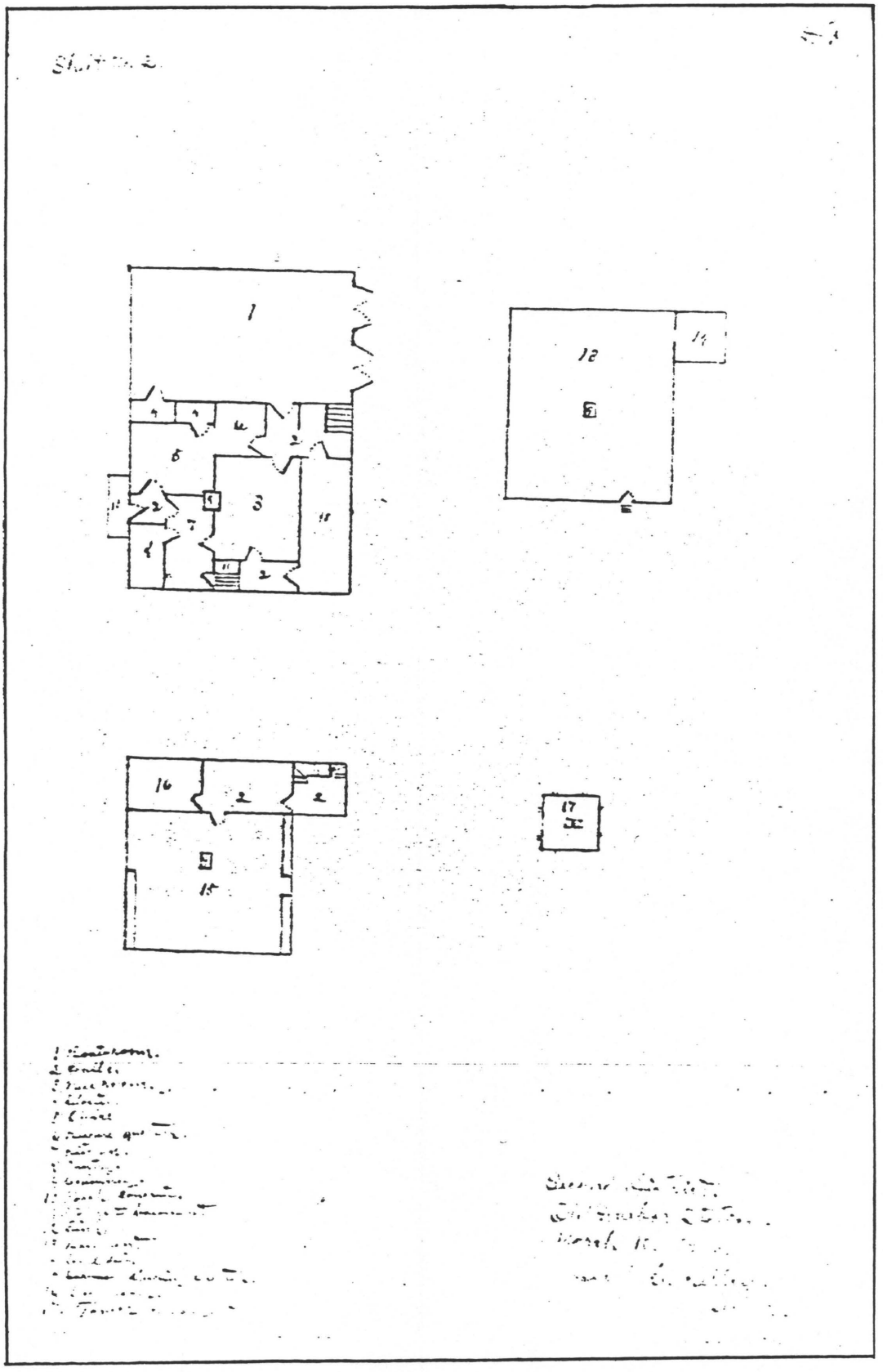


Illustration 14. Floor Plans, Old Harbor Life-Saving Station, March 10, 1916.

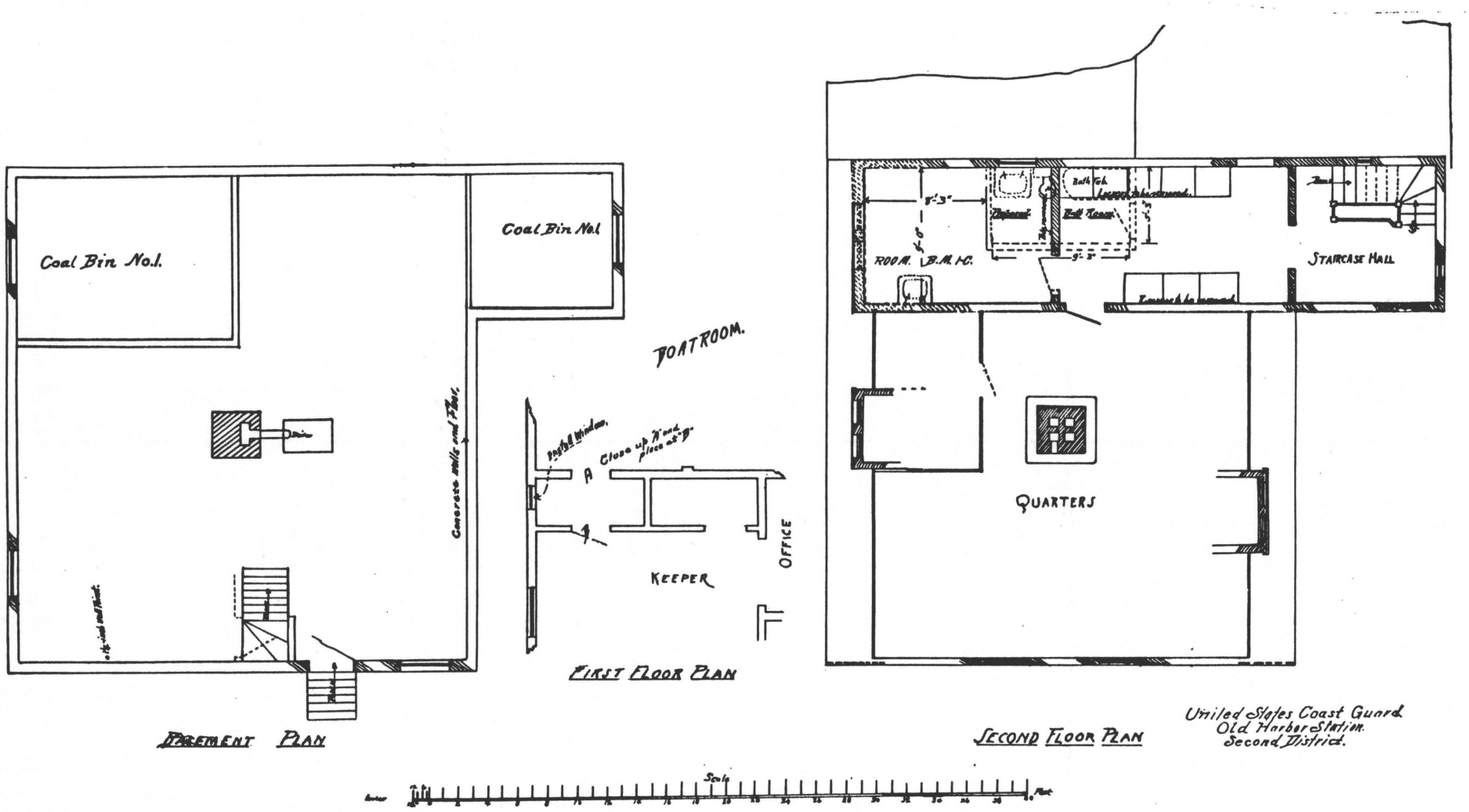


Illustration 15. Floor Plans Showing Circa-1927 Renovations, Old Harbor Coast Guard Station.

Because it shows the 1927 second-floor bathroom, and because it alludes to the 1927 installation of a first-floor bathroom, this plan is thought to date to 1927.

The plan does provide fairly detailed information about the creation of the second-floor bathroom. The wall between the Spare Room and the Locker Room was taken down, and three new partitions were erected to enclose a bathroom along the center of the west wall. This construction would have necessitated the destruction of at least some of the original lockers in the Locker Room. The bathroom included a sink, toilet, and bathtub, and a sink also was added on the east wall of what had been the Spare Room. The drawings also suggest that the double-window dormer in the south wall of the former Spare Room was added at this time.

The ca.-1927 plans contain at least two other pieces of evidence. They depict the small room in the southwest corner of the Quarters, suggesting that the 1916 plans erred by omitting this room. The ca.-1927 plans also indicate that by that time, the 1900 north-elevation cellar bulkhead had definitely been converted to a window, and its exterior steps removed.

The station had not been electrified by 1930, and its personnel were informed in 1931 that they would have to wait until funds became available for each station in turn.[134] By 1932, a proposed electric-lighting layout had been drawn (fig. 16) that provides much evidence about changes to the station. For example, this plan indicates that at some time between 1910 and 1932, the interior stair to the cellar was enlarged, expanded from only the southeast corner of the room to the entire south end of that room. (The 1916 plan suggests that the enlargement was done before that year, but the plan's crudeness makes it difficult to be sure; the ca.-1927 plans do not show that area of the station.)

The 1932 plans also confirm that the old Boat Room closet had by that time been converted to a toilet for the Keeper. The Keeper's Room closet was still labeled as such, and so probably did not contain any plumbing up to this time. Finally, the layout shows that both front and rear porches had received concrete floors, and that the cellar had been subdivided into rooms, including a generator room. In 1933, a set of storage batteries (Model D-32 plant, Kohler Co.) were ordered to be shipped to Old Harbor, for use in conjunction with the electric generator plant.[135]

At the close of 1935, permission was granted to paint the interior of the station building according to the new regula-

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[134] Correspondence, December 7, 1931. Correspondence of the USCG, RG 26, Decimal File 220, National Archives.

[135] Correspondence, December 13, 1935. Correspondence of the USCG, RG 26, Decimal File 220, National Archives.

tions.[136] Exactly what those regulations were is unknown, but the chosen colors may have been white or salmon, based on the paint analysis (Appendix N).

Other alterations continued in the structure. The second-floor bathroom was apparently relocated and enlarged in 1942. According to a drawing dated March 9, 1942 (fig. 17), the partitions that enclosed the 1927 bathroom were demolished, and a new partition was constructed in the same location as the partition that had originally separated the Spare Room from the Locker Room. The area originally known as the Spare Room was redesigned as the enlarged bathroom, utilizing two of the sinks from the 1927 bathroom, and relocating one electric light fixture. The existing radiator had to be relocated slightly off-center from the double-window dormer, in order to create space for two toilet stalls on the west wall. Two shower stalls also were added along the west wall, north of the toilets. The two relocated sinks and a third new sink were installed along the east wall of the room. These sinks were still present as late as November 1977 (see figure 18). Holes remaining in the floor today confirm these alterations.

In March 1942, a request was submitted to replace the existing 32 V/ DC 1500w, gasoline-driven electric generator with a new, more powerful generator.[137] Two plans for the new installation were found, the most recent of which was dated January 2, 1943 (fig. 19). This plan not only records the location of a gasoline tank outside the station (to its rear), but also denotes the location of the interior cellar stair, created in 1910 and enlarged prior to 1932. According to Coast Guard records, the installation of the new Kohler 110V DC 2kw gasoline-driven electric generating plant was completed by Sager Electric Supply on September 13, 1943.[138]

Perhaps in conjunction with the new generating plant, but through separate official documentation, the gasoline water-pumping engine also was replaced with an electric equivalent between August and September 1943.[139] The generosity of the Coast Guard towards Old Harbor continued throughout 1943. Due to the inadequacy of the station's small, coal-burning range, it was replaced by a #61 Agamatic, Single Oven Heavy Duty, coal-burning

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[136] Ibid.

[137] Request for Work Authorization, March 13, 1942. Correspondence of the USCG, RG 26, National Archives.

[138] Weekly Days Work Construction Report, September 18, 1943. Correspondence of the USCG, RG 26, National Archives.

[139] Work Order and Report, August 31, 1943. Correspondence of the USCG, RG 26, National Archives.

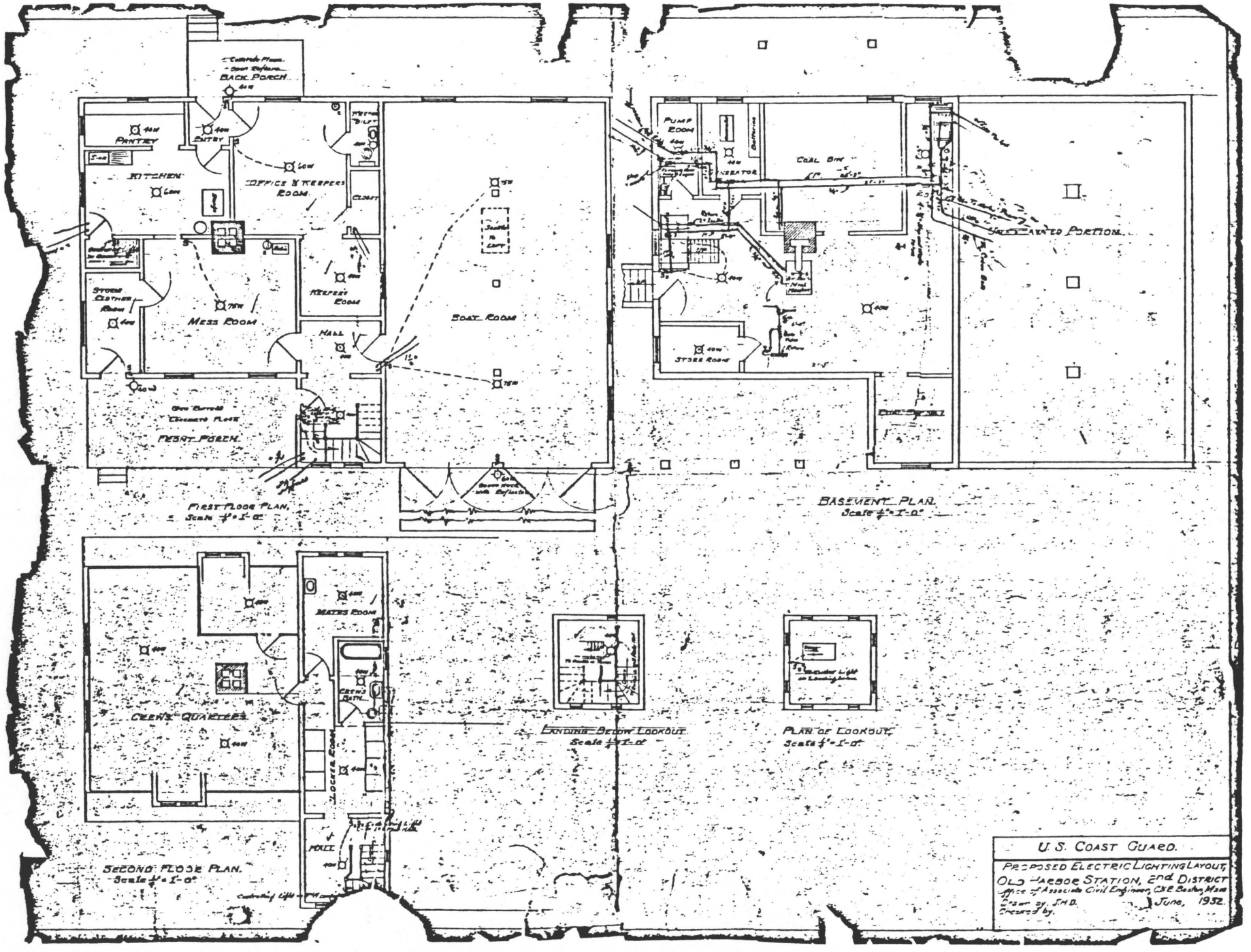
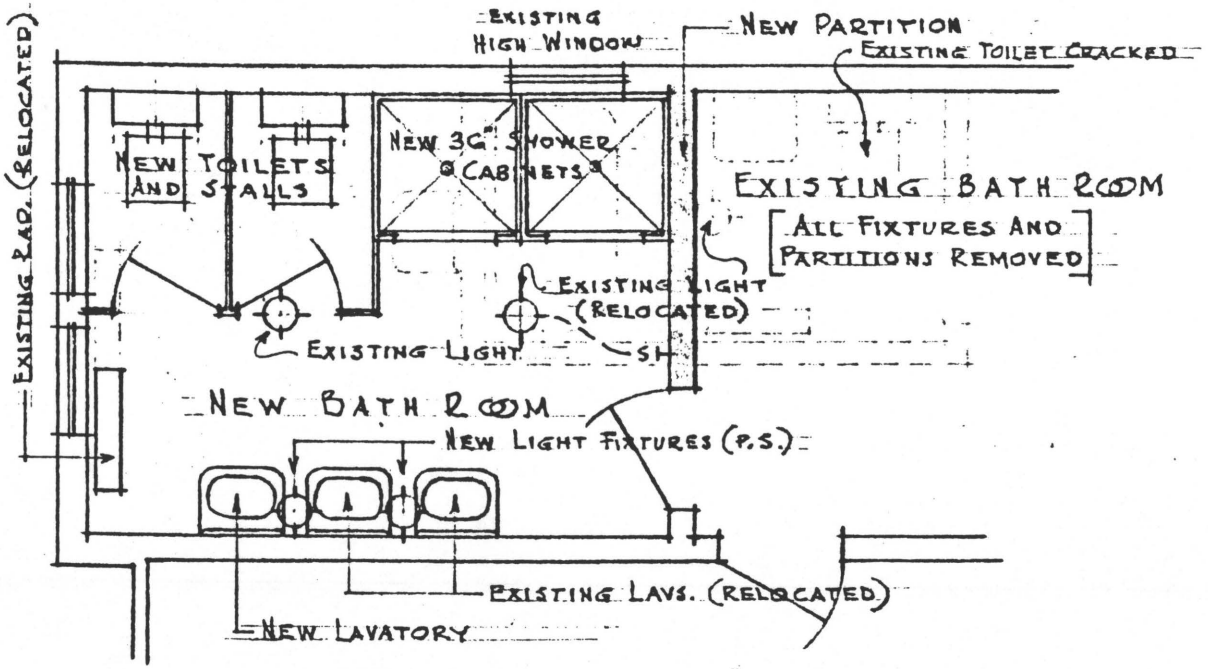


Illustration 16. Floor Plans Showing Proposed Electric Lighting System, Old Harbor Coast Guard Station, June 1932.



PLAN OF CREW'S NEW BATH ROOM
[SECOND FLOOR]
SCALE ¼" = 1'-0"

KEY:- REMAINING EXISTING WORK ═══ EXISTING WORK REMOVED ═ ═ ═ NEW WORK ═══

IMPROVEMENT TO BATH ROOM FACILITIES
OLD HARBOR LIFEBOAT STATION
ORLEANS, MASS.

U.S Coast Guard ~ 1st Naval District ~ Boston, Mass ~ Mar. 9, 1942 ~ B.C.T. ~ G.M.B.

Illustration 17. Plan Showing Improvement to Second-Floor Bathroom Facilities, Old Harbor Coast Guard Station, March 9, 1942.



Illustration 18. East Wall of Spare Room, Sinks Installed During 1942 Improvement to Second-Floor Bathroom.

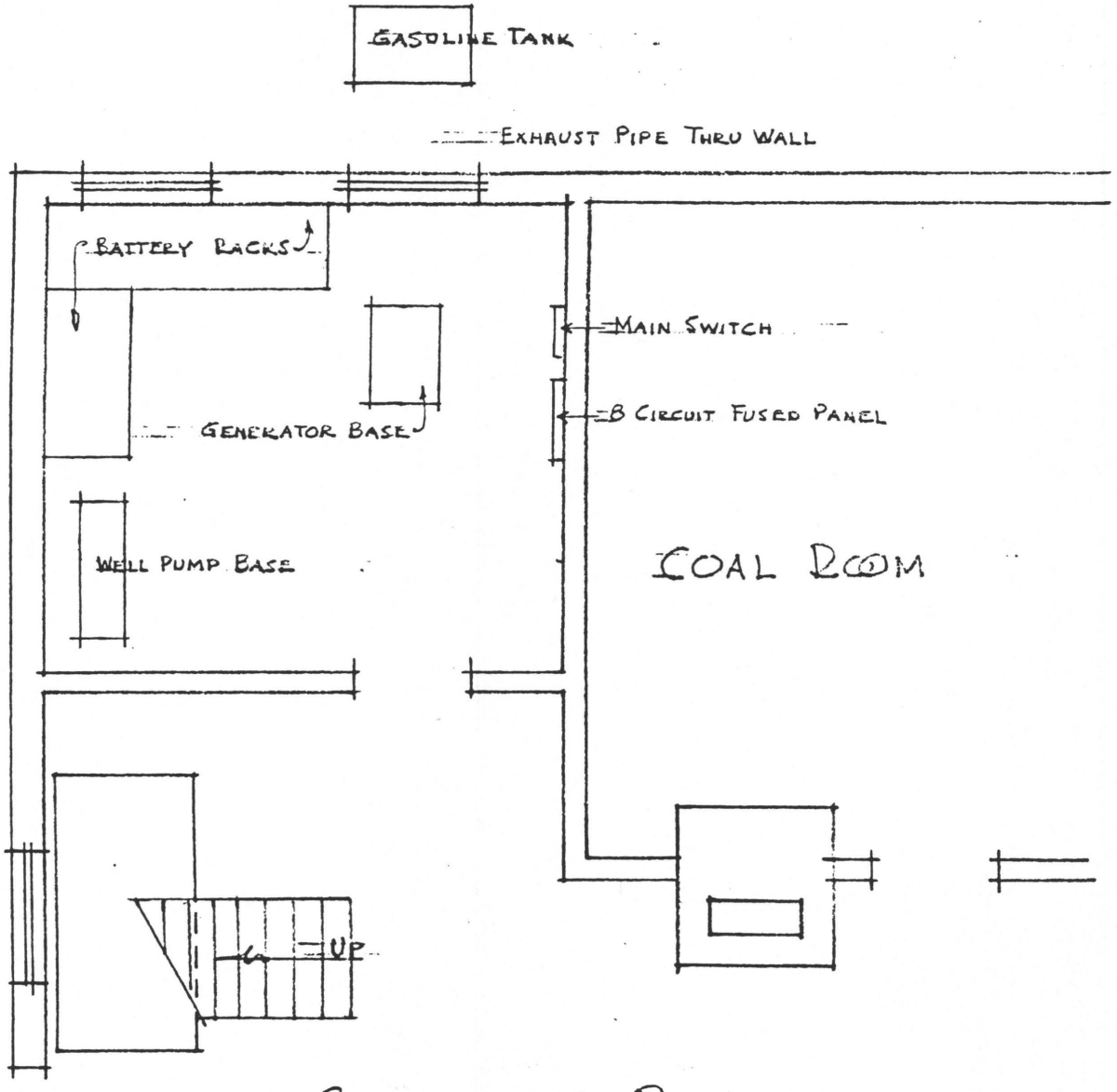


Illustration 19. Basement Plan Showing Location of New Generator and Battery Racks, Old Harbor Coast Guard Station, January 2, 1943.

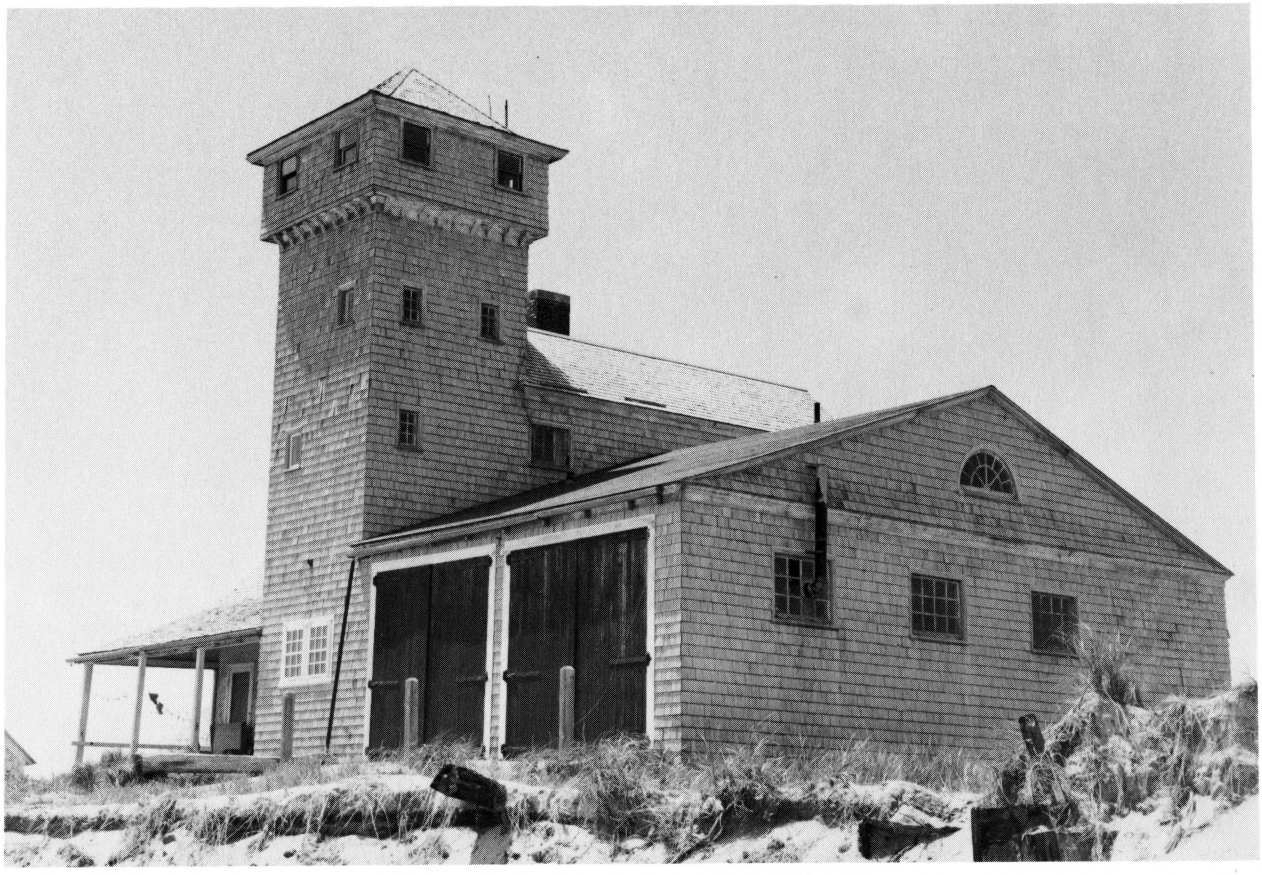


Illustration 20. Exterior View of Old Harbor Life-Saving Station on Original Site in Chatham, no date.



Illustration 21. Exterior View of Old Harbor Life-Saving Station on Original Site in Chatham, no date.

range.[140] The replacement included an auxiliary oven, stove-top accessories, and a hot-water boiler and storage tank. Approval for the purchase was given on August 3, 1943,[141] and the equipment was presumably installed, although a second work order follow-up was issued on October 18, requesting the status of the installation.[142] In addition, during the month of September, the domestic hot-water tank was moved from the kitchen to the cellar, and a "jack" water heater was installed.[143]

An inventory of the site was taken by the Civil Engineer's Office of the Coast Guard, possibly in January 1944, while the station was still active. The inventory listed the station building with lookout, a boat house half a mile southwest of the station, a garage, a workshop, a steel flag tower, a wooden drill pole, and an "aviation [pole?] with no platform."[144]

Two photographs (figs. 20-21) were taken of Old Harbor at about this time. Although neither of these are dated, the presence of the American flag suggests that perhaps the site was still in Coast Guard ownership.

C. Abandonment Proceedings

By June 1944, the District Coast Guard Officer decided that the Old Harbor station should "be placed on an inactive status in custody of the Orleans Life Boat Station, East Orleans, Mass."[145] Its observation duties were to be taken over by the Chatham and Orleans stations. It was to be officially decommissioned and

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[140] Job Approval Form, May 24, 1943. Correspondence of the USCG, RG 26, National Archives.

[141] Request Form, Office of Finance and Supply, Material Budget Section, approved August 3, 1943. USCG files.

[142] Work Order Follow-Up #2, October 18, 1943. Correspondence of the USCG, RG 26, National Archives.

[143] Work Order and Report, September 21, 1943. Correspondence of the USCG, RG 26, National Archives.

[144] Civil Engineer's Office Report, U.S. Coast Guard, Washington, D.C., n.d. Correspondence of the USCG, RG 26, National Archives.

[145] Letter, Assistant District Coast Guard Officer, to Section Coast Guard Officer, Cape Cod, June 9, 1944. Correspondence of the USCG, RG 26, National Archives.

closed on July 1, 1944.[146] All doors and windows were to be boarded up, and all pipes were to be drained to prevent freezing.[147] This work was completed on August 9 of the same year.[148]

The next logical step for the Coast Guard was to declare the inactive station as surplus after the close of World War II. A Board of Survey was formed in November 1945 for this purpose. The board's findings were reported on December 11 of the same year, declaring the property surplus to the needs of the First Coast Guard District (see Appendix F). However, the report contained an error that required clarification before the Declaration of Abandonment could be prepared. This error was the statement that attributed ownership of the land upon which the station stood to the U.S. Government. The Coast Guard investigated further, and finally concluded that the Town of Chatham still owned the land.[149]

By June 1946, the Coast Guard had decided that the buildings should be sold and removed from the site.[150] Bids were received in September, the highest bid of $2,752.05 going to Edwin W. Taylor and Jonathan Eldridge of Chatham.[151] The Declaration of Abandonment (Appendix G) was official on February 10, 1947, and was recorded in the Barnstable County Registry of Deeds on March 24, 1947.[152]

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[146] Letter, W.D. Lee, to District Coast Guard Officer, First Naval District, June 15, 1944. Correspondence of the USCG, RG 26, National Archives.

[147] Letter, District Coast Guard Officer, First Naval District, to Commanding Officer, Coast Guard Station, Chatham, Mass., June 27, 1944. Correspondence of the USCG, RG 26, National Archives.

[148] Ibid.

[149] Letter, Admiral, U.S. Coast Guard, to Secretary of the Treasury, February 4, 1947. Correspondence of the USCG, RG 26, National Archives.

[150] Letter, C.M. Opp, to Commander, First Coast Guard District, June 28, 1946. Correspondence of the USCG, RG 26, National Archives.

[151] Letter, Commander, First Coast Guard District, to the Commandant, September 26, 1946. Correspondence of the USCG, RG 26, National Archives.

[152] Barnstable County Registry of Deeds, Book 667, p. 373.

PRIVATE OWNERSHIP (1947-1973)

Edwin W. Taylor and Jonathan Eldridge apparently did not remove the buildings from the site, since a 1973 memorandum and subsequent deed transactions cite the buildings' locations as being similar to their original locations. In October 1946, Taylor and Eldridge instead purchased the land on which the buildings sat from a private individual.[153] As indicated in Chapter I, "CHAIN OF TITLE," a succession of private owners were buying and selling that land all the while the Town of Chatham and the Federal Government thought that it was town-owned land. The Final Decree entered by the Superior Court of Massachusetts in 1958 suggests that the town did originally own the land, but that the private individuals obtained at least some legal rights to it because the town did not contest their claims of ownership within the prescribed period of time. The result was that the land and the buildings of the former Old Harbor Life-Saving Station passed through the hands of several private owners from 1947 to 1973. On April 23, 1973, the U.S. Government repurchased the property, in order to save the lifesaving station from the encroaching sea.[154]

A number of changes were made to the Old Harbor Life-Saving Station before it came back into Federal ownership in 1973. Since these changes were not documented in the fairly detailed records of either the Life-Saving Service or the Coast Guard, it is possible to assume that they were carried out during the station's period of private ownership. However, some of these changes could have been made by the Coast Guard, and the official documents concerning them were simply not found.

Of those changes presumably made during the era of private ownership, it is difficult to determine which were performed by specific owners. The best source of information for this time period are two documents that date to the Rose family's ownership. These are a 1962 real-estate prospectus (Appendix H) and a 1972 property appraisal (Appendix I). Both documents state that the structure contained 10 rooms and 3 bathrooms, and had a full concrete cellar. This suggests that most private-owner alterations occurred prior to 1962. Those changes that presumably occurred prior to the Federal reacquisition of the property, and probably prior to 1962, include:

1) the removal of several first-floor partitions, to increase the living space in the Mess Room and Kitchen. Walls removed included those between the Mess Room and the Storm Clothes Room, the Keeper's Office, and the Stair-Hall

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[153] Barnstable County Registry of Deeds, Book 6658, p. 291.

[154] Ibid., Book 1884, p. 201.

Foyer; and the one between the Keeper's Office and the Stair-Hall Foyer. This transformed the Mess Room into a large living room. The post-original wall across the south end of the Storm Clothes Room, which was part of the interior stair to the cellar, remained. The Kitchen also was expanded, by knocking down the walls around the Pantry, and the wall between the Rear Entry and Pantry.

2) the addition of stovepipe flues to the existing chimney in the Mess Room to serve a "Heatilator" fireplace (fig. 22).

3) the replacement of the kitchen stove with a large Garland-brand gas range with stainless-steel sheathing behind, and a metal exhaust hood and fan over, the range (fig. 23). An enamel sink with a disposal was added before 1962, and a large Servel-brand gas refrigerator was installed prior to 1972. The 1962 appraisal did mention a refrigerator, but it was located in the Boat Room, and neither its brand or its power source were mentioned.

4) the creation of an interior doorway, in the south end of the wall between the Keeper's Room and its closet. The reason for this appears to have been to allow a shower stall to be added in the south half of the closet. (The adjacent Boat Room closet, converted to a toilet room for the Keeper's Room, continued in that role.) The north half of the closet must have remained in use as a closet: the 1962 real-estate prospectus states that this room had a toilet room, a shower stall, and two closets. Also, NPS notes taken in 1980 show that the original doorway to the closet, at the north end, was still in place, and showed no signs of having been altered.

5) the addition of a small storeroom within the Boat Room. Paint evidence extant on the Boat Room floor (figs. 24-25) suggests that this enclosure was located in the southeast corner.

6) the installation, within the front east Boat Room doorway opening, of frames holding insect screening (fig. 26).

7) the subdivision of the second-floor Quarters into four bedrooms. One of these rooms (the southwest bedroom) may have existed before the Coast Guard sold the structure.

8) the installation of another bathroom in the vicinity of the old Locker Room. The evidence for this is contained in the 1972 real-estate appraisal, which describes a modern bathroom and linen closet off the middle of the hall that leads from the stair. (This was in addition to the 1942 bathroom in the former Spare Room.) There is no record as to exactly where this new bathroom and linen closet were located. Two doorways were cut through the



Illustration 22. Mess Room Fireplace Built During Period of Private Ownership.

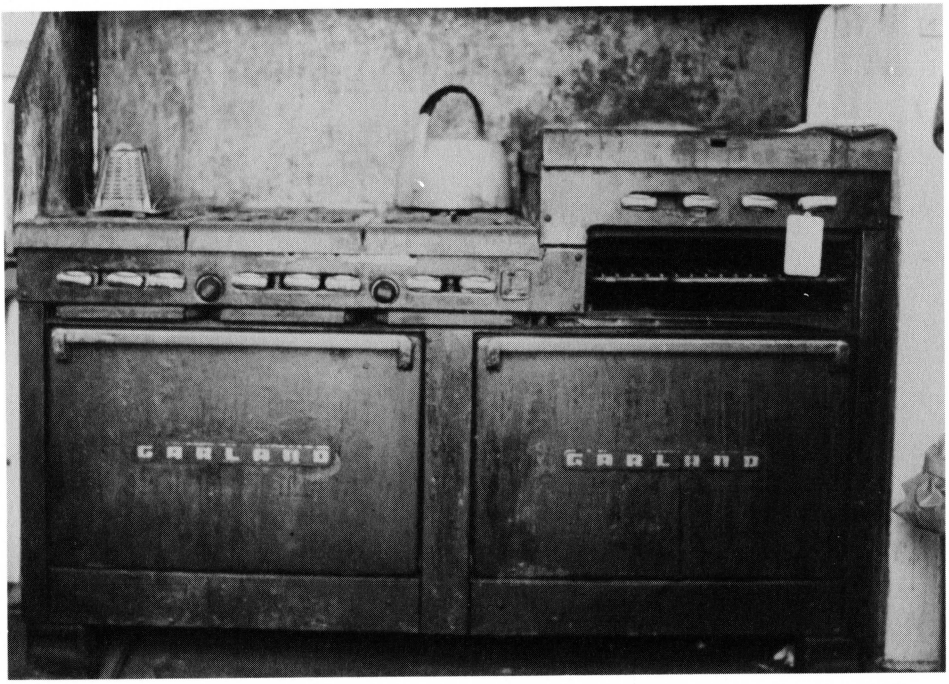


Illustration 23. Kitchen Stove Installed During Period of Private Ownership.



Illustration 24. Boat Room Floor, Looking East at Paint Evidence of Storeroom in Southeast Corner.



Illustration 25. Boat Room Floor, Looking South at Paint Evidence of Storeroom in Southeast Corner.



Illustration 26. North-Elevation Boat Room Doorways, Framing for Screen Within Doorway 115.

wall between the old Locker Room and the area over the Boat Room (see figure 27), which was outfitted with a floor at some time. It is possible that one of these doorways accessed the new bathroom, if the latter were located above the Boat Room. However, the appraisal states that the walls of the new bathroom consisted chiefly of plaster and wainscot, with some fiberboard wall replacement. This suggests that the bathroom was located inside the former Locker Room.

9) the installation of a full floor over the Boat Room. The 1972 appraisal describes this storage area as being open, with rough flooring, and exposed roof rafters and studding. It also mentions that the Boat Room below could be accessed through a trap door and ship's ladder. It does not mention any doorway between the storage area and the second floor of the main building.

10) the covering of most of the wooden floors with linoleum or tile. The only two areas not so treated were the Boat Room, and the second-floor storage area above the Boat Room.

Although Coast Guard records denote the subdivision of the cellar, the 1962 prospectus names three specific rooms: a work-shop, a larder room, and a power plant; and two laundry sinks. The 1972 appraisal mentions only partitioned storage areas and two enameled "set-tubs." By 1962, two wells provided water to the structure, but it is not known if the existing cistern was still in use. As was the case at the end of Coast Guard occupancy, the structure's hot water was heated by gas, and electricity was supplied by generators. By 1962, however, gas and electric space heaters had been introduced to supplement the fireplace Heatilator. The prospectus makes no mention of the 1910 hot-water radiator system. Although electricity had been introduced to the structure ca. 1932, lighting fixtures extant in 1972 were a combination of gas and electric. No documentation remains that indicates when the gas fixtures had been installed.

NATIONAL PARK SERVICE ACTIVITIES (1973-Present)

A. Period of Private Occupancy

Under the terms of purchase of the Old Harbor Life-Saving Station by the U.S. Government in April 1973, the Rose family was allowed to continue residential use of the property for five years. However, the Roses must have relinquished their right of use earlier than required, because the National Park Service was able to begin the relocation of the structure in November of 1977.[155]

B. Relocation of the Life-Saving Station

The National Park Service purchased the Old Harbor property on April 23, 1973,[156] for inclusion in the Cape Cod National Seashore. On September 12 of that year, the Superintendent of the Cape Cod National Seashore contacted the Regional Director of the North Atlantic Region, requesting that the main building and two outbuildings be sold.[157] His rationale was that the sea was reclaiming the sand dunes in front of the structures and threatening their survival. Since funds were not available to move the structures (estimated cost: $26,000 in 1973), he argued, the only solution was to sell them, hoping the new owner would move and therefore rescue them.

The buildings were not sold, and local groups began a campaign to save them. In September 1975, the Cape Cod National Seashore Advisory Commission met to discuss the future of the Old Harbor Coast Guard Station.[158] At that time, the structure had been nominated for inclusion in the National Register of Historic Places (on August 18, 1975), but had not yet been accepted.[159] The commission agreed that: (a) if the station stayed in its original location, the sea would claim it; (b) if it were to be moved elsewhere on Nauset Beach, the problem would recur; and (c) that

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[155] "Saving the Life...."

[156] Barnstable County Registry of Deeds, Book 1884, Page 201.

[157] Letter, Superintendent, Cape Cod National Seashore, to Director, Northeast Region, NPS, September 12, 1973. NPS files.

[158] Minutes, Cape Cod National Seashore Advisory Commission, meeting of September 5, 1975. NPS files.

[159] Letter, Assistant Director, Park Historic Preservation, to Director, North Atlantic Region, September 5, 1975.

the structure should be moved, possibly to the Chatham mainland, to prevent its loss.

The following spring, the National Park Service's Regional Director suggested that one of the outbuildings on the site might be an earlier lifesaving station, and therefore be more significant historically than the main structure.[160] The hope was that the smaller building, if historically important, could be moved instead of the larger Old Harbor Station, at less cost. A team of preservationists was sent to investigate the smaller structures at the site, and to report its findings.

No report prepared by that team has ever been found. However, it appears that the hope of solving the issue less expensively was abandoned. In March 1977, the Superintendent of the Cape Cod National Seashore informed the Regional Director of the advantages and disadvantages of moving Old Harbor to one of nine different locations formerly occupied by lifesaving stations.[161] Race Point was the most desirable location, but the Superintendent felt the significance of the structure did not justify the $125,000 or more needed to move and restore the building. The Regional Office did not concur. Three months later, representatives from that office were meeting with Cape Cod's U.S. Congressman Gerry Studds, requesting $100,000 for moving Old Harbor station to Race Point in Provincetown.[162] Money was approved by Congress, and the relocation process began.

A firm called Middlesex Contractors and Riggers, Inc., was hired to physically relocate the structure.[163] That company subcontracted with John Born Associates, Consulting Engineers, to provide drawings for the lifting and rigging of the building; and with the engineering firm of Nickerson and Berger, Inc., to develop site, foundation, and existing floor-frame plans for the Race Point site. A third firm, Coastal Engineering Company, was hired by the National Park Service as a consultant, and to prepare documentation details pertaining to the chimney reconstruction (Appendix J).

A Notice of Intent was filed with the Chatham Conservation Commission on September 7, 1977, delineating not only the measures

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[160] Letter, Regional Director, North Atlantic Region, to Superintendent, Cape Cod National Seashore, April 1, 1976. NPS files.

[161] Letter, Superintendent, Cape Cod National Seashore, to Regional Director, North Atlantic Region, March 11, 1977. NPS files.

[162] Letter, Ross Holland, to Jack Stark/Denis P. Galvin, June 23, 1977. NPS files.

[163] Contract #CX1600-7-0046. Contract files, CRC.

that would be taken to conserve the Nauset Beach site after the station was removed, but also how curiosity-seekers would be handled.[164] A public hearing was held on September 21, 1977.[165] One abutter, worried about insufficient protection of her property, sent a letter of protest to the National Park Service requesting clarification of an item in the Letter of Intent.[166] By October 3, a meeting was scheduled for final review with the Chatham Conservation Commission; Middlesex Contractors and Riggers, Inc.; and National Park Service representatives.[167] One month later, the move commenced.

The original relocation contract (#CX1600-7-0046) included several phases of work involving site preparation, moving the structure, demolition, concrete work, masonry work, and carpentry (Appendix K). Only two phases, moving the structure and demolition, pertained to the Chatham site. In preparation for the move from Nauset Beach, the contractor was to be responsible for disconnecting existing utilities; installing plywood doorway and window coverings; installing plywood boxing, secured by metal strapping, to cover the exterior brick chimney; removing the first-floor fireplace jambs and hearth, leaving only the original chimney structure; and salvaging materials from the cistern and base of the chimney. The Regional Historical Architect has stated that the majority of the posthistoric ceilings were to be removed, in order to lighten the load. Photographs taken before the move (e.g., fig. 22) confirm his memory.

Site work at Race Point was to include the erection of a solid, reinforced, concrete-block foundation, with cement-stucco pargeting on its exterior surfaces. The foundation was to include the ca.-1900 bulkhead on the north elevation at the base of the tower, but not the ca.-1910 bulkhead on the east elevation. The reason for choosing concrete block as the new foundation material went unrecorded.

Other site work was to include the reconstruction of the brick cistern; the building of the foundation for the chimney and the piers for the carrying beams; the creation of foundation walls for porches, steps, and the bulkhead; the provision of basement

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[164] Notice of Intent, Wetland Protection Act, Massachusetts G.L.C. 131s. 40, September 7, 1977.

[165] Notice of Public Hearing, Town of Chatham, Conservation Commission, to be held September 21, 1977. Filed by Marcia G. Norman, Clerk, Conservation Commission. NPS files.

[166] Letter, Robert W. Kelley, Esq., to Cape Cod National Seashore, September 30, 1977. NPS files.

[167] Letter, Historical Architect, NAHPC, to Superintendent, Cape Cod National Seashore, September 28, 1977. NPS files.

window casings and sash; and the replacement of wooden sills as needed (possibly in only two places on the east elevation.)

The first change order was issued on November 22, 1977, 10 days after the contractor requested an extension of the original completion date.[168] The government requested the deletion of the concrete piers for the carrying-beam support, the concrete porch slabs and steps, the concrete cistern cap and bulkhead steps, and all other exposed concrete work, including retaining walls, walkways, and ramps. The five basement window openings were reduced to four, with the sash not to match the existing, but rather to be equivalent to the Anderson-brand window #2817--a standard wooden basement window approximately 32 by 20 inches, with screen. The brick cistern wall was changed to brick veneer on concrete block, with a temporary wooden cover to be provided by the contractor. In place of the supporting concrete piers, four concrete-filled steel columns were to be installed on concrete footings with three equal spans on either side of the chimney base. Basement window openings and a bulkhead were to be recreated as per an attached drawing that has not survived. The material of the section of bulkhead above grade was changed to be brick masonry, to match the cistern. This last change, however, must not have been implemented, since the existing bulkhead is constructed of pargeted concrete block.

On November 25, 1977, the government issued a second letter to the contractor, referring to it as Change Order #1, requesting that the chimney be reconstructed using salvaged brick from the original chimney and granting a work extension until December 26, 1977.[169] Why the letter of November 22 was not considered a change is unclear, especially since its recommendations were incorporated into the finished product.

According to a list found in the Project Supervisor's file, all window sash apparently were labeled and removed before the openings were boarded closed.[170] The building was split in two (fig. 27) and reinforced with steel, the division occurring where the Boat Room met the main building.[171] The two structures were then loaded on a barge on November 30, 1977 (fig. 28),[172] which was towed to Provincetown Harbor.

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[168] Letters between Middlesex Contractors and Riggers, Inc.; Marsha Fader, Project Supervisor; and Contracting Officer, North Atlantic Region; November 12 and 22, 1977. Contract files, CRC.

[169] Change Order #1, November 25, 1977. Contract files, CRC.

[170] Project Supervisor file, CRC.

[171] "Saving the Life...."

[172] Ibid.

While preparations were underway to remove the station from Nauset Beach, the Cape Construction and Engineering Company was subcontracted to build the new foundation at Race Point. The same day that Old Harbor was placed on the barge, the Project Supervisor made a site inspection of the new foundation. It was determined that the work in progress did not meet the contract specifications, and that everything except the footings should be demolished.[173] The concrete-block walls were to be rebuilt. Because of this delay, when the barge arrived at Provincetown, the foundation was not ready to receive the station (fig. 29). The barge therefore was moored in Provincetown Harbor, supposedly for a few days (fig. 30).

The decision by the NPS Project Supervisor that the foundation would have to be torn down and rebuilt apparently did not sit well with the subcontractor. Accusations from one party to the other are recorded in exchanges of letters.[174] The result was that the subcontractor rebuilt the foundation reusing the original concrete blocks, without permission from the government, without an approved test panel, and again without meeting contract specifications. The Park Service rejected this foundation, also,and the December 26 deadline went unmet. On January 3, 1978, the government suggested to the principals of Middlesex Contractors and Riggers, Inc., that they either hire a new subcontractor or do the work themselves.[175]

Meanwhile, the original Chatham site was to have been cleared of "all concrete, brick, miscellaneous debris and abandoned utilities" by the contractor.[176] However, that site had not been left in the condition specified in the contract, or in the Chatham Conservation Commission permit.[177] No snow fencing had been installed as required, and debris from the old foundation was protruding above the sand. The contractor was directed to remedy the situation, and that section of the contract finally was

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[173] Letter, Historical Architect (Project Supervisor), to Middlesex Contractors and Riggers, Inc., December 2, 1977. Contract files, CRC.

[174] Letters, December 19-22, 1977. Contract files, CRC.

[175] Letter, Contracting Officer, to Middlesex Contractors and Riggers, Inc., January 3, 1978. Contract files, CRC.

[176] Letter, Historical Architect (Project Supervisor), to Middlesex Contractors and Riggers, Inc., December 20, 1977. NPS files.

[177] Meeting notes, December 21, 1977. Contract files, CRC.

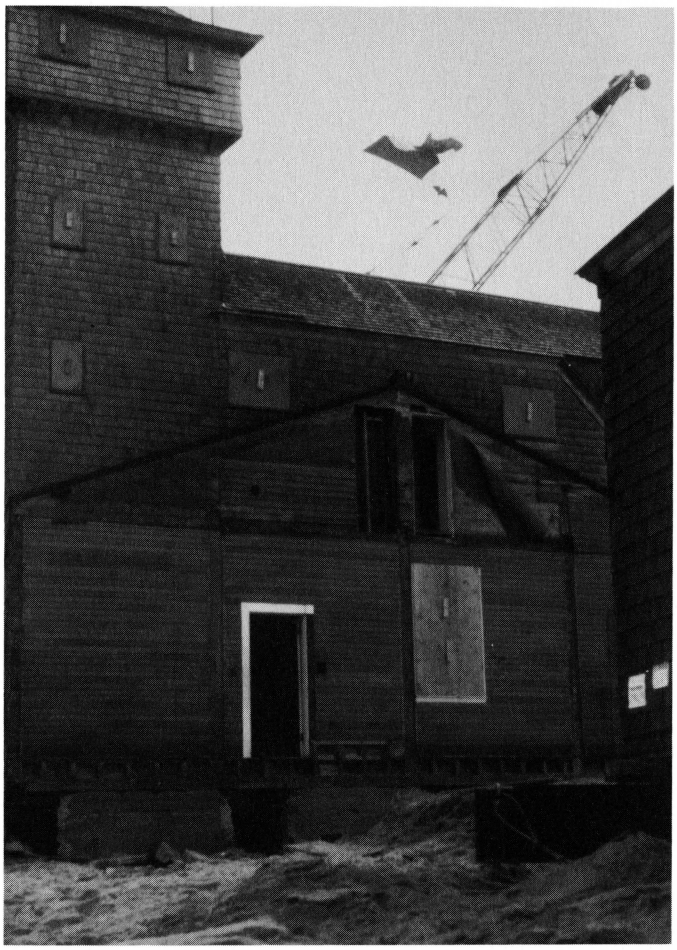


Illustration 27. Separation of Boat Room from Main Structure, November 1977.

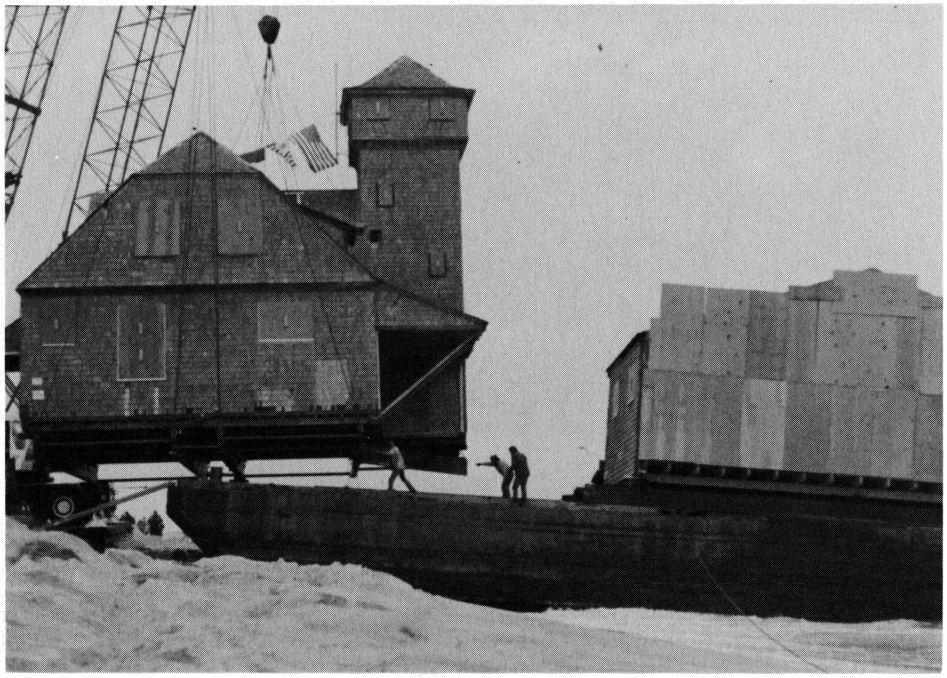


Illustration 28. Loading Boat Room and Main Structure onto Barge, November 30, 1977.



Illustration 29. New Foundation at Race Point, no date.



Illustration 30. Loaded Barge Docked at Provincetown Harbor, December 1977.

accepted as completed on January 30.[178] Concrete rubble was still surfacing in the sand as late as 1980, which prompted the National Park Service to finally have 9 tons of it removed at its own expense.[179]

The government granted a 60-day extension to Middlesex Contracting and Rigging on January 9, 1978, establishing a new completion date of February 24, 1978 (Change Order #2).[180] Apparently the third attempt at building the foundation was accepted by the National Park Service, since a moving date of January 24 was scheduled.[181] Strong winds and high seas forced the cancellation of this attempt. On February 16, 1978, Change Order #3 was issued, extending the completion date to June 16.[182]

The delay in unloading the divided lifesaving station from the barge had caused unanticipated damage. This damage was recorded on March 21, 1978.[183] Damaged or lost historic architectural fabric included:

1) damage to the cornice molding on the front elevation of the Boat Room;

2) loss of some shingles and pieces of 1-inch, tongue-and-groove sheathing on all three exterior elevations of the main building;

3) loss of pieces of sheathing on the Boat Room foundation area on two elevations;

4) breakage of two panes of glass in the rear door of the main building;

5) loss of two areas of wooden ceiling in the Boat Room;

6) buckling of the interior wall sheathing, and wracking of the adjoining corner post, in the Boat Room;

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[178] Letter of Acceptance (Partial), January 30, 1978. Contract files, CRC.

[179] Letter, Historical Architect (Project Supervisor), to NAHPC files, May 20, 1980. NPS files.

[180] Change Order #2, January 9, 1978. Contract files, CRC.

[181] Weekly Field Report (weeks ending 1/27/78 and 2/3/78), February 8, 1978. Contract files, CRC.

[182] Change Order #3, February 16, 1978. Contract files, CRC.

[183] Memorandum, Historical Architect, to Contracting Officer, March 21, 1978. Contract files, CRC.

7) settling of one Boat Room door; and

8) nails protruding into the interior wall finish on the west wall of the main building.

Possible damage to stored architectural elements and areas inaccessible at the time was not recorded.

By mid-April, a detailed moving procedure had been agreed upon by the government and the contractor.[184] It permitted the temporary placement of the two sections of the station on land, rather than on their foundations.[185] Since it was a Federal project on Federal land, with no private abutters, no state or local permits were required.[186] However, favorable weather conditions were essential to the unloading of the station onto Race Point.[187] In addition, a request had been made by the Division of Fisheries and Wildlife of the Commonwealth of Massachusetts to have all sand deposition on the beach caused by the landing of the barge to be completed by June 1, in order to not disturb the traditional Least Tern nesting colony in the area.[188] The nesting usually occurred between June 1 and July 31.

A few weeks later, the third foundation attempt was found to be deficient. The Park Service had hired an Exhibit Specialist as a Project Inspector who, along with the consulting engineer and a representative of the contracting firm, discovered that three out of the six tests for compressive strength of the foundation failed to meet contract specifications.[189]

Dated photographic documentation suggests that the barge finally left Provincetown Harbor on May 17 (fig. 31). It landed on Race Point Beach on May 19 (fig. 32), and the unloading of the station began. The riggers continued work through the 23rd (fig.

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[184] Letter, Historical Architect, to Middlesex Contractors and Riggers, Inc., April 18, 1978. Contract files, CRC.

[185] Ibid.

[186] Rules and Regulations, Federal Register, 33CFR Part 322, 3(c)(2), Vol. 42, No. 138, July 19, 1977.

[187] Letter, Superintendent, Cape Cod National Seashore, to Secretary of the Standing Committee, The Humane Society of the Commonwealth of Massachusetts, May 12, 1978. NPS files.

[188] Letter, Deputy Director, Division of Fisheries and Wildlife, The Commonwealth of Massachusetts, to Director, Coastal Zone Management, April 19, 1978.

[189] Letter, Marsha Fader (Historical Architect) to Middlesex Contractors and Riggers, Inc., May 3, 1978. Contract files, CRC.



Illustration 31. Loaded Barge Leaving Provincetown Harbor, May 17, 1978.



Illustration 32. Loaded Barge Landing on Race Point Beach, May 19, 1978.

33), such that the station was over the foundation excavation by the 23rd.[190]

On May 23, the Project Supervisor wrote a letter to the contractor that listed four items that remained to be done.[191] These were:

1) the replacement in kind of two Boat Room rafters adjacent to the main building;

2) the provision of six additional cedar posts for the Boat Room foundation, including two adjacent to the main building;

3) the pouring of concrete footings for 34 cedar posts--18 for the Boat Room, and a total of 16 for the two boat ramps and porches yet to be constructed; and

4) the installation of three additional courses of white cedar shingles below the sill, fastened to strapping on the concrete-block foundation, and the application of the cement-plaster stucco finish, five-eighths of an inch thick.

The same letter stated that the cement-block foundation and the cistern still were unfinished at that time. A week later, the Project Supervisor wrote a memorandum to the contractor, requesting that the latter provide brick samples for use in various areas if insufficient numbers of salvaged bricks were available.[192] This memorandum indicates that the brick-salvage operation had not yet begun; it thus implies that not only the cistern but also the chimney were unfinished at that time, since both needed salvaged bricks for their completion. This thought is reinforced by the fact that a drawing for the chimney construction was executed by the National Park Service in mid-June. This, and a drawing for the cistern cover, dated a week later, probably were submitted to the contractor.[193]

After the completion date of June 16 had passed, the Project Supervisor notified the Superintendent of the Cape Cod National Seashore that a compromise had been negotiated with Middlesex

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[190] Slide files, CRC.

[191] Letter, Project Supervisor to Middlesex Contractors and Riggers, Inc., May 23, 1978. CRC files.

[192] Memorandum, Project Supervisor to Middlesex Contractors and Riggers, Inc., May 31, 1978. Contract files, CRC.

[193] Plans by Marsha Fader, June 16 and 26, 1978. Project Supervisor files, CRC.

Contractors and Riggers, Inc., in order to expedite completion.[194] Carpentry work would be completed by the government, if the concrete footings for the Boat Room's cedar posts would be supplied by the contractor. The Exhibit Specialist would supervise the restoration of the structure with either CETA or park employees. A request for $10,000 for exterior restoration accompanied the notification. The Project Supervisor also reported to the Contracting Officer that she did not recommend an extension of the completion time for the contractor.

The contractor was still on site in mid-July when the Exhibit Specialist was instructed to make the doors to the structure secure; to treat the crown, or cornice, molding with wood preservative before the contractor refastened it; to install two support posts under the places where the Boat Room beam was spliced; and to instruct the contractor not to reattach the existing wooden gutters.[195] (The latter request was based on the conclusion that the existing gutters were posthistoric: the original specifications stated that the gutters were to consist of galvanized iron.) At that time, the existing crown molding and roof boards should have been examined, for evidence of the appearance of the original gutters. There is no record that this was done; the only visual record of the early gutters consists of the historic photographs.

An inspection of the site by the Project Supervisor on July 10 was recorded the following day.[196] Several items required completion by the contractor. These included:

1) the reconstruction of the chimney, including one coat of plaster and flashing (30% complete);

2) the plugging of cable holes in floors;

3) the reconstruction of the cistern cover;

4) the replacement of two Boat Room posts;

5) the fitting of the Boat Room more tightly to the main building;

6) the flashing at the junction of the Boat Room roof with the main building, including incidental shingles;

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[194] Memorandum, Historical Architect, to Superintendent, Cape Cod National Seashore, June 21, 1978. Contract files, CRC.

[195] Memorandum, Historical Architect to Exhibit Specialist, July 11, 1978. Contract files, CRC.

[196] Memorandum, Historical Architect to Contracting Officer, July 11, 1978. Contract files, CRC.



Illustration 33. Riggers Moving Structures onto Foundations, May 23, 1978.



Illustration 34. Old Harbor Life-Saving Station at Race Point, October 23, 1978.

7) the replacement of the sheathing at building separation points, including shingles;

8) the refastening of all of the crown (cornice) moldings, except for one damaged section on the front elevation of the Boat Room;

9) the straightening of an 8-inch-square post in the Boat Room;

10) the replacement of the boarding on two sides of the Boat Room;

11) the backfilling of the area under the Boat Room, and the regrading of the entire site;

12) a general clean-up of the work area and parking lot; and

13) the repair of the fence, blacktop, curb, and "cemented material on the surface of the Boat Room" (the first three items may relate to the parking lot, but the location of the fourth item is unknown).

Three days later, a second inspection was made that included the following items from the above list: 1, 7, 8, 10, 12, and 13, as well as finish work to the cistern (cleaning out the inside, cleaning up the masonry, installing 4-inch and 1 1/2-inch pipes, and coating the cistern cover with one coat of oil).[197] The contract was finally accepted as completed on September 13, 1978.[198]

The Old Harbor Life-Saving Station faces north in its adopted location, and sits high on the dunes above Race Point Beach, affording magnificent views of the Atlantic Ocean. The entire area surrounding the structure has been planted with beach grass as part of conservation efforts undertaken by the Cape Cod National Seashore. To the station's east and south are higher ridges of sand dunes, the view of which is interrupted by nothing except a replica drill pole anchored in the sand approximately 50 feet southeast of the station. The drill pole simulates a ship's mast, complete with a platform resembling a crow's nest. Such a structure was used historically by the crew of the Old Harbor Life-Saving Station one day a week to practice the "Beach Apparatus Drill." Today, the replica drill pole is used during the summer in a reenactment of the Beach Apparatus Drill by park interpreters and volunteers.

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[197] Letter, Contracting Officer to Middlesex Contractors and Riggers, Inc., July 18, 1978. Contract files, NAHPC.

[198] Letter of Acceptance, October 3, 1978. Contract files, CRC.

C. Restoration

Since its relocation, several, but not all, aspects of restoration have been accomplished at Old Harbor. However, sufficient restoration was completed in the Boat Room to open it to visitors, and to have it interpreted by the staff of the Cape Cod National Seashore.

By May 31, 1978, Park Service personnel were preparing estimates for exterior repairs to the structure soon after it was deposited on Race Point (fig. 34).[199] The Park Service's CETA-worker restoration crew apparently did not begin work until mid-August, since the first purchase requisitions reflect that date.[200] According to the purchase requisitions and orders, the site crew, under the supervision of the Exhibit Specialist, reshingled 5,900 square feet of building, and bought stock for exterior trim, interior trim, and wainscot, and material for reglazing sash. Scaffolding was also purchased, no doubt in order to reshingle the exterior.

In September and December 1978, the Project Supervisor transmitted two color matches to the Exhibit Specialist.[201] The first corresponded to the historic "French gray" (California Paint #44-10M), matching Munsell 5PB 7/1; no mention was made as to where it was to be used. The second color was black (Dutch Boy #180/c, Gibralter Black), to be applied to the window sash.

A number of work items remained to be done, however, according to several memoranda outlining the need for safety and security improvements at the station. In August 1978, the Provincetown Center for Coastal Studies requested the use of the tower for whale-research observations.[202] This request precipitated an assessment of safety and security provisions at the station. At the end of October, the building did not have front or rear porch steps, lighting, window sash in the tower, heat, or

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[199] Letter, Historical Architect, to Superintendent, Cape Cod National Seashore, May 31, 1978. NPS files.

[200] Exhibit Specialist files, CRC.

[201] Project Supervisor files, CRC.

[202] Letter, Chief of Interpretation and Resource Management, Cape Cod National Seashore, to Historical Architect, North Atlantic Historic Preservation Center, November 14, 1978. NPS files.

fire extinguishers.[203] Apparently a Special Use Permit for use of the tower was granted to the Provincetown Center for Coastal Studies in mid-November, but which, if any, safety and security deficiencies were corrected at this time is unknown.[204]

Also lacking were appropriate replacements for the three historic stoves used in the station. The 1897 list of furnishings for the Old Harbor station (Appendix D) listed three "Princess Beaver" No. 12, indirect-draft, hard-coal stoves. These stoves were no longer at the station. In November 1978, a search was conducted for replacements.[205] The most positive recorded response came from the U.S. Stove Company.[206] It suggested that this stove type was manufactured by at least 1,000 manufacturers across the country, and may have been similar to their mica-front, hot-blast stove built from 1890 to 1916. Apparently nothing came of this inquiry, because there is no record of any further research, no record of purchase orders for replacement stoves, nor any stoves in the station today.

The NPS Exhibit Specialist left the project due to a heart attack, with several outstanding items remaining to be completed. Not all of the shingling had been finished, and apparently security was still a problem in the beginning of January 1979.[207] The two reproduction front doors needed to be made secure, and the historic rear door should have been moved to storage and the doorway boarded over. The tower windows required boarding up, because their window sash would not be replaced during this phase of the project. Apparently, a buildup of sand was threatening a rear basement window; that opening was to be checked to see if plywood installation was needed here.

The Project Supervisor's notes from March confirm what restoration work items remained to be completed.[208] On the exterior of the main building, the front and rear porches needed to be rebuilt, and the exterior doors had to be restored or reproduced. On the exterior of the Boat Room, three large sliding

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[203] Memorandum, Historical Architect, to Regional Historical Architect, North Atlantic Region, October 26, 1978. Project Supervisor files, CRC.

[204] Special Use Permit, November 13, 1978. Project Supervisor files, CRC.

[205] Project Supervisor files, CRC.

[206] Letter, United States Stove Company, to Marsha Fader, November 14, 1978. Project Supervisor files, CRC.

[207] Project Supervisor files, CRC.

[208] Ibid.

doors needed to be hung in the north doorways and the west doorway. (The latter doorway had been closed up in 1910, but was reopened during the restoration.) One large boat ramp needed to be constructed in front of the north doorways, and a smaller one in front of the west doorway. Downspouts and a lightning-protection system needed to be installed, and painting was required.

The interior of the first floor needed some partitions reinstalled; all walls required plastering and painting; various woodwork needed installing; and the condition of floors needed to be assessed, since all were (and still are) covered with linoleum.

On the second floor, the north and south knee walls in the Quarters needed to be rebuilt in their original locations, and some wainscot and the lockers in the Locker Room required reproduction. The only tower work mentioned included reconstruction of a ladder. These notes imply that all of the necessary demolition, such as the removal of plumbing fixtures, may have been accomplished prior to the move. The basement, since it was new and existed entirely for park staff use, did not need any work.

Required mechanical work included the installation of a fire-detection system and possibly an intrusion-alarm system; the procurement of replacement coal-burning stoves; and the installation of minimal electrical wiring above the basement level, needed to meet safety requirements. No plumbing was to be installed, since none existed within the structure historically. The landscape also required regrading and the planting of grass.

Security was still a problem in March 1979. Finally, at the end of the month, some measures were taken.[209] The crawlspace at the front of the Boat Room was boarded up and backfilled with sand. A solid-wood security door had been ordered for the rear door, to replace the original door destined for temporary storage. The two front doorway openings were covered with plywood and reinforced. The Kitchen and Mess Room windows also were covered with plywood, and all exterior debris was removed.

In May, the Project Supervisor notified the park that the Cultural Resources Center (then the North Atlantic Historic Preservation Center) was still awaiting the appointment of a new Exhibit Specialist to serve as crew chief for the Old Harbor

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[209] Memorandum, Superintendent, Cape Cod National Seashore, to Regional Director, North Atlantic Region, March 30, 1979. Project Supervisor files, CRC.

restoration.[210] This Exhibit Specialist must have been hired by mid-June, since he began to issue Job Order Requests for Old Harbor.[211] All of these requests noted the proposed start date as June 18, and the target completion date as September 30, 1979. The project was to include the reconstruction of the original boat ramps, the north and south porches, and the sliding doors of the Boat Room, all per the original specifications (Appendix B). In addition, all of the windows were to be restored. All of the glass was to be removed, due to loose putty; each sash was to be repaired individually for split wood, dry rot, and nail holes; all paint layers were to be stripped off; all holes were to be filled with polysulfide filler; and the windows were then to be reassembled, coated with linseed oil, and primed with coats of white paint. A total of 38 windows, presumably placed in storage before the move, would be thus treated.

Several purchase orders were issued in June and July for tools, since a robbery at the station caused the loss of all tools belonging to the site.[212] Additional purchase orders throughout July, August, and September chronicled purchases of stock to build boat ramps and porches.[213] Concrete was brought in for the foundations of each.

Inside the Boat Room, the east wall was reclapboarded with 2,400 feet of clear white pine. Apparently, the original east-wall clapboards--still in place on the main building at the time of the move (fig. 27)--had accidentally been removed. This may have been done when the posthistoric horizontal sheathing on the interior north, west, and south walls was purposely removed. Three new Boat Room doors were ordered from a millwork house, in addition to interior moldings, doorway trim, cornice, dado and dado cap (the latter two items may have related to chair rails). Three sets of rollers (barn-door hardware) were ordered for the Boat Room doors. Two electrical circuits were brought into the basement, and four light fixtures were installed on the same level. On May 14, 1979, the new Project Supervisor issued drawings to the Exhibit Specialist for repair of the original rear door, and for matching reproductions of the two front doors.[214] A purchase order for the same followed.

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[210] Memorandum, Project Supervisor, to Chief of Interpretation and Resource Management, Cape Cod National Seashore, May 9, 1979. Project Supervisor files, CRC.

[211] Exhibit Specialist files, CRC.

[212] Ibid.

[213] Ibid.

[214] Letter, Andrea Gilmore (Project Supervisor), to John Darcy (Exhibit Specialist), August 14,1979. Project Supervisor files, CRC.

In October 1979, wooden lath was purchased, along with paint materials, nails, "board," flashing, and lattice, probably some of which was ordered in preparation for the plastering and painting contract awarded at the end of September.[215] Paragon Contracting Corporation won the contract for a total of $14,600 (#CX1600-9-0050).[216] The plastering was to be completed during the fall of 1979, and the painting during the spring of 1980. The July 1979 specifications (Appendix L) stated that the plaster should be applied to metal lath that would be installed by the National Park Service. However, a letter of November 5, 1979, indicates that the type of lath remained a topic of discussion.[217] At the October 11 preconstruction meeting, the NPS decided to use wooden lath instead. By November 5, the contractor had persuaded the Service to revert to metal lath. However, the Park Service subsequently requested a seasonal shutdown, due to "concern for potential cracking of the newly applied plaster due to low temperatures." During the shutdown period, the government again changed its mind; deciding that the use of metal lath would be "incongruous with the historical integrity of the building," the Park Service directed the contractor to install wooden lath prior to the start of plastering.[218] Plastering was to resume March 10, 1980.

The contract called for the plastering of the first floor of the main building, and the stair halls of the second and third floors. It appears that plaster work also took place in the Locker Room and Spare Room on the second floor. Original plaster was to be left in place, while the new plaster was to meet, but not overlap, the old. Approximately 2,700 square feet of new plaster was to be applied to match the existing finish, including a scratch coat and base coat with a "sand-float" finish.

The reproduction-painting section of the contract specified the use of historic colors in the first-floor rooms of the main building and the stair halls of the second and third floors, and on the window architraves and sash of the Boat Room. Apparently, the fourth-floor tower room (Lookout) was also added to the contract. Except for the Boat Room and Lookout, the rooms generally were to reflect a four-part color scheme, consisting of the ceiling, a cornice band, the plaster walls, and the wainscot. In the Keeper's Room and the Keeper's Office, a chair rail was

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[215] Exhibit Specialist files, CRC.

[216] Notice of Award, Contract #CX1600-9-0050, September 25, 1979. Contract files, CRC.

[217] Letter, Contracting Officer, to Paragon Contracting Corporation, November 5, 1979. Contract files, CRC.

[218] Letter, Contracting Officer, to Paragon Contracting Corporation, March 25, 1980. Contract files, CRC.

used in place of the wainscot. The contract was finally closed out on November 26, 1980.[219]

Meanwhile, attention was also being directed toward the mechanical systems. At the end of October 1979, temporary electrical service was supplied to the first and second floors of Old Harbor.[220] The preceding month, a contract for the installation of an intrusion-alarm system (Appendix M) had been awarded to the Norel Service Company (#CX1600-9-0042). The initial contract provided for approximately 10 magnetic door contacts; two more were added by a change order in early December.[221] Although the contract was closed out in February 1980,[222] the intrusion-alarm system never functioned properly. A major problem was that the beach winds could shift the station enough to set off the door alarms. By October 1980, the Project Supervisor recommended that since the park was not inclined to repair the system, it should become the responsibility of the Cultural Resources Center (then the North Atlantic Historic Preservation Center).[223]

Nevertheless, vandals were able to break into the station. It is not known if the park had turned off the alarm system, due to the extreme sensitivity of the door contacts, or whether the system simply malfunctioned. The intruders damaged most of the doors on the first floor; nearly every door had one of its panels kicked in. Today, the alarm system is still not activated, because of its sensitivity.

Although not specifically documented, other restoration tasks were accomplished by the second crew working on the project.[224] The first three feet of the west exterior wall of the Boat Room was reshingled; the tower roof was reshingled, using the Boston-hip method of finishing the hip ridges; and comb boards were covered with lead and installed on the ridge of the Boat Room roof. The boat ramps in front of the north doorways and the west doorway were re-created. However, the latter ramp was raised from

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[219] Letter, Contracting Officer to Paragon Contracting Corporation, November 26, 1980. Contract files, CRC.

[220] Purchase Order #PX1730-0-0075, October 26, 1979. Exhibit Specialist files, CRC.

[221] Notice of Award, Contract #CX1600-9-0042, September 5, 1979. Contract files, CRC.

[222] Letter of Acceptance, February 21, 1980. Contract files, CRC.

[223] Trip Report, Andrea Gilmore (Project Supervisor), to E. Blaine Cliver (Regional Historical Architect), October 21, 1980. Contract files, CRC.

[224] Existing conditions recorded by Peggy A. Albee.

its outer footings and incorporated into the disabled-access boardwalk that was built from the parking lot in 1985.

Inside the station, missing historic interior partitions on the first floor were recreated, based on the original specifications and evidence found on the ceilings. These walls included those that had historically separated the Pantry and Rear Entry from the Kitchen; the Keeper's Office from the Stair-Hall Foyer; and the Mess Room from the Storm Clothes Room, and from the Keeper's Office and Stair-Hall Foyer. The doorway between the Keeper's Room and the Keeper's Office was also restored to its historic form of an arched opening. Wainscot was installed in the second-floor Locker Room.

One completely undocumented aspect of the restoration pertains to the return of the loft above the Boat Room to its historic configuration. This process required the removal of the existing full floor, which apparently had not been destroyed prior to the relocation of the station.

Old Harbor Life-Saving Station exists today in much the same condition as it was left in the early 1980's when the last restoration crew departed, except for the vandalism. Only the Boat Room is open and interpreted for park visitors; the restoration of the main building remains unfinished.

III. ARCHITECTURAL DESCRIPTION

EXTERIOR DESCRIPTION

A. Foundations

Main Building and Tower

The foundation walls of the main building and tower consist of concrete block pargeted with concrete. They are in good condition.

A bulkhead entrance to the basement (D119) is located in the north foundation wall of the tower. Its below-grade walls are constructed similarly to the north foundation wall, into which they are tied, but they are slightly lower in height. The upper surface of the wooden framework slopes away from the north wall, being attached to it below the third row of wall shingles. A plain fascia board surrounds the doorway opening in the upper surface. The opening contains one unpainted, board-and-batten door. The door is attached to the framework by three strap hinges on its east edge. A plain metal handle is located on the west side. A metal hasp is attached to the west side of the framework, but the corresponding loop on the west edge of the door is missing. Instead, security is provided by two boards that have been applied on top of the door, between the battens, and nailed through to the framework.

Window openings located in the foundation walls are discussed in Section D.

Cistern

Attached to the east side of the main building's foundation, the cistern is constructed of concrete block faced with brick, as per the revised contract specifications. Brick stretchers compose the east face of the cistern; the north and south faces are similar, except that they have one row of alternating stretchers and headers directly below the top course. The cistern lies mostly underground; above grade, it rises to a height level with the third course of shingles on the east wall. A metal overflow pipe extends out the north side of the cistern, its top edge being level with the bottom of the wall shingles on the main building.

An unpainted wooden fascia board frames the top of the cistern. An unpainted wooden board-and-batten cover rests on top of the cistern. The boards of the cover are cupping; the battens are beginning to pop off, and one board has cracked along the grain. The reasons for the deterioration of the cover, which is less than 10 years old, seem to stem from its orientation and manner of construction. Its battens are perpendicular to northeasterly winds, such that windblown sand accumulates on the cover and retains rainwater.

Porches

Both the front (north) and rear (south) porches are supported by cedar posts set in concrete footings below grade.

Boat Room

The Boat Room is supported by cedar posts set in concrete footings below grade. The posts are placed so as to carry the structural load of the Boat Room. The south side of the Boat Room has plank sheathing boards extending from the sill area down to the ground. The west side features a sill board and shingles in the same area.

The two north doorways of the Boat Room (D115-116) are served by a wooden ramp leading down to grade. Composed of unpainted wooden planks, the ramp is a reconstruction of the boat ramp located here historically. It measures 25 feet long by 15 feet deep. A nonhistoric sheet of wood has been nailed to the east side of the ramp, near the tower bulkhead (D119), probably to prevent sand buildup under the ramp. This wood is painted gray.

A boat ramp was also reproduced for the west doorway after the station was moved in 1977-78. However, it later was raised and incorporated into a boardwalk built to lead from the parking lot and beach to the doorway.

B. Walls

Main Building

Design. Because of the station's large roof, the north and south elevations of the main building are essentially one story high. The east elevation is two stories high, with a clipped-gable end. The two-story west elevation of the main building rises above the Boat Room, and displays a modified clipped-gable end: the gable end is intersected by the section of building connecting the second floor of the main building to the tower. The east elevation flares out slightly at the level of the second floor, forming a belt course across that end wall.

Covering. All exterior walls are covered with weathered wooden shingles. The shingles on the south elevation below the roof of the rear porch bear traces of white paint. This may represent either a residue from an earlier painting, or a contamination from painted trim above. In any case, it appears that perhaps these particular shingles were not replaced by the Park Service ca. 1980.

An unpainted drip molding is located below the bottom course of shingles on all four walls, dividing the wall shingles from the foundation.

Cornice. A cornice molding runs all around the main building, at the top of each wall. On the north and south elevations, the molding runs horizontally and includes a fascia board. (It exists at the same level as, and forms a visual continuation of, the flared belt course on the east elevation.) On the east and west elevations, the cornice molding without fascia board follows the raking gable ends.

Finishes. At least some parts of the cornice trim and flared belt course appear to have been painted white, but the effects of wind and sand have abraded most of the paint from the structure. The cornice on the east elevation appears to have been painted gray, as was the south-elevation cornice east of the rear porch. To the west of the rear porch, the cornice was painted white.

Utilities. One porcelain light fixture is attached to the exterior north wall of the main building, west of the doorway to the Storm Clothes Room (D101). This is a nonhistoric addition, since the building was not originally electrified.

Tower

Design. The tower walls do not exhibit the flared belt course found on the main building. The fourth level of the tower, however, is overhung on all four sides.

Covering. Weathered wood shingles cover the walls of the tower. A drip molding is used below the bottom course of wall shingles here, as well.

Cornice. A heavy bracketed cornice sits under the overhang of the fourth level. A simpler cornice is used at the top of the tower, below the roof overhang. This simpler cornice is still larger than the one used on the main building, however, because the tower-roof overhang is wider than the roof overhang of the main building.

Boat Room

Design. The Boat Room is a one-story structure with gable roof that is appended to the west elevation of the main building. The west gable end of the Boat Room has a flared belt course at the same level as the belt course on the east end of the main building.

Covering. The walls are clad with the same type of weathered wooden shingles as found on the main building and tower. Some of the shingles on the west elevation are missing. The row of shingles above the north-elevation doorways are nailed to the underlying sheathing boards with exposed nails. This is the only place where shingle nails are visible, and may indicate an area of alteration.

The usual unpainted drip molding is also present between wall and foundation of the Boat Room, but it does not extend under the north-elevation boat ramp, nor under the west-elevation boardwalk.

Cornice. The same type of cornice molding with fascia board as used on the main building is utilized on the north and south elevations of the Boat Room. The cornice molding without fascia follows the rake of the west gable end. Two small pieces of wood extend down from the cornice over the western north-facade doorway, and might possibly be the remnants of hangers from a previous gutter system.

Finishes. The paint color on the south cornice, at least, appears to have been white.

C. Doorways

Figure 35 shows the doorways and windows at the first-story level. Figure 36 shows them at the second-, third-, and fourth-story levels.

Main Building

D101. This north-elevation doorway, located inside the front porch, enabled the crew to enter and exit the station through the Storm Clothes Room. The doorway's architrave is molded. This differs from the original drawings, which call for this architrave to be a plain board. However, the presence of various hinge mortises in it suggests that the current architrave is the historic one. The architrave has three mortises cut out of the east side, for former hinges, and one cut out of the west side, for a former strike plate. This constitutes evidence for the former existence of an exterior storm door here, which is mentioned in the original specifications. The architrave and its threshold are painted white.

The door here is reproduction fabric, based on the original drawings. It has six panels, with the top two panels currently filled in with plexiglass. A single sheet of plywood is nailed to the door, obscuring its condition. From the inside, however, the condition can be seen to be poor. The west center panel is missing, and its lower piece of trim molding is lying on the floor; the lock rail is split, due to vandalism. The exterior of the door is painted yellow.

Three butt hinges with four screws on each plate support the door on its east side. The top hinge has two knuckles, while the middle and bottom hinges have five knuckles. The top hinge is missing its top ball finial; the middle hinge is missing its bottom ball finial. The door does not have a doorknob, but only a modern, single-key, dead-bolt mortise lock.

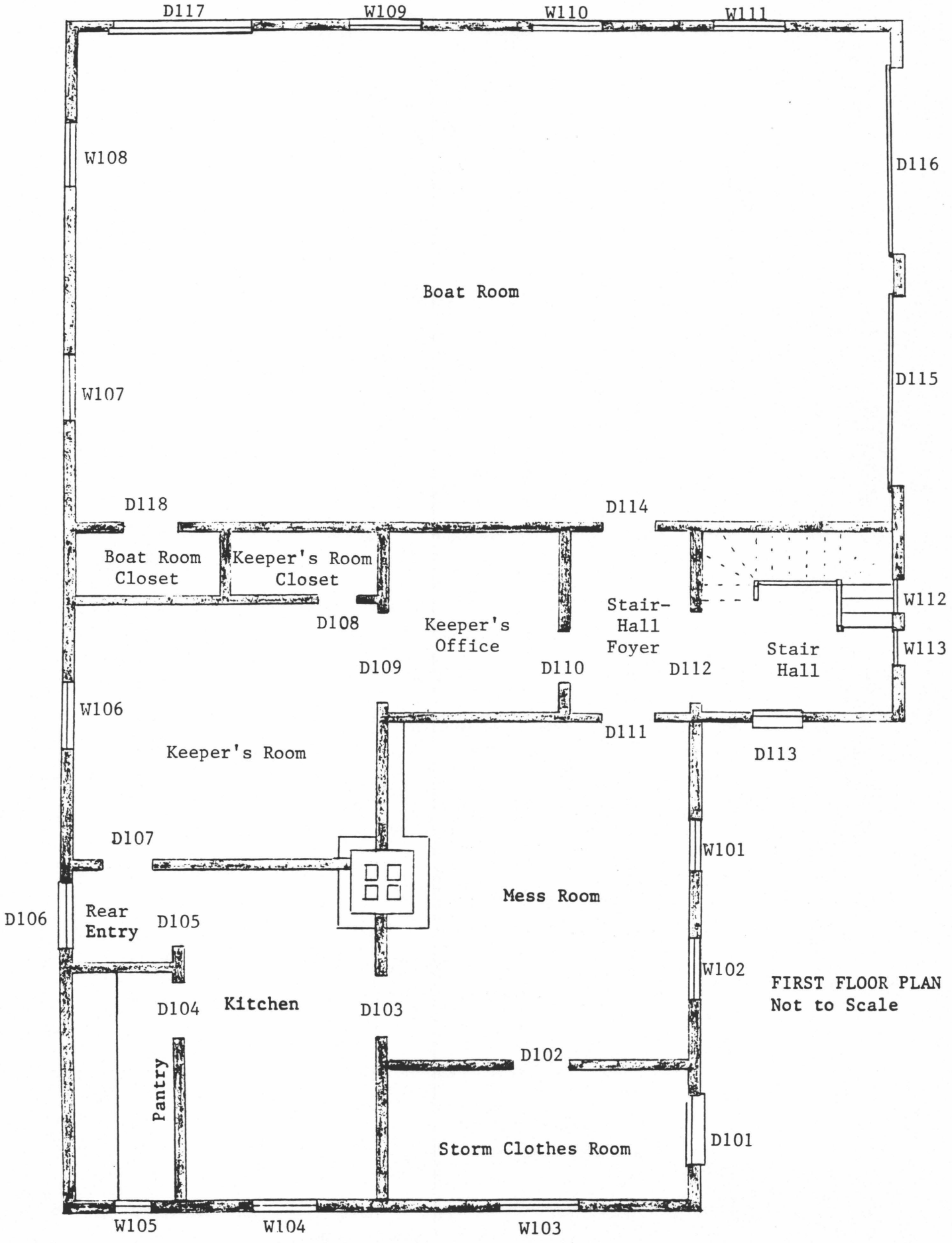
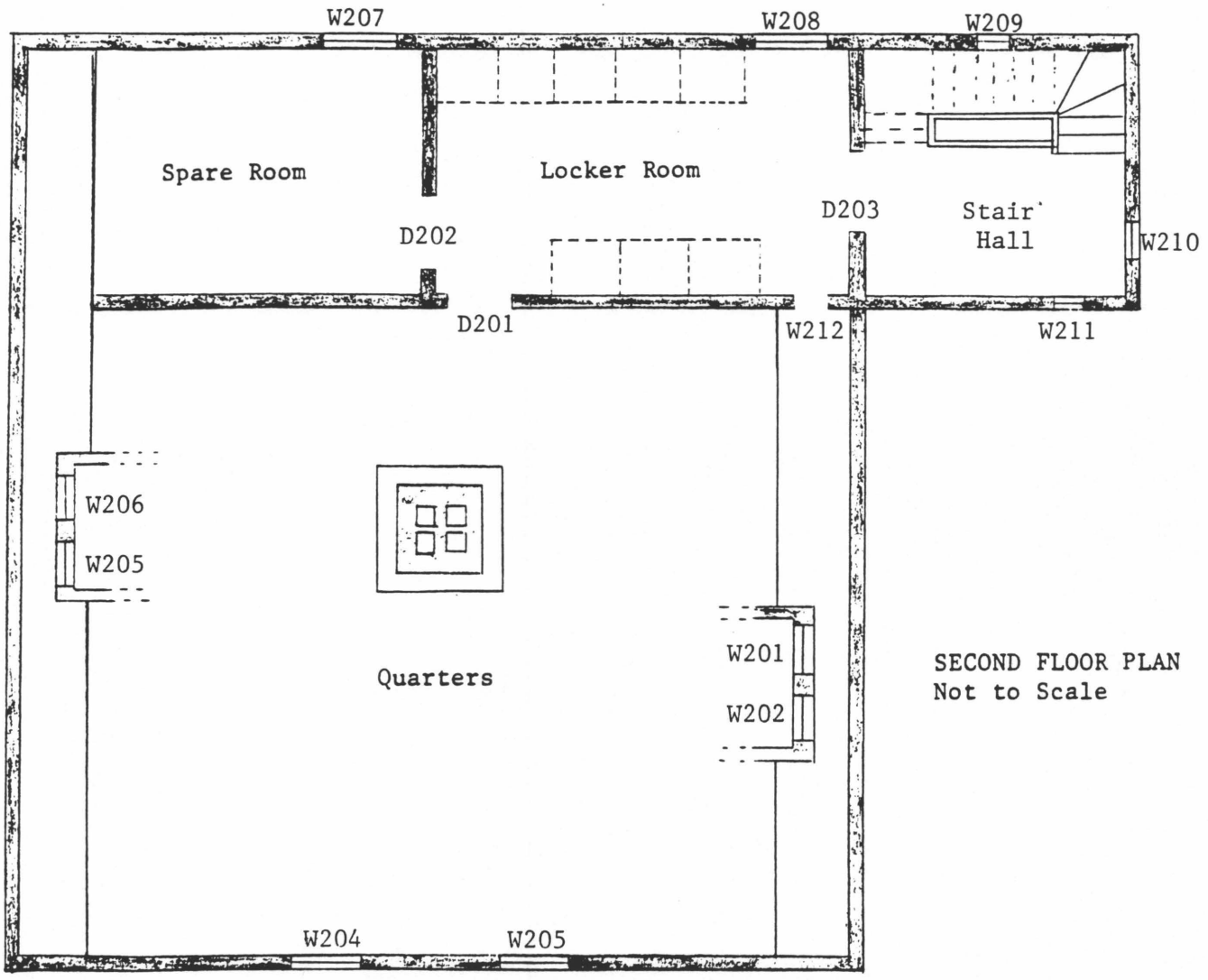
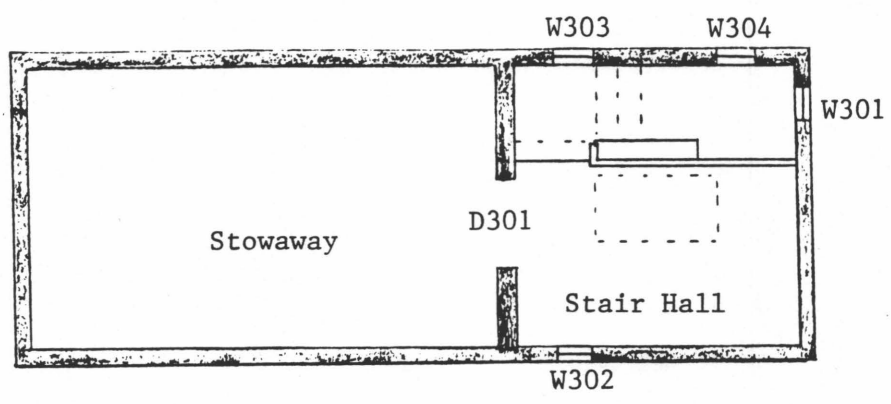
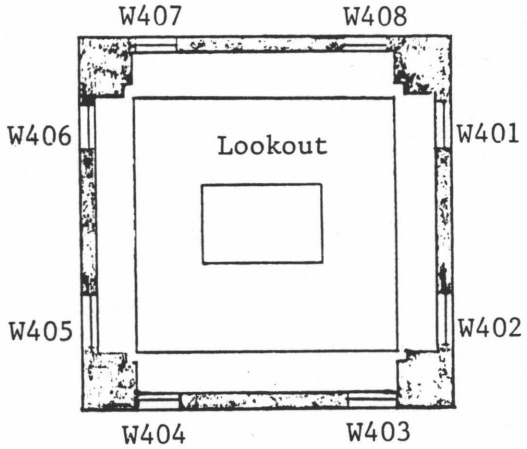


Illustration 35. Key to Numbering of Doorways and Windows, First Floor.





THIRD FLOOR TOWER



FOURTH FLOOR TOWER

Illustration 36. Key to Numbering of Doorways and Windows, Second, Third, and Fourth Floors.

D106. This south-elevation doorway leads into the Rear Entry. The threshold of the doorway is painted dark green, the architrave and jambs are painted white, and all of the paint is in bad condition. The architrave here is thought to be historic: it has three hinge mortises approximately 3 3/4 inches long on the east side, for a former exterior storm door no longer extant. The west side displays a mortise in the location where a latch or strike plate would have been positioned.

The door here is also believed to be original. It is attached with three two-knuckle butt hinges having four-screw hinge plates. Most of the ball finials here originally are missing; they remain on only the bottom of the top hinge, and on the top of the bottom hinge. The door shows evidence of several former locks, possibly as many as six. One area suggests that a box lock once may have been used, evidenced by a keyhole above a round hole that does not pierce the thickness of the door. A single-key metal "Best-Lock" bolt lock is currently in place, but no doorknob exists. The door, which is incorporated into the intrusion-alarm system, can be closed by pulling a rope threaded through an old keyhole and knotted on the interior side. The door is painted white, but is also boarded over with plywood nailed through the door.

Tower

D113. The doorway leading from the north, front porch into the main building (D101) has already been discussed. A second doorway inside the north porch is located in the east elevation of the tower, leading to the Stair Hall.

The architrave of this doorway, like that of D101, is molded but still thought to be historic. The north side of the architrave features three hinge-type mortises that are small and almost oval in shape from wear and paint buildup. These mortises presumably relate to a storm door formerly here. Two mortises also exist on the south side of the architrave. This suggests that two different locks or knobs, or perhaps two different storm doors, have existed in this location. One metal strike plate is currently screwed into the door stop on the south side. The architrave is painted white. The door itself is boarded over with plywood, but the yellow paint on its face is visible beyond the edges of the plywood.

Boat Room

D115-116. Situated in the north elevation of the Boat Room, this pair of large doorway openings features plain board architraves. These architraves formerly were painted white, but the paint is in very poor condition, having been eroded by wind and sand. A layer of white-painted canvas has been folded down over, and nailed to the face of, the lintel trim of both doorways. This acts as a type of flashing.

Each doorway contains two doors. The doors are constructed of narrow, vertical boards (probably tongue-and-groove) backed by battens. Each door is supported by three heavy strap hinges secured to the architrave. These doors may be the original ones, modified in 1910 from sliding to swinging operation. The doors and door hardware were previously painted dark green, but this paint, like that on the architraves, is in poor condition.

D117. The large doorway in the Boat Room's west elevation is framed by a unpainted, molded architrave. The exterior side of the door is composed of narrow vertical boards, similar to the north-elevation Boat Room doorways, but unpainted. Since the door slides northward inside the Boat Room to open, no hardware is visible. No canvas is nailed across the lintel trim of this doorway.

D. Windows

All exterior window architraves exhibit the same molding profile: an outer fillet, a quirked cyma reversa, and an inner bead (fig. 37). All of the architraves except those at basement level appear to have white-painted canvas folded down over and tacked onto the face of their lintels, to act as a type of flashing.

Main Building

Basement. Four window openings exist in the present foundation walls, situated directly below the sills. All four are concealed by porches or the Boat Room, and cannot be readily observed from the exterior. A more complete description is provided in a following section, "INTERIOR ELEMENTS: BASEMENT."

First Floor. All first-floor window openings of the main building are boarded over with plywood, in a manner not damaging to the historic fabric. The small amount of trim still visible appears to have been painted white, except for that on the east elevation, where it appears to have been painted gray. Most of the paint has worn off.

The windows themselves are of varying sizes and styles. There are two basic types: those with double-hung sash, and those with casement sash probably hinged on their top exterior edge. (Because of the exterior boarding, the presumed hinges cannot be seen.) The distribution of first-floor windows is as follows:

- north elevation: two large, vertically oriented, double-hung windows with nine-over-two sash

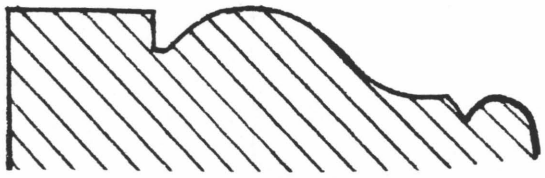


Illustration 37. Molding Profile of Exterior Window Architrave.

- east elevation: one large, horizontally oriented, casement window with 18-light sash; one large, vertically oriented, double-hung window with 12-over-4 sash; one small, vertically oriented, casement window with 9-light sash

- south elevation: one large, vertically oriented, double-hung window with 12-over-2 sash

Second Floor. Two small, vertically oriented window openings are located in the gable end of the east elevation. They formerly held double-hung sash, probably 12-over-2, judging by the historic drawings. Today, the sash is missing and the openings are boarded over.

The north and south roof slopes of the main building each feature one shed-roofed dormer. The sides of the dormers are sheathed with weathered wood shingles. Each dormer contains a pair of windows, currently boarded over.

Tower

Most of the windows of the tower are boarded up in a manner similar to those of the main building. The first story of the tower has a pair of windows centered on its north elevation. Behind the plywood boarding, the east window (W113) retains its six-over-six, double-hung sash; that of the west window (W112) is missing.

The second and third levels of the tower, and the section of building that connects the second story of the main building to the tower, have vertically oriented windows with six-light casement sash. Both levels and the connector have one such window in each of their east, north, and west elevations. The only one of these windows not boarded up is the east-elevation window at second-story level (W211).

The fourth story of the tower has two double-hung windows with one-over-one sash in each of its four elevations. Of these windows, half are boarded up. Those not boarded are W410 (north elevation), W407 and W408 (west elevation), and W406 (south elevation).

All visible trim and sash appear to have been painted white, but most of the paint is worn.

Boat Room

W107. One of two south-elevation windows in the Boat Room, this opening is surrounded by a molded architrave, and contains a single 12-light casement sash hinged at the top. The glazing putty is in fair condition, but it needs some patching. The sash

and trim are painted white. Four screws and one nail are attached to the sash, for unknown purposes.

W108. The other south-elevation window contains the same type of casement sash as found in W107, but the molded architrave and the casement hinges are missing. The sash, which appears to be unpainted, needs complete reputtying. The existing trim is painted white, but is in need of repainting.

Again, the sash has four screws and one nail attached to it, for unknown reasons.

W109, W110, and W111. These three west-elevation windows are all located at the first-floor level of the Boat Room. All have molded architraves and single 12-light casement sash hinged at their top edges. The architraves and sash are painted white, but the paint has worn off due to wind and sand erosion.

W213. Located in the gable end of the west elevation is a semicircular opening now boarded up with plywood. A corner of the trim protrudes from behind the boarding, showing that the upper edge of the opening is covered with canvas flashing painted white. The sash belonging to W213 is stored in the basement.

E. Porches

Front (North) Porch

The front porch sits on the north elevation of the main building, and is bordered on its west side by the east side of the tower. Wooden lattice extends across the foundation of the porch from post to post, below which snow fencing is attached in order to control sand build-up. The porch floor is in good condition, but does not show any evidence of paint. The floorboards have a diagonal seam extending from the northeast corner of the porch to a point west of D101. No steps lead from ground level up to the porch. Metal flashing was installed where the porch meets the main structure, but it is loose at the middle of the north elevation, and is entirely detached under D113, to the tower.

Three chamfered posts support the porch roof at its north edge. The posts have had blocks wedged in at their tops. Their base and capital trim are missing; pieces of these may be stored in the basement. The posts are painted white. A fascia board and soffit, also painted white, run along the outer, north and east edges of the porch. A molded cornice board, likewise painted white, is used above the fascia board on the north edge only. The east end of the porch roof is shingled, without any trim along its upper, raking edge.

No balusters or handrails are currently evident on this porch, but some of these elements also may be stored in the basement.

Rear (South) Porch

The rear porch is centered on south elevation of the main building, sheltering the rear doorway. As with the front porch, wooden lattice stretches between the porch's foundation posts, except on the south edge between the two easternmost posts where the steps are located. The porch steps are of the "ship's-ladder" type: the six treads are simply horizontal boards set between two diagonal boards that serve as stringers. The boards of the porch floor display two diagonal seams that extend from the outer corners of the porch toward the structure, but do not meet. The floor had been painted gray, but its paint has worn off. The metal flashing, installed where the porch floor meets the main structure, is loose on the west side.

The porch roof is supported by two chamfered posts painted white. A third post, formerly located west of the steps, is missing; the evidence for it consists of cutouts in the soffit. These posts, like those on the north porch, have blocks wedged in at the top; they also are shimmed at the bottom to make them secure. The surviving posts are missing their capital and base trim pieces, which again may be found in the basement.

The cornice molding and fascia board of the main structure continue underneath the south porch's roof, here with a quarter-round molding beneath it. The same cornice molding with soffit board formerly wrapped around all three outer edges of the porch roof. The cornice molding is now missing on the west side, and the molding pieces of the soffits are either missing or hanging loose. The exterior surfaces of the ends of the porch roof are shingled, while the interior sides are sheathed with vertical matchboarding. Two round holes exist in the ends of the porch roof, near the face of the main building. The west hole is higher than the east hole; both are remaining evidence of an earlier drainage system, probably leading to the cistern. The underside of the porch roof is composed of five exposed rafters supporting tongue-and-groove sheathing boards.

The porch posts, fascia and soffit, and interior surfaces of the roof ends were painted white, while the underside of the porch roof and cornice under the porch were painted dark gray. The raking portion of the porch roof's east end is painted gray. The gray paint begins to wrap around the southeast corner trim but abruptly stops, as if the painter had run out of paint. No railing or balusters are present on this porch.

F. Roofs and Chimney

Roof Coverings

All roofs are covered with weathered wood shingles, which were installed during the ca.-1978 and ca.-1980 restoration construction periods as per the original (1897-98) specifications. The north and south sides of the main roof have been stained by runoff from the chimney flashing.

Boat Room Sign

The present roof of the Boat Room lacks the sign that is seen in all of the early photographs of Old Harbor (e.g., figs. 6, 11, and 13). It is presumed that this sign was original to Old Harbor: it is shown in the original drawings, and is mentioned in the original specifications, where it is called an "inscription tablet." The National Park Service has reconstructed this sign (see Appendix O), but it has not yet been installed on the roof. The "pressure-treated pine" cited in the specifications was not used in the actual construction, because of concern that it would not hold paint well.

Flashing

Flashing is evident where the chimney emerges from the roof, and where the roofs of the main building and tower connector meet. However, no flashing is visible where the walls of the tower and connector abut the roofs of the main structure or porch. If flashing exists at the ridge poles, it was installed under the roof shingles.

Gutters

As stated in Chapter II, the wooden gutters on the building prior to the 1977-78 move were removed and not reattached after the relocation of the structure. The gutters were thought to be posthistoric, based upon the original specifications, which called for gutters of galvanized iron. However, no investigation of the extant crown molding, roof boards, or wooden gutters was undertaken to determine the appearance of the historic gutters.

Chimney

The red-brick chimney of the station is centered on the ridge of the main roof. It is a reconstructed feature.

INTERIOR DESCRIPTION: BASEMENT

A. Room B01

Plan

The present basement extends beneath the main building and the tower, forming a large room with an ell off the northwest corner, respectively. The area below the tower measures approximately 8 to 9 feet wide (east to west) by 10 feet deep (north to south).

Floor

The existing poured concrete floor of the basement is covered with loose sand blown in from the exterior.

Walls

The walls of both sections of the basement consist of concrete-block masonry.

Ceiling

The exposed wood joists and subflooring of the first floor comprise the basement's ceiling. The joists, which run north-south, support the unbeaded planks of the subfloor, which are oriented east-west. The joists are lapped where they rest on the carrying beam at the center of the room. They also are lapped at the beam that marks the south edge of the ell. Directly north of the chimney is an east-west bridging joist, probably installed to support what had been the hearth of the posthistoric fireplace. A patch in the basement ceiling, which marks where the hearth was removed from the first floor, is now supported by this extra bracing. Four metal lally columns support the main center beam, two being located on either side of the chimney base.

Doorways

D119 (to the exterior). Located in the north wall of the basement ell, this is an exterior bulkhead opening accessed by a "ship's-ladder" stair, having closed stringers and open risers. The sloping bulkhead door is of board-and-cross-batten construction. It opens outward, and is secured by a metal slide bolt.

Former Stairwell. A rectangular opening in the ceiling of the main basement, at the center of the east wall, provides interior access between the basement and the first floor of the station. The opening is served only by an unsecured ladder. This opening marks the former location of the posthistoric interior basement stair, which before the move occupied the south end of

the Storm Clothes Room and terminated at a doorway in the north wall of the Kitchen. Paint evidence of the risers and treads can be seen on the east and south framing members of the opening. Neither the stair nor the doorway to the Kitchen remain: the stair was removed when the structure was relocated, and the doorway was closed up during restoration work following the move. A sheet of plastic and a sign have been nailed to the south side of the opening's frame.

Windows

Four window openings exist in the main basement, directly below the sill. All four openings measure 32 1/2 inches wide by 18 inches high. Their locations and designs are as follows:

- W-B01: in north wall, beneath front porch; contains louvered-vent panel
- W-B02: in west wall, south end, beneath Boat Room: contains louvered-vent panel
- W-B03: in west wall, north end, beneath Boat Room; boarded closed
- W-B04: in south wall, beneath rear porch; contains louvered-vent panel

Chimney

The chimney base is located in the center of the main basement room. Composed of brick laid in stretcher bond, the chimney base is supported by two attached brick piers, one each being centered on the base's east and west sides. Two cast-iron doors exist side-by-side on the north face of the chimney base, approximately 3 feet from the floor. The doors are cast with the wording "Allied Dealers" in them. A thimble is located on the south face of the chimney, near the west corner.

Utilities

Electrical System. Electric power is brought into the station through a circuit-breaker panel located in the basement. The panel, mounted on a piece of plywood, sits at the south end of the west wall. Four fluorescent light fixtures with two tubes each hang from the underside of the joists forming the basement ceiling. One light-switch box is mounted, facing downward, on a bridging joist north of the opening for the former interior basement stair.

Miscellaneous

Several remnants of historic fabric are currently stored in the basement, including exterior railings, window sash, and doorway architraves.

INTERIOR DESCRIPTION: FIRST FLOOR

A. Mess Room (Room 101)

Floor

The floor is composed of lapped-joint floorboards running north-south, covered by posthistoric pink linoleum with a jute back. There are varnished wood patches around the chimney, and a wood block nailed into the center of the floor through the linoleum. Two holes from radiator pipes exist in the floor near the center of the north wall, with the indentations of four radiator legs being evident in the linoleum between the holes.

Walls

Woodwork. No baseboards are extant in this room, but a quarter-round molding exists where the floor meets the wainscot at the east end of the south wall. Other evidence of a similar molding consists of a paint build-up approximately 1 inch above the floor on sections of original wainscot.

The room's extant single-beaded matchboard wainscot is a combination of old and new material, differentiated chiefly by the thickness and condition of the olive-green painted finish. New wainscot, probably installed ca. 1980, is present on all three sides of the chimney breast, except for the chamfered northwest corner piece, which is original material (fig. 38). A copy of this piece was made for use on the northeast corner. The new wainscot extends from the chimney breast onto the south wall of the room, to a point 14 3/4 inches east of the chimney, and to a point 23 1/4 inches west of the chimney. New wainscot also is found on all of the west wall, and on the east wall, except for a section 41 1/2 inches from the south end. A metal thimble (painted olive green) for a stovepipe connection is embedded in the north face of the chimney wainscot (see figure 38).

All of the cap molding used where the wainscot meets the plaster wall is reproduction material, except for historic pieces remaining on the north wall, between the two windows and west of the west window. A horizontal build-up of paint exists on the south-wall wainscot, at the west end. This may indicate the former presence of a shelf here, as called for in the original specifications. However, many alterations have occurred in this area; perhaps the wainscot cap simply was removed and reinstalled three-eights of an inch too high. The paint on the wainscot is peeling at the west end of the south wall, but is otherwise in good condition.

Plaster. Heavily textured plaster extends from the wainscot cap up to the ceiling. It is painted tan, with an orange-painted

cornice band. This band is 16 inches high on the north and south walls, but smaller on the east and west walls (fig. 39).

Ceiling

The ceiling is composed of the exposed north-south joists and the exposed east-west subflooring of the second floor. The easternmost and westernmost joists are incorporated into the east and west walls, respectively. The easternmost joist is actually two joists used side-by-side. The subflooring consists of random-width, single-beaded boards.

Originally, a type of wooden cornice molding was used to cover the joints where the subflooring met the joists and the plaster walls. This molding is still intact (see figure 39). A smaller wooden molding was applied around the ends of the joists, below the cornice, where the joists ran into the north and south plaster walls. Pieces of this smaller trim remain on the north wall, but not on the south wall. Paint evidence indicates that a molding also once covered the joint between the east plaster wall and the joist atop that wall: a line of built-up paint runs the length of this joist one-half inch from the wall. It is probable that the same type of trim originally existed where the west plaster wall met the joist atop it. (No paint line is visible here, because the entire west wall was re-created ca. 1980.)

All of the ceiling woodwork is painted gray. A patch is evident in the third bay from the east, near the south wall.

Doorways

D102 (to the Storm Clothes Room). The architrave of this east-wall doorway is reproduction fabric from ca. 1980. It includes space for a transom sash over the door, but no sash is present. The architrave is the same type as that used for most historic interior doorway and window architraves at Old Harbor. Its members are channeled; corner blocks with an incised bull's-eye design are used in the upper corners, while the doorway architraves also feature plinths at their bottom ends (see figure 40). The architrave of D102 is painted olive green, but its threshold is unpainted.

The door, planed down on both long edges, is a five-paneled door (two-one-two). Half of an upper panel is missing, due to vandalism; the upper center stile is also split. The old white paint covering the door is in very poor condition.

The door is hung with butt hinges on its south edge. The hinge plates are attached with three screws each, and the top hinge has a flat-headed finial. (Larger hinges were once used on the door, since the extant hinge plates are smaller than the plate mortises on the door's edge.) A hole exists for a doorknob that has disappeared; a second hole below that has been plugged with

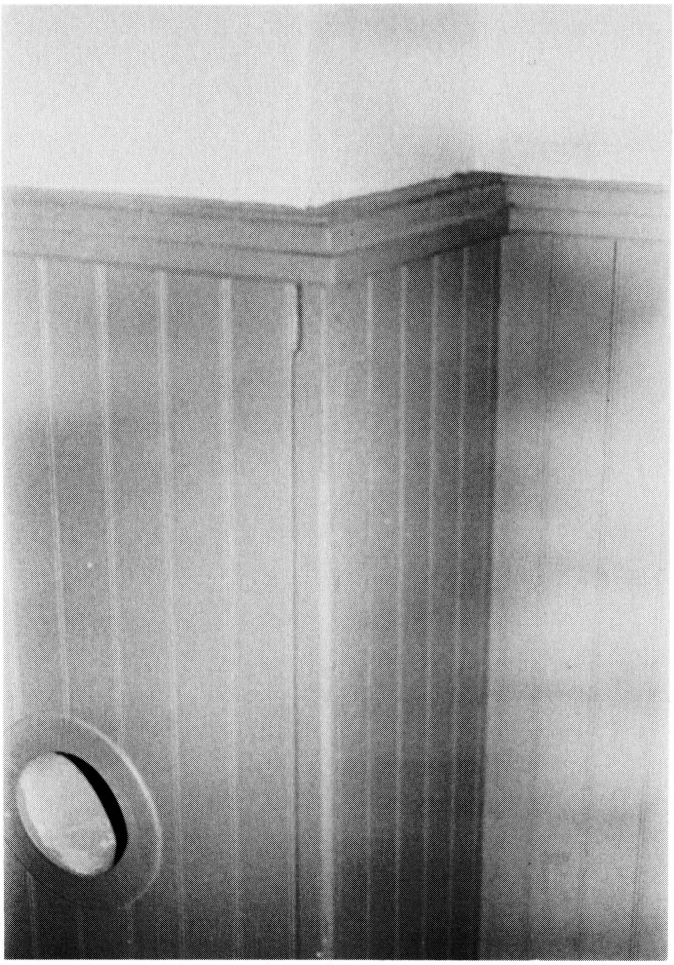


Illustration 38. Mess Room: Reproduction Chimney Wainscot With Original Corner Piece.

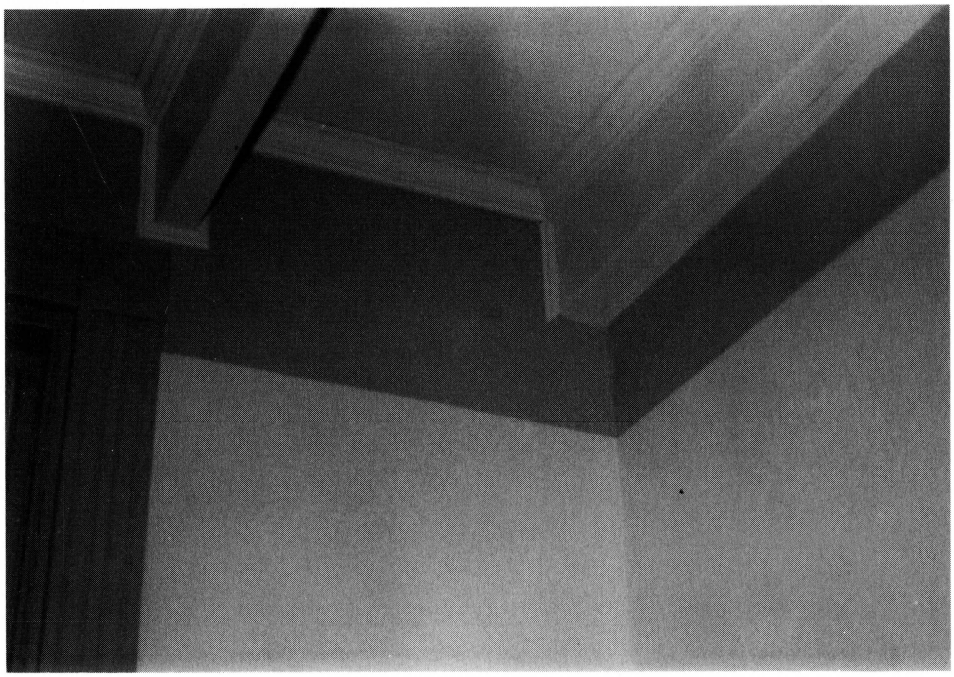


Illustration 39. Mess Room: Cornice Paint and Ceiling Moldings.



Illustration 40. Doorway 103: Looking From the Kitchen Into the Mess Room.

wood. A metal slide bolt is mounted on a block of wood on the north stile of the door, with the strike mounted on the doorway architrave.

A contact for the intrusion-alarm system is located at the lower end of the north doorway jamb.

D103 (to the Kitchen). The architrave of this doorway is historic fabric, and displays the usual channeled molding profile and corner blocks. The architrave includes a historic, three-light transom sash above the door, hinged at the top with two butt hinges on the Kitchen side. Both the architrave and the transom sash are painted olive green. The threshold, which is new material, is unpainted.

The five-paneled door (two-one-two) has the lower panel kicked in, and half of the upper west panel is missing. The door is painted olive green, but the paint is scarred and scraped.

The door is hinged on its east side with two butt hinges having ball finials. The hinge plates are attached with four screws each. The door now opens into the Mess Room. However, hinge marks can be found on the Kitchen side of the east jamb, indicating that the door once swung into the Kitchen. This corresponds to the depiction of the door in the original drawings of the lifesaving station. The door features a mortise lock with a knob and keyhole in the knob backplate. A metal slide bolt is attached to a block of wood mounted on the west side of the architrave. All of the metal hardware is painted olive green.

D111 (to the Stair-Hall Foyer). The molded architrave of this doorway is a reproduction, made to replace the one lost when the wall between the Mess Room and the Stair-Hall Foyer was removed during the period of private ownership. It has a space for a transom sash, but no sash is present. The architrave is painted olive green; its reproduction threshold is unpainted.

The five-paneled door is painted white, but the paint is scratched and in poor condition. The door is splitting at the joint along its south stile.

The door hangs on two hinges on the north jamb, and opens into the Mess Room. The hinges are mounted on wooden blocks with three screws per hinge plate. These hinges, with flat-headed finials, are too short and wide for this door. The doorknob and its backplate are unpainted metal that is rusting. The plate is installed at a higher level than the original, judging by paint lines on both sides of the door.

A contact for the intrusion-alarm system is located on the south jamb, near the floor.

Windows

W101. The architrave of this north-wall window is historic, displaying a molding profile exactly like that of the room's doorway architraves. The olive-green paint on the architrave is in good condition.

The window contains double-hung sash with nine-over-two lights, sash cords, and metal sash latches. The sash and all hardware are painted olive green. Damage includes broken sash cords, a broken sash latch, and a split upper stop on the east jamb. Also, two of the lights are cracked. A metal "anti-rattle" sash fastener is installed on the east stop.

W102. This window sits just east of W101. It resembles that window in virtually all respects, except for the following:

- the olive-green architrave paint is peeling from the bottom and middle of the west side;
- the sash latch and upper stop on the east side are not damaged, nor are any lights cracked;
- the upper stop on the west side is split; and
- there is no metal "anti-rattle" sash fastener here.

B. Storm Clothes Room (Room 102)

Floor

The lapped-joint floorboards run east-west; the floor is covered by posthistoric pink linoleum with a jute backing, glued directly to the floor. The wood floor is exposed in the northeast corner of the room, where two small, round holes have been drilled through the floor. The posthistoric opening to the former cellar is located at the south end of the room, extending across its entire width.

Walls

No baseboard is extant, but a paint line exists approximately 1 inch above the floor on the wainscot, indicating a molding installation at some previous time. The wainscot is composed of tongue-and-groove, double-beaded matchboarding painted olive green. Each board is approximately 2 5/8 inches wide, exclusive of the beading. The wainscot is 40 1/2 inches high, and has a molded cap 2 1/2 inches high. The cap is also painted olive green. The wainscot is reproduction fabric on the west and south walls, and on the southern third of the east wall. Reproduced wainscot cap exists on the west wall, and possibly on the west side of D101. The paint on the wainscot and its cap is mildewed.

Plaster. The rough-textured plaster walls above the wainscot are painted bright yellow, with a maroon cornice band extending

16 inches below the ceiling trim. A plaster patch on the west side of the north door is distinguishable by its smooth texture.

Ceiling

The wood joists and single-beaded, irregular-width subflooring of the second floor comprise the ceiling of the Storm Clothes Room. There are only three joists visible here, running north-south. Two of these are fully exposed, while the third sits atop the east plaster wall. The cornice molding and joist-end trim used in the Mess Room ceiling are found here, as well. The cornice molding, used where the subflooring abuts the joists and the plaster walls, is intact. The joist-end trim is extant only on the north wall, and even here, a piece is missing on the west side of the west joist. The joint where the east plaster wall meets the joist atop that wall has no trim.

All ceiling elements are painted gray. The paint is in good condition, except for a peeling area in the northwest corner of the ceiling.

Doorways

D101 (to the exterior). The molded architrave of this doorway is historic fabric, painted olive green. The door here has been described in the section, "EXTERIOR ELEMENTS." Its interior surface is also painted olive green.

D102 (to the Mess Room). The molded architrave of this doorway is reproduction fabric painted olive green. The door here has been described in connection with the Mess Room.

Windows

W103. The molded architrave of this east-wall window is historic fabric painted olive green. The 18-light sash (6 lights across) is also painted olive green. It displays no visible hardware, indicating that the sash is either fixed or a casement hinged on the exterior, probably at the top rail. Since the window is boarded over on the exterior, the sash type can not be identified at this time.

C. Kitchen (Room 103)

Floor

The floorboards in the Kitchen run east-west and are covered with posthistoric pink linoleum. A large hole exists in the floor in the southeast corner, possibly cut out for the original pipes running from the cistern to the sink. Two small holes can be found under a linoleum patch in the northeast corner, probably from a posthistoric radiator installation.

Walls

Woodwork. Paint evidence for a small molding exists at the base of extant sections of historic wainscot. Historic wainscot is extant on the west wall, including around the chimney; on the north wall, except at the east end; and on the east wall, from the north end to the south edge of W104. Reproduction wainscot covers all other wall areas. All of the wainscot features a cap molding that appears to be reproduction fabric in all locations, except on the north wall east of D103, and on the east wall north of W104. The height of the wainscot cap increases in the northwest corner of the room, around the chimney.

The wainscot and its cap are painted olive green. Several paint lines can be found on the wainscot in the northwest corner on both the north and west walls, and on the chimney. These lines may relate to earlier stoves and shelves. The paint is peeling on the south end of the west wall, near the floor; it is in only fair condition on all other areas of historic wainscot, because it was applied over old, unscraped paint.

Plaster. The rough-textured plaster that extends from the wainscot to the ceiling trim is painted light brown, with a gray-green cornice band 16 inches high. The paint is in good condition, but a red chalk line still exists where the lower edge of the cornice band meets the walls' ground color. A metal thimble for a stovepipe is located on the south face of the chimney, about 6 feet above the floor.

Ceiling

The north-south joists and single-beaded, irregular-width subflooring of the second floor form the ceiling of the Kitchen. The usual wood cornice molding exists where the subflooring meets the joists and the plaster walls. Although no joist-end trim is extant in this room, evidence of such pieces can be found in paint lines on the plaster. The additional framing members around the chimney are trimmed with a wood molding where they meet the plaster walls. The profile of this molding appears to be unique.

All wooden ceiling elements are painted gray, and the paint is mildewed. A patched hole, approximately 9 inches in diameter, exists in the westernmost ceiling bay near the chimney.

Doorways

D103 (to the Mess Room). The molded architrave of this doorway (fig. 40) is historic fabric painted olive green. Its door has been discussed in connection with the Mess Room; its olive-green paint is scarred.

D104 (to the Pantry). The reproduction architrave here lacks the bull's-eye design in its corner blocks, and displays no paint ghosts or hinge mortises. The architrave is painted olive green;

its threshold is new and unpainted. No door is extant in this doorway.

D105 (to the Rear Entry). This doorway represents a puzzle: its molded architrave is clearly historic, but it exists in a wall that supposedly was removed during private ownership and rebuilt by the Park Service. NPS field notes suggest that the architrave is reused material found at the site. It is painted olive green.

The west jamb has two hinge mortises, 4 1/16 inches long and displaying four screw holes per hinge plate. On the east side of the jamb, the strike plate for the mortise lock with knob still remains, but it is painted olive green. A wooden threshold is extant at the base of the doorway, but no door is currently installed.

Windows

W104. The historic molded architrave of this east-wall window is painted olive green. The sash is double-hung, with 12 lights over 4. The lower sash may be a replacement: the original drawings depict it as a two-light sash. The sash cords are missing. Both sash and their metal sash locks are painted olive green.

D. Pantry (Room 104)

Floor

The east-west floorboards are covered with red vinyl tiles. The tiles do not extend all the way to the east wall.

Walls

Woodwork. The only extant baseboard, approximately 5 inches high, is located in the southeast corner, along the east and south walls inside the easternmost cabinet on the south wall. The south end of the west wall has metal flashing where the floor meets the wall, inside the west cabinet on the south wall.

The east, north, and west walls are wainscotted with single-beaded matchboarding. All of the wainscot and its cap appear to be reproduction fabric.

Plaster. Rough-textured plaster extends above the wainscot to the ceiling on the east, north, and west walls, and from floor to ceiling on the south wall. Visible areas of plaster are painted light brown, with an orange-painted cornice band 15 inches high.

Ceiling

The ceiling of the Pantry consists of the north-south joists and single-beaded, irregular-width subflooring of the second floor. The usual cornice molding is extant where the subflooring meets the joists and the plaster walls. No joist-end trim survives, but evidence of it can be found as paint lines on the plaster walls into which the joists run. All ceiling fabric is painted gray.

Doorways

D104 (to the Kitchen). The reproduction architrave for this doorway is missing the bull's-eye design in its upper corner blocks, and is painted olive green. No door is extant in this doorway.

Windows

W105. The molded architrave surrounding this east-wall window is historic fabric painted olive green. Its nine-light wood sash does not show any interior hardware, but may be hinged at the top on the exterior. (The window is boarded up on the exterior, which would hide such hinges).

Cabinets and Shelves

South-Wall Cabinets and Shelves. The south wall of the Pantry is fully covered by built-in wooden base cabinets with shelves above. These are similar, but not identical, to those shown in the original drawings (Appendix A).

From east to west, the cabinets consist of a two-door unit, a stationary panel, a one-door unit, another stationary panel, and a unit containing three drawers. All cabinet doors and stationary panels consist of single-beaded matchboarding. The two doors of the cabinet at the east end have metal cupboard turns; the strikes for the turns are located on the stile that separates the doors. The interior of this cabinet is divided from that of the center cabinet by a partition. A single board, perhaps a former shelf, is stuck behind the shelf supports here. The door of the center cabinet is hinged on the east side, and is secured on the west side by a metal slide bolt. The interior of the cabinet contains two L-shaped shelves along its east and south sides. The three drawers at the west end of the cabinetry have two metal pulls each.

The two stationary panels and the base of the drawer unit display a paint line near the floor, suggesting that a shoe molding was once used here. All cabinet doors, stationary panels, and drawer fronts are painted olive green, including their hardware. The interior surfaces of the cabinet doors also are painted olive green, but the rest of the woodwork inside the cabinets is not.

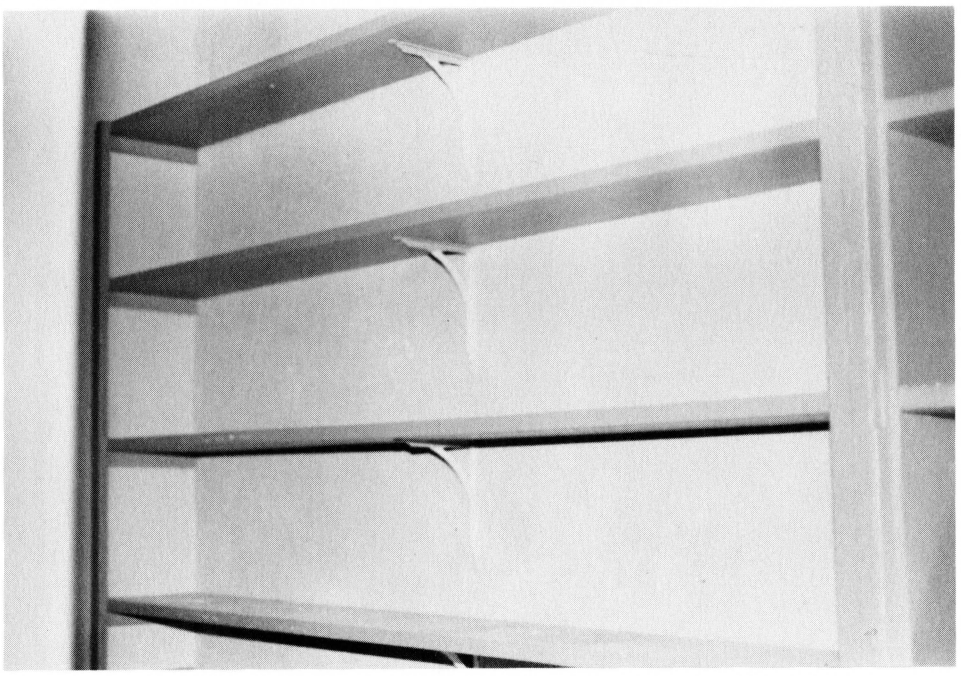


Illustration 41. Pantry: East Section of South-Wall Shelves.

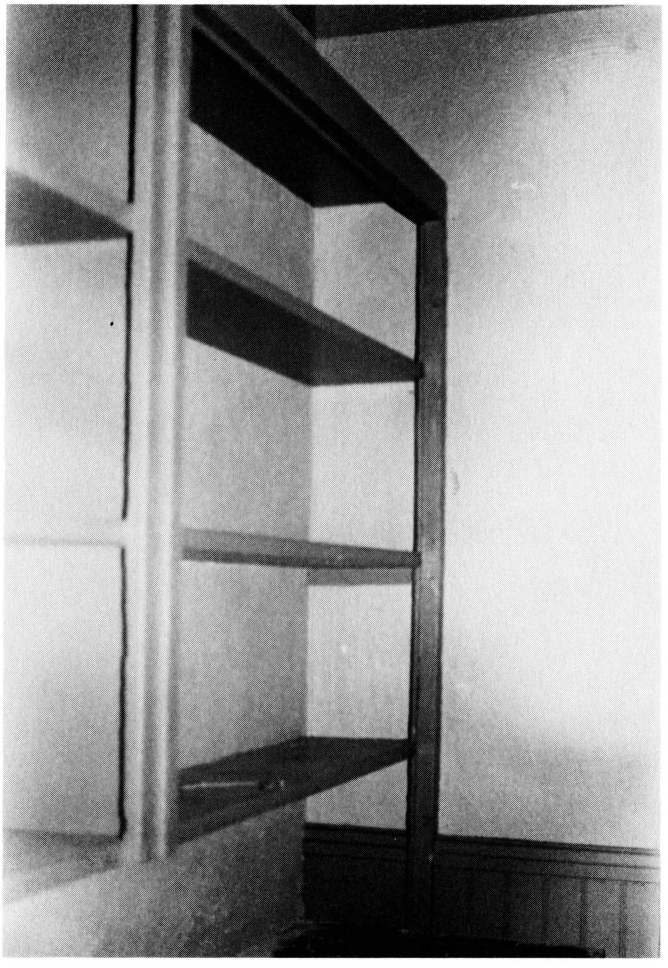


Illustration 42. Pantry: West Section of South-Wall Shelves.

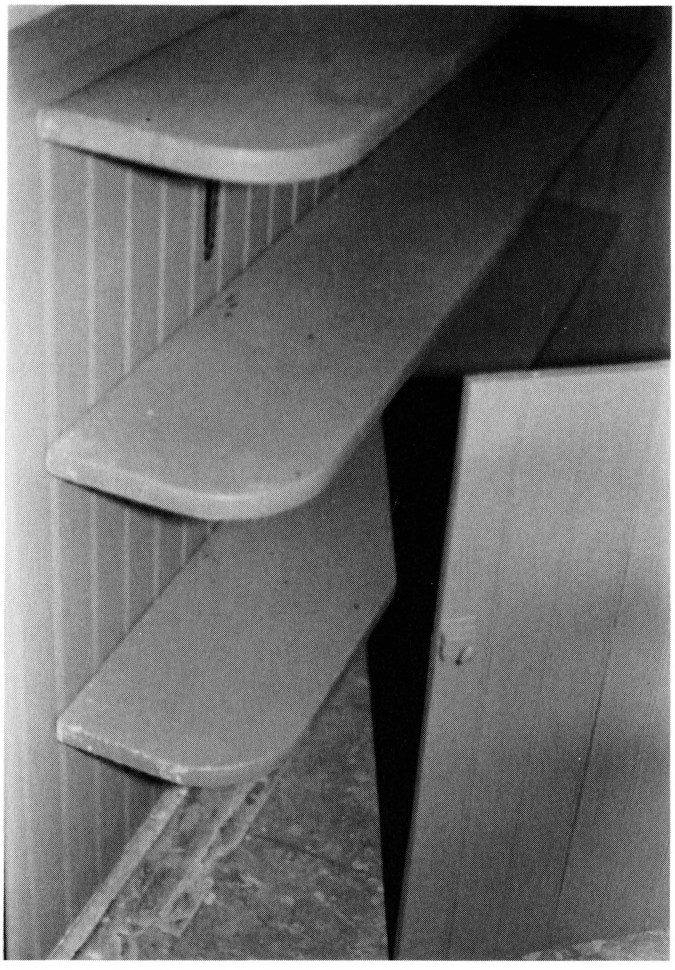


Illustration 43. Pantry: North-Wall Shelves.

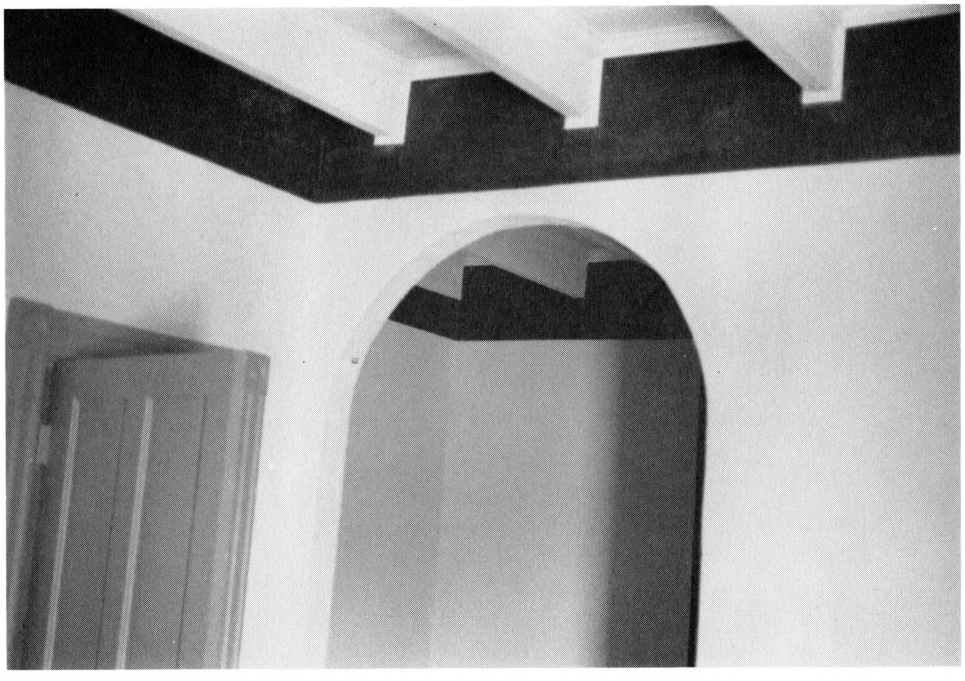


Illustration 44. Doorway 109: Looking From the Keeper's Room Into the Keeper's Office.

The base cabinets are covered by a continuous counter top. At the east end of the counter top are two wooden covers, flush with the top. These are historic features, being designated by the notation "lift" on the original plans. They were originally hinged at the rear; the hinges are missing, but their mortises remain. Each cover has mitered corners. The counter top bears remnants of a black material that may be a deteriorated and darkened varnish.

The south wall above the counter top is covered with open shelving. The shelving is divided by a vertical wooden support into two sections, a larger east one and a smaller west one. (The vertical support is actually two boards installed side-by-side.) The east section extends all the way up to the ceiling; it contains four long shelves with molded edges (fig. 41). The east ends of these shelves are supported by wooden ledgers on the east wall, and are edged by a vertical molding running up the wall. The middle of the shelves rest on painted metal angle brackets. The bottom shelf is also supported by one metal angle bracket at its west end. This bracket seems to postdate the other brackets: the bottom end of the vertical divider was sawn off at the level of the bottom shelf at some point, and the west end of the bottom shelf would have needed an alternative means of support.

The west section (fig. 42) has four shelves at the same levels, and with the same molded edges, as the east shelves. However, it does not extend all the way up to the ceiling: the top shelf is edged with a molding that also extends down the sides of the section, creating the illusion of an enclosed unit with three shelves. These shelves run between the vertical divider and a second vertical support against the west wall. This support extends all the way down to the counter top; its bottom end was not cut off. It is likely that the west section of shelves was originally covered by doors, to form a type of china closet. The original drawings show such a design. No doors or hinges are extant today, but the mortises for the hinges remain: three on the west vertical support, and two on the vertical divider. (A third mortise presumably was lost when the bottom end of the divider was cut off.) All of the south-wall shelves and their vertical supports are painted olive green.

North-Wall Shelves. The section of north wall between D105 and the east wall features three shelves spaced equidistantly below the level of the wainscot cap (fig. 43). The east end of the shelves are supported by wooden ledgers attached to the east wall; each shelf also rests on one metal angle bracket (painted black) attached to the north wall. The edges of the shelves are molded like those of the south-wall shelves; their southwest corners are rounded, undoubtedly to facilitate movement through D105. These shelves are painted the same olive-green color as the south-wall cabinets and shelves.

E. Rear Entry (Room 105)

Floor

The floorboards in the small Rear Entry are oriented in an east-west direction, with posthistoric pink linoleum installed over them.

Walls

Woodwork. Reproduction single-beaded matchboard wainscot with molded cap is installed on all walls in this vestibule, except in the southwest corner between the exterior D106 and D107, to the Keeper's Room. A paint line suggestive of a small shoe molding can be found 1 inch above the floor along the historic wainscot remaining in the southwest corner of the room. The wainscot and cap are painted olive green.

Plaster. Roughly textured plaster extends from the wainscot cap to the ceiling. The plaster is painted a tan color, with a 15-inch-high, orange-painted cornice band below the ceiling.

Ceiling

The exposed north-south joists and single-beaded, irregular-width subflooring of the second floor forms the ceiling here. The usual cornice trim is extant where the subflooring meets the joists and the plaster walls. Joist-end trim is evident only on the north wall, on the west side of the east joist. However, paint lines around all joists suggest a former installation of the same trim, including around the west ceiling beam. All of the ceiling woodwork is painted gray.

The east ceiling bay contains a hole that was patched with glued paper and painted over. The paper has lost its adhesion, and the paint around it is peeling. A seemingly older patch exists on the cornice trim of the west wall. The paint around it is also beginning to peel.

Doorways

All doorway architraves in the Rear Entry are painted olive green, and are slightly battered and gouged.

D105 (to the Kitchen). The molded architrave of this north-wall doorway is mostly reused historic material, as described in connection with the Kitchen. The east jamb is replacement material. There is no door here.

D106 (to the exterior). The molded architrave of this doorway is mostly historic, but the west side may be reproduction material. The door here is a six-paneled door with a clear material, possibly plexiglass, in the top two panels. The glazing

compound around the east light is not painted. The center west panel has been kicked in, and the lock rail and center stile are split. The interior side of the door is painted olive green.

D107 (to the Keeper's Room). The historic molded architrave of this doorway contains a three-light transom sash, hinged on the top rail with two small butt hinges so as to open into the Keeper's Room.

The wooden five-paneled door (two-one-two) has been vandalized; the middle panel is split. The door is hinged on the south jamb with two butt hinges. The top hinge has flat-head finials and four screws per hinge plate. The bottom hinge has a ball finial on the lower end. The metal doorknob is modern, operating a mortise lock. This side of the door retains a rectangular metal escutcheon; paint evidence suggests that a similar escutcheon existed on the Keeper's Room side of the door, but it is now missing.

F. Keeper's Room (Room 106)

Floor

The east-west floorboards are covered with posthistoric pink linoleum, except in the northeast corner of the room. The exposed boards in this corner display a varnished finish. There is a hole in the floor along the south wall, near the west corner.

Walls

Woodwork. There is no matchboard wainscot in this room, only a baseboard and a chair rail. The baseboard is composed of a fascia board capped by a molding that includes an ovolo and a small cavetto at the top. No chair rail exists on the wall at the northeast corner where the plaster encases the chimney stack. The baseboards and chair rails are painted olive green.

Plaster. Rough-textured plaster exists both below and above the chair rail. A metal thimble for a stovepipe pierces the plaster on the west face of the chimney stack at chair-rail height. The plaster walls are painted lime green, except for a 16-inch cornice band of maroon (see figure 44). In areas that appear to be original plaster, the lime-colored paint is peeling and cracking, especially on the west wall. Major plaster cracks are visible on the east, south, and west walls; these have been patched, but not well. The maroon-colored paint on the west wall is cracking.

Ceiling

The ceiling is composed of the north-south joists and the single-beaded, irregular-width subflooring of the second floor.

The usual cornice trim exists where the subflooring meets the joists and the plaster walls. Joist-end trim surrounds the three exposed sides of every joist at both the north and south wall. All of this woodwork is painted gray.

Additional wooden bracing occurs around the chimney stack at the ceiling, and one east-west brace runs from the center of the westernmost joist through the west wall into the closet. This latter member is somewhat smaller in dimension than the joists.

An ornate metal chandelier hook is screwed into the subflooring at the center of the ceiling, and is also painted gray. No lighting fixture is now suspended from it. The original specifications do not mention any such hooks or fixtures. However, the 1897 list of furnishings to be installed at Old Harbor (Appendix D) does include two hanging lamps 29 inches long. Presumably, one of these hung in the Keeper's Room. The former location of the other fixture is unknown; it might be determined through a more careful examination of the ceilings.

In at least four areas of the ceiling, crude wooden patches are covered over by a type of contact paper applied to follow the surfaces of the joists and subflooring. The paper, which is painted gray to match the ceiling, is falling off and exposing the patches.

Doorways

Three historic doorways exist in the Keeper's Room, as described below. A fourth doorway was added in the west wall sometime after 1932 (see figure 16). It is thought that this doorway accessed a shower stall that was installed in the south end of the Keeper's Room closet before 1962 (see Appendix H). This doorway was removed by the National Park Service.

D107 (to the Rear Entry). The historic fabric of the molded architrave here is painted olive green. The door has been described in connection with the Rear Entry.

D108 (to the closet). This doorway has a historic, molded architrave painted olive green, with no threshold. Its five-paneled door (two-one-two) is painted the same color. It hangs by two butt hinges on its south edge, and opens into the room. Each hinge has two knuckles, four screws per plate, and ball finials. The top ball finial of the top hinge is missing. The hinge plates are 4 1/16 inches long, which is the size of most of the jamb and door mortises where smaller replacement hinges exist. The double-knuckle design also matches the type of hinges found on the original rear exterior door (D106). For these reasons, the hinges on this door might be considered historic. The doorknob is missing, but the hole for it and a paint line for the knob plate exist. The keyhole is plugged, but the mortise lock remains in the door. All hardware is painted olive green, to match the architrave and door.

D109 (to the Keeper's Office). This doorway is an arched opening in the north wall (fig. 44). It has no architrave or threshold; the baseboard and chair rail of the north wall run through the doorway to the Keeper's Office.

Windows

W106. The molded architrave of this south-wall window is historic and painted olive green. The opening contains 12-over-2, double-hung sash also painted olive green. The upper sash, with four lights across, has two broken lights and one that is cracked. No sash cords remain, but the metal hardware for the sash cords is extant. Two metal sash pulls are attached to the bottom rail of the lower sash, and a metal sash lock is attached to the meeting rails. All hardware is painted olive green, to match the architrave and sash.

Closet

Floor. The narrow floorboards run in an east-west direction, with posthistoric pink linoleum covering the south end of the floor. The northwest corner of the floor has a gray-painted rectangular area more than 2 feet long and 6 inches wide, oriented north to south. Immediately to the east of the painted floor, and adjacent to the north-wall baseboard, is a large hole in the floor, with two smaller, round holes in the northeast corner.

Walls. A baseboard exists on all four walls of the closet, except on the east wall south of D108. An additional small molding is attached to the baseboard where it meets the floor in the northwest corner, around two edges of the painted rectangle. Olive-green paint is present on the following sections of baseboard: that on the east wall, north of D108; on the north wall; and on most of the west wall. The baseboard on the south end of the west wall, and on the south wall, is painted pink.

The plaster walls, painted lime green from the baseboard to the ceiling, are cracked. No chair rail exists in the closet, but paint lines on the west wall, and on the west end of the south wall, suggest that shelves were installed at three different levels. A wooden nailer installed across the south wall appears to be posthistoric. It is unpainted, except for paint slopped onto it accidentally.

Ceiling. The closet ceiling consists of one fully exposed floor joist and one end joist, oriented in a north-south direction, and single-beaded subflooring running in the opposite direction. The exposed joist is cut at its south end, and is braced by an undersized cross member that enters from the Keeper's Room and intersects the end joist. In addition, two wooden blocks flank the sawed-off joist between the south wall and the cross brace. The usual historic cornice trim survives on the west wall, north of the cross brace, and on the north wall, between the east wall and joist. Joist-end trim surrounds the exposed, cut end of

the joist on the south wall. Two large holes exist in the ceiling, possibly from earlier posthistoric plumbing installations. The ceiling is painted gray.

Doorways. The only doorway in the closet is the one leading to the Keeper's Room (D108). Its historic molded architrave is painted olive green. The door here has been described in connection with the Keeper's Room.

Utilities

Electrical System. One duplex electrical outlet with its metal plate sits in the south wall, near the west end, above the baseboard. It is painted lime green, to match the plaster wall around it.

Protection Systems. Elements of the intrusion-alarm system are located in the closet. Mounted on the south wall are the control panel, an electrical box, and the telephone dialer. Other elements are simply sitting on the floor. Wires feed through ceiling holes to the second floor.

G. Keeper's Office (Room 107)

Floor

The narrow floorboards are oriented in an east-west direction, with posthistoric pink linoleum glued over them.

Walls

Woodwork. A baseboard and chair rail exactly like those found in the Keeper's Room ornament the Keeper's Office. Both elements are painted olive green.

Plaster. Rough-textured plaster exists both below and above the chair rail. It is painted lime green, with a maroon cornice band extending down 16 inches from the ceiling. At the juncture of the two wall colors, the maroon paint has bled into the lime. The plaster of the west wall is cracked below the chair rail.

Ceiling

The exposed joists run in a north-south direction, with the exposed single-beaded subflooring installed in the opposite direction. No joist trim survives in this room, but all of the original cornice trim is extant where the joist and plaster walls meet the subflooring boards. All ceiling woodwork is painted gray. Two patches exist on the ceiling, one in the west bay, south corner, and one on the second joist from the west wall, at the south end. Wooden patches were papered over with a contact

paper and painted gray. The paper is now falling off, exposing the unpainted wooden patches.

Doorways

D109 (to the Keeper's Room). This arched doorway has been discussed in connection with the Keeper's Room (see figure 44).

D110 (to the Stair-Hall Foyer). The molded architrave of this doorway includes a three-light transom sash, hinged at the top with two butt hinges to open into the foyer. The architrave and transom sash are probably reproduction fabric, since this wall had been demolished during the period of private ownership and reconstructed ca. 1980 by the Park Service. Both elements are painted olive green. The threshold is unpainted, and is clearly reproduction material.

The door here is of wood, with five panels (two-one-two) and olive-green paint. Its upper west panel is split but intact. The door currently hangs from two butt hinges on its east jamb, to open into the office. These hinges are attached with three screws per plate, and have flat-headed finials. These plates are smaller than the mortises in which they sit, suggesting that they are not original. The metal doorknob remains, but it is rusted, and there is no keyhole or escutcheon. A metal strike plate is mounted on the west jamb. A metal slide bolt and strike are mounted on wood blocks, on the west side of the door and the architrave, respectively.

Hinge mortises on the west jamb indicate that a door once hung from this jamb, but no evidence was found of a lock plate on the east jamb. Interestingly, the original drawings show no door whatsoever in this doorway.

A contact for the intrusion-alarm system is situated at the bottom of the west jamb.

H. Stair-Hall Foyer (Room 108)

Floor

Posthistoric pink linoleum is glued over narrow floorboards running east to west. The linoleum is missing in the northwest corner. Two holes pierce the floor in the same corner, and another small hole can be found in front of D114, to the Boat Room.

Walls

Woodwork. The lower wall areas are sheathed with wainscot. A paint line recalling the former presence of a shoe molding is evident 1 inch from the floor at the base of extant sections of

historic wainscot. The wainscot itself is composed of single-beaded matchboard with a cap. Historic wainscot can be found on the north wall, and on the west wall, north of D114. The remainder of the walls are wainscotted with reproduction fabric.

Plaster. The roughly textured plaster between the wainscot and ceiling is painted tan, with a 16-inch-high cornice band painted deep purple.

Ceiling

The ceiling is similar to the ceilings found elsewhere on the first floor, consisting of exposed second-floor joists running north-south and exposed single-beaded subflooring running east-west. The usual cornice trim exists where the subflooring meets the joists and plaster walls. No joist-end trim remains on the plaster walls. All of the wooden ceiling elements are painted gray and in good condition. A hole is bored in the northwest corner of the ceiling.

Doorways

D110 (to the Keeper's Office). Being located in a re-created wall, the molded architrave and its transom sash are probably reproduction fabric. They are painted olive green. The door has been described in connection with the Keeper's Office.

D111 (to the Mess Room). The molded reproduction architrave, which includes space for a transom sash, is painted olive green. The door here has been discussed in connection with the Mess Room. A metal hook and eye secure it on the foyer side; the hook is screwed into the door, and the eye is screwed into the south door stop.

D112 (to the First-Floor Stair Hall). This doorway is a wide opening with no door. It has no raised threshold, but is framed by a historic molded architrave similar to those of the other doorways and windows on the first floor of the main building. The architrave's base blocks display a paint line like that found at the base of the historic wainscot, suggesting that a shoe molding once trimmed their bottom edge. The architrave is painted olive green, but the paint is beginning to peel on the east jamb.

D114 (to the Boat Room). The usual type of historic architrave, painted olive green, trims this doorway. The door here has five panels (two-one-two); it opens into the foyer, and is also painted olive green. Its upper north panel is split but still intact. The paint is badly worn near the bottom of the door. The north stile is also split at the metal doorknob plate, exposing the mortise lock.

The door is hung with two butt hinges on the south jamb. The top hinge has flat-headed finials and four screws per hinge plate. A filler piece in the jamb and a larger mortise on the

door provides evidence that the upper hinge is posthistoric. The bottom hinge has only one ball finial, at the lower end of the hinge.

A single keyhole for the mortise lock is found in the doorknob backplate. The plate is rusted, but is probably fairly new, because it still retains its clear protective-paper cover on the foyer side. The lock plate on the north jamb is smaller than the mortise in which it is installed. A metal slide bolt is mounted on a wood block on the upper north stile of the door; its strike plate is mounted on the architrave.

Utilities

Electrical System. A metal duplex electrical outlet box lies on the floor, connected to the power supply in the basement by wiring fed through the hole in the northwest corner of the floor. Another wire, snaked through the same floor hole, runs up through the room into a ceiling hole to provide electrical power to the second floor.

I. First-Floor Stair Hall (Room 109)

Floor

The narrow board flooring is oriented in an east-west direction, and is covered by cut pieces of linoleum. A 2-inch round hole pierces the flooring in front of exterior D113.

Walls

Woodwork. Single-beaded matchboard wainscot wraps around all lower walls and follows the angle of the stair up to the second floor. All sections of the wainscot and its cap molding are historic and painted olive green. The paint on the west-wall wainscot is worn, due to the wedging of a large timber between the wainscot and D113, to keep the door securely shut. The wainscot displays a paint line approximately 1 inch above the floor, indicating the former presence of a shoe molding. Wainscot without a cap exists on the short north wall under the soffit of the stair (fig. 45).

Plaster. The rough-textured plaster walls are painted tan, with deep-purple painted bands of trim. One band, at cornice level, is 12 1/2 inches wide on the eastern portions of the south (fig. 46) and north (fig. 47) walls. On the adjacent east wall, the bottom of the band is level with that of the other walls, but it rises only to the bottom of the joist that runs along the top of the east wall. The 12 1/2-inch band reduces to 5 inches on the western portions of the south and north walls, where it parallels the slope of the stair. The 5-inch band on the south wall continues onto the west wall, descending along the soffit of the

stair to the second floor. The 5-inch band on the north wall also continues onto the west wall, ascending along the soffit of the stair from the second to the third floor.

A second deep-purple band 5 inches wide encircles the room just above the wainscot cap. It is interrupted by doorways and windows, but follows the wainscot as it rises with the stair. The purple paint was not applied evenly to the walls, and large drips are evident.

Ceiling

The plaster soffit of the first-floor stair is painted tan, to match the ground color of the walls. The remainder of the ceiling is similar to other first-floor ceilings, being composed of exposed second-floor framing elements painted gray. As usual, the joists run north-south, and support single-beaded, irregular-width subflooring oriented east to west. Cornice trim exists where the subflooring meets the joists and the plaster walls. No joist-end trim remains in the room; however, paint lines for this are evident on the north and south plaster walls.

Doorways

D112 (to the Stair-Hall Foyer). The wooden architrave here is historic, molded, and painted olive green (fig. 46). As stated in the section on the foyer, this wide doorway contains no door.

D113 (to the exterior). The entire doorway here, including the historic architrave, is covered by a large piece of plywood. A large timber is wedged between the plywood and the opposite west wall to provide security. More information about this doorway can be found in the section, "EXTERIOR DESCRIPTION."

Windows

W112-113. These two windows sit side-by-side in the north wall, being separated by a mullion. The mullion is incorporated into the windows' architrave, which is of the usual historic type (see figure 47). The sash of the west window (W112) is missing; only the broken sash cords remain. The exterior plywood boarding is visible through the window opening. The east opening (W113) contains a double-hung, six-over-six sash, and its broken sash cords are evident. The exterior plywood boarding can be seen through the sash lights. A metal sash lock is installed on the meeting rails of this window. All of the wooden elements of these two windows are painted olive green, except the exterior plywood boarding.

Stair

The stair to the second floor begins its ascent at the midpoint of the north wall. Three regular treads climb the north wall; three winder treads turn the northwest corner; five regular

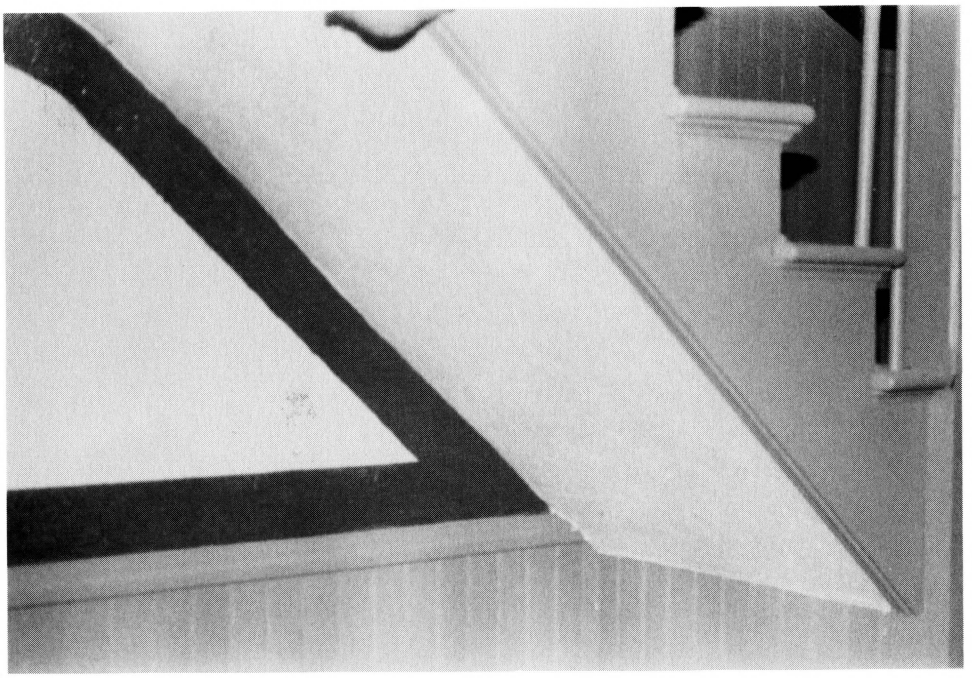


Illustration 45. First-Floor Stair Hall:
Soffit of Stair.

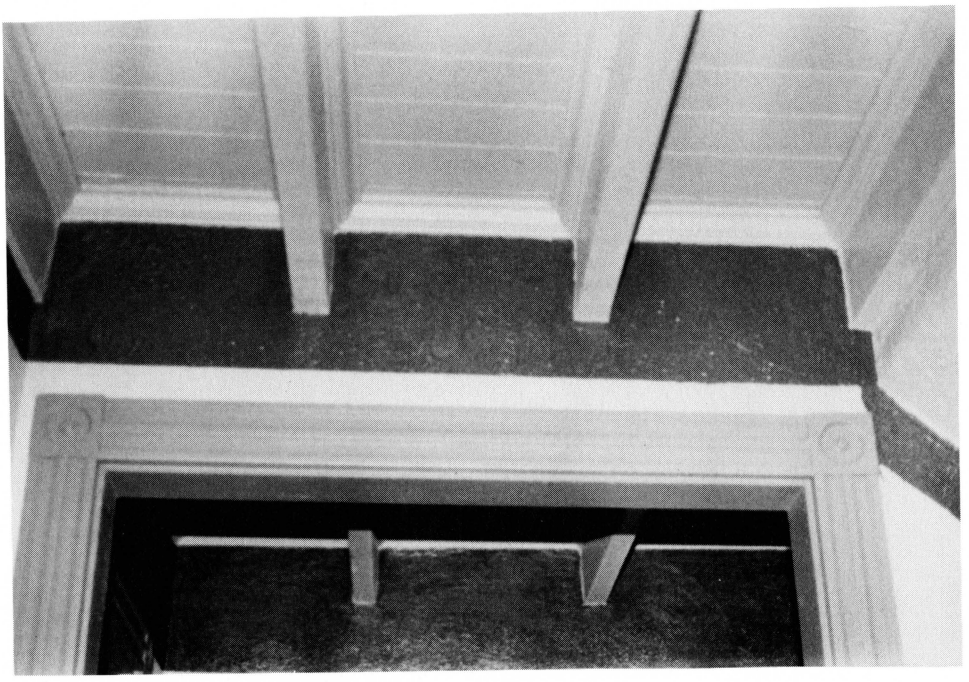


Illustration 46. First-Floor Stair Hall:
Cornice Paint on South Wall.



Illustration 47. First-Floor Stair Hall:
Cornice Paint on North Wall.

treads rise along the west wall; three more winder treads turn the southwest corner; and one regular tread ascends the south wall to reach the level of the second floor.

The stair is composed entirely of wood, and was built as designed in the original drawings. The newels are square posts whose upper ends are turned to produce a flattened, bulbous appearance. The corners below the "bulbs" are cut off to create smooth, rounded "shoulders." The newel at first-floor level is also turned at its midpoint. The other newels are not turned in this manner, but their bottom ends--which hang down as drops--display a protruding bull's-eye design. Three plain, round balusters sit on each tread, except for those treads adjacent to a newel. The handrail has a flattened, bulbous top surface and molded sides.

The entire staircase is painted olive green. This represents a mistake made during the 1980 painting contract. Paint analysis showed that no paint had ever been applied to the stair prior to 1980; historically, it was oiled. Vandals have broken all of the balusters on the treads along the west wall, except for the two balusters closest to the north wall.

J. Boat Room (Room 110)

Floor

The floor in the Boat Room is composed of floorboards ranging in width from 4 3/8 to 5 1/2 inches and oriented north to south. The majority of the floor is painted a color that could be light gray, medium gray, or blue; it is too worn to tell. A shuffleboard court has been painted along the east side of the floor. An unpainted section of floor can be found in the southeast corner, extending 50 1/4 inches from the east wall and 94 1/2 inches from the south wall (see figures 24-25). Along the west edge of this unpainted section, two jogs in the paint line can be seen. They provide evidence for a previous doorway threshold that most likely provided access to the storeroom mentioned in the 1972 appraisal. This storeroom was probably located in the southwest corner of the Boat Room, its dimensions being defined by the unpainted section of floor. Evidence of former sheathing on perimeter walls can also be found in floor paint lines that stop approximately 1 1/4 inches before the now-exposed studs of the north, west, and south walls.

Walls

The north, west, and south walls consist of exposed studding backed by the exterior tongue-and-groove sheathing. As indicated above, paint lines on the floor remain from the interior wall sheathing once here (see figure 12), as well as nail holes in the studs. The east wall is covered with reproduction clapboards

between the posts that support the east end of the roof framing. All of the wall fabric is unfinished wood.

Ceiling

There is no ceiling per se in most of the Boat Room, only the exposed framing of the Boat Room roof. However, the floor of the second-floor Loft, located in the center of the east side of the space, forms a ceiling in this area.

Roof Framing. The roof of the Boat Room is supported by a system of unpainted trusses built according to the original drawings. Three large east-west beams at second-floor level divide the Boat Room spatially into four bays from north to south. Each beam rests on three large posts, one at each end of the beam and one at its center (fig. 48). The end posts help support the east and west walls of the Boat Room. The three center posts are chamfered. Diagonal braces strengthen the connections between posts and beams.

Seated on top of the three large beams are shorter posts that carry the purlins that support the roof rafters. The posts on the center beam are the tallest, supporting a purlin in ridge position. The posts on the outer two beams are shorter, reflecting the slope of the roof.

The roof's rafters sit on the north and south wall plates. They are supported at their midpoints by the two outer purlins, and at their top ends by the center purlin. The rafters carry sheathing boards oriented in an east-west direction. The rafters and sheathing boards are unpainted, like the truss members and the purlins. A gap between the roof sheathing and the exterior fascia occurs at the southeast corner, exposing that corner of the Boat Room to the weather.

A hand-operated fire extinguisher is mounted on one of the large east-wall posts. The north beam's bottom surface has embedded in it two iron "pig-tail" hooks and large cut nails, all on the west side.

Loft. Like the truss system, the Loft is a historic feature, built in the east half of the two center bays according to the original drawings (Appendix A). Its floor, which forms a ceiling for the east center section of the Boat Room, utilizes five joists, including one incorporated into the east wall. These joists run north-south, and support single-beaded, tongue-and-groove boards of narrow but uniform width running east-west. A hole three boards wide exists in the northwest corner, between the first two joists.

Doorways

D114 (to the Stair-Hall Foyer). The historic architrave of this doorway displays a different type of profile from that



Illustration 48. Boat Room: Roof Truss and Post.

discussed so far. It was used for doorways and windows in less-important areas at Old Harbor. It includes flat, unmolded boards and no corner blocks. The architrave here is painted olive green. Its door has been described in connection with the Stair-Hall Foyer.

D115-116 (to the exterior). The two side-by-side doorways in the north wall of the Boat Room are large, to admit boats and other equipment. They do not feature architraves.

Each doorway contains one sliding door, hung so that the doors slide by one another to open. (The east door--D115--slides to the north of the west door--D116). Both doors are reproductions of the original doors here, which were changed to swinging doors in 1910. They are of board-and-batten construction, with narrow vertical boards being secured by end and diagonal braces. Both doors are painted olive green; both are suspended from metal rollers concealed by a fascia board; and both have contacts for the intrusion-alarm system. For additional protection from vandalism and the weather, the extant swinging doors here were not removed. As mentioned earlier, they may in fact be the original doors, rehung in 1910.

The wooden vertical sheathing on either side of the doorways is painted olive green, while the sheathing between the doors is painted light cream at the upper end and olive green at the lower end, as though the painter ran out of paint.

D117 (to the exterior). The doorway in the west wall of the Boat Room is constructed in the same manner as D115 and D116, except that the roller hardware for its door is not hidden by a fascia board. The door slides to the north to open, is tight to the frame when closed, and is painted olive green. This door is also connected to the intrusion-alarm system.

D118 (to the closet). The doorway to the closet at the south end of the east wall is framed by an unmolded, reproduction architrave painted olive green. No threshold is present here, so the ends of the closet floorboards are exposed. No door hangs here.

Windows

The first floor of the Boat Room has five window openings, two in the south wall and three in the west wall. These openings do not feature architraves, but merely frames. None of them are boarded up; all five contain 12-light (four across) casement sash hinged at the top rail on the exterior. The west wall also features a window opening at second-floor level. All wooden frames and sash are painted olive green.

W107. The east window in the south wall features two metal eyes, one screwed into the east jamb, and one screwed into the bottom stop.

W108. The west window in the south wall displays two metal hooks and eyes attached to the lower half of the window. On the east side, the hook is screwed into the sash with an eye bolt, and the eye is screwed into the stop. On the west side, the hook is screwed into the stop with an eye bolt, and the eye is screwed into the sash.

W109. On the south window in the west wall, two long and two short metal hooks and eyes are evident. The longer hooks are located on the jambs, being screwed in with eye bolts; the eyes are screwed into the stiles of the sash (the north eye is missing). The smaller hooks are attached to the bottom rail of the sash with eye bolts, and the eyes are screwed into the sill.

W110. The middle window in the west wall has one large metal eye screwed into the north jamb, another screwed into the north stile of the sash, and a third screwed into the south jamb. The hooks for these eyes are missing, as is the second eye bolt on the south stile of the sash. Two smaller hooks and eyes are installed on the bottom rail and sill in the same fashion as those found on W109.

W111. The north window in the west wall has four large metal eyes, two screwed into the jambs and two screwed into the stiles of the sash. One smaller hook and eye are attached to the bottom rail of the sash and the south jamb. One eye is screwed into the sill, on the north side.

W213. The frame of this fanlight window is painted olive green. The sash is not installed, but the opening is boarded up from the outside.

Closet

This space is located within the main building, but was originally accessed via a doorway (D118) at the south end of the east wall of the Boat Room. After the historic period, this closet was converted into a bathroom serving the Keeper's Room. D118 was closed up, and a new doorway was cut in the opposite wall, connecting to the Keeper's Room. The work of ca. 1980 restored most aspects of the closet to their historic appearance.

Floor. The closet floor is composed of narrow tongue-and-groove boards running-west. The floorboards are covered with posthistoric pink linoleum, except where the doorway threshold should be located.

Walls. There are no baseboards in the closet. New plaster is evident on the entire east wall, where the posthistoric doorway was closed up. Sections of new plaster are apparent on the other three walls, as well. A rectangle composed of old painted plaster and a board is exposed on the north wall of the closet. The board, measuring 21 inches long by 8 inches high, is set into the wall at about chair-rail height; traces of dark green paint can be found on it. Directly below and flush with the board, old

plaster is exposed. The section of old plaster extends the length of the board, and is about 6 inches high. This plaster is painted a salmon color.

Ceiling. Since the closet is located in the main section of the building rather than in the Boat Room, its ceiling consists of the usual exposed joists and single-beaded subflooring of the floor above. The joists run north-south; the subflooring runs east-west. Evidence of the usual cornice trim can be seen on the subflooring and joists: where the trim was once installed, the wood is unpainted. However, since most of the wall plaster is new at ceiling height, evidence of joist-end trim can be seen in only one location: on the east joist, north end, bottom surface.

The remainder of the historic wooden ceiling is painted. The paint seems to have discolored, and may be the historic paint. It originally may have been gray, but it now has an olive tint; its true color is therefore difficult to ascertain. Part of the ceiling is patched, and two holes exist at either end from previous posthistoric plumbing installations on the second floor above.

Doorways. As stated previously, the historic D118 to the Boat Room was closed up after the historic period, and reopened during the ca.-1980 restoration work. It has no architrave on this side; the raw edge of the wall plaster abuts the doorway frame. The doorway also lacks both a threshold and a door.

INTERIOR DESCRIPTION: SECOND FLOOR

A. Quarters (Room 201)

Floor

The floorboards in the second-floor Quarters run in an east-west direction; they are covered with posthistoric pink linoleum. Paper can be found under the linoleum in some areas, and round indentations in the linoleum appear to relate to former bed- or cot-leg locations. Several holes exist in the floor, including one large round hole south of the chimney in the center of the floor. This hole corresponds to the hole in the Kitchen ceiling. A small patch exists in the floor along the east wall.

Walls

Woodwork. Double-beaded, matchboard wainscot was used historically on the lower sections of all four walls, including the alcoves created by the south and north dormers (fig. 49). Most of this wainscot is extant, but it is missing from the east and west walls of the north-dormer alcove.

Three hinged panels are cut into the wainscot of the south and north walls, to provide access to storage space under the eaves. Two of these panels are located in the south wall, one on either side of the dormer alcove. The east panel is supported by two small butt hinges on its west edge, and is secured with a metal cupboard turn on its east edge. The west panel's hinges are missing, and the panel is nailed shut. Presumably, it had hinges and a turn similar to those of the east panel. The third hinged panel is located in the north wall, west of the dormer. It displays hinges and a cupboard turn similar to those used on the south wall; these are located on the panel's west and east sides, respectively.

A quarter-round shoe molding is found along the base of much of the wainscot. This molding is present along the entire north wall; on the west wall, north of D201; three-quarters of the way around the south-dormer alcove; on the bottom edge of the east access panel in the south wall; and on the east wall, north end. Also, two small sections are found at the middle of the east wall. Paint evidence 1 inch from the floor on all of the other historic wainscot indicates that such a molding was used there, as well.

The top edge of the wainscot apparently was trimmed historically with a molded cap. One type of wainscot cap is extant on the east and west walls. A cap with a different profile is found where the wainscot abuts the windows in the south and north dormer alcoves. It is probable that the first type of cap molding also was used historically on the south and north walls:

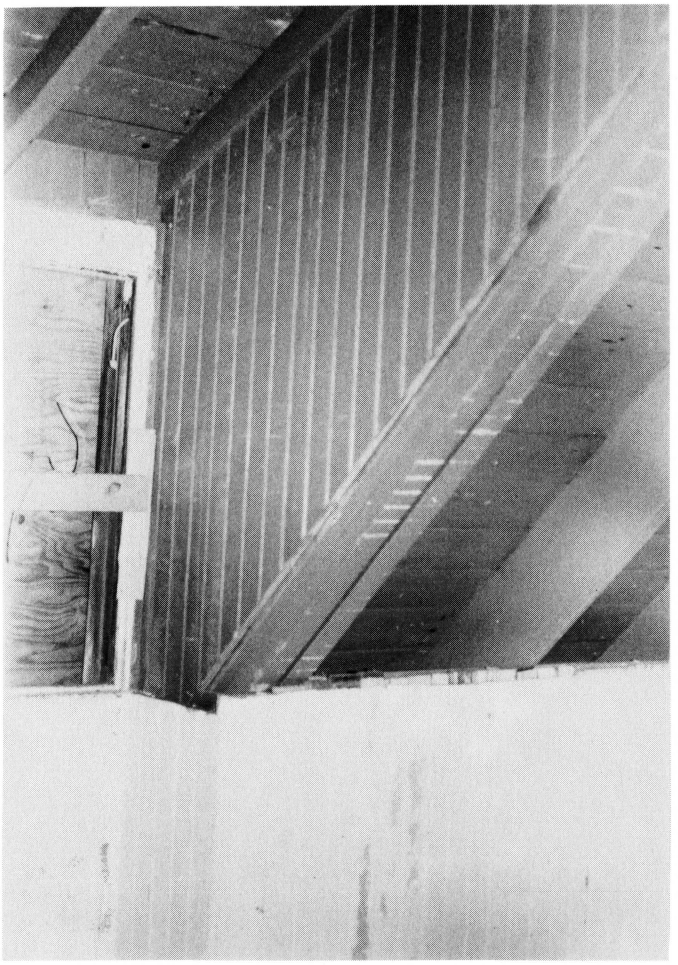


Illustration 49. Quarters: Side of South Dormer.

fewer paint layers above a paint line at the top of the wainscot here suggest the former presence of such a molding.

Most sections of the wainscot, and its shoe and cap moldings, are painted white.

Cuts in the extant wainscot cap appear to indicate the former locations of partitions. One cut is visible in the west-wall wainscot cap, south of D201. As will be described shortly, there is a change is wall-paint color in this vicinity. However, the change in color does not align with the cut in the wainscot cap. Clearer evidence exists for a partition abutting the east wall. There is a cut in the wainscot cap on the east wall, between the two windows; there is a paint build-up on the east plaster wall; and there is a discolored strip in the linoleum as wide as a partition wall. Two narrow, unpainted areas of wainscot also exist on the east wall, on either side of the floor patch. Their origin is unknown.

In addition to the double-beaded matchboard used as wainscot in the Quarters, single-beaded matchboarding is used to sheathe the upper sections of the side walls of the south-dormer alcove (fig. 49). Such sheathing also exists in the north-dormer alcove, but only on the south ends of the side walls. It is missing from the north ends, which exposes the unpainted dormer framing members and exterior sheathing boards here. All of the single-beaded matchboard sheathing is painted gray-green; the paint is in generally poor condition.

Plaster. The east and west walls are plastered above the wainscot, and a paint line on both walls indicates where the posthistoric plaster ceiling was installed. The plaster below this paint line is painted white; above the line, both the east and west walls are painted light olive, except at the south end of the west wall, where salmon-colored paint is evident. On the north section of the west wall, above the paint line, traces of earlier color bands can be seen, with a deep blue color visible under later paint layers.

Ceiling

The ceiling is composed of the exposed roof rafters, tie beams, and sheathing boards. The single-beaded roof sheathing is oriented in an east-west direction, except at the east end, where the clipped gable, or jerkinhead, occurs. Here the roof sheathing runs north-south across four short rafters. A small ovolo molding on the east wall covers the raking joint where the plaster meets the easternmost pair of roof rafters. The same molding occurs on the west wall, but only near the peak: its lower sections are broken off.

The majority of ceiling elements are painted olive-brown, with a light-gray undercoating that shows through the finish paint under the eaves. Behind the extant north and south knee walls,

the paint color of the ceiling members changes to gray-green. This line of demarcation suggests that the wainscot was once installed further back along the slope of the roof, closer to the end of the rafters. Nailers also exist immediately beyond the change in paint color, secured to the sheathing boards (see figure 9). If these nailers were original and the wainscot was historically attached to them, the installation would have looked as the original sectional drawing depicts it (Appendix A, Drawing 4), with the rafters running through the top edge of the wainscot.

Doorways

D201 (to the Locker Room). The only doorway in the Quarters sits near the center of the west wall. Its historic molded architrave includes a three-light transom sash over the door, hinged at the top with two butt hinges and opening into the Quarters. No other hardware is evident, but two holes can be found on the north side of the sash, and a chunk of wood has been dug out of the jamb opposite the holes. Both architrave and transom sash are painted white; the paint is in poor condition.

No door currently hangs in this doorway. Evidence that a door was here historically consists of two mortises for hinges on the south jamb of the doorway, on the Quarters side. They measure 4 1/16 inches long and have four screw holes each. The hinge evidence suggests that the door formerly here hung on the south jamb, and opened into the Quarters.

Windows

The six window openings in the Quarters are boarded up and do not contain any sash at the present time. However, the metal hardware for sash ropes for double-hung sash is extant for all six windows. All of the window architraves are painted white, and are in poor condition.

W201-202. Located in the north dormer, these two window openings each measure 23 1/4 inches wide by 40 inches long. They are framed by the unmolded type of architrave, which is painted white. The plain board that separates the two openings acts as a mullion. The metal hardware for a shade that spanned both openings is extant, but the shade is missing. Other holes in the upper corners of the architrave can be seen, but the hardware that was once fastened to them is missing.

W203 and 204. Unlike the dormer windows, W203 and W204 are distinctly separate windows, situated on the north and south halves of the east wall. Each opening measures 33 3/4 inches wide by 52 inches long. Both are framed by the usual type of molded architrave, which--as stated--also trims the doorways of the room. Metal curtain-rod and shade hardware exists at the upper corners of both windows, with the unpainted curtain rod hardware situated between the white-painted shade hardware. The positions of the hardware suggest that the shade was wider than the curtain, and

so was not contemporary with the curtain. Since the curtain-rod hardware is not painted, it probably postdates the shade hardware.

W205-206. The two window openings of the south dormer are similar to those of the north dormer. The only difference consists of the lack of extant hardware from previous shades or curtains. However, paint ghosts and holes in the trim suggest that shades or rods once existed.

Chimney

The reconstructed chimney extends from the center of the floor up through the roof. The chimney brick is bare below wainscot height, and pargeted above. It appears that, since the chimney was historically wainscotted, the masons left the lower part bare for the carpenters to cover after the relocation work was completed. A metal thimble is located in the east face of the chimney near the south edge, approximately 7 feet from the floor. Another, rectangular opening exists on the north face of the chimney, near the east edge and approximately 10 feet from the floor.

Utilities

Protection Systems. A rusted metal hook and a piece of wooden bracing are fastened to the west wall, south of the doorway. These two elements appear to have supported a wall-mounted fire extinguisher.

B. Spare Room (Room 202)

Floor

The wood flooring in this room runs in an east-west direction, but is wider than is found elsewhere in the building. While other rooms display boards 2 1/2 inches wide, this room has boards that are 3 1/4 inches wide. Many holes exist in the extant floorboards from earlier posthistoric plumbing.

Walls

Woodwork. No wainscot ever appears to have existed in this room. No baseboards are extant, but paint evidence found on areas of old plaster suggests that a baseboard once did exist 5 3/4 inches from the floor.

Plaster. The east, north, and west walls are plastered from floor to ceiling. New plaster can be found on sections of the east and west walls, and on all of the north wall, except over D202. Two holes remain in the east plaster wall from earlier, but still posthistoric, electric fixture boxes.

The south "wall" consists of the sloping roof framing. However, there is evidence for a knee wall here at one time: plaster stains on nailers in both the southeast and southwest corners suggest that a vertical partition once existed here.

The new plaster is unpainted, but the evidence of several previous paintings, including bands of color, remains on the old plaster in poor condition.

Ceiling

The ceiling of the Spare Room consists of two sections: a flat area at the north end, and the slope of the roof at the south end. The flat area features exposed third-floor joists and single-beaded subflooring. The joists run east-west, while the subflooring boards run north-south. A cornice molding similar to that used for first-floor ceilings is extant where the subflooring meets the east and west plaster walls. This trim is not present where the subflooring meets the north plaster wall, or where it meets the joists. Nevertheless, a lack of paint in these areas indicates that such a molding did formerly exist here. Also as with the first-floor ceilings, there is evidence that the ends of the joists were trimmed with a now-missing smaller molding where they abutted the east and west plaster walls.

The south section of ceiling is composed of the exposed rafters and single-beaded roof sheathing of the south roof slope. An area of new rafters and sheathing marks the place where a dormer, which had been added after the historic period, was removed after the station was moved to Race Point. The new rafters are sistered to the old rafters at the eaves. The new sheathing can be distinguished by its light color: the old sheathing is much darker.

The majority of elements of the flat ceiling are painted dark gray-green. The elements of the south roof slope are unpainted.

Doorways

D202 (to the Locker Room). This doorway is located at the east end of the north wall. The historic molded architrave is missing its upper west corner block. The bottom halves of two two-knuckle hinges are screwed into the east jamb on the Spare-Room side. The upper halves are missing; these are probably still attached to the door, which is also missing. A mortise for a strike plate with two screws exists on the west jamb, but the plate is missing. A metal keeper for a slide bolt is extant on the west jamb, but the bolt is missing (also probably still attached to the missing door). All doorway trim is painted white, and is in poor condition.

Windows

W207. The only window opening in the room is located at the north end of the west wall. It features the usual type of molded architrave, but only the upper half is painted white; the bottom half appears to have been stripped. The paint that remains is peeling. The window sash is missing, no hardware is evident, and the opening is boarded up from the outside.

Utilities

Protection Systems. A black-coated wire comes up through a small hole in the floor, and extends straight up to exit where the flat part of the ceiling meets the roof slope. This wire is part of the security system located in the Keeper's Room closet, directly below; it runs out to the roof, where it acts as an antenna.

C. Locker Room (Room 203)

Floor

The narrow floorboards run in an east-west direction, with the majority of the floor being covered with pink linoleum. Several large holes exist in the floor along the west wall, probably from previous plumbing installations.

Walls

Sections of historic and reproduction wainscot and plaster comprise the wall surfaces in the Locker Room.

Woodwork. The historic single-beaded wainscot can be distinguished from the reproduction wainscot by its white-painted finish. (The new wainscot is unpainted.) Historic wainscot is located on the north wall, west of D203 (except for one new board next to the architrave of that doorway). Three additional sections of historic wainscot are found on the east wall: at the north end, and on either side of D201. A small section also is present on the south wall, east of D202. The white paint on the historic wainscot is in poor condition. Reproduction wainscot exists on the rest of the south wall, and on the entire east wall. As will be discussed shortly, the installation of some of this reproduction wainscot appears to have been a mistake.

No shoe molding is extant, but the usual paint line 1 inch from the floor on the sections of historic wainscot attests to its former presence. Only one small section of wainscot cap remains, in the southeast corner between D201 and D202. However, it is partially covered with new plaster.

Plaster. The plaster on the walls above the wainscot is mostly new and unpainted. (Sections of old plaster can be identified by their paint.) Old, unpainted plaster is found in lieu of wainscot along the center of the east wall. Dirt lines in this plaster mark the former locations of three historic lockers (fig. 50). The original drawings (Appendix A) show eight lockers in the room: three on the east wall, and five on the west wall, extending northward from the south wall. Presumably, posthistoric alterations destroyed all plaster evidence of the west-wall lockers. However, it seems likely that the portions of south and west walls covered by the lockers would not have been wainscotted historically, but rather plastered, as was the east wall.

Ceiling

The ceiling consists of joists oriented in an east-west direction, supporting single-beaded subflooring boards that run in the opposite direction. The southernmost joist is actually a beam that is cased two-fifths of its length from the east corner. Several pieces of cornice and joist-end trim remain as evidence that all junctures of subflooring with joists and plaster walls were covered with the usual cornice molding, and that the ends of all joists were edged with the usual smaller trim where they abutted the plaster walls. The majority of the ceiling paint has been stripped.

Doorways

D201 and 202 (to the Quarters and Spare Room, respectively). Both doorways' historic molded architraves are painted white; their paint is in poor condition. Neither doorway contains a door. As explained in the discussions of the Quarters and the Spare Room, doors formerly here are missing.

D203 (to the Second-Floor Stair Hall). The molded architrave for this doorway is reproduction fabric, introduced when the wall south of it was reconstructed by the Park Service. The corner blocks of the architrave are missing the bull's-eye detail found on the historic architraves' corner blocks. The entire architrave is painted olive green.

No door was installed here, because it appears that this doorway was never meant to have one. Evidence for this includes the fact that the doorway: (a) is wider than the majority of other doorways; (b) acts as an entrance from the stair hall; and (c) is reflected as only a opening on the floor plan.

Windows

W208. The molded architrave of this west-wall window is painted white, but the paint is flaking and peeling. The sash is missing, and the opening is boarded up.

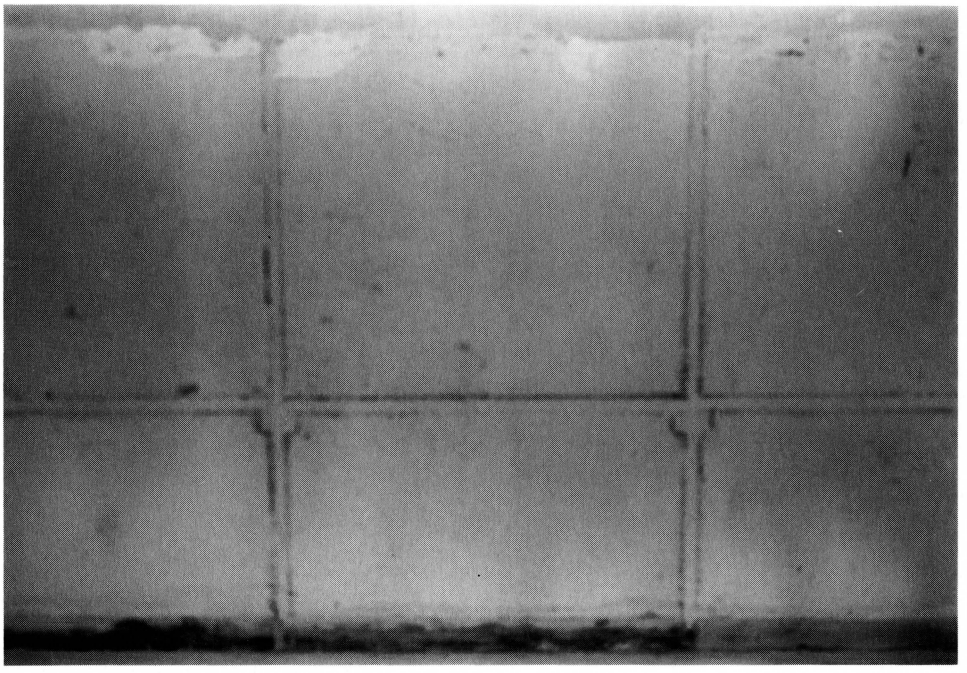


Illustration 50. Locker Room: Evidence of Former East-Wall Lockers.



Illustration 51. Second-Floor Stair Hall: Cornice Paint on North Wall.

W212. The east-wall window opening is slightly smaller than its western counterpart. Its molded architrave is painted white, but the paint is in poor condition. It also lacks sash and is boarded up. A pair of hooks and eyes are located on the north jamb.

Utilities

Protection Systems. A hand-operated fire extinguisher is mounted on the east wall below the window sill. A horn connected to the security system is mounted on the casing of the south beam. Wiring for one duplex outlet box has been brought up through a hole in the northwest corner of the floor, but the box lies unmounted on the floor.

D. Second-Floor Stair Hall (Room 204)

Floor

The east-west floor boards are covered with posthistoric pink linoleum.

Walls

Woodwork. The single-beaded matchboard wainscot used on the walls of the first-floor stair hall continues up along the stair to the second floor, and around the perimeter of the second-floor stair hall. Most of the wainscot at second-floor level is historic. Reproduction wainscot exists only on the south wall, east of D203, and as the first two boards on the adjacent east wall. This was installed as part of the reconstruction of this section of wall by the Park Service. As in the first-floor hall, the wainscot follows the rise of the stair to the next floor level.

A paint line 1 inch from the floor along the sections of historic wainscot suggests that a shoe molding was once present. A molded wainscot cap is still extant. The wainscot and its cap molding are painted olive green.

Plaster. Again, the treatment of the plaster walls above the wainscot resembles closely that of the first-floor stair hall. A tan-colored field is enlivened by purple-painted bands at cornice level and above the wainscot. The cornice band is 12 1/2 inches high on the east halves of the south and north walls. On the adjacent east wall, the bottom of the band is level with that of the other walls, but it rises only to the bottom of the joist that runs along the top of the east wall. The 12 1/2-inch band reduces to 5 inches on the west half of the south wall; it follows the soffit of the stair to the third floor. On the north wall, the 12 1/2-inch band simply ends at the westernmost ceiling joist (fig. 51).

The 5-inch band of purple paint running above the wainscot follows that element up from the first floor, around the perimeter of the second-floor stair hall, and up the stair to the third floor. It is interrupted by the architrave of D203.

The paint is in good condition, but the plaster of the east wall is cracked below W211, all the way down to the wainscot. Smaller cracks exist in the plaster on either side of the window's architrave, at its bottom end; this suggests that the window frame may be leaking.

Ceiling

The four ceiling joists are oriented north-south, supporting single-beaded subflooring boards that run east-west. These members generally display the standard cornice and joist-end trim. However, a different trim piece covers the joint where the east plaster wall abuts the bottom of the joist that runs along the top of this wall. All of this woodwork is painted olive green. The plaster soffit of the stair to the third floor is painted tan.

Doorways

D203 (to the Locker Room). The only doorway in the room sits in the south wall. Its molded architrave has been reproduced, complete with bull's-eye detail in the upper corner blocks. This opening contains neither door nor threshold, only floorboards. The trim is painted olive green, and is in good condition.

Windows

W209 and W210. W209, in the west wall, and W210, in the north wall, are the same size. Both openings display the usual historic molded trim, which is painted olive green. Both openings lack sash, and are boarded up from the outside. W209 has a metal hook and eye attached to the jamb, while W210 has two hook and eyes attached to the east jamb.

W211. This east-wall opening is the same size as those of W209 and W210, and it has the same type of architrave painted olive green. Here, however, a six-light casement sash is extant, and no exterior boarding is present. The sash appears to be nailed shut, and the two butt hinges on the north side of the sash do not seem to be attached to the jamb.

Stair

The stair to the third floor begins its ascent at the midpoint of the north wall. Two regular treads ascend the north wall; three winder treads are located in the northwest corner; and six regular treads climb the west wall. A landing in the southwest corner leads to one regular tread on the south wall.

The newels, balusters, and handrail of the stair balustrade match those found at first-floor level. The bottom end, or drop, of the northwest newel has been inappropriately altered. Also, as happened with the first-floor stair, the second-floor stair was erroneously painted olive green during the ca.-1980 restoration. (Historically, the stair components were not painted, but only oiled.)

INTERIOR DESCRIPTION: THIRD FLOOR

A. Stowaway (Room 301)

Floor

The unfinished floorboards vary in width, but none are less than 5 3/8 inches. They are oriented in a north-south direction.

Walls

The only wall of full height in this room is the north wall. The east and west walls are only about 12 inches high (see figure 52, left and right). Above them are the roof members of the "connector" linking the main building and the tower at second-floor level. The south wall consists entirely of roof framing members belonging to the south roof slope of the main building.

The north wall, and the 12-inch-high east and west walls, are sheathed with unfinished, horizontal, tongue-and-groove boards.

Ceiling

As indicated above, the roof of the main building, and the roof of the connector between the main building and the tower, intersect at right angles at the location of the Stowaway. The unfinished rafters and sheathing boards of these roofs are exposed inside the Stowaway, forming the ceiling of this room. The east and west roof sections each begin at a plate 12 inches above floor level, and they slope upward to meet at a ridge board (fig. 52). The south roof section also slopes inward, somewhat like a hipped roof. There is no north roof section.

The bottom of the south roof section shows evidence of having been affected by the installation, and later removal, of a post-historic dormer in the south wall of the Spare Room (Room 202). The historic rafters are missing their bottom ends, and new pieces have been sistered onto them (see figure 52). New roof sheathing also was needed: its bright color distinguishes it from the old sheathing boards.

Doorways

D301 (to the Third-Floor Stair Hall). This opening, located in the north wall, is surrounded by a narrow unmolded architrave. A more complete description is provided in Section B, below.



Illustration 52. Stowaway: Looking South.

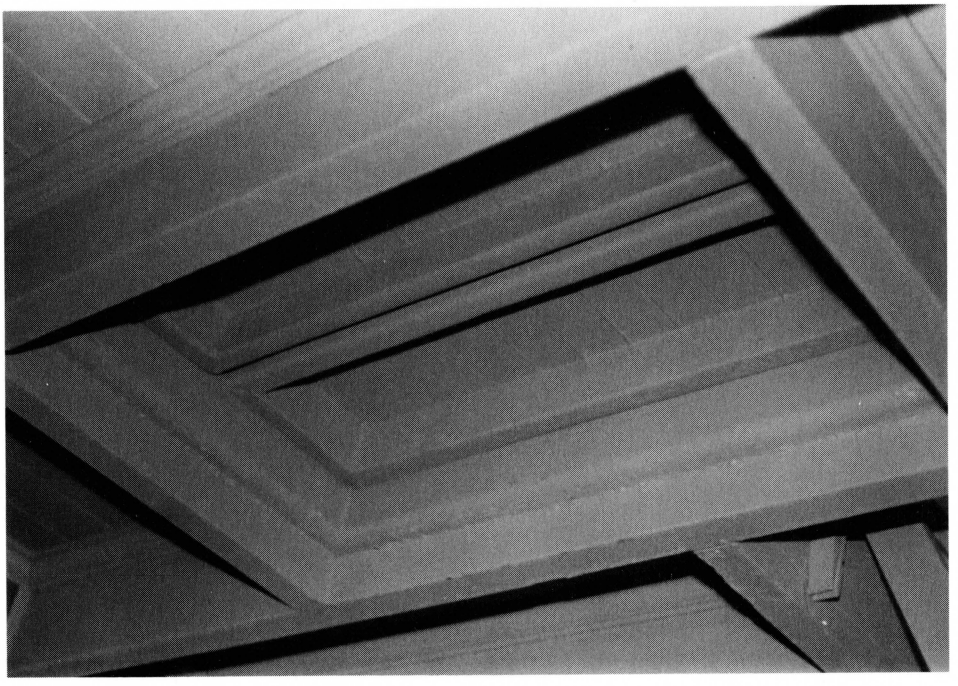


Illustration 53. Third-Floor Stair Hall:
Historic Hatchway in Ceiling.

B. Third-Floor Stair Hall (Room 302)

Floor

The posthistoric pink linoleum that covers the floorboards is glued down so tightly that it cannot be pulled up to expose the underlying floor. Two round holes, probably from pipes, are located in the northeast corner of the floor. An extant pipe comes up through the floor in the southeast corner, but is cut off near the ceiling.

Walls

Woodwork. The same type of single-beaded, matchboard wainscot used on the walls of the stair halls at first- and second-floor levels is found here as well. The wainscot on the south wall follows the stair up from the second floor. It is interrupted by D301, but continues onto the east wall, and thence onto the north wall. The wainscot on the north wall runs approximately two-thirds of the way to the west wall, then stops at the edge of the stairwell. (This is where the stair balustrade runs into the north wall, and where the east side of W301 is located.)

A quarter-round shoe molding is extant around the base of the wainscot, on top of the linoleum. A molded wainscot cap also is present. All of this woodwork is painted olive green.

Plaster. Rough-textured plaster is used on the walls above the wainscot. As in the stair halls at the lower levels, the plaster is painted tan and trimmed with bands of purple paint. The band at cornice level is the usual 12 1/2 inches wide on the north and south walls. On the east and west walls, the bottom of the band is level with that on the north and south walls. However, the band extends up only to the bottoms of the joists that run along the tops of the east and west walls.

Ceiling

Six ceiling joists run north-south. Two of these lie at the tops of the east and west walls. The single-beaded subflooring above the joists runs east-west. The usual cornice molding covers the joints between the subflooring and the joists. The usual smaller trim surrounds the ends of the joists where they abut the north and south walls. A larger, different molding covers the joints where the plaster of the east and west walls meets the joists at the tops of these walls.

The original, rectangular hatchway to the fourth-floor Lookout is located in the center of the ceiling (fig. 53). It is framed by header joists running between the middle two joists. The hatchway is covered by two doors; the underside of each door features a wooden frame around its outer edges that supports boards narrower than the surrounding subflooring boards. The

cover will be discussed in greater detail in the following section, "INTERIOR DESCRIPTION: FOURTH FLOOR," Section A.

A second, larger opening to the Lookout is located in the southeast corner of the ceiling, extending northward along the east wall. This opening exists because the second joist from the east runs only halfway to the south wall, being framed into a header joist. This larger opening is not historic: it does not appear in the original drawings. Also, the header joist is clearly the cut-off, reused south end of the second joist from the east. A paint line from the usual cornice trim is evident on the lower edge of the header. This indicates that not only was the cut-off section reused, but also that it was turned upside down before being trimmed to fit between the adjacent joists. This opening has no door. It is served by a freestanding wooden ladder (fig. 54) that extends up through the opening, resting against the north edge of the opening. The ladder appears to consist of rectangular rungs mortised into the top surfaces of the two stringers.

All of the wooden ceiling elements are painted olive green, including the freestanding ladder. A cut cable extends down through the ceiling at the north end of the second bay from the east. Three holes exist in the ceiling in the bay next to the hatchway. Otherwise, the ceiling is in good condition.

Doorways

D301 (to the Stowaway). This small doorway is located in the south wall. Although much smaller in scale than other Old Harbor doorways, the architrave exhibits the usual molded trim painted olive green. The threshold here is unpainted.

The door here is composed of single-beaded matchboarding. It has two holes drilled through its east side; a wire snakes through these holes and ties around an iron ring attached to the east jamb. The stop is missing from the east jamb, but a paint line and a cutout in the threshold confirm its former existence. The iron ring, as well as a screw eye, are attached to the center of the jamb where the stop was originally attached. This suggests that the ring and eye are both posthistoric.

Windows

All four of the window openings in the room are the same size, approximately 13 inches wide by 22 inches high. All four feature the standard molded architrave trim painted olive green. Finally, all four windows are boarded up, and no sash are visible.

W301. Located at the west end of the north wall, this opening is boarded up on the outside; neither sash nor hardware is present.

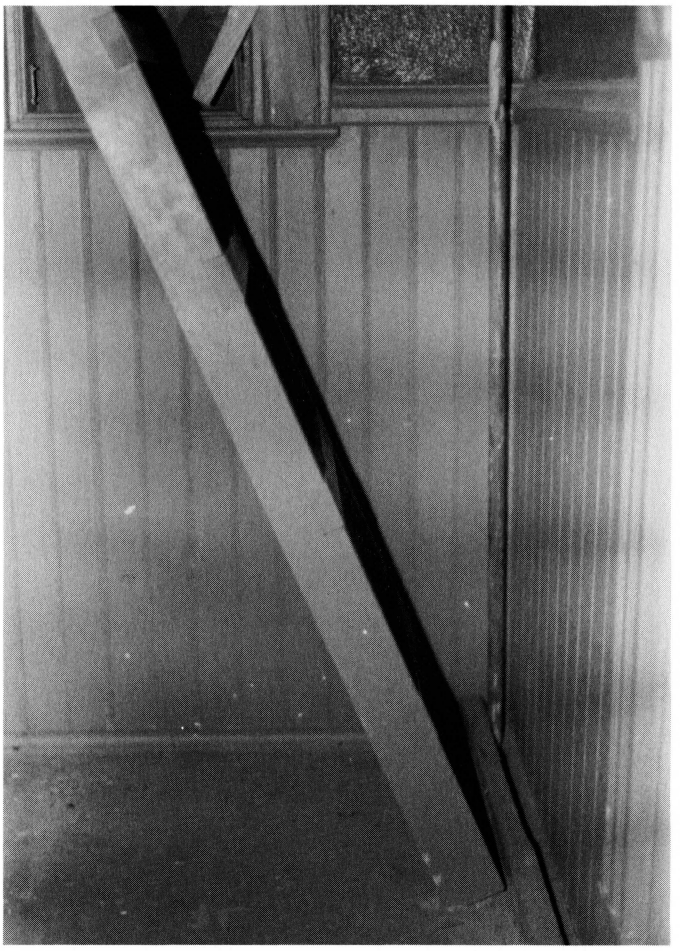


Illustration 54. Third-Floor Stair Hall:
Ladder Serving Posthistoric Opening in Ceiling.



Illustration 55. Lookout: Doors of Historic Hatchway.

W302. Located at the south end of the east wall, this opening also is boarded up on the outside. No sash is present, but two metal hooks are attached to the north jamb.

W303. Located at the south end of the west wall, this opening is the only one of the four that is boarded up on the inside. This obscures any hardware or sash that might be extant.

W304. Located at the north end of the west wall, this opening is boarded up on the outside. No sash is present, but two metal eyes are attached to the north jamb.

Stair

There is no stair to the fourth floor. The open well of the stair coming up from the second floor runs along the entire west side of this room. The well is edged by a section of stair balustrade that runs between the newel at the head of the stair, and a newel attached to the north wall. The newels, balusters, and handrail match those used at the lower levels. All elements are painted olive green. As with the stairs at the lower levels, this represents an error: historically, the stair elements were merely oiled.

INTERIOR DESCRIPTION: FOURTH FLOOR

A. Lookout (Room 401)

Floor

The majority of the floorboards composing the Lookout floor are covered with posthistoric pink linoleum. The floorboards run in an east-west direction; they are exposed in a square area located just north of the posthistoric floor opening along the east wall.

The historic hatchway to the third floor sits in the center of the floor, oriented north-south (fig. 55). The double doors covering the hatchway are covered by a piece of unsecured linoleum. The doors consist of short lengths of board running east-west, and a longer board running north-south at the outer edge of each door. All elements of the doors are flush with the Lookout floor, and are painted salmon pink.

Approximately halfway down the length of each door, near the joint where the two doors meet, is evidence for flush-ring hardware: a recess for a ring exists in each door, but the rings are missing. A small, rectangular rubber mat is glued to the linoleum at the north edge of the hatchway opening. Presumably, this was to provide secure footing for persons using the hatchway.

The larger, posthistoric opening to the third floor sits in the southeast corner of the room (fig. 56).

Walls

The walls of the Lookout appear to be divided into three tiers. The lower and upper tiers lie in the same plane, but the middle tier is recessed away from the center of the room.

Woodwork. The lower tier of wall is sheathed with single-beaded matchboards (fig. 57). The same material covers the stepped-back area where the lower tier meets the middle tier. This stepped-back area is horizontal, and forms a built-in bench around the entire perimeter of the room.

The "jambs" and "soffit" of the recessed middle tier are covered with smooth lumber (fig. 58). This material appears to be original, despite the fact that the original drawings call for these areas to be covered with matchboarding. The "back" of the recessed middle tier is finished with the same type of matchboarding used on the lower tier of wall. This material is also used on the upper tier of wall.

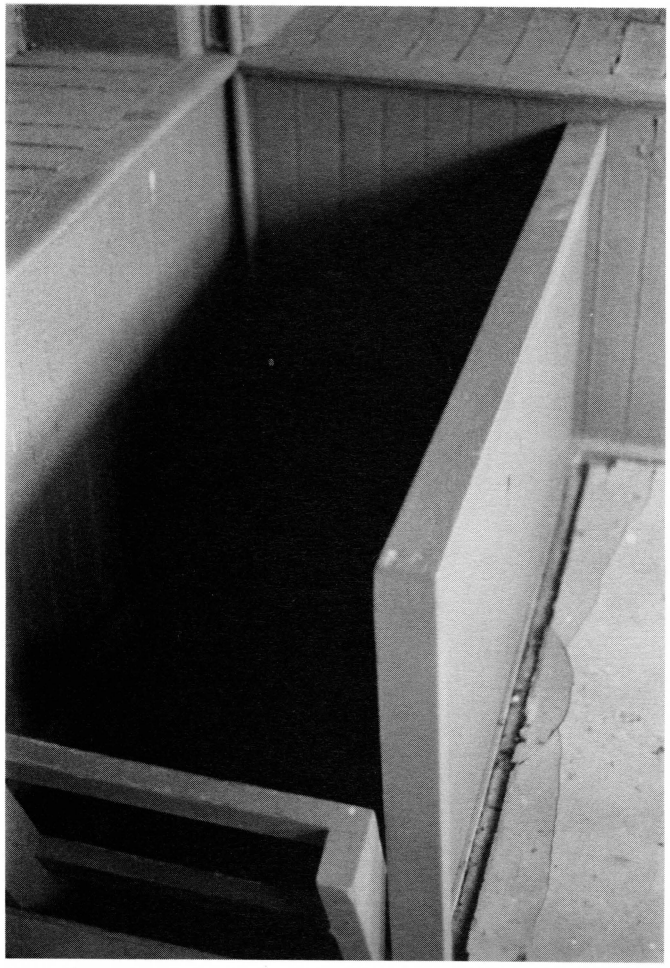


Illustration 56. Lookout: Posthistoric Opening in Floor.

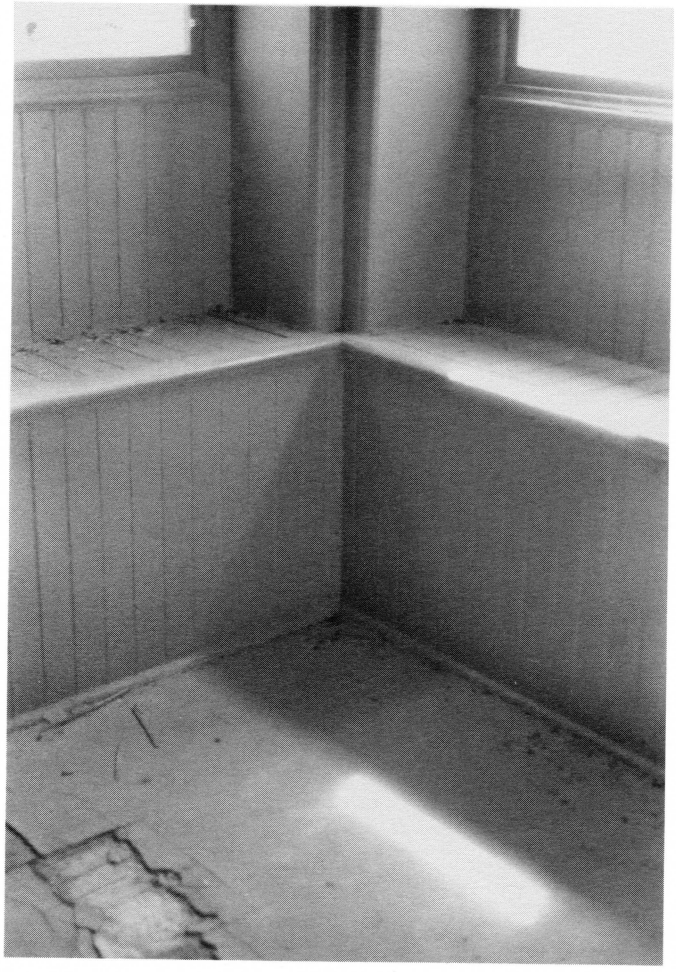


Illustration 57. Lookout: Lower and Middle Wall Tiers.

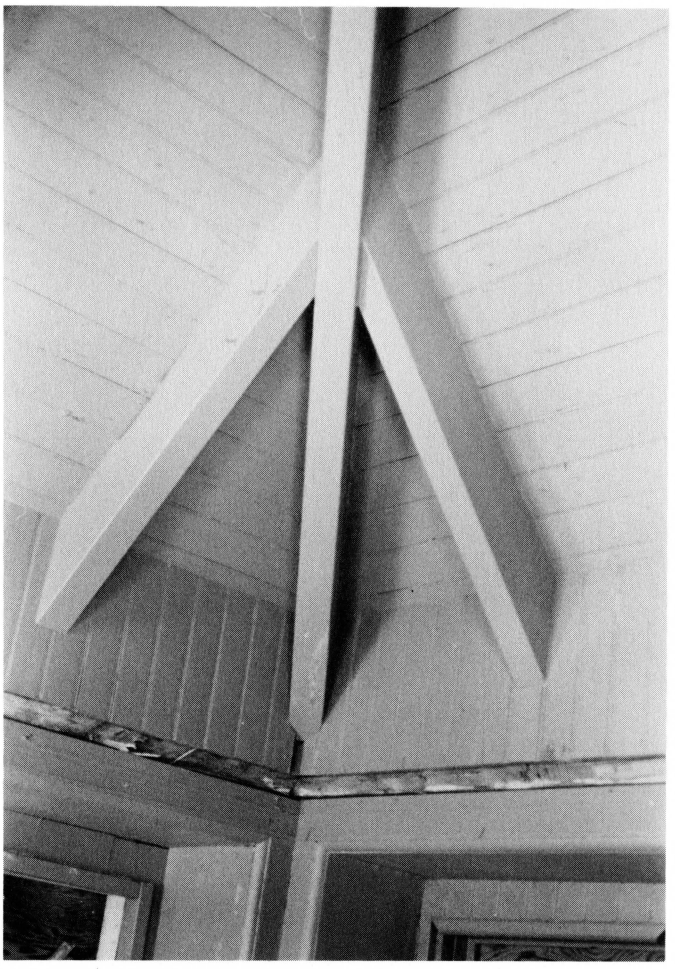


Illustration 58. Lookout: Upper Wall Tier and Hip Rafter.

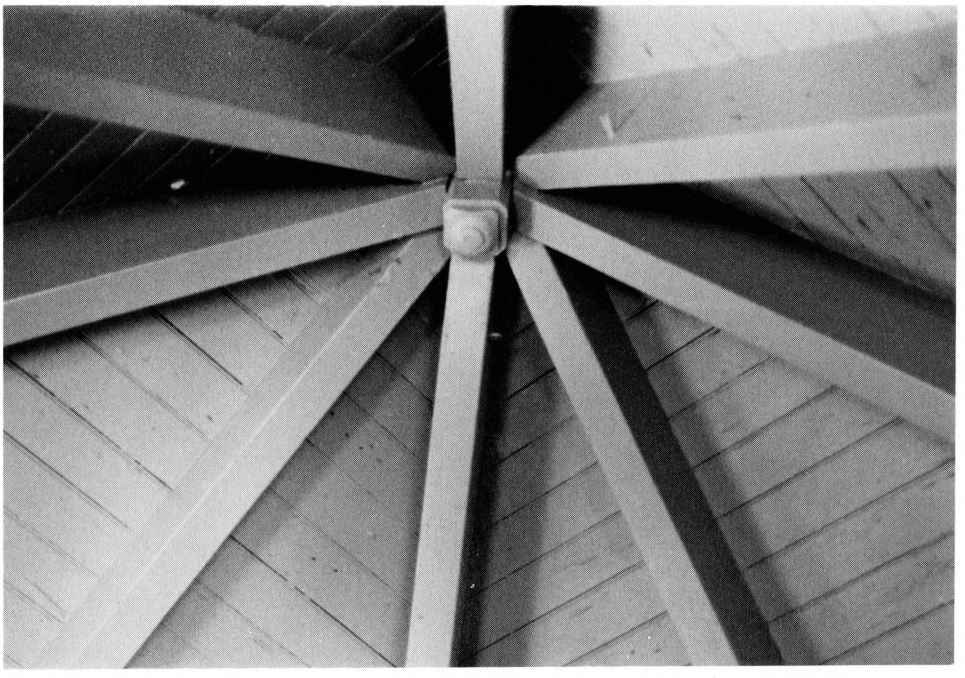


Illustration 59. Lookout: Apex of Roof Framing.

Most of the original matchboarding and smooth lumber is intact. It is missing in two places, which have been patched with wide pine boards. These places are part of one bench seat, and the east half of the middle tier of the north wall.

A quarter-round shoe molding is extant around most of the base of the lower wall tier. It is missing from the southern two-thirds of the east wall, where the posthistoric opening to the third floor was created. The matchboarding here is intact, however, and paint lines on it clearly indicate the former presence of floorboards and a shoe molding. A joint near the bottom of the upper tier was formerly covered by a molding that ran around the entire perimeter of the room. This molding is now missing (see figure 58, top).

A low partition about 24 inches high edges the west side of the posthistoric floor opening, being anchored to the south wall (see figure 56). It is composed of plywood with unmolded wooden trim.

Except for the strip of raw wood in the upper tier exposed by the disappearance of the molding, all of the wall and bench woodwork in the Lookout is painted olive green, and is in good but dirty condition.

Ceiling

The ceiling consists of the exposed rafters and single-beaded matchboard sheathing of the tower roof. The roof is hipped, so there is a hip rafter at each of the four corners. Four other rafters bisect the four triangularly shaped roof slopes, one per slope. Thus, eight rafters meet at the apex of the roof (fig. 59), where a wooden drop displays the same protruding bull's-eye detail found on the bottom ends of the stairs' newels. A pair of shorter rafters flank each bisecting rafter; the top ends of the shorter rafters are nailed to the hip rafters. The bottom ends of all rafters sit above the upper tier of wall. The entire ceiling is painted olive green.

Windows

Eight window openings are located in the recessed middle tier of the Lookout's walls, two at the opposite ends of each wall. All eight openings measure 20 inches wide by 24 inches high; their top edges abut the soffit of the middle wall tier. The pieces of historic molded architrave that remain are painted olive green, but many pieces are missing. Holes in the frames of windows where sash are absent suggest that sash pulleys and weights existed only for the upper sash.

W401. Located at the west end of the north wall, this opening contains a one-over-one sash. It retains a metal sash lock and a small metal slide bolt, on the right stile of the lower sash. A metal strike is attached to the right stop to receive the

bolt. The bolt may have been added to hold to lower sash open, since apparently only the upper sash had sash weights.

W402. Located at the east end of the north wall, this window has an architrave different from that of the other windows. Since this is the area where the matchboarding has been patched, it is likely that this architrave represents a posthistoric alteration. The sash are missing, and the window is boarded up on the outside.

W403 and W404. Both of these windows are located in the east wall, at the north and south ends, respectively. Neither opening retains its sash, and both are boarded up on the outside.

W405. Also lacking sash and boarded up on the outside, W405 is located at the east end of the south wall.

W406. This window sits at the west end of the south wall. As with W401, this opening contains a one-over-one sash, a metal sash lock, and a metal slide bolt for the lower sash. It also features a metal "anti-rattle" sash fastener.

W407 and W408. These windows are located at the south and north ends of the west wall, respectively. Both windows retain their one-over-one sash with metal sash fasteners. Only W407 has an "anti-rattle" fastener; only W408 has a slide bolt on its lower sash.

IV. RECOMMENDATIONS

INTRODUCTION

The Old Harbor Life-Saving Station at this time is only partially restored. The extent to which this work will be completed will depend upon decisions yet unmade about the building's suitability for visitor interpretation. The recommendations presented here are based upon the premise that a decision will be made to continue the restoration of the entire structure to its appearance at the time of its construction in 1897-98. These recommendations are drawn from the original specifications and drawings, and from physical evidence found in the structure.

In the following sections, recommended paint colors are specified only by name (e.g., "olive green"). Corresponding Munsell designations and commercial paint matches for these colors are provided in Appendix N of this report.

GENERAL RECOMMENDATIONS

Much restoration work has been accomplished at the Old Harbor Life-Saving Station, particularly in the realm of re-creating historic elements that had disappeared. However, many such elements are still missing, including column details and balustrades for the porches, doorway architraves and doors, window architraves and sash, and miscellaneous moldings. A number of such elements are currently stored in the basement of the Old Harbor Life-Saving Station. Before any further restoration occurs, these elements should be inventoried and their original locations determined, insofar as possible. It will then be clear as to what elements are definitely missing, and will need to be reproduced.

EXTERIOR RECOMMENDATIONS

A. Foundations

Main Building and Tower

The present foundation walls are part of the basement built at Race Point to receive the main building and the tower of the Old Harbor Life-Saving Station following its move to Nauset Beach. No work needs to be done on the foundation walls themselves.

No documentation has been found that explains the rationale behind the design of the new basement. This design includes a north-elevation bulkhead entrance (D119) in the tower. The bulkhead does not relate to either the station's original appearance, or to its posthistoric full cellar. Rather, the bulkhead relates to the period 1900-10, when only a partial cellar was extant, beneath the tower. When the full cellar was constructed in 1910, an east-elevation bulkhead entrance was created, which is clearly documented by the various plans and historic photographs. It seems that the old north-elevation bulkhead entrance was converted to a window at about that time.

Technically speaking, then, the north-elevation bulkhead should not have been included in the Race Point foundation; the east-elevation bulkhead could have been included. However, none of the elements involved--basement or bulkheads--were present during the historic period, so it is not critical that the costly bulkhead relocation be carried out.

The historic-era boat ramp at the north doorways was re-created when the station was relocated. The historic-era boat ramp at the west doorway was also re-created at that time. However, the latter ramp was subsequently altered to improve visitor access to the station. If visitor circulation into the building is ever altered, consideration should be given to reconstructing the boat ramp as per the original specifications.

Cistern

The wooden cistern cover is in poor condition, and should be either repaired or replaced. At a minimum, the split board and the cupped battens should be replaced. Any work here should remedy the orientation and construction problems that caused the present cistern cover to deteriorate so rapidly.

B. Walls

Wherever exterior shingles are missing, replacement shingles should be procured and installed. The west elevation of the Boat Room particularly needs this attention.

The shingles should be left unpainted. All moldings and trim elements, such as cornices and fascia boards, should be painted "French gray." See Section H for more information.

C. Doorways

Main Building and Tower

D101, D106, and D113. The plywood over the front and rear doorways of the main building, and over the east-elevation doorway of the tower, should be removed. The vandalized reproduction doors in D101 and D113 must be repaired or replaced. The historic door of D106, which is still in place, should be repaired.

The architraves of the doorways should be painted "French gray." The doors should be painted "light Colonial yellow." See Section H for more information.

All three doorways were also originally fitted with storm and screen doors. If funding permits, these doors should be reproduced as described in the specifications.

Boat Room

D115-116. The north-elevation Boat Room doorways now have two sets of doors. On the outside are the swinging doors that date to 1910; they may be the doors hung here originally, converted from sliding to swinging operation in 1910. On the inside are the modern, reproduction sliding doors. Achieving a historic appearance will require the removal of the outer doors. (If these are determined to be the original doors, they should be labeled and stored.) The outer doors should be removed only if the interior, sliding doors can be secured in such a way as to prevent unauthorized access into the Boat Room. The specifications originally called for "stay rolls" at the bottom of the doors to prevent them from blowing in, and for hooks and lag-screw eye bolts to hold the doors shut. If these additions can provide adequate security, they should be installed, and the exterior doors removed.

The architraves of the doorways should be painted "French gray." The exterior faces of the doors should be painted olive green.

D117. The architrave and door of the west-elevation Boat Room doorway should be painted to match those of D115-116.

D. Windows

The plywood covering should be removed from all windows, and all missing window sash should be replaced. The architraves of the windows, like those of the doorways, should be painted "French gray." The outside of all window sash should be painted blue-black. See Section H for more information.

E. Porches

Although the porches were partially rebuilt during the initial phases of restoration, they were not completed. The stair to the front porch, or "piazza" in the specifications, was not rebuilt. The latticework needs to be extended behind the stair to the rear porch. The column missing from the rear porch, west of the stair, should be re-created. All extant columns lack their base and capital trim. Balustrades need to be installed on both porches. The pieces of molding on the soffit require either repair or replacement. As indicated previously, portions of these elements appear to be stored in the basement, and could either be reinstalled or used as models for reproduction elements. Finally, flashing needs to be installed where each porch meets the main structure.

After the carpentry work is completed, the porch columns, balustrades, steps, and ceilings should be painted "French gray." The porch floors should be oiled. The latticework could be painted "light Colonial yellow." See Section H for more information.

F. Roofs and Chimney

Gutter System

Little evidence of the historic drainage system remains on the structure, but the original specifications call for galvanized-iron gutters, gutter straps, and downspouts. The two holes in the sides of the rear-porch roof recall the existence of a drainpipe, but whether this pipe was part of the historic drainage system is unknown. The specifications detail the gutter system and how it should interact with the cistern. The system should be reconstructed, using these specifications, and all elements should be painted "French gray."

Tower Finial

The original specifications call for a copper finial atop the tower roof. Since one was not installed during the 1980 restoration, such a finial should be added during final restoration.

Boat Room Sign

The NPS restoration work did include the re-creation of the historic sign for the Old Harbor Life-Saving Station. This sign is currently sitting on the Boat Room floor. It should be mounted on the roof of the Boat Room, facing north, above D115-116. (See Appendix A, Sheet 2; Appendix O; and figures 6 and 11.)

G. Utilities

The porcelain electric light socket on the north elevation next to the front doorway (D101) is posthistoric, since the structure was not electrified during the historic period. However, the fact that it was retained through two phases of restoration may indicate a reason that was not recorded. If it is decided that a light should remain for safety and security purposes, the fixture should be retained. If historical accuracy is to be achieved, however, then the fixture should be removed.

H. Finishes

Walls

The wood shingles should be left unpainted. All moldings and trim elements, such as cornices and fascia boards, should be painted "French gray" as per the original specifications.

Doorways

The architraves of all doorways should be painted "French gray" according to the original specifications. D101, D106, and D113 should be painted "light Colonial yellow," again as cited in the original specifications. A light yellow color is now present on the vandalized reproduction doors of D101 and D113. No record exists that documents the manufacture or name of this paint. It thus might be matched in situ. The exterior faces of D115-116 and D117 should be painted olive green.

Windows

The architraves of the windows, like those of the doorways, should be painted "French gray." The outside of all window sash should be painted Dutch Boy #180/c (Gibralter Black).

Porches

Once all of the carpentry work is completed, the porch columns, balustrades, steps, and ceilings should be painted "French gray." The porch floors should be oiled with two coats of a mixture of one part turpentine to eight parts raw linseed oil. Although not specifically named, the latticework could be painted under the direction that "the remainder of the outside work" was to be painted "light Colonial yellow."

Roofs

After the historic drainage system is reconstructed, all of its elements should be painted "French gray" to match the wooden trim.

INTERIOR RECOMMENDATIONS: GENERAL

A. Floors

All of the posthistoric pink linoleum and red vinyl tiles should be removed from the floors of Old Harbor, so that the condition of the wooden floorboards underneath can be ascertained. The sections of floorboards that can be seen now suggest that the boards are the same width in all of the rooms except the Spare Room, where they are wider. Some of the floors are probably original to the construction of the station; others have certainly been replaced. In any case, the existing boards are within the dimensions cited in the original specifications: a maximum of 3 inches wide. Thus, the extant wood floors should be kept and repaired wherever possible. This will involve primarily the patching of holes in the floors.

B. Walls

Woodwork

Installation of reproduction wainscot, wainscot cap, chair rail, and baseboard has been mostly completed in the first-floor rooms. The primary task remaining will be to complete the reinstallation of missing pieces of woodwork, including wainscot, wainscot cap, baseboards, mantelshelves, and other shelving.

Although not specifically mentioned in the specifications, a quarter-round shoe molding appears to have been used originally at the base of the wainscot. (Paint evidence for a molding can be found along the bottom edges of sections of extant historic wainscot, and a piece of quarter-round molding remains in this location in the southeast corner of the Mess Room.) This molding is missing in almost all areas, but can be purchased as a stock item, and so should be reinstalled.

Plaster

The plaster walls of the first-floor rooms have been mostly restored. A few areas of cracking should be repaired. The plaster walls of the upper floors will require similar restoration work.

C. Ceilings

Many sections of the cornice molding and joist-end trim used originally to finish the exposed ceiling framing are missing, and need to be replaced in kind. Also, there are a number of crude patches in the ceilings, some of which have been covered with a type of contact paper. This paper needs to be removed, and the patches replaced with ones more skillfully executed.

D. Doorways

Many of the original doors remain but, because of the recent vandalism, need to be repaired or reproduced. The door to the Keeper's Room closet (D108) is the most historically intact of the historic interior doors, and could be used as a model for reproduction doors. They had five panels (two-one-two), and two two-knuckle hinges with four screws per hinge plate and ball finials. Very few of the original hinges remain in place. These will need to be located or reproduced and installed on the original doors.

Metal doorknobs and escutcheons are in general use now on the historic interior doors. The original specifications call for doorknobs in various sizes of polished cherry wood, cherry escutcheons, and cherry door stops with rubber bumpers. None of these cherry-wood elements remain; it is not known if the specifications were followed in this matter. Therefore, an inventory of door hardware should be taken, in order to determine if the extant metal doorknobs and escutcheons are the historic ones. This will require that all paint be removed from extant door hardware. If the metal hardware is proved to be posthistoric, then the original specifications should be followed, and cherry-wood elements installed. Otherwise, the metal hardware should be retained, and missing pieces should be either purchased or reproduced.

E. Windows

All broken glass should be reglazed. All of the sash cords need to be repaired. Although the specifications call for sash lifts, no evidence for these have been found on the windows. Interior shades for all windows in the main building, except the fourth-floor Lookout, were included the 1897 list of equipment to be supplied to the Old Harbor station. These shades were specfied as "Best Scotch Holland with sage 'Hartshow' rollers and similar." It is not known if the shades were in fact installed. Marks remaining on the window frames indicate that shades did exist at some time, but not necessarily during the historic period.

F. Finishes

Floors

After being repaired and patched, all of the wood floors at Old Harbor should be thoroughly cleaned. They then should be oiled with at least two coats of a mixture of one part turpentine to 8 parts raw linseed oil. If visitors will circulate through the main structure, thought should be given to installing a carpet runner, in order to protect the floors and control the circulation path.

Walls

In general, all woodwork--wainscot, wainscot cap, shoe molding, and baseboards, whether original or reproduction fabric--should be painted an olive-green color. (This is not true of the elements of the main stair; see below.) Olive-green paint has been applied to most of the woodwork on the first floor, but it is peeling in several locations, and should be touched up. The woodwork of the upper floors needs extensive application of the olive-green color.

Ceilings

The reproduction moldings and neatly executed patches introduced in the ceilings of various rooms should be painted the same color as the surrounding ceiling elements. This color is "French gray" on the first floor, and olive green on the second, third, and fourth floors.

Doorways

As stated previously, the paint needs to be removed from the metal door hardware, in an effort to ascertain its historicity. After this has been done, and the doors have been repaired, olive-green paint needs to be applied to all doorway architraves, transom sash, and doors. The metal or wooden hardware should not be painted.

Windows

The original specifications called for windows to have unpainted pulley stiles, and oiled and varnished cherry window stops. The over-enthusiasm of the 1980 painting contractor caused both of these details to be painted olive green. The paint should be removed from the stiles and stops; the stops should be oiled with the 1:8 mixture of turpentine and raw linseed oil. All extant window hardware also should be stripped of paint.

Stair

The same contractor painted all elements of the main stair olive green. The treads, risers, nose moldings, balusters, newel posts, and handrail all should have remained unpainted. These details should be stripped of paint, and returned to their original oiled finish. The usual mixture of one part turpentine to eight parts raw linseed oil can be used for this finish.

INTERIOR RECOMMENDATIONS: BASEMENT

A. Room B01

Interior access from the cellar to the first floor was available before the move, via a stair leading up through an opening in the floor of the Storm Clothes Room. That stair was lost at the time the station was relocated. No new stair was reintroduced after the move, but the former stairwell hole was not closed. (A ladder was installed to provide marginal interior access between the new basement and the first floor.) No record remains of the philosophy behind this decision. See "INTERIOR RECOMMENDATIONS: FIRST FLOOR, Section B" for more discussion.

INTERIOR RECOMMENDATIONS: FIRST FLOOR

A. Mess Room (Room 101)

Floor

The present patches around the chimney stack should be replaced with floorboards similar to the existing ones.

Walls

The original specifications and drawings called for a mantelshelf around the chimney, and three shelves on the south wall, west of the chimney stack. Both types of shelves were to be 8 inches wide, 1 3/8 inches thick, and mounted on the wainscot. Beaded edges were specified for both types; they probably resembled the edges of the existing Pantry shelves.

All four of these shelves are missing, and should be recreated. The mantelshelf should be mounted directly beneath the wainscot cap and supported by bronzed iron brackets. The highest of the three shelves should be mounted in line with the mantelshelf, with the other two shelves below. These three shelves should be supported by wooden standards and ledgers.

Doorways

The architrave of D102 is missing its three-light transom sash and the hardware for that sash. If not found in the basement, the sash should be reproduced, based on an existing transom sash. The door here should be repaired if possible and fitted with the proper hardware.

The door of D103 is hung on the wrong side of the jamb. If the door can be repaired and repainted, it should be rehung on the Kitchen side of the opening, on the east jamb where mortises for former hinges still exist. The current hinge locations should then be patched.

The architrave of D111 also needs a three-light transom sash. The door here may be repairable, but it needs to be repainted, and all of its hardware needs to be replaced.

Finishes

Floor. All floorboards, including those installed to replace the wooden patches around the chimney stack, should be oiled.

Walls. The newly installed mantelshelf and the three shelves on the south wall of the Mess Room should be painted olive green.

Doorways. All doorway woodwork not already painted olive green should be so painted. This includes repaired or replaced doors, and reproduction transom sash.

B. Storm Clothes Room (Room 102)

Floor

The small holes in the northeast corner of the floor should be patched. The recommended treatment for the former stairwell to the cellar, located at the south end of the room, is less clear. A decision needs to be made whether or not to keep the stairwell. If it is to be kept, then a stair should be built to serve it. If no stair is to be built, then the stairwell should be closed up and patched with floorboards. In the meantime, additional safety precautions should be taken around the open hole, especially if the first floor of the lifesaving station will be open to the public.

Doorways

Although the door of exterior D101 was reproduced ca. 1980, vandals have since sufficiently destroyed it such that another reproduction door is needed. Perhaps the existing door could be taken apart, with the intact pieces being retained, and the damaged parts being reproduced. The door could then be reassembled. The uppermost hinge appears to be historic, but the remainder of the hardware needs to be replaced per the specifications, including a Yale and Towne "make-lift" latch with handles (No. 1070) and a Yale rim night latch.

Finishes

Floor. All floorboards, including newly installed patches, should be oiled.

Ceiling. The peeling section of paint in the northwest corner should be repainted "French gray."

Doorways. The interior side of the door in D101 should be painted olive green.

C. Kitchen (Room 103)

Floor

The small holes in the northeast corner should be patched. The large hole in the southeast corner, which may relate to the original sink plumbing, should be retained.

Walls

Woodwork. As in the Mess Room, a mantelshelf should be installed in the Kitchen around the chimney stack, at a level directly below the wainscot cap.

Plaster. The red chalk line that delineates the bottom edge of the contrasting painted cornice band should be washed off the wall.

Ceiling

The badly patched hole in the westernmost bay of the ceiling should be better camouflaged and repainted.

Doorways

D104's architrave is reproduction fabric that lacks the bull's-eye design in its corner blocks. The corner blocks should be removed long enough to have the design incised, and then reinstalled. The door is also missing, and if a suitable five-paneled door cannot be found in the basement, one should be milled and hung on the east jamb to open into the Kitchen. The specifications call for this door to have two knobs, and one could speculate that it is the one Kitchen door that was to have a "mortise knob lock." (The two other Kitchen doors, D103 and D105, were to receive mortise latches with knobs.)

D105's door also is missing; it should be found if possible, reproduced if not, and installed. The hinge mortises exist on the west side of the jamb, indicating that the door was hung according to the original drawings. It should be fitted with a mortise latch with knob.

Windows

The four-light lower sash of W104 should be changed to a two-light sash. If the original sash is not found in the basement, one should be reproduced, painted, and installed.

Fixtures

The specifications and drawings call for a "flap table" in the Kitchen, in the northeast corner. Since that section of north wall and wainscot is now reproduction fabric, no physical evidence of the table remains on that wall, nor can any be found on the east wall. It may be that no flap table ever existed: the 1897 list of furnishings for Old Harbor (Appendix D) includes a kitchen table 27 by 42 inches in size; perhaps this freestanding piece of furniture replaced the need for a flap table. The flap table should not be installed until evidence for it is found.

The original specifications (Appendix B) state that the sink should be a Columbus wrought-steel galvanized sink, 18 by 30 by

6 inches, made by the W.& B. Douglas company (Fig. 393 in the company's catalog), with a grooved wooden draining shelf as depicted in the drawings. A towel roller was to be installed next to the sink. The design of the towel roller is unknown.

The 1897 list of furnishings specifies the cook stove to be a "Beaver" coal range, No. 8-21. An effort should be made to locate both a similar sink and stove.

Finishes

Ceiling. The newly installed patch in the westernmost ceiling bay should be painted "French gray."

Doorways. The newly incised bull's-eye designs in the upper corner blocks of D104 should be painted olive green.

Windows. The reproduced two-light lower sash of W104 should be painted olive green.

D. Pantry (Room 104)

South-Wall Cabinets and Shelves

Although the cabinets and shelves on the south wall of the Pantry were not built exactly as shown in the original drawings, enough physical evidence remains to deduce their original appearance.

Cabinets. A shoe molding, probably a quarter-round, was once installed at the base of the two stationary cabinet panels that are located below the counter top, and at the base of the drawer unit. This molding should be reinstalled.

Counter. Brass butt hinges should be screwed to the two wooden covers that lift up at the east end of the counter; the size of the hinges should be determined by the size of the existing hinge mortises.

Shelves. The vertical divider between the east and west sections of shelving, which is missing its lower end, should be replaced or pieced to extend once again down to the counter. This will re-create the east side of the china cupboard. Two glazed doors similar to those seen in the original drawings (Appendix B) should be milled and hung to enclose the china cupboard. The size of the hinges to be used will be determined by the existing hinge mortises.

Finishes

Walls. The shoe molding replaced at the base of the two stationary cabinet panels, and at the base of the drawer unit, should be painted olive green.

Cabinets and Shelves. The existing metal cabinet hardware should be stripped of paint. The counter above the cabinets, although not clearly specified, appears to never have been painted. The existing residue of old varnish should be stripped, and the counter cleaned and oiled. A new coat of varnish can then be applied.

E. Rear Entry (Room 105)

Doorways

The architrave of D104 to the Kitchen is missing the bull's-eye design in both of its upper corner blocks. The blocks should be removed, so that the design can be incised in them, and then reinstalled. The door of exterior D106 and the doorway to the Keeper's Room (D107) both need repairs.

Finishes

Doorways. All wooden elements not already painted olive green should be so treated. This includes the new bull's-eye designs in the corner blocks of D104's architrave, and the repaired doors of D106 and D107.

F. Keeper's Room (Room 106)

Floor

The hole in the southwest corner should be patched.

Walls

Woodwork. The original drawings call for a mantelshelf around the chimney stack in the Keeper's Room, and one should be installed. Since no wainscot was used in this room, but only a chair rail, the shelf should be hung so that its bottom surface is flush with the top of the chair rail.

Plaster. The major plaster cracks in the east, south, and west walls that have been crudely patched should be redone.

Ceiling

The metal chandelier hook that is screwed into the center of the ceiling should be retained, but no light fixture should be hung from it until more research is done. A careful examination of the ceilings in other rooms should be conducted, in an effort to find evidence of a similar hook for the other hanging lamp mentioned in the 1897 furnishings list.

The four crudely executed patches in the ceiling should be replaced with better patches.

Closet

In the closet of the Keeper's Room, a reproduction baseboard should be installed on the east wall, south of D108. Three shelves should be installed on the west wall, abutting the south wall, based on paint evidence and the original drawings. The closet ceiling also needs to be patched and painted.

Utilities

The electrical outlet in the south wall is posthistoric but, like the front exterior light fixture, may have been retained for convenience. Since electricity is available in the structure in less conspicuous places, thought should be given to removing the wall outlet, and patching and painting the wall.

Finishes

Floor. The floorboards of the closet should be stripped of their paint and then oiled.

Walls. The newly installed baseboard in the closet should be painted olive green. The lime-green paint on the plaster walls of the main room should be touched up as needed. The band of maroon cornice paint should be touched up where it is cracking, chiefly on the west wall.

Ceiling. The newly executed patches in the ceilings of the main room and the closet should be painted "French gray" to match the rest of the ceiling members.

G. Keeper's Office (Room 107)

Walls

The plaster of the west wall below the chair rail is cracked. It should be patched.

Doorways

Even though the original plans do not show a door in D110, one was probably located here. The opening is the same size as the other interior doorways with doors in the main building. Also, the doorway has a transom over it, which would have been unnecessary if there was no door here. Finally, the original specifications call for three sets of doorknob hardware for doors in the Keeper's rooms; D110 would account for the third door. Thus, a typical interior door should be hung in this doorway.

The jambs of D110 offer little help in the matter: although both sides display hinge mortises, the doorway frame is reproduction material installed during the work of ca. 1980. Whichever side is selected for the hanging of the door, the other side of the jamb needs to be patched and painted.

Finishes

Walls. The patched plaster on the west wall, below the chair rail, should be painted lime green to match the rest of the wall areas. The same paint should be reapplied wherever the maroon cornice paint has "bled" down onto the lime-green paint.

Doorways. The patches introduced to fill the hinge mortises of D110 that are not used to hang the door should be painted olive green, to match the rest of the doorway members.

H. Stair-Hall Foyer (Room 108)

Doorways

D114, to the Boat Room, needs to have its vandalism damage repaired.

Utilities

Electrical System. The electric outlet box now lying loose on the floor should be mounted in a wall, preferably behind a door. The wire that leads to the second-floor outlet box should be run inside one of the walls.

Finishes

Doorways. Areas of peeling paint and repair should be painted olive green, to match the rest of the woodwork in the room.

I. First-Floor Stair Hall (Room 109)

Windows

The double-hung sash for W112 should be reinstalled if they can be found in the basement stockpile. Otherwise, new sash should be reproduced. In either case, the sash should be painted prior to installation.

Stair

The majority of stair balusters at the first-floor level need to be replaced, having been broken by vandals. An existing baluster should be used as the prototype for the correct-diameter stock for reproduction balusters.

Finishes

Walls. After the door of D113 is repaired, the olive-green paint on the west-wall wainscot, worn away by the timber wedge used to secure the door, needs to be touched up.

Stair. The historic stair elements need to be stripped of their olive-green paint. They and the reproduction balusters then need to be oiled and rubbed.

J. Boat Room (Room 110)

Floor

Most of the restoration of the Boat Room had been completed by 1980. The Loft floor has splintered floorboards in its northeast corner that need to be repaired.

Ceiling

The gap now existing between the roof sheathing and fascia in the southeast corner of the room should be closed.

Doorways

Although the original plans do not show a door in the doorway to the Boat Room closet (D118), the specifications call for a mortise lock with knob for this doorway, clearly indicating the existence of a door. The present doorway is a reproduction, so no physical evidence remains as to the direction of the door's swing. Logic would suggest that the door was hinged on the south jamb, to open into the Boat Room. A threshold needs to be installed in this doorway.

Windows

All of the window sash are in place in the Boat Room, except for that of the lunette window in the gable end (W213). This sash is stored in the basement, and should be painted and reinstalled.

Closet

As stated earlier, the Boat Room closet was changed extensively after the historic period, when it was converted to a toilet for the Keeper's Room. Little documentation can be found in the specifications or drawings as to the original appearance of the closet. Thus, any restoration of the interior of the closet would be highly speculative.

The drawings do note that three shelves were to wrap around three sides of the closet, and that three drawers were to be installed at the south end of the closet. Since most of the plaster has been replaced within the closet, little physical evidence of original installations remain. No paint samples were taken from the one section of old plaster to ascertain the original color of the walls. Presumably, the three shelves were installed above the drawers; perhaps a baseboard was present around the closet walls. It is not known if these elements were painted olive green, or if the plaster walls were painted at all.

The ceiling of the closet retains more numerous clues for restoration purposes. Joist and cornice trim should be installed, and the holes in the ceiling should be patched. The ceiling is also in need of repainting.

An unmolded wooden architrave should also be installed on the closet side of D118 and painted.

Finishes

Floor. The paint currently on the floorboards of the Boat Room, including the shuffleboard-court design, should be removed before the boards are oiled.

Walls. The painting of the north-wall sheathing between D115-116 should be completed in olive green.

Doorways. The re-created closet-side architrave of D118 should be painted olive green, like its counterpart on the Boat Room side of the same doorway.

INTERIOR RECOMMENDATIONS: SECOND FLOOR

A. Quarters (Room 210)

Floor

The paper underneath the pink linoleum should be removed along with the linoleum. Several holes in the floor will require patching.

Walls

Woodwork. The existing wainscot on the north and south walls should be rebuilt closer to the eaves, where the paint line remains on the rafters. This will mean that the lower edge of the rafters will pass through the wainscot below the level of the wainscot cap. According to the original specifications, the location of the wainscot would be approximately 2 feet 6 inches in from the plate.

The three access doors in the wainscot leading to storage space in the eaves should be eliminated when the wainscot is moved: they are probably not historic, since they were not mentioned in the original specifications.

Sections of double-beaded wainscot and single-beaded matchboarding missing from the walls of the dormer alcoves should be reproduced and installed.

A quarter-round shoe molding should be installed, where not already extant, at the base of the wainscot all around the entire room. Sections of the small wainscot cap on the east and west wall need to be pieced in, while a similar molding should be reproduced and installed on the rebuilt north and south knee walls (between the rafters).

Plaster. Plaster exists only on the east and west walls, above the wainscot. The plaster needs to be patched, and the old paint needs to be scraped and sanded prior to any repainting. Before this is done, however, careful scraping should be done, to determine the size of the original blue-painted cornice band (see "Finishes: Walls").

The small ovolo molding partially extant at the peaks of both the east and west walls should be reproduced, and installed the full length of the room's end rafters where the latter meet the plaster.

Doorways

The architrave of D201, including transom sash, should be repaired, cleaned, sanded, and painted. If a suitable historic, five-paneled door for this doorway cannot be found stored in the basement, one should be reproduced and hung on the south jamb, where hinge mortises exist. The door should receive a mortise latch with a doorknob, but no lock.

Windows

If not found stored in the basement, the sash for all six of the windows in this room should be reproduced as per the original specifications. The sash should be painted, hung on new sash cords, and installed in their respective window openings.

Chimney

Sections of the double-beaded matchboard wainscot with cap molding used on the perimeter walls should be reproduced and installed on all four sides of the chimney. A mantelshelf should be installed at a level just below the wainscot cap, also around all four sides.

Finishes

Walls. All of the double-beaded wainscot, along with its shoe and cap moldings, should be painted olive green. This includes the reproduction wainscot and mantelshelf newly applied to the chimney stack. The single-beaded matchboarding used on the side walls of the dormer alcoves also should be painted olive green.

Once the plaster wall areas are prepared, they should be painted a lime color, with a bright-blue cornice band. The height of the cornice band has not been determined. However, the historic blue paint is still visible: careful scraping done prior to any wall preparation can probably determine the exact size of the cornice band.

Ceiling. All of the ceiling elements, including the small ovolo molding reproduced for the east and west walls, should be painted olive green.

Doorways. The repaired architrave of D201 should be painted olive green. The same is true of the door procured for this opening, whether it be original or reproduction fabric.

Windows. The architraves of all six windows in this room should be painted olive green. The same color should be applied to the sash installed in these openings, whether original or reproduced material.

B. Spare Room (Room 202)

Floor

The floorboards of the Spare Room are slightly wider than those found in other rooms of the main building. These may represent the only original flooring remaining in the main building, or they could be a later replacement. More investigation and some demolition are needed to answer this question. If such an effort is undertaken, and the results are inconclusive, the existing flooring should be retained, and the holes in it patched with similar floorboards.

Walls

Two holes in the east plaster wall should be patched. A new knee wall should be constructed along the south side of the room, using the nailers in each corner as the example for placement of new studs. This room was not specified to have a "dado" (wainscot), so the wall should be finished with lath and plaster.

The specifications state that "where there is no dado," a 6-inch-high molded baseboard should be installed. Paint evidence on old plaster suggests that at one time a baseboard was installed here, being 5 3/4 inches high. A reproduction baseboard therefore should be installed on all walls. For lack of a better precedent, the molding profile of the baseboard in the Keeper's Room should be reproduced and installed in the Spare Room.

The finish treatment where the top edge of the plaster wall met the roof slope is unknown; it is not described in the specifications or the drawings.

Ceiling

Cornice trim and joist-end trim needs to be added where missing, and painted to match the ceiling.

Doorways

The architrave of D202 needs to have its missing upper west corner block replaced, complete with bull's-eye design. According to the original drawings, a door should be hung on the east jamb of this doorway, to swing into the Spare Room. No door is currently present here; if no suitable historic door is found in storage in the basement, one should be reproduced and hung according to the plan. Half of each of the two hinges here originally are extant in the proper location, awaiting only their other halves, which may be attached to an existing door.

Windows

The missing casement sash of W207 should be found or reproduced, painted, and installed.

Utilities

The black wire that leads to an exterior antenna should be concealed within a wall, or at least stapled to existing molding, out of the sight of visitors.

Finishes

Walls. The baseboard should be painted olive green, the plaster walls should be yellow, and a cornice band should be painted bright blue.

Ceiling. Since the sloped roof on the south side of the room was recently reconstructed after the removal of a posthistoric dormer, no evidence of paint or plaster remains. Because the specifications state that the "under side of the stowaway floor and timbers, under side of roof and timbers,..." should be painted olive green, one could conclude that the entire ceiling, both angled and horizontal sections, should be painted olive green. This color should thus be applied to all ceiling members, including the reproduced sections of cornice molding and joist-end trim just added to the ceiling.

Doorways. The architrave and door of D202 should be painted olive green.

Windows. The architrave and casement sash of W207 should be painted olive green.

C. Locker Room (Room 203)

Walls

The main element missing from the Locker Room is the eight original lockers, three of which were on the east wall, and five of which were on the west wall, abutting the south wall. Evidence remains on the east wall of the three lockers there; combined with the original specifications and drawings, it should be possible to reconstruct all eight historic lockers. Reproduction wainscot was accidentally installed ca. 1980 along the west and south walls where the five lockers had stood. This will have to be removed before the lockers can be reconstructed. Once the lockers are in place, a quarter-round shoe molding and wainscot cap should be added to the remaining wainscot.

Ceiling

Sections of cornice and joist-end trim need to be added where they are missing. The partially encased beam at the south end of the ceiling should be completely encased.

Doorways

The architraves of D201 and D202 should be sanded and repainted. The architrave of D203 should have its corner blocks removed to have the bull's-eye design incised in them, and then reinstalled.

Windows

Both windows in this room are missing their casement sash. The sash of W208 was hinged at the top, while that of W212 was hinged on the side. If the sash used here originally are not found in the basement, reproduction sash should be made. In either case, the sash should be painted prior to installation.

Utilities

The duplex outlet box that is currently loose on the floor should be mounted in a discreet place, perhaps behind a reconstructed locker.

Finishes

Walls. The wainscot, its moldings, and the lockers should all be painted olive green. The plaster walls above the wainscot and lockers should be painted tan, with a bright-blue painted cornice.

Ceiling. All of the ceiling elements, including the reproduced sections of cornice and joist-end trim, should be painted olive green.

Doorways. The architraves of D201 and D202 should be painted olive green, as should the reproduced bull's-eye design in the corner blocks of the architrave of D203.

Windows. The architraves and sash of W208 and W212 should be painted olive green.

D. Second-Floor Stair Hall (Room 204)

Walls

Although this room has been partially restored, certain projects require completion. A quarter-round molding needs to be added at the base of existing wainscot, excluding the steps.

Windows

The casement sash for W209 and W210 need to be located or reproduced. In either case, they should be painted prior to installation. The east window frame (W209) should be examined: cracks have occurred around its lower perimeter, possibly due to water penetration. The cause of the cracks should be found and remedied, and the cracks themselves patched and repainted.

Finishes

Walls. The newly installed quarter-round shoe molding should be painted olive green.

Windows. The sash of W209 and W210 should be painted olive green.

Stair. The stair elements need to be stripped of their olive-green paint, then oiled and rubbed.

INTERIOR RECOMMENDATIONS: THIRD FLOOR

A. Stowaway (Room 301)

No restoration work needs to be accomplished in this room.

B. Third-Floor Stair Hall (Room 302)

Floor

The posthistoric linoleum should be removed so that the floorboards beneath can be examined and repaired if necessary. A solvent may be necessary to remove the linoleum. The pipe that comes up through the floor in the southeast corner should be removed.

Ceiling

The posthistoric opening in the ceiling's southeast corner should be closed. A new joist will need to be scarfed to the cut joist, and subflooring installed to complete the ceiling. The cut cable at the north end of the room should be removed, and the ceiling holes should be patched.

Doorways

The wire that secures the door of D301 should be removed, and a stop should be added to the east jamb, its size being dictated by the paint evidence and threshold cutout.

Windows

The missing casement sash of this room's four windows may be found in the basement; if not, they should be reproduced. In either case, they should be painted prior to installation.

Finishes

Floor. After the removal of the linoleum, the floorboards should be oiled.

Ceiling. The patches in the ceiling should be painted olive green to match the rest of the ceiling elements.

Windows. The sash of all four windows, whether original or reproduction fabric, should be painted olive green prior to installation.

Stair. As with the stairs on the lower floors, the stair elements here need to be stripped of their olive-green paint, then oiled and rubbed.

INTERIOR RECOMMENDATIONS: FOURTH FLOOR

A. Lookout (Room 401)

Floor

The rubber mat glued to the linoleum at the north edge of the historic hatchway should be removed along with the linoleum. The posthistoric opening in the floor should be patched to match the existing floor.

The hatchway doors should be refitted with flush-ring hardware, to make them manually operative.

Walls

After the posthistoric floor opening is closed up, the low partition edging the west side of this opening must be removed. The quarter-round shoe molding should then be reinstalled on the east wall, at the base of the bench there.

The pine boarding on the east half of the north wall should be replaced with matchboarding like that found elsewhere in the room. The molding that once trimmed the junction of the middle and upper sections of wall may be found stored in the basement. If not, a new one will need to be milled, based on the original drawings.

Windows

The posthistoric architrave of W402 should be replaced with one made to match the historic architraves on the other seven windows in the Lookout. All eight windows need to have sash pulleys installed. One-over-one sash for W402, W403, W404, and W405 need to be found or manufactured, painted, and installed. Any other hardware that is missing should be installed according to the original specifications.

Finishes

Floor. All of the floor elements that are painted pink, including the hatchway doors, should be stripped of paint. Once the floor is in a reasonably clean and complete state, it should be oiled.

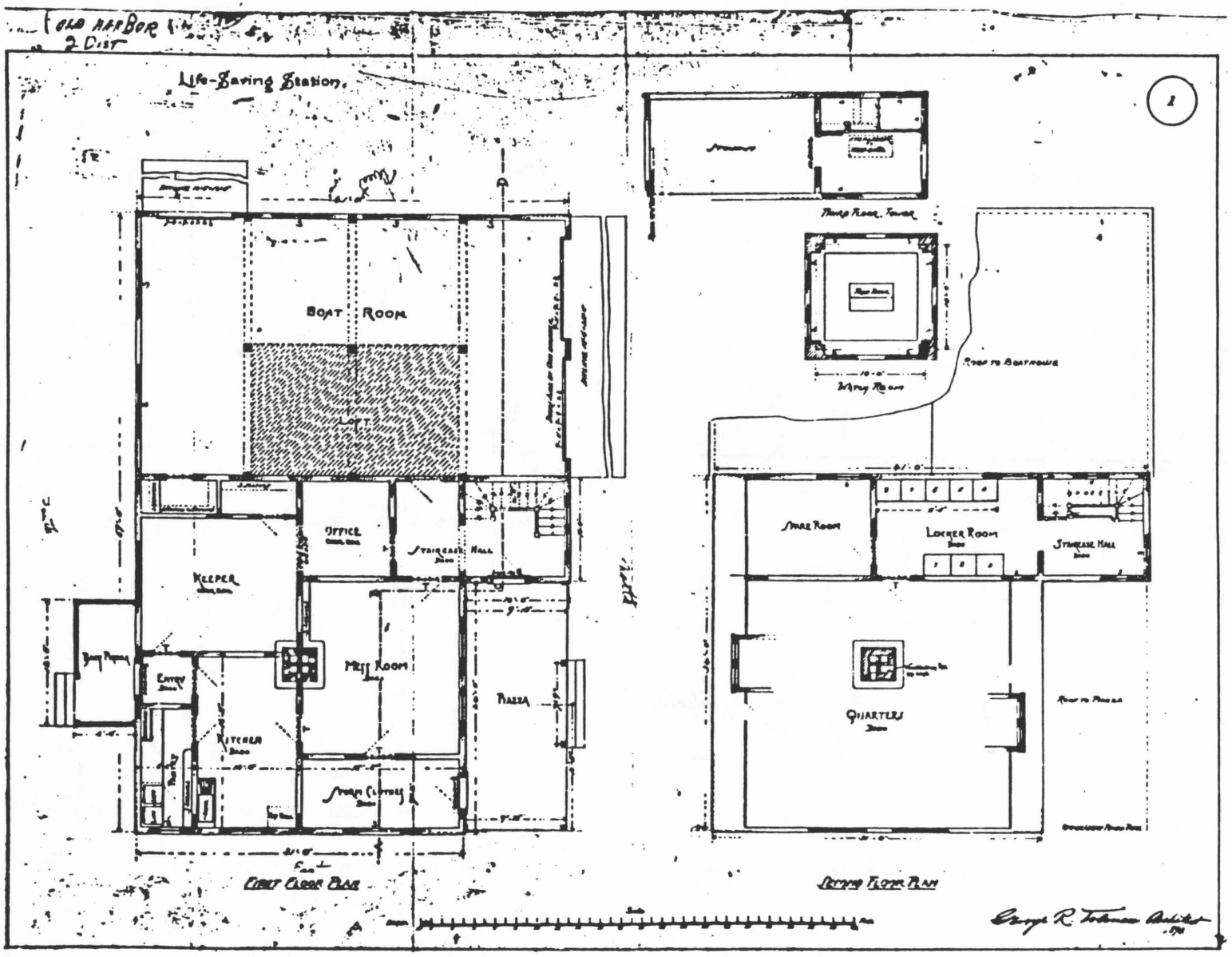
Walls. All of the new elements in the room should be painted olive green, to match the existing elements.

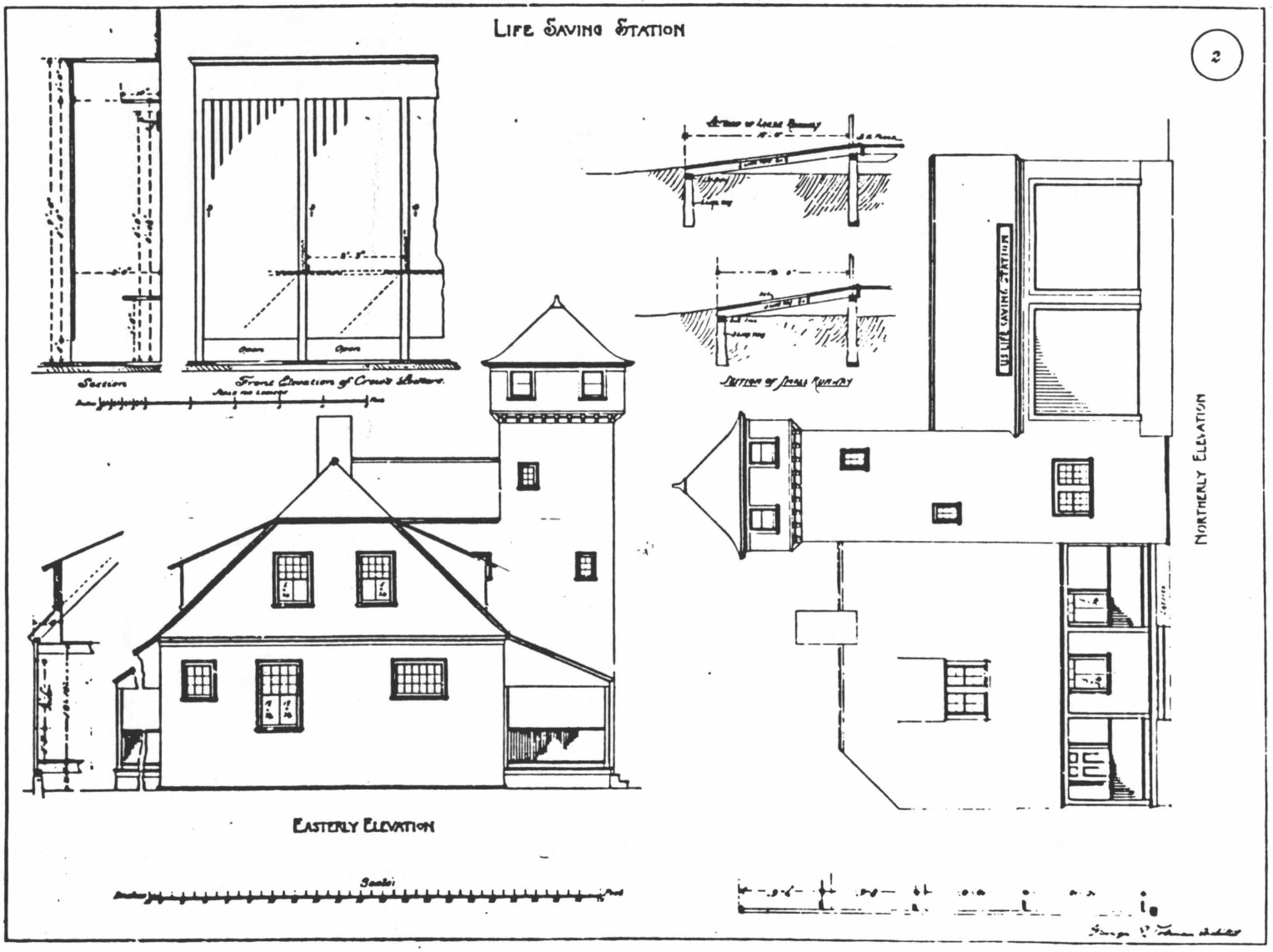
Windows. The newly installed reproduction architrave of W402 should be painted olive green. The same paint should be applied to the new sash before they are installed.

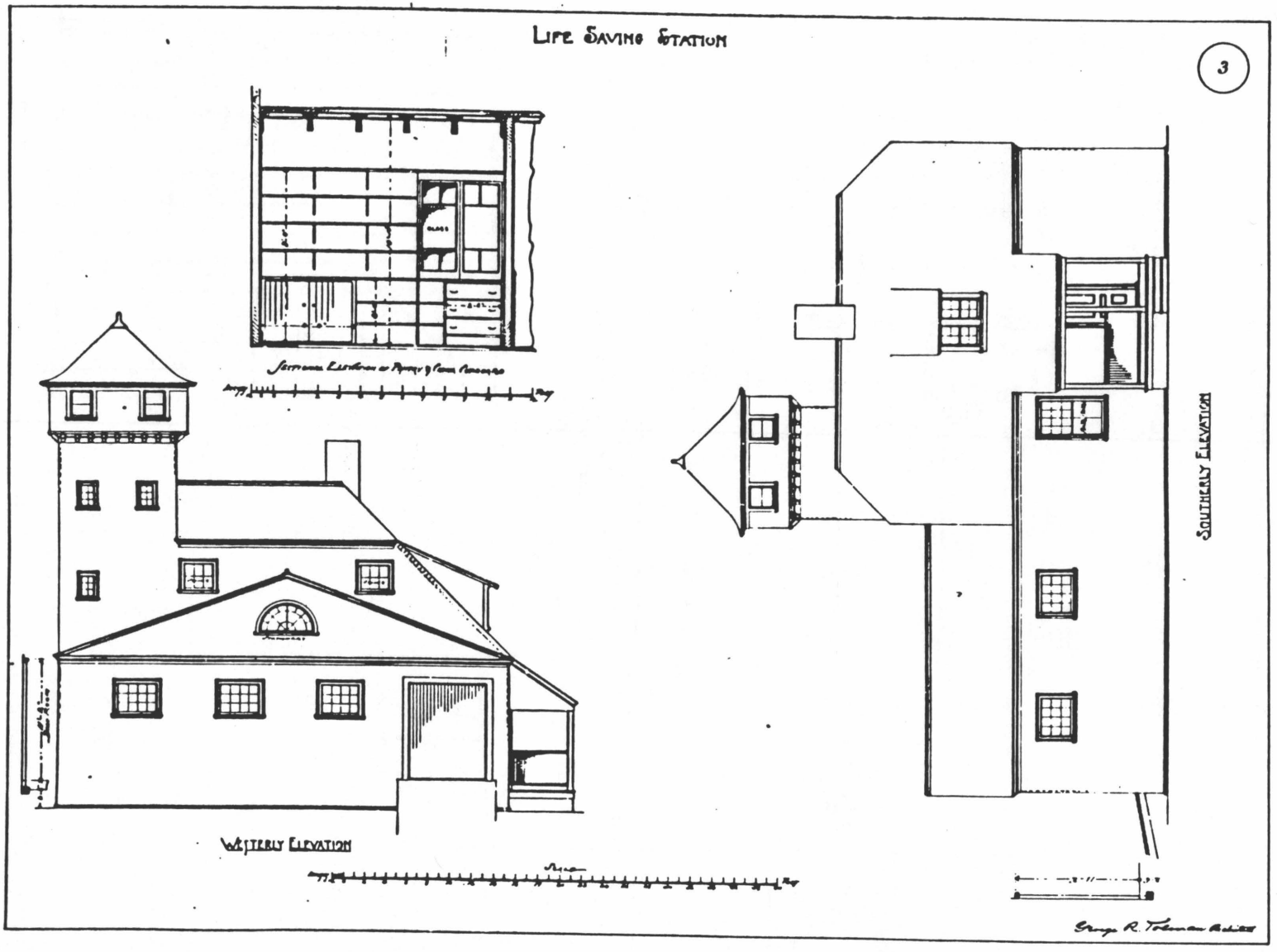
VI. APPENDICES

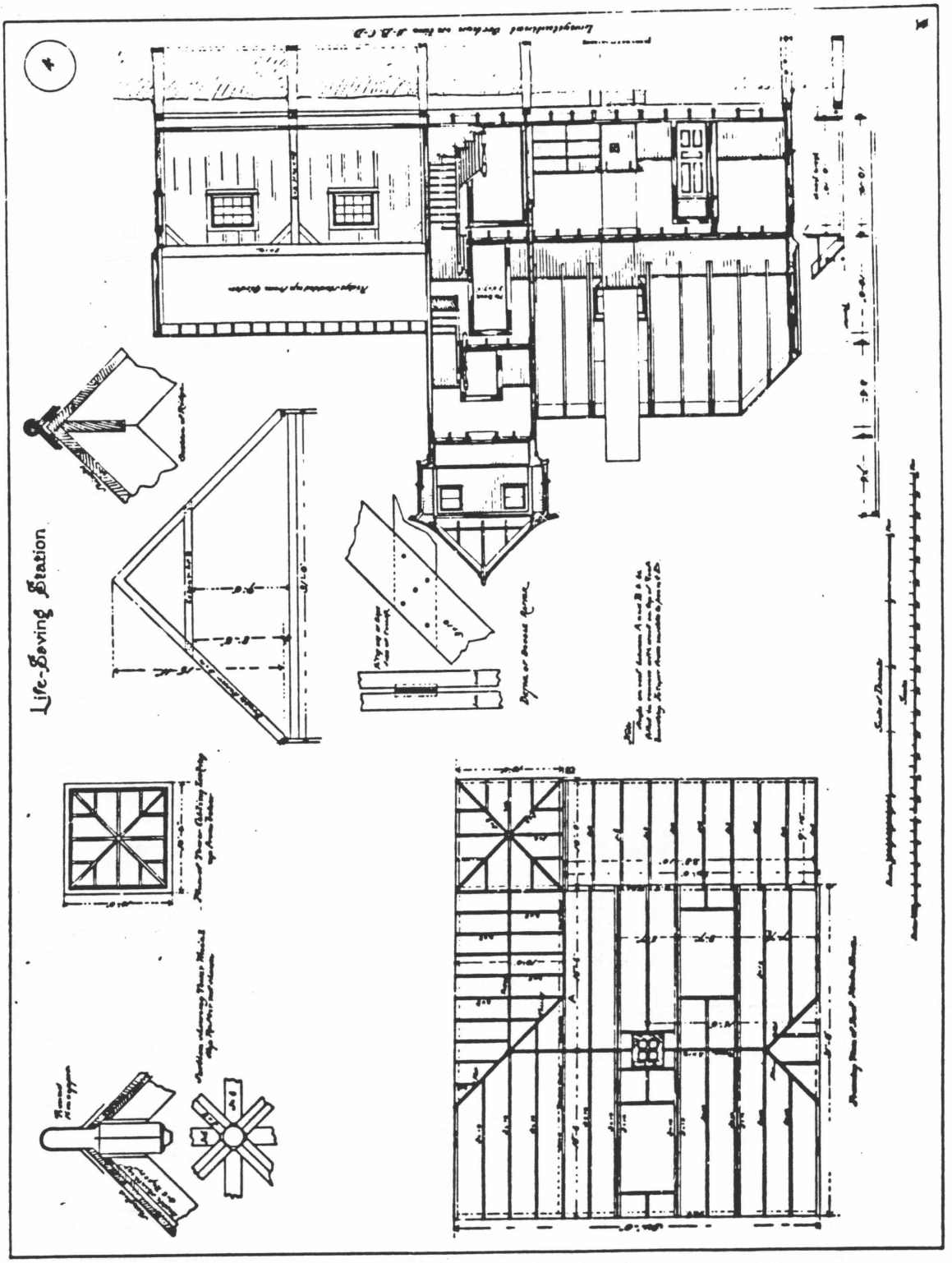
APPENDIX A.

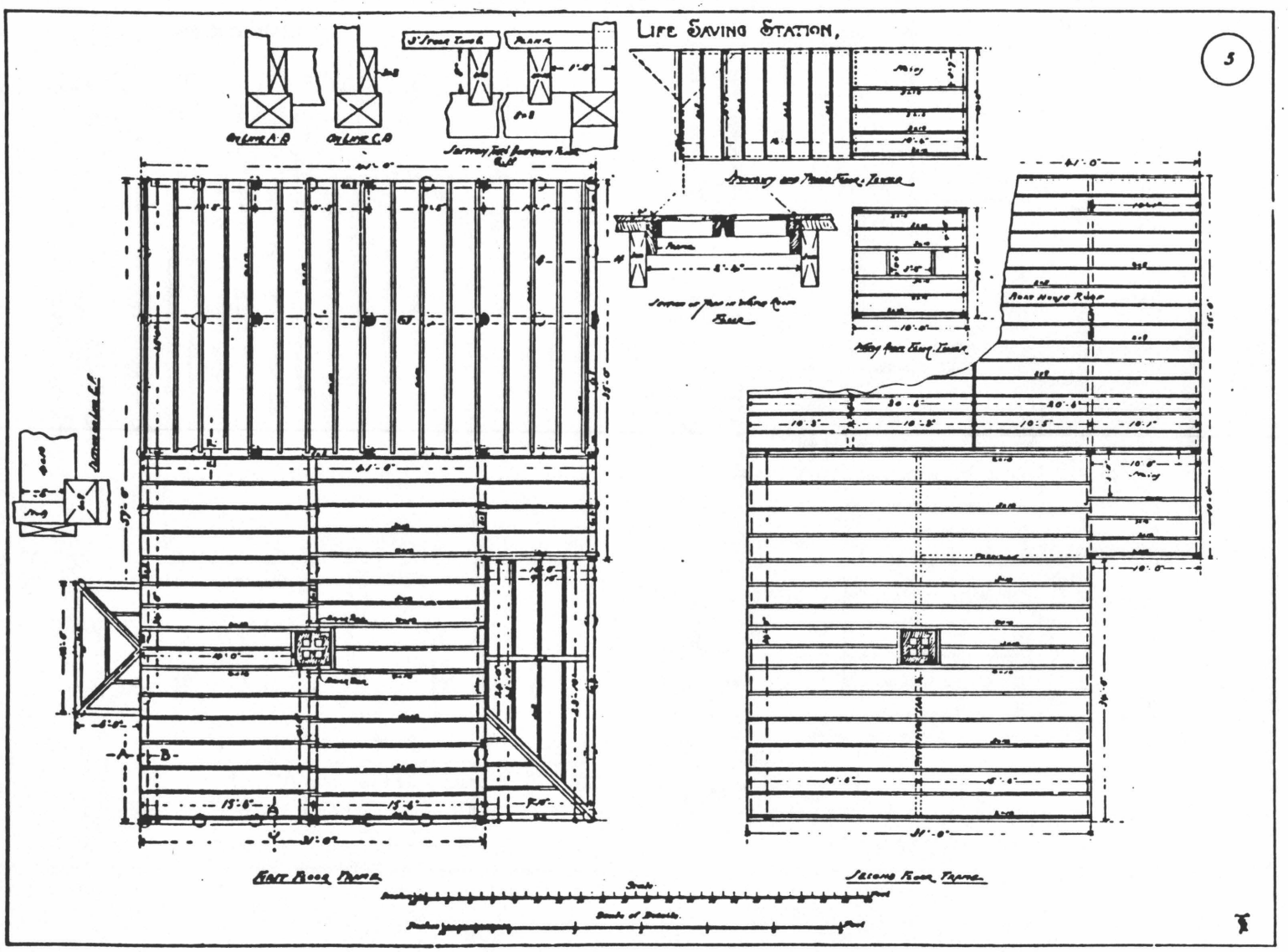
Original Floor Plans (1893 "Duluth" Style), Old Harbor Life-Saving Station

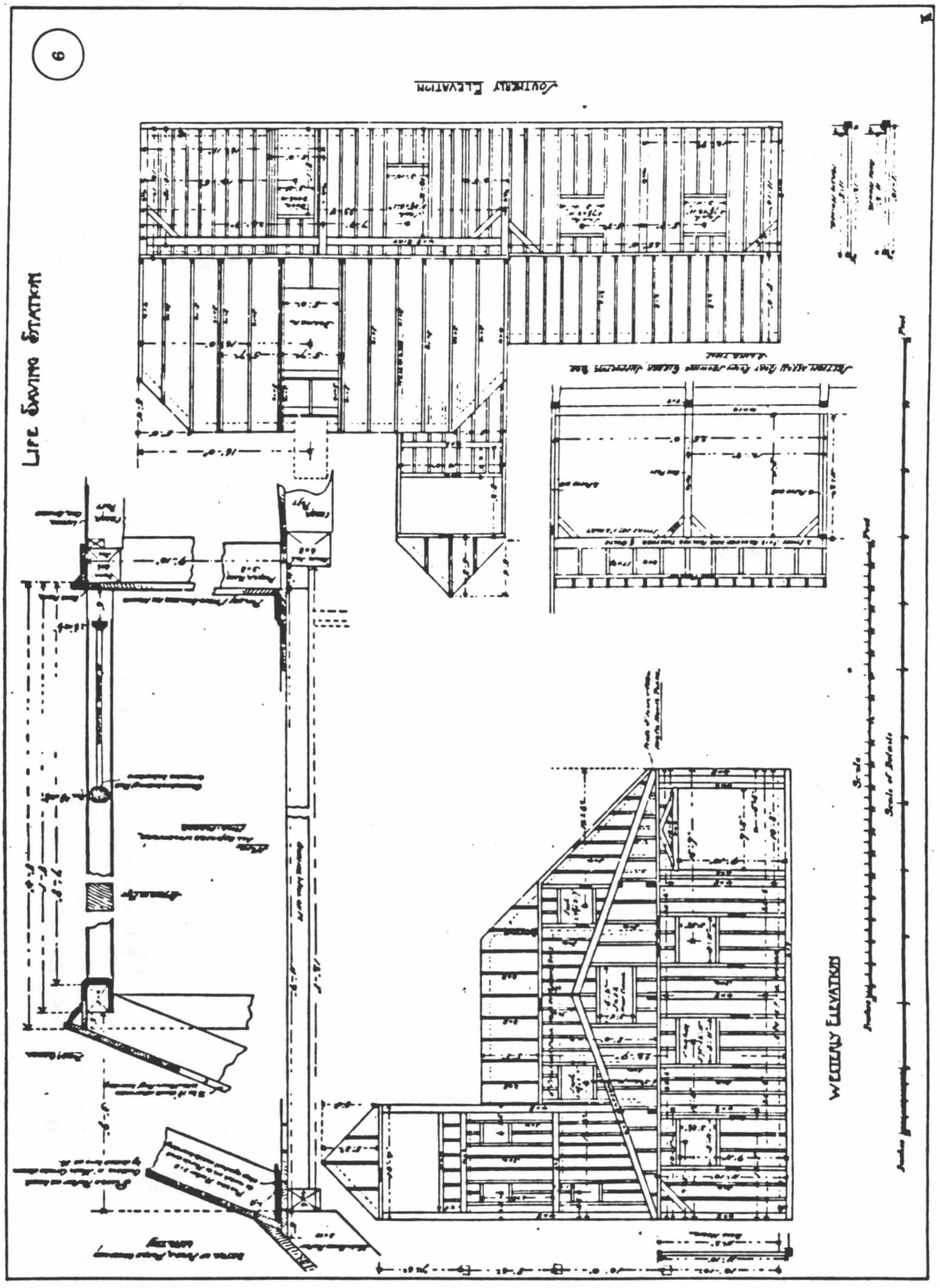

Old Harbor
2 Dist
Life-Saving Station.
1
Boat Room
Loft
Office
Keeper
Mess Room
Piazza
Kitchen
Entry
Store Closet
Tower Room
Water Room
Road to Boathouse
Store Room
Locker Room
Quarters
First Floor Plan
Second Floor Plan
George R. Tolman Architect

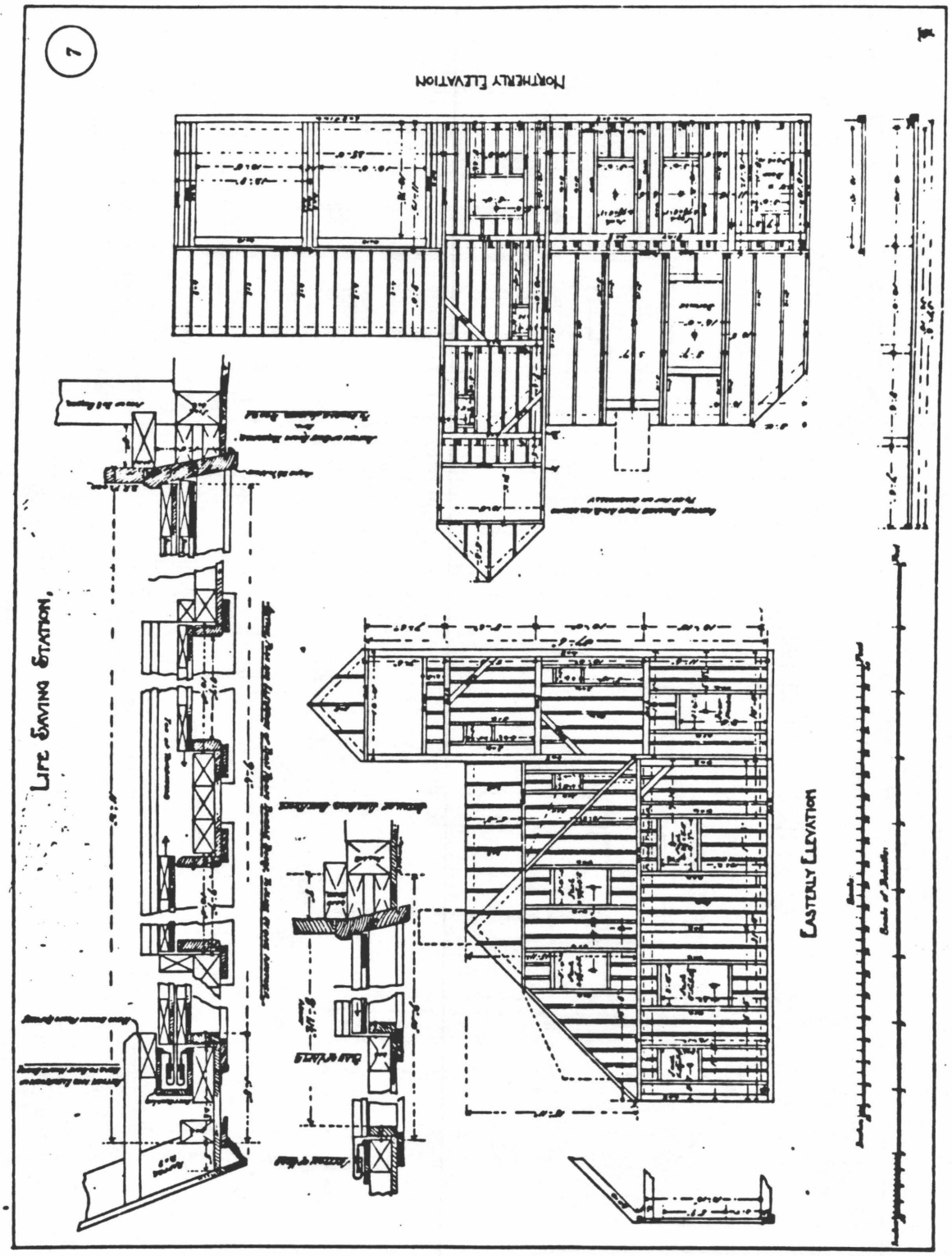

Life Saving Station
2
Section
Front Elevation of Crew's Shelter
Section of Inner Runway
Life Saving Station
Northerly Elevation
Easterly Elevation

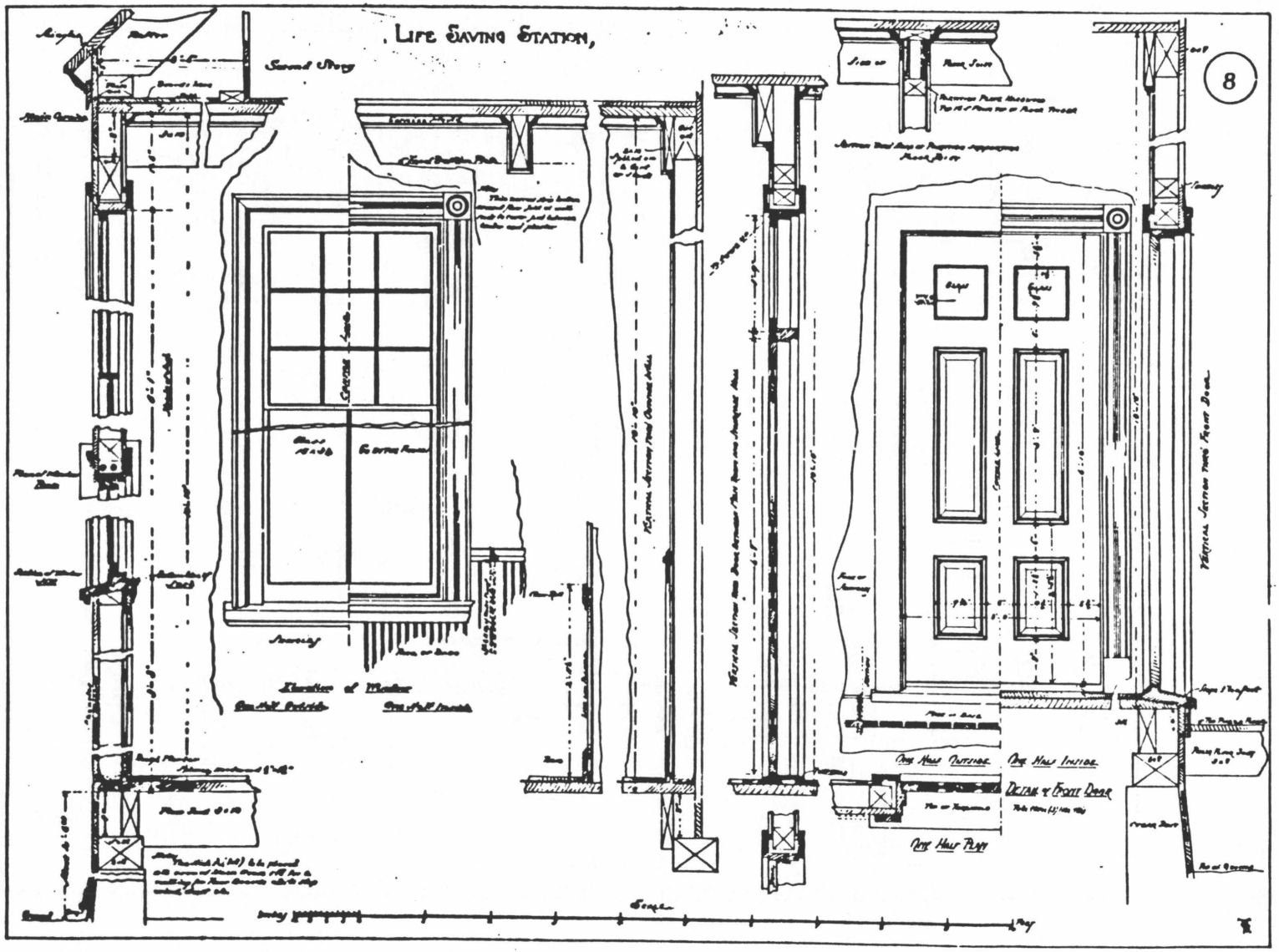

Life Saving Station
3
Southerly Elevation
Westerly Elevation

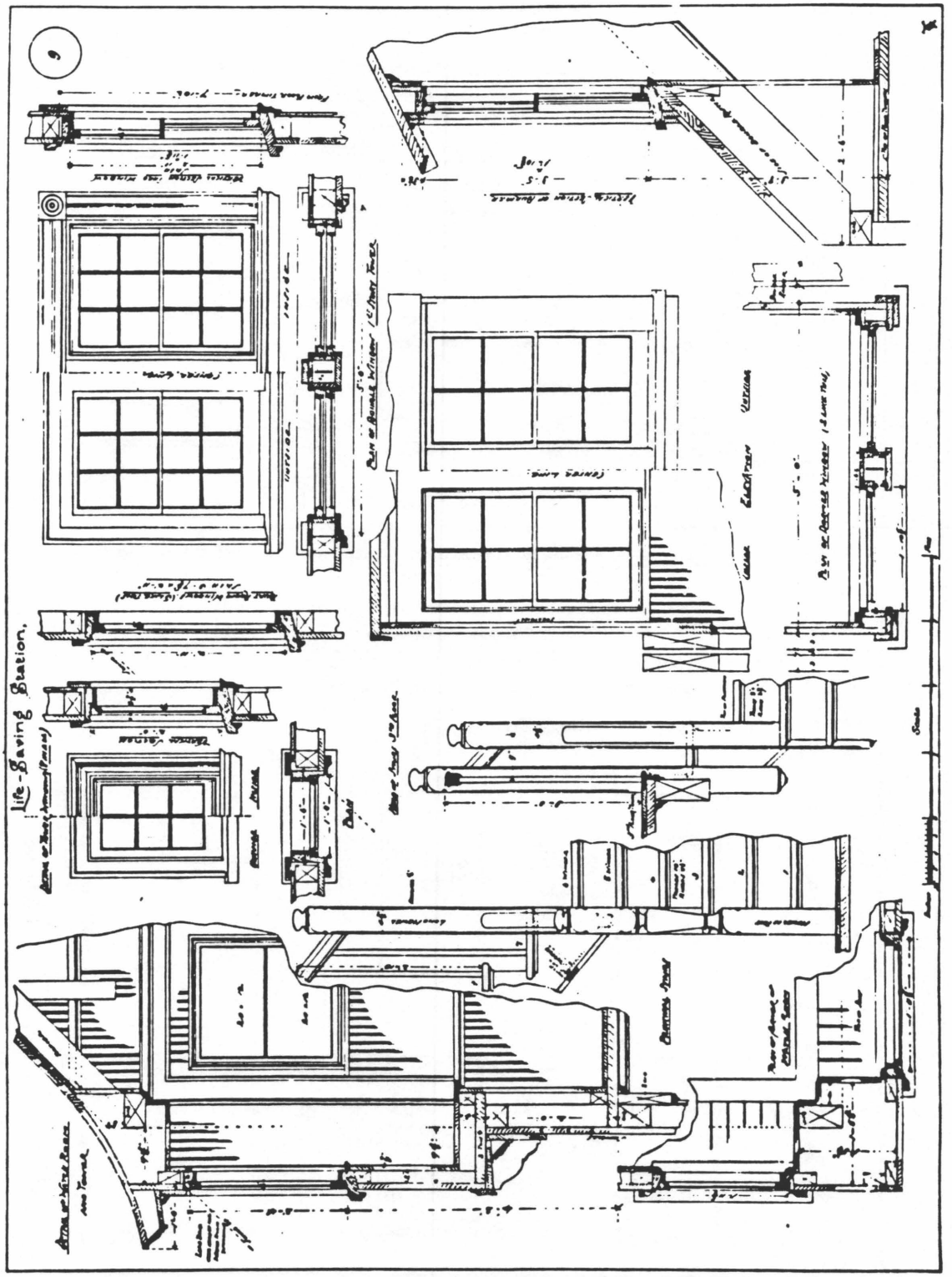

Life-Saving Station

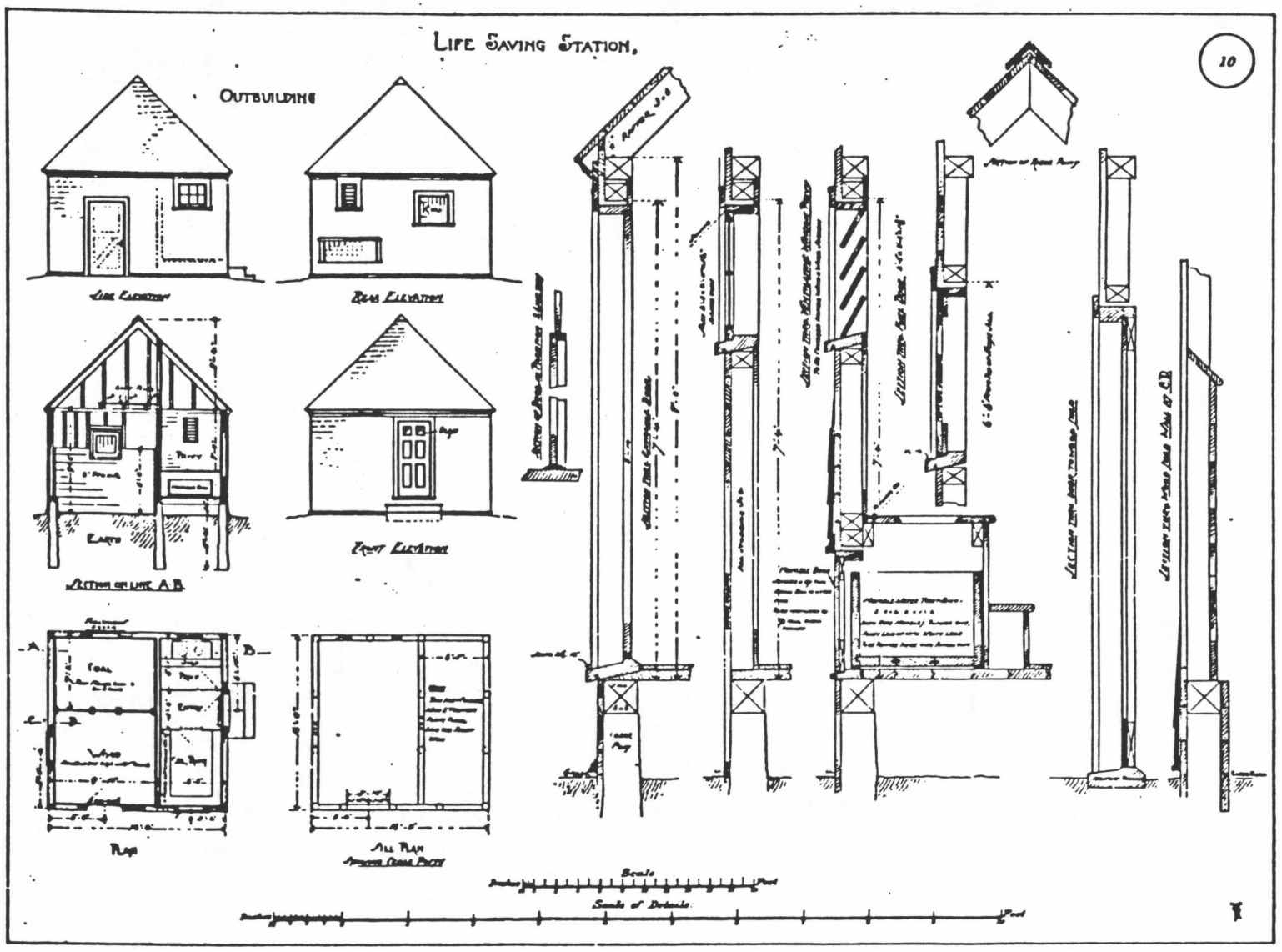

Life Saving Station,
5
First Floor Plan.
Second Floor Plan.


6
Life Saving Station
Outside Elevation
Scale of Details
Weekly Elevation

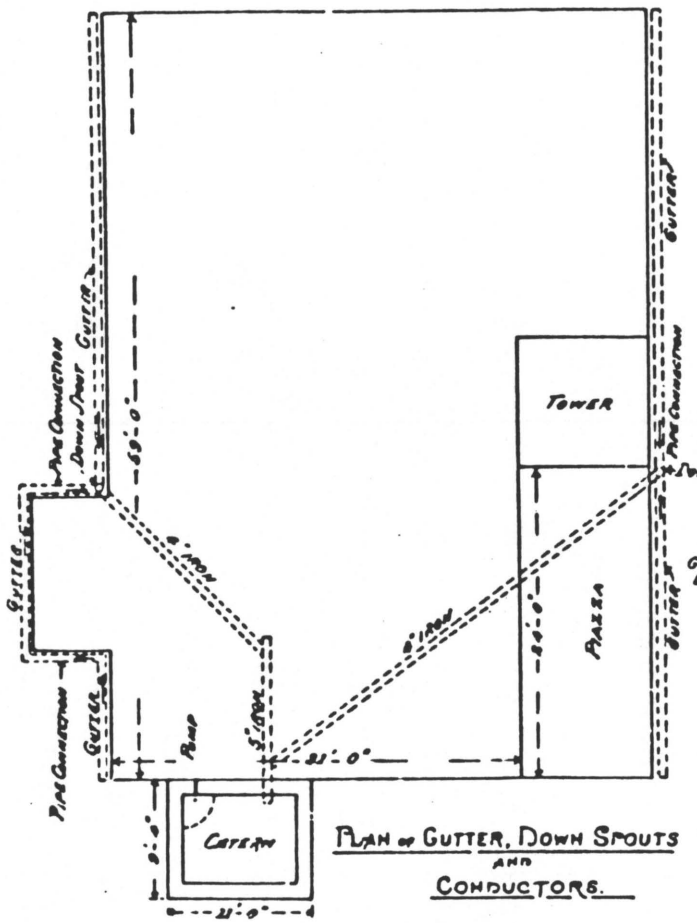

7
Northerly Elevation
Life Saving Station,
Easterly Elevation


Life Saving Station,
8
Elevation of Window
Door Half Outside
Door Half Inside
Door Half Plan

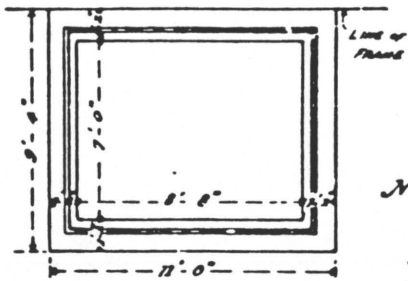

Life-Saving Station.


Life Saving Station.
10
Outbuilding
Side Elevation
Rear Elevation
Front Elevation
Section on Line A.B.
Plan
All Plan
Scale
Scale of Details

CISTERN.



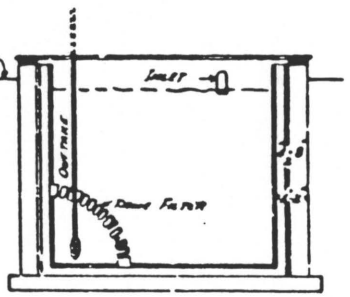
PLAN OF GUTTER, DOWN SPOUTS AND CONDUCTORS.



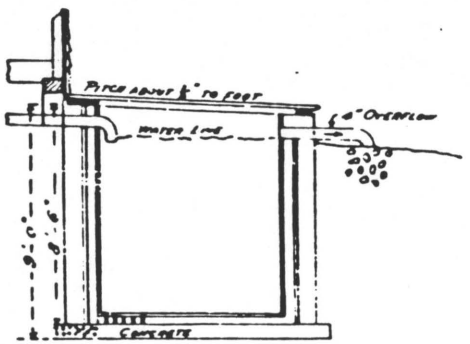
PLAN OF CISTERN.

Note:

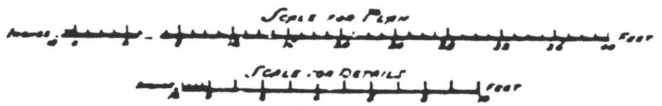
Place the cistern as low as the grade of site will allow, and set inlet and overflow pipes in accordance with it.



LONGITUDINAL SECTION.



TRANSVERSE SECTION.



APPENDIX B.

Original Specifications, Old Harbor Life-Saving Station, 1897

SPECIFICATIONS AND DRAWINGS

For A

L I F E - S A V I N G S T A T I O N

At

Old Harbor (near Chatham), Mass.

2nd District

1897

INFORMATION FOR BIDDERS

All proposals to be made on blank forms, which will be furnished with the specifications and drawings. The individual names of a firm must be signed in full to the proposal.

Bidders to state the time they will require to complete the buildings ready for occupancy.

Certified check.--Each bid must be accompanied by a certified check in the sum of $100. drawn to "the Secretary of the Treasury or order," as security that the bidder will enter into contract without delay and give such bonds as security for the faithful performance thereof as may be required if his bed be accepted. Certified checks will be returned within two weeks to the unsuccessful bidders, and the check of the successful bidder will be returned after his contract, together with bond for the faithful performance of the terms thereof, shall be approved by the Secretary of the Treasury.

Forfeiture.--At the discretion of the Secretary of the Treasury, on failure of the successful bidder to enter into contract, his check shall be forfeited to the United States Government. Proposals must be inclosed in a sealed envelope, addressed to the General Superintendent Life-Saving Service, Washington, D.C. and the envelope indorsed "Proposals for the construction of a life-saving station at Old Harbor (near Chatham), Mass.

The right is reserved by the United States Government to reject any or all bids or to waive defects.

SPECIFICATIONS

General Conditions

The contractor is to provide at his own expense all the apparatus, materials, and labor, including transportation, necessary for the complete and substantial execution of everything described, shown or reasonably implied in the drawings and specifications.

He must give his personal superintendence to the work, keeping a competent foreman upon the premises, and see that everything is constructed in the most workmanlike manner, according to the true intent and meaning of the drawings and these specifications, all of which are attached to the contract and form a part thereof.

Quality of Material and Workmanship

All materials and workmanship throughout to be the best of their several kinds, unless otherwise specified.

The drawings and specifications are intended to cooperate with each other, and anything shown upon one or stated in the other is to be done and performed as if set forth upon both. No advantage is to be taken by the contractor of any omission in the specifications or drawings, as full explanations and detail drawings will be given for any part of the work not sufficiently shown or understood.

Full size working drawings will be supplied to the contractor on application to the superintendents of construction of life-saving stations.

When figures are given on the drawings they will be the guide; otherwise scale dimensions are to be accurately followed.

Any permanent matter of construction essential to make the structure substantial and suitable, but which may have been omitted from the specifications and drawings, shall be supplied and put in place by the contractor at his own expense.

The building to be erected under the supervision and to the entire satisfaction of such person or persons as may be designated by the Government, who are to have at all times access to the works. The contractor shall substitute,at his own expense and without delay, satisfactory work and materials for such as may be rejected, and make good all other work that may be disturbed thereby.

Any damage to the building during its construction, by fire, water, or otherwise, must be made good by the contractor who will also give to the proper authorities all requisite notices relating to work in his charge, obtain official permits and licenses for temporary obstructions, and pay all proper fees for the same, and for use of

water for building, and entrance into sewers or drains, and is to be solely answerable for all damage, injury, or delay caused to other contractors, to neighboring premises, or to the persons or property of the public by himself or his men, or through any operations under his charge, whether in contract or extra work.

The contractor will protect the work and materials from damage during the progress of operations and will clear away from time to time, as may be necessary, all dirt and rubbish resulting from the work. On completion, he will throughly clean all floors and windows, remove all rubbish, and leave the premises in good order ready for occupancy and satisfactory in every respect to the superintending officer, to whom he will then deliver the keys.

GENERAL DESCRIPTION

The life saving station will consist of a main building, with tower and connecting boathouse.

The outbuilding and flagstaff will be separate structures.

Main Building and Tower

Main building.--Will be one and a half stories high, arranged for the accommodation of the keeper and crew.

The tower will be four stories high, the uppermost story to be the watch room.

The construction throughout is designed to make a tight and warm structure, avoiding inclosed air spaces, and relying upon increased thickness of nonconducting material to accomplish this result.

The outside covering to be heavy tongued plank, covered with felt, with a weather covering of shingles.

The floors to be treated the same way with felt between under and upper floor. Rough mortar to be filled in between the studs on the outside wall of first-story floor, also between main house and boat room, all as shown on the details. In main building and tower all the inside walls and partitions, excepting in watch room, will be plastered from the floor to the roof boarding, with a molding broken around in the ceiling angles where plaster comes against the woodwork.

The ceilings throughout, including under side of roof, will not be plastered. In second story the slope under roof to be sheathed vertically about 2 feet 6 inches in from line of frame to finish under dormer window stool, as shown on drawings.

The watch room of tower will be sheathed as shown: no plastering.

All the exposed woodwork of ceilings throughout the main building and tower to be mill planed, with the angles between plastering and woodwork filled with a neat moulding, as shown on drawings.

The buildings to have a foundation of cedar posts and mudsills, as shown.

The boathouse will be arranged for boats, boat wagon, apparatus cart, etc. Excepting the walls of the closet, there will be no plastering of boathouse.

The frame, including the roof, will show, dressed.

The roof to be supported from below, as shown on framing drawings. The partition wall between main building and boat room to be treated as an outside wall, on the face toward boat room, to be boarded, then clapboarded the full height.

The foundations to be similar to main building.

Outbuilding and flagstaff will be specified hereinafter.

Kind of Materials

Wherever any material specified herein can not be obtained in the locality of the proposed station, equally good material, common to the locality may be substituted, subject to the approval of the superintending Government officer.

Excavation and Grading, etc.

Excavate to the required depth for trenches, to receive mudsills posts, chimney, and drains.

Ram thoroughly or puddle with water all filling material every foot in height. Set proper batter boards and mark out the building accurately, under the direction of the superintending Government officer.

Drains.--To be 50 running feet of 4-inch "Akron" self-glazed drainpipe, with running trap and cleaning hand-hole.

The ground about the building will be filled, leveled, and graded to the grade line shown.

Chimney

Foundations.--To be of concrete, well rammed, 12 inches thick, made of good cement, clean, washed sand, and small broken stone, in the proportion of one cement, two sand, to five of stone. To measure 6 by 4 feet in plan. To be laid upon two courses of 2-inch chestnut rough plank: joints of the upper course to be laid at right angles to the lower.

Flues to be one brick square, carried separate the full height.

Outside walls one brick thick. Withes one-half brick, bonded in. To be of hard brick, good quality, laid in cement mortar in the proportion of one cement to two of lime, and proper proportion of sand, as far as the under side of roof boarding, above that point to be of selected brick laid in equal parts of cement and lime.

The top six courses to be laid in clear cement.

Piers.--To be two 1½-brick square piers, built into chimney, to receive the end of first floor girders, as shown. All bricks to be well washed, and laid wet, except in freezing weather, with joints

thoroughly flushed up with mortar, and all well bonded, joints left rought for plastering; where exposed to view above roof to be neatly struck to weather well. Exposed brickwork to be washed down with muriatic acid.

King's brick mortar.--Entire outside of chimney stack from first floor to under side of roof boarding to be plastered direct upon the brick with King's brick mortar; angles slightly rounded.

Thimbles.--Proper earthenware thimbles with metal movable covers to be built into chimney.

Flashing.--Four-pound lead cap flashings (to be built into chimney) turned down over 16-ounce zinc flashings, the latter to turn up 6 inches high at the lowest point, and to run 6 inches under shingles.

Carpenter Work

Except where otherwise specified, all timber used in the construction of the station to be well seasoned and of the best kind and quality used for similar purposes at or near the locality where the station is to be built, all subject to the approval of the superintending officer.

Foundations.--To be cedar posts not less than 10 inches at the butt, to be framed into house sills and spiked to mudsills, mudsills to be chestnut, 4 by 10 inches. Posts to be placed under all sills and cross sills, braced at angles and intersections from mudsills to sills by 4 by 6 inch braces spiked in.

Iron straps.--The sills to be secured to cedar posts by ¼ by 1½ inch wrought-iron straps, running 12 inches on the posts, securely spiked on. To be eight straps in all.

Frame.--To be a full frame of pine or spruce properly tenoned, pinned, framed, and spiked together.

Long timbers to be halved, lapped, and bolted, not more than two equal lengths to a piece.

Sills halved on and spiked together. Posts framed into sills and plates and pinned. Girts framed into posts and pinned. Braces framed into posts and girls and pinned. Plates halved on and spiked together.

Floor Joist.--On the first floor to be shouldered 2 inches onto sills and cross sills.

On the second floor, the joist to be one length shouldered onto girts 2 inches and sized onto partition cap.

In tower, from second floor up, the joists to be shouldered onto girts 2 inches.

All joist to be spiked to suds and one another where practicable.

On the first floor, running all around the building, to be a 3 by 8 inch joist, spiked to studs and resting on sill, cutting in between where running perpendicular to them.

All joist exposed to view to be mill planed. All timber to be placed at least 1 inch from chimney.

Wall studs.--To be dressed, butt joints well spiked in.

Partition studs.--Where carrying floor joists to be 3 by 4 inches, set five nailings to a lath: others 2 by 4 inches, set four nailings to a lath.

All doubled over openings and trussed above.

All angles to be made solid.

Partitions over voids to be securely trussed.

Hard-wood cap.--Cap to partition carrying second floor joist to be hard wood.

Herringbone bridging.--Partition studs to be braced horizontally by one line of herringbone bridging, once in the middle height of each story.

Under floor not to be cut.--Partitions to rest direct upon the under floor, which, where practicable, is not to be cut through.

Rafters.--To be securely spiked to ridge and plate. Double rafters to have a 2-by-8 collar cut in between them, securely spiked.

On gable ends the studs to run up to a cap piece, thus supplying the place of a rafter.

All rafters exposed to view in main building and tower to be mill planed.

Boathouse roof.--To be supported by studs resting and spiked onto girders.

Girders to be supported by 4-by-8 posts framed in the regular way, stiffened by 4-by-8 posts spiked to them, stopping under girders, as shown.

To be a center 8-by-8 dressed oak post under each girder as shown.

Loft in boat room.--To be 12½ by 20 feet, as indicated by shaded area on first-floor plan.

Floor joists 3 by 8 inches, about 2 feet 6 inches on centers, notched 4 inches and resting on a 2 by 4 inch ledge piece, spiked flush with bottom of girders. All exposed work to be mill planed.

Outside Covering

The entire outside walls to be covered with 1 inch pine boards, -------- planed one side to an even thickness, not exceeding 8 inches wide, laid close, and through nailed. To be of approved quality, free from large or loose knots and other defects.

Roof boarding of main building to be 1-inch pine planks, not exceeding 6 inches wide, matched, single-beaded, planed one side to an even thickness, laid close-through nailed. To be of approved quality, free from large or loose knots and other defects.

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Roofs of boathouse and tower to be covered with 1-inch--------- boards, similar to coutside covering, but not exceeding 6 inches wide, through nailed.

Roof filling.--The angle between roof of main building and tower to be filled in concave with boards properly flashed with 16-ounce zinc, "shingled in" and plugged with roofing cement where necessary, all to make a tight and workmanlike job. This is to give snow and water a good clearance and prevent backing up under shingles.

Sheathing paper.--Roof boarding throughout to be covered with two thicknesses of H. F. Watson's W. C. waterproof paper. An extra thickness at all angles. Outside wall of main building, including boathouse, to have one thickness of felt like that used between floors and specified elsewhere, to lap 1½ inches, secured by flat-headed tacks placed 14 inches on centers.

Shingles.--To be No. 1 quality cedar, all heart, laid in the best manner, secured by two galvanized-iron nails to each shingle, laid 5 inches to the weather on roof and 6 inches on walls. All the outside walls and roof to be shingled throughout, excepting partition wall between main building and boathouse, which is to be covered in best manner with pine clapboards laid up to boathouse roof boards.

Flashing zinc and lead.--Valleys and hips "shingled in" close with 16-ounce zinc, 10 by 10 inches, laid diagonally under each course of shingles. Especial care to be taken in flashing about dormer windows with zinc and lead. Flash about top of door, window, and other openings with 4-pound lead cap flashingts to run under covering 4 inches and turn down over casings, securely tacked.

Roofing cement to be used where necessary.

Copper finial.--To be hammered copper secured by copper tacks (tower roof).

Floors

First floor, main building, and tower to be 1-inch pine planks, ----------, planed one side to an even thickness, not exceeding 8 inches wide. To be of approved quality, free from large or loose knots and other defects. ----------.

Second story and tower and all under floors of tower above to be selected 1-inch pine plank, matched,----------, planed one side to an even thickness, not exceeding 6 inches wide. To be of approved quality, free from large or loose knots and other defects. All to be through nailed. The under floors to cover the whole area from outside to outside up to boarding, and are not to be cut by the partitions.

Upper floors.--Throughout the main building and tower to be No. 1 quality -inch rift Southern pine boards, matched, planed to an even thickness, not exceeding three inches wide, blind nailed.

Boathouse floor.--To be single 3-inch pine plank, matched, planed one side to an even thickness, not exceeding 6 inches wide. To be of approved quality, free from large or loose knots and other defects. All to be through nailed and set.

Loft in boat room.--To have a floor similar to under floors of 2-inch, matched, through-nailed plank.

Floor felt lining.--Between upper and under floors to be one thickness, 3-inch lap of H. F. Watson's (Erie, Pa.) insulating wool deafening felt, with the edges turned up under baseboard, dado, or sheathing, as shown.

Felt to be laid with care to stop all joint cracks.

Lath and Plaster

Wooden grounds and angle beads.--To be /8 by 3/4 inch grounds for plastering, placed as shown upon the drawings, with stout grounds to receive base, dado, and chair rail.

Wooden angle beads at all outer angles to receive plastering, which is to be done in the Eastern manner.

Laths.--To be green pine, free from large knots, bark, or stains, all laid not exceeding inch apart, joints well broken.

Plaster.--To be King's Windsor Asbestus Cement Dry Mortar. To be laid two-coat work, with float sand finish, to be floated with clear soft pine or cork-faced floats. Sufficient yellow ocher to be mixed with the sand coat to finish a light canary tint. The mortar to be applied, as directed, upon the packages properly tempered with water. Plastering in all cases to be carried to the under floor. All the walls and partitions of main building up to and including third-story tower to be lathed and plastered.

Jobbing rough mortar.--On the first floor, main building, between studs on top of under floor, fill in with rough mortar, as shown, to stop all joint cracks.

Inside Finish

Full-size drawings will be furnished the contractor when required, as before mentioned.

Where not otherwise specified, the finish to be of the best quality kiln-dried white pine, free from all defects, to be hand-smoothed, quirks, etc., worked out with sandpaper.

For contours of moldings the detail and full-size drawings to be strictly followed. To be generally 1-inch stuff.

Door and window trim.--Inside to be 5 inches wide, 1 1/8 inches thick, molded, with corner blocks, turned rosettes, and plinth blocks, all to be the same width and thickness as the trim. Outside to be as shown on drawings.

Molded base.--In main building where there is no dado to be a molded base 6 inches high, measured from the under floor.

Dado.--To be white pine, 1-inch, planed to an even thickness, matched, beaded, and reeded, not exceeding 3 inches wide, with a rabbeted cap, to finish flush with door and window trim.

Dado to run up the rake of all stairs. (See plans for rooms, etc., to have a dado.)

Chair rail.--To be 7/8 by 4 inches, molded, secured to stout grounds.

Windows and boxing.--To be double hung, sliding sash, 1½ inches thick, evenly balanced, pockets in stiles, pulley stiles Georgia pine, 1 full inch thick; round-bottomed, cast-iron weights, hung with best Samson braided sash cord, cherry stops, secured by blue iron round-headed screws, not exceeding 14 inches on center.

Sills 2½-inch stock molded, as shown. All sills to pitch at least 2½ inches to 12 inches.

Swing windows.--To be 1½ and 1¼ inches thick, as shown, with 2½-inch molded sills. Six wide ones to be hung at the top, the others at the sides, all to swing out. Swing windows are marked S on plans.

Boathouse windows.--To be 1 3/4-inch sashes, sills like other windows, interior finish plain. (See drawings)

Outside doors.--To be 1 3/4-inch solid pine doors, laid up in white lead, molded and paneled, both sides, as shown, with heavy oak molded thresholds. Glass in upper two, small panels, molded door frames, the same thickness as doors. To be three in all.

Storm doors.--To be three well-braced, batten doors hung on outer rabbet of outside door frame to main building.

Interior doors.--To be solid pine, five paneled, beveled, and molded on the solid, both sides, 1½ inches thick.

All to have cherry or hard-wood 3/4-inch beleved thresholds.

Where "T" is marked upon the plans to be a swing transom sash, same thickness as door, hung at top.

Boathouse sliding doors.--To be 1 3/4 inches thick, stiles and rails tenoned and pinned, well braced, covered outside by 7/8-inch matched, beaded sheathing, not exceeding 4 inches wide.

Doors to slide by one another, hung with extra heavy "The Modern Antifriction Hanger." with 5-inch wheels, two to each door, hung at the top on a double-bracketed rail.

To have "stay rolls" at bottom of doors to prevent them blowing in.

All to be of the Terry Manufacturing Co.'s make, address Horse-heads, Chemung County, N.Y.

To be proper hooks and lag screw eyebolts, to secure sliding doors shut; all galvanized iron.

Sliding door for apparatus wagon to be similar to above.

Stairs.--To have 3-by-12 stringers, stout carriages. Treads, risers, nose moldings, and balusters to be ash or oak; newel posts and hand rail cherry.

All to be blocked, fitted, glued and secured (using iron dogs where necessary) in the best workmanlike manner.

Treads to be 1 1/8 inch, with rounded nose, tongued into risers on face.

Risers 7/8 inch, tongued into under side of treads.

Balusters 1 inch round, let in full diameter into treads.

Gallery rail, 3 by 4 inches, molded, with a grooved channel to receive balusters.

Newel posts -inch stock turned.

Stair dado to scribe onto stairs in best manner.

Soffit of staircase to be lathed and plastered.

Tower stairs.--To be generally like principal stairs. (See drawing)

Watch-room stepladder.--Treads to be 1¼ inch thick, 18 inches long, 6 inches wide, stringers 1½ x 8 inches, the proper length.

Treads mortised into stringers, edge rounded. Risers 12 inches high; all dressed, all pine.

Shelving.--To be 10 by 1 1/8 inches, dressed both sides, and where not supported by standards or ledges to have 8 by 10 bronzed iron brackets of approved pattern, not over 2 feet 6 inches on center.

Drawers.--To be strongly jointed, neatly set up, all to have hardwood running strips.

Pantry.--To have a counter shelf 2 feet wide and 3 feet high, cupboard under, of narrow, matched, and reeded sheathing, divided to receive flour and meal barrels, with swing doors below and lift lids above, butt hung.

Exposed faces of shelves to be neatly beaded.

China cupboard.--To be 8 feet high, 4 feet wide, the lower part to be 3 feet high, with counter shelf 2 feet deep.

To have 3 wide drawers and a side division with open shelves.

The upper portion to be 3 feet wide, 1 foot deep, with three shelves inclosed by two swinging glazed doors. (See drawings)

Crew's locker.--All to be of narrow, matched, beaded sheathing, agreeing with dado, in eight divisions, each, 7 feet high, 2 feet 1 inch wide in the clear, and 2 feet deep, with door to each, all securely put up; to have proper floor cleats. The top closed tight with sheathing, then covered with one thickness of oil carpeting.

A neat flush molding to be broken around the top to conceal the ends of sheathing.

Doors to be 5 feet 6 inches high, stayed on the back by two wooden, horizontal cleats, put on with screws. To be hung with stout brass flap butts and screws, secured by Yale rim spring lock, No. 510 S. with 7/8-inch nose, right hand, two keys, eight changes, small wooden knobs, one side screwed on.

Doors to be set 6 inches above the floor, leaving a space 6 by 24 inches open below and under for ventilation.

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Wall plaster will form the back of lockers. To be two shelves in each division, about 2 feet long and 10 inches wide, placed where directed, strongly secured.

Mantels.--To be 1 3/8 inches thick, 8 inches wide, edges beaded, of dressed pine.

Supported by bronzed iron brackets of approved pattern.

Shelves beside mantel in mess room to be similar, with wooden ledges and standards, beaded where exposed, all neatly put up.

Dado sheathing to be carried behind and the full height of shelves.

Hanging strips.--To be 72 running feet, of 7/8 by 4 inch, beaded hanging strip, placed where shown upon the plans (or as may be directed) in main building, also 36 running feet of plain hanging strips in boathouse.

Flap table.--To be in kitchen, laid up of narrow pieces doweled and glued together, to be 1 1/8 inches thick with stout butt-hung braces.

Watch-room trapdoor.--To be as shown on drawings, of 2 by 4 inch dressed pine, covered with matched 7/8-inch pine, hung in stout rabbeted frame, with flush pull rings, stout strap hinges, secured by carriage bolts, nuts, and washers.

Watch-room finish.--To be sheathed, etc. (See drawings) No plastering in watch room.

Towel roller.--To be put up near sink.

Weather strips.--To be patent rubber weather strips to three outside doors, main building, also door from staircase hall to boathouse.

Piazza and porch (see drawing).--Floor to be 1¼-inch, No. 1 pine, planed to an even thickness, jointed, not exceeding 4 inches wide, laid open joint, through nailed.

Sills to be bolted into house sills.

Floor to pitch 1 inch, all round, from the building.

Top of sill 3 inches above house sill.

Below sill to be filled in with the basket-work lattice, to be carried behind steps.

Outside steps.--To have stout 2 inch stock, mill planed, pine stringers, with 1 3/8-inch pine treads, open risers, all mill planed, strongly secured to piazza.

Boathouse runways.--One to be 25 by 15 feet, the other 10 by 12 feet on frame.

To slope from floor level to ground.

To be cedar posts at ground end, framed into a 6-by-8 sill, on this to rest 6-by-8 floor joist, notched and secured at both ends to sills, where exposed to be mill planed, covered with 3-inch rough pine plank, jointed, laid open joint of 1 3/4 inches, not exceeding 6 inches wide.

All to be strongly secured and supported.

The gradient of the platforms will be determined by the superintendent, and under his direction to be so arranged as to give an easy run for boat and apparatus wagons.

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Miscellaneous

Inscription tablet.--To be laid up with marine glue of 2-inch wide diagonal, reversed, pine strips of two equal thicknesses, with one thickness of stout canvas or copper between.

A rabbeted molding to be broken all around outer edges.

Tablet to be secured to roof by four stout wrought-iron standards, and two 3/4-inch wrought-iron stay braces, running back and secured to roof.

Background to be painted a light Colonial yellow, letters to be 8 inches high, painted black, molding a French gray.

Back of sign to be painted.

Ladder.-- To be a 16-foot ladder of hard wood, strongly and neatly made. To be left at the station on completion of the work.

Plank walk.--To be 3 feet wide, of 2-inch rough pine plank, with proper sleepers, extending from outbuilding to keeper's entrance.

Window and door screens.--To be covered with brass gauze No. 16 mesh, No. 28 wire, to lap on outside, covered with a neat wooden bead.

Frames for windows to be 1 3/4 by 7/8 inches, the size of the lower sash only, the stiles grooved to receive and slide up and down upon stout brass screw eyes, the latter screwed into the edge of outer casings to window boxing.

Frames for doors, three in all, to be full height, stiles 1 1/8 by 3 inches: top, middle, and bottom rail 3, 4, and 5 inches about, hung by two 5-inch No. 5 brass spring butts of Scoville Manufacturing Company's make, to swing one way--outward; proper small knob on outside.

All frames of hardwood, tongued together, braced at angles, and well secured.

Sink.--To be a Columbus wrought-steel galvanized sink, 18 by 30 by 6 inches, of W. & B. Douglas' make, fig. 393, with brass screw, complete, supported by a strong frame or brackets, with a wooden grooved draining shelf, as shown.

All to be left open below and neatly finished.

To be a heavy 1½-inch lead waste pipe from sink, properly trapped, connecting with drainpipe, 8 feet outside the building.

Hardware

Butts.--All doors not otherwise specified to have loose-joint steel washers, Boston finish, 4 by 4 inch butts, three to each outside door.

Doorknobs, etc.--All doors not otherwise specified to have 2¼-inch cherry wood polished doorknobs, No. 116, Yale & Towne Manufacturing Company make, with wooden shank, rose, and threaded spindle cherry key plates, No. 13.

Cherry hand-turned and polished base, door stops, with hard-rubber bunters, No. 130.

Knobs to closet doors 1 3/4 inches diameter, same make.

Pantry door to have knobs both sides.

Entrance doors.--Three in all, to have each a standard Y. & T. make-lift latch with handles, No. 1070. And Yale rim night latch No. complete, crew's doors to have eight keys, other doors two keys each.

Storm doors.--Three storm outside doors to have plain japanned iron handles and lift latches complete, with galvanized iron lag-screw eyebolts and hooks, to secure them open and shut.

Knob-latches.--The following doors to have Standard, easy spring, mortise knob latches, No. 1020: Two in kitchen, one in keeper's room, two in mess room, and two in second story.

Knob locks.--The following to have Standard, easy spring, mortise knob locks, No. 1620, with two keys each: One in kitchen, two in keeper's room, one in hall leading to boat room, and one to boat-room closet.

Window hardware.--Sliding sashes to have Y. & T. No. 1391 P. real bronze, natural-color, sash pulleys, complete.

Sash fasterners.--Sliding sashes to have Y. & T. No. 1372 P. self-locking, sash fasts, complete.

Sash lifts.--Two to each sliding window, plain bronze, No. 1341 P. hook sash lifts, complete.

Swing windows.--To have stout flap butts and screws, all brass.

Each window hung at the top to have two galvanized stout long hooks and screw eyebolts to hold them open at an angle of 45°, except lookout windows which will open 90° . Windows hung at the sides to have hooks and sockets working from the sill to hold them open at different angles and secure them in position; all metal work galvanized. Also proper brass hooks, and eyebolts, two to each window, to secure them shut.

All to be of an approved pattern.

Transom sashes.--To have japanned butts and bronzed iron patent-lever arms, to work from below, to hold them open and shut.

Pantry hardware.--To have Yale & Towne, No. 1082 P. bronze, cup-board catch, brass butts and screws, to china cupboard.

Plain bronzed iron drawer pulls, six in all.

Brass butts and screws to lift lids and cupboard doors, and brass cupboard catch to cupboard doors of barrel division.

Drawer pulls.--Elsewhere to be plain bronzed iron, two to each drawer.

Flap table.--To have stout brass butts and screws, complete.

Harness and hanging hooks.--The contractor is to provide three dozen 6-inch harness hooks, and six dozen black japanned hanging hooks, of an approved pattern, all with brass screws complete, and leave them in the building on the completion of the same.

Flagstaff

The flagstaff to be in two parts, lower mast with crosstrees and topmast. The lower mast to be of white pine, 46 feet long, 12 inches

diameter at heel and 7 inches at head; topmast of spruce, to be 25 feet long, 6 inches diameter at heel and 3½ inches at head.

A 6-inch lignum-vitae truck, two sheaves and halyards, wooden cleats on lower mast for climbing to masthead, and iron cleats for belaying halyards to be furnished. The lower mast to bury 6 feet, stepped and mortised into 4 by 12 inch mudsills, 12 feet long, crossing each other at right angles.

The braces and butt of staff to receive a thorough coating of hot coal tar.

From the end of mudsills 4 by 6 inch braces will extend to the lower mast above the surface of the ground, and be properly framed in and secured.

The flagstaff to be erected and fitted up ready for use of signals.

All as may be directed by the superintending Government officer.

Paint and Glazing

All woodwork for painting and oiling to be prepared by properly rubbing down, puttying up, etc.

All knots properly killed with shellac, nails set, and work oiled before puttying up.

All paint work to be of the best material, with a mixed white lead and zinc base, using a large proportion of oil, and the smallest practicable portion of spirit or drier.

Only pure linseed oil to be used.

Shingles not to be painted or stained.

Outside work.--All the outside work usually painted to be painted three coats.

The following to be painted a French gray: Cornices, trimmings, moldings, casings, piazza, and porch posts, railings, steps, and the ceilings of piazza and porch. Outside of all window sashes to be blue black.

The remainder of the outside work, including doors, to be a light Colonial yellow.

Pulley stiles oiled three coats, not painted. Cherry window stops oiled two coats and varnished.

Inside work.--All work usually painted to have three coats.

The following are to be French gray: Boards and exposed timber of first-story ceilings.

The following a light olive tint: Doors, sashes, all standing finish, casings, dado, base, chair rail, sheathing, pantry, cupboard, shelves, under side of stowaway floor and timbers, under side of roof and timbers, second-story ceiling and timber of tower, third story and watch room of tower, including walls, ceilings, and exposed timbers, sheathing, stepladder, string casings, and exposed woodwork of all stairs (excepting the hard-wood work, which will be oiled two coats and rubbed down), crew's lockers, mantels, standing finish. All

upper hard-wood floors, including piazza, to be oiled two coats in the proportion 1 turpentine to 8 raw oil.

Boat-room paint.--In boat room, doors both sides, sashes (inside), and trimmings about them to be painted a light olive.

Excepting as above specified, there will be no paint work inside boat room. Plank to platform and runways will not be painted.

Outbuilding paint.--All the outside work usually painted, including both sides of entrance door, sashes, and the casings about them, to be done in harmony with the main building.

Flagstaff.--To be painted three coats Colonial yellow.

Glass.--Watch-room windows to be No. 1 double-thick-American glass.

Elsewhere to be No. 2 double-thick-American glass.

All set in the best manner.

Outbuilding

To contain wood and coal rooms, oil room and privy. (See drawings.)

Foundations.--To be fifteen cedar posts, 6 feet long, placed 5 feet in the ground, as shown on drawings. To be 8 inches at the butt.

Sills to be strapped, with wrought iron straps 1½ by 3/4 by 18 inches, to each cornerpost, securely spiked on.

Frame.--To be full frame, timbers in one length of pine or sprcue, properly tenoned, pinned, framed, and spiked together.

Sills, 6 by 6, halved on and pinned.

Posts, 4 by 6, tenoned into sills and plate.

Studs, 3 by 4, spiked into sills and plate set four nailings to a lath.

Plate, 4 by 5, halved on and pinned.

Rafters, 3 by 6, spiked on.

Hips, 3 by 8, spiked on.

Collars, 3 by 6, sized onto plate, spiked to rafters.

Covering.--Outer walls and roof to be covered with No. 2 matched, planed one side to an even thickness 1-inch boards, not exceeding 8 inches wide.

Covered, one thickness on walls and two on roofs, with Watson's W. C. waterproof paper, properly lapped and tacked, a double thickness about openings.

Weather covering.--Roof and walls shingled with No. 1 quality cedar shingles, same as main building.

Where the shingles come against casings, mail at the side next casing with two nails and use narrow widths.

Floors.--There will be no floor joist.

Oil room, entry, and privy to have an under floor of 2-inch pine planks matched, planed one side to an even thickness, not exceeding 8 inches wide. To be of approved quality, free from large or loose knots and other defects, laid the short way, and spiked to sill and cross sill.

Under floor to be covered with 1-inch pine boards, jointed, planed one side to an even thickness, not exceeding 4 inches wide. To be of approved quality, free from large or loose knots and other defects.

One lapped thickness of sheathing paper between floors.

Floor of coal bin to be 1-inch rough boards, laid close,not nailed.

Sheathing.--Privy, oil room, and entry to be sheathed up to the plate.

Sheathed partitions between them carried to the same height.

The longitudinal partition to be studded and sheathed to the roof boarding on one side only. Sheathing to be 1-inch pine boards, matched, beaded, planed one side to an even thickness not exceeding 4 inches wide. To be of approved quality, free from large or loose knots and other defects.

Coal bin to be sheathed 6 feet high, with 2-inch rough plank, jointed, not exceeding 10 inches wide, securely spiked. The front planks to be movable between studs, divided into three sections, as shown.

Studs strongly secured at top and bottom.

Walls of wood shed to be sheathed 6 feet high, with rough, jointed, 1-inch plank.

Privy.--To be as shown on drawings. Seat to be hung with stout brass flap butts and screws. Seat and bottom of movable box to be splined together and glued up, of narrow widths.

Entrance door.--To be 1½-inch pine, six panels, molded on the solid, tenoned together, joints laid up with white lead.

Glass in two small upper panels.

Rabbeted plank frame, heavy molded hard-wood thresholds.

Hung with stout, loose joint, japan butts. Galvanized-iron hasp and staple secured by No. 843 Yale spring padlock, three keys.

To have a galvanized-iron lift latch complete.

Wood-shed door.--To be 1½-inch frame, tenoned and pinned together, covered outside with one thickness, matched beaded 7/8 sheathing, not exceeding 4 inches wide. Hung with stout, galvanized-iron plate hinges, hasp and staple secured by No. 843 Yale spring padlock, three keys.

Interior doors.--To be 1¾-inch, 5-panel, stock door, hung with loose joint butts. All with black enamel lift latches, complete.

Oil-room door to have a black enamel rim lock, three keys.

Privy door to have a 4-inch brass, square case bolt.

Fuel door.--To have a braced board frame, covered on outside with sheathing like wood-shed door. Hung with galvanized-iron plate hinges, hooks, and lag-screw eyebolts to secure it open and shut.

Swing window.--To be molded sash 1½ inches thick, glazed with No. 2 American glass, plank, molded, frames, and sills. To be hung at top with stout galvanized-iron butts, hooks, and lag-screw eyebolts to secure them open and shut.

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Cistern

The cistern to be built on well-rammed concrete, 6 inches thick, made of good Rosendale cement, clean sand, and broken stone, in the proportion of 1 cement to 2 sand to 5 stone.

The outer walls to be laid with a 2-inch space left in the middle, and to be properly bonded across the same; this space to be filled with grout made of best Portland cement; mixed with extra fine sand, in the proportion of 1 to 1. The floor to be one thickness of brick edgewise, laid dry, with open joints ¼ inch each; the open joints to be filled with grout, the same as just described for the 2-inch space in outer walls.

The cistern to be built with best hard-burnt brick and Rosendale-cement mortar; the brickwork to be well bonded and laid solid with joints not exceeding ¼ inch in thickness. The bricks to be soaked in water before laying; the outer faces of joints struck smooth.

The inside of cistern, except filter, to receive three coats of Portland-cement mortar, the last coat being of cement only. In the work on the cistern none but fresh water and washed sand to be used.

Openings for the down spouts, pump connections, and overflow to be left in the brick walls. The overflow pipe to be a 4-inch cast-iron pipe, with elbow. The cast-iron pipe to be coated with asphaltum. The cistern to be covered by a 3 x 8 inch plate, with a strongly framed, and battened lid of white pine, in two sections, hung by galvanized-iron plate hinges.

To be a porous brick dome filter, removable, built inside cistern.

Flash properly with zinc; double flashings where covering of cistern meets outside wall of house.

Pump.--To be a patent revolving stand Premium pump, fig. 1, No. 2 of W. & B. Douglas's make (Middletown, Conn). To have a inch bore, 5 inch stroke, and 1¼-inch galvanized-iron suction pipe, iron couplings, brass thread screw; all properly connected with cistern.

Gutters.--To be No. 26 galvanized-iron, 10-inch birth, semicircular secured b y 1 by inch galvanized-iron gutter straps the proper length, running up on and nailed to roof boarding, placed not exceeding 2 feet 6 inches on centers.

To be two 4-inch corrugated down spouts, with proper elbows, secured by proper tinned-iron gutter hooks.

Iron conductors.--To be 1-inch iron, with lead joints, with all proper connections and bonds to connect down spouts with cistern, passing under building as shown, an iron elbow to connect the down spouts with iron conductor pipes. The iron conductor pipes are to be kept up as high as possible after passing under sill, cutting the

joist where necessary, so as to give a good pitch toward cistern, to prevent freezing. Pipe to be covered with asphaltum paint. The bottom of inlet pipe will enter cistern at grade. The top of the overflow pipe to be on a line with bottom of inlet pipe, to prevent backing up.

To be a blind drum or some similar contrivance for overflow pipe to waste into.

Painting.--Exposed metal work painted in harmony with trimmings of main building.

APPENDIX C.

"Duluth" Style Life-Saving Stations, Chronological and Geographical Listings and List of Surviving Life-Saving Stations (Taken from M.A. Thesis by Eugene V. York, Boston University, 1983)

Duluth Type - Chronological

Architect: George R. Tolman

Plans Dated: 1893

Built	Station	Location
1894	Spermaceti Cove	Sandy Hook, N. J.
1894	Avalon	Avalon, N. J.
1894	Duluth	Duluth, Minn. (L. Superior)
1894-5	Tathams (Stone Harbor)	Stone Harbor, N. J.
1895	Monmouth Beach	Monmouth Beach, N. J.
1895-6	Baileys Harbor	Baileys Harbor, Wisc. (L. Mich.)
1895-6	Plum Island	off Washington Island, Wisc. (L. Mich.)
1896	Wood End	Provincetown, Mass.
1896	Rocky Point	East Marion, N. Y.
1896	Absecon	Atlantic City, N. J.
1896	Cape May	Cape May, N. J.
1897	Salisbury Beach	Salisbury, Mass.
1897-8	Hog Island	off Birds Nest, Va.
1897-8	Caffeys Inlet	Duck, N. C.
1898	Old Harbor	off North Chatham, Mass.
1899	Charlevoix	Charlevoix, Mich. (L. Mich.)
1900	Gloucester	Gloucester, Mass.
1900	Straitsmouth	Rockport, Mass.
1900	Grand Marais	Grand Marais, Mich. (L. Mich.

Duluth Type - Chronological (cont.)

Built	Station	Location
1901	Monomet Point	Manomet, Mass.
1901	Harvey Cedars	Harvey Cedars, N. J.
1902	Squan Beach	Squan, N. J.
1904	Fletchers Neck	Biddeford Pool, Me.
1904	Grande Pointe au Sable	Luddington, Mich. (L. Mich.)
1905	Chadwick	Chadwick Beach, N. J.
1907	Portsmouth Harbor	Wood Island, off Portsmouth, N. H.
1907	Long Beach	Beach Haven Terrace, N. J.
1907-8	Forked River	South Seaside Park, N. J.

Duluth Type - Geographical

Architect: George R. Tolman — Plans Dated: 1893

Built	Station	Location
1904	Fletchers Neck	Biddeford Pool, Me.
1907	Portsmouth Harbor	Wood Island, off Portsmouth, N. H.
1897	Salisbury Beach	Salisbury, Mass.
1900	Straitsmouth	Rockport, Mass.
1900	Gloucester	Gloucester, Mass.
1901	Monomet Point	Manomet, Mass.
1896	Wood End	Provincetown, Mass.
1898	Old Harbor	off North Chatham, Mass.
1896	Rocky Point	East Marion, N. Y.
1894	Spermaceti Cove	Sandy Hook, N. J.
1895	Monmouth Beach	Monmouth Beach, N. J.
1902	Squan Beach	Squan, N. J.
1895	Chadwick	Chadwick Beach, N. J.
1907-8	Forked River	South Seaside Park, N. J.
1901	Harvey Cedars	Harvey Cedars, N. J.
1907	Long Beach	Beach Haven Terrace, N. J.
1896	Absecon	Atlantic City, N. J.
1894	Avalon	Avalon, N. J.
1894-5	Tathams (Stone Harbor)	Stone Harbor, N. J.
1896	Cape May	Cape May, N. J.
1897-8	Hog Island	off Birds Nest, Va.

Duluth Type - Geographical (cont.)

Built	Station	Location
1897-8	Caffeys Inlet	Duck, N. C.
1900	Grand Marais	Grand Marais, Mich. (L. Superior)
1894	Duluth	Duluth, Minn. (L. Superior)
1899	Charlevoix	Charlevoix, Mich. (L. Mich.)
1904	Grande Pointe au Sable	Luddington, Mich. (L. Mich.)
1895-6	Baileys Harbor	Baileys Harbor, Wisc. (L. Mich.)
1895-6	Plum Island	off Washington Island, Wisc. (L. Mich.)

Surviving Stations - Geographical

(Stations known or believed to be standing as of December 1982)

Station	Type	Built	Location
Cross Island	1874	1874	off Machiasport, Me.
Present use: Unknown; abandoned.			
Great Wass Island	Port Huron	1904	off Jonesport, Me.
Present use: Station torn down, new building constructed on original foundation; original boathouse survives.			
Cranberry Islands	1876	1879	Little Cranberry Island off Mt. Desert, Me.
Present use: Private residence.			
Whitehead Island	1874	1873-4	off Spruce Point, Me.
Present use: Summer camp; owned by Pine Island Camps.			
Burnt Island	Marquette	1891	off Port Clyde, Me.
Present use: Unknown.			
Damariscove Island	One of a kind	1897	off Boothbay Harbor, Me.
Present use: Abandoned; owned by Maine Audubon Society.			
Hunniwells Beach	1882	1883	Popham Beach, Me.
Present use: Private residence.			
Cape Elizabeth	Chatham	?	Cape Elizabeth, Me.
Present use: U. S. Coast Guard Station dwelling.			
Biddeford Pool (Fletchers Neck)	1874	1873-4	Biddeford Pool, Me.
Present use: Biddeford Pool Center for Professional Development.			
Fletchers Neck	Duluth	1904	Biddeford Pool, Me.
Present use: Biddeford Pool Center for Professional Development.			
Portsmouth Harbor	Duluth	1907	Wood Island, off Portsmouth, N. H.
Present use: Unknown; may be abandoned.			
Isle of Shoals ?	Isle of Shoals	1910	Appledore Island, off Portsmouth, N. H.
Present use: Unknown.			

Surviving Stations - Geographical (cont.)

Station	Type	Built	Location
Plum Island	1874	1873-4	off Newburyport, Mass.
Present use:	Private residence.		
Straitsmouth	Duluth	1899	Rockport, Mass.
Present use:	Private residence.		
Gloucester	Duluth	1900	Gloucester, Mass.
Present use:	Private residence.		
Nahant	One of a kind	1900	Nahant, Mass.
Present use:	U. S. Coast Guard Recreation Facility.		
Point Allerton	Bibb #2	1890	Hull, Mass.
Present use:	Hull Lifesaving Museum.		
North Scituate	Bibb #2	1886-7	North Scituate, Mass.
Present use:	Private residence.		
Manomet Point	1874	1873-4	Manomet, Mass.
Present use:	Private residence.		
Gurnet	Bibb #2	1892	off Duxbury, Mass.
Present use:	Private residence.		
Cahoons Hollow	Quonochontaug	1894	Wellfleet, Mass.
Present use:	Beachcomber Restaurant.		
Old Harbor	Duluth	1898	off North Chatham, Mass.; moved in 1977 to Cape Cod National Seashore, Provincetown, Mass.; owned by National Park Service.
Present use:	Lifesaving exhibit.		
Surfside	1874	1873-4	Nantucket, Mass.
Present use:	Youth Hostel; owned by American Youth Hostels.		
Narragansett Pier	One of a kind	1887-8	Narragansett, R. I.
Present use:	Coast Guard House Restaurant.		
New Shoreham	1874	1874	Block Island, R. I.; moved in 1968 to Mystic Seaport Museum, Mystic, Ct.
Present use:	Lifesaving exhibit		

Surviving Stations - Geographical (cont.)

Station	Type	Built	Location
Block Island	Bibb #2	1886	Block Island, R. I.
Present use:	Private residence.		
Fishers Island	Port Huron	1904	Fishers Island, N. Y.
Present use:	Private residence.		
Forge River	Unknown	1925	off Center Moriches, Fire Island, N. Y.; moved in 1948 to Ocean Bay Park, Fire Island, N. Y.
Present use:	Flynn's Hotel.		
Blue Point	Lorain	1913	David Park, Fire Island, N. Y.; moved in the 1950s to Seaview, Fire Island, N. Y.
Present use:	Fire Island Summer Club.		
Lone Hill	1871 Red House ?	1871 ?	Fire Island Pines, Fire Island, N. Y.; moved in 1947 to The Carrington Tract, Fire Island, N.Y.
Present use:	Joined with another building to form Carrington Guest House.		
Point of Woods	Chatham	1916	Point of Woods, Fire Island, N. Y.
Present use:	Flynn's Hotel.		
Oak Island	1871 Red House	1872	Oak Island Beach, N. Y.
Present use:	Oak Island Beach Community Center.		
Point Lookout	1871 Red House ?	1872 ?	Point Lookout, N. Y.
Present use:	Point Lookout Community Church.		
Rocky Point	Duluth	1895	East Marion, N. Y.
Present use:	Private residence.		
Spermaceti Cove	1849	1849	Sandy Hook, N. J.; moved in 1950s or 1960s to Twin Lights State Historic Site, Highlands, N. J.
Present use:	Lifesaving exhibit.		

Surviving Stations - Geogrqphical (cont.)

Station	Type	Built	Location
Spermaceti Cove	Duluth	1894	Sandy Hook, N. J.
Present use:	Lifesaving exhibit; owned by the National Park Service; located in Gateway National Rereation Area.		
Seabright	Bibb #2	1891	Seabright, N. J.
Present use:	Private residence.		
Monmouth Beach	Duluth	1895	Monmouth Beach, N. J.
Present use:	New Jersey Marine Police Station.		
Long Branch	1875	1878-9	Westend, N. J.
Present use:	Unknown.		
Long Branch	Port Huron	1903-4	Westend, N. J.
Present use:	Unknown.		
Spring Lake	Quonochontaug	1895	Spring Lake, N. J.
Present use:	Private residence.		
Island Beach	Jersey Pattern	1898	Seaside Park, N. J.
Present use:	Unknown; owned by New Jersey Department of Environmental Protection.		
Forked River	Duluth	1907-8	South Seaside Park, N. J.
Present use:	Unknown.		
Loveladies Island	1871 Red House	1871	Loveladies, N. J.
Present use:	Gift shop.		
Harvey Cedars	Duluth	1901	Harvey Cedars, N. J.
Present use:	Long Beach Island Fishing Club.		
Long Beach	Duluth	1907	Beach Haven Terrace, N. J.
Present use:	Private residence.		
Bonds	Bibb #2	1887-8	Beach Haven, N. J.
Present use:	U. S. Coast Guard Recreational Facility.		
Little Beach	Quonochontaug	1896	Brigantine, N. J.
Present use:	Unknown; located in Brigantine National Wildlife Refuge.		

Surviving Stations - Geographical (cont.)

Stations	Type	Built	Location
Absecon	Duluth	1896	Atlantic City, N. J.
Present use:	Unknown.		
Ocean City	1882	1885-6	Ocean City, N. J.
Present use:	Private residence.		
Carson Inlet	Jersey Pattern	1899	Ocean City, N. J.
Present use:	Private residence.		
Townsend Inlet	Bibb #2	1886-7	Townsends Inlet, N. J.
Present use:	Unknown; owned by U. S. Coast Guard.		
Avalon	Duluth	1894	Avalon, N. J.
Present use:	Private residence.		
Tathams	Duluth	1894-5	Stone Harbor, N. J.
Present use:	Private residence.		
Cold Spring	Bibb #2	1890-1	Cape May, N. J.
Present use:	Clubhouse		
Indian River Inlet	1875	1876	Bethany Beach, Del.
Present use:	Storage shed; owned by Delaware Department of National Resources and Environmental Control.		
Ocean City	1882	1891	Ocean City, Md.
Present use:	Ocean City Life Saving Museum.		
Assateague	Lorain	1922	Assateague Island, off Chincoteague, Va.
Present use:	Unknown; located in Assateague Island National Seashore.		
Virginia Beach	Quonochontaug ?	1903	Virginia Beach, Va.
Present use:	Virginia Beach Maritime Museum.		
Wash Woods	Chatham	1919	Corolla, N. C.
Present use:	Private residence.		
Currituck Inlet (Pennys Hill)	1876	1878	Corolla, N. C.
Present use:	Private residence.		

Surviving Stations - Geographical (cont.)

Stations	Type	Built	Location
Whales Head (Currituck Beach)	Quonochontaug	1903	Corolla, N. C.
Present use: Private residence.			
Poyners Hill	1876	1878	Corolla, N. C.
Present use: Private residence.			
Caffeys Inlet	Quonochontaug	1897	Duck, N. C.
Present use: Real estate sales office.			
Kitty Hawk	1874	1874	Kitty Hawk, N. C.
Present use: Restaurant.			
Kitty Hawk	Chatham	1911	Kitty Hawk, N. C.
Present use: Private residence.			
Kill Devil Hills	1876	1878	Kitty Hawk, N. C.
Present use: Unknown.			
Bodie Island	1876	1878	Nags Head, N. C.
Present use: Unknown.			
Bodie Island	Chatham	1925	Nags Head, N. C.
Present use: Unknown.			
Oregon Inlet	Quonochontaug ?	1897	Rodanthe, N. C.
Present use: Unknown; on the grounds of an active U. S. Coast Guard station.			
Chicamacomico	1874	1874	Rodanthe, N. C.
Present use: Not used; located in Cape Hatteras National Seashore.			
Chicamacomico	Chicamacomico	1911	Rodanthe, N. C.
Present use: Not used; located in Cape Hatteral National Seashore.			
Gull Shoal	1878	1876	Waves, N. C.
Present use: Unknown.			
Little Kinnakeet	1874	1874	Avon, N. C.
Present use: Not used; located in Cape Hatteral National Seashore.			
Little Kinnakeet	Southern Pattern	1903	Avon, N. C.
Present use: Not used; located in Cape Hatteras National Seashore.			

Surviving Stations - Geographical (cont.)

Stations	Type	Built	Location
Durants	1876	1878-9	Hatteras, N. C.
Present use: Motel.			
Ocracoke	Southern Pattern	1904	Ocracoke, N. C.
Present use: Unknown; owned by U. S. Coast Guard.			
Portsmouth	Quonochontaug	1894	Portsmouth, N. C.
Present use: Unknown; owned by the National Park Service.			
Sullivan's Island	Marquette	1894	Moultrieville, S. C.
Present use: U. S. Coast Guard station dwelling.			
Gilbert's Bar	House of Refuge	1876	Hutchinson Island, off Stuart, Fla.
Present use: Gilbert's Bar House of Refuge Lifesaving Museum.			
Pointe aux Barques	1875	1875-6	Harrisville, Mich. (L. Mich.); moved to Pioneer Huron City, Huron City, Mich.
Present use: Lifesaving exhibit.			
Muskalonbe Lake (Deer Park)	1876 Lake Superior	1876	Deer Park, Mich. (L. Superior)
Present use: Abandoned.			
South Manitou Island	Marquette	1901	South Manitou Island, Mich. (L. Mich.)
Present use: Unknown; owned by National Park Service.			
Sleeping Bear Point	Marquette	1901	Glen Haven, Mich. (L. Mich.)
Present use: Unknown; owned by National Park Service.			
Old Chicago	One-of-a-kind	1903	Chicago, Ill.
Present use: Unknown.			
Ilwaco	Marquette	1891	Klipsan Beach, Wash.
Present use: Private residence.			
Tillamook Bay	Petersons Point	1908	Bar View, Oreg.
Present use: Private residence.			

APPENDIX D.

List of Furnishings for Old Harbor Life-Saving Station, September 17, 1897

(U.S. National Archives, RG 26,
Records of the U.S. Coast Guard)

LIST OF FURNISHINGS FOR THE OLD HARBOR LIFE SAVING STATION

ITEM NO.	QUANITY	DESCRIPTION
1	15	Beds, iron, single, hard wood side rails, with quality woven wire mattresses combined.
2	3 okrs	Blankets, 8 pounds per pair, gray.
5	15	Mattresses, stuffed with rattan, cotton tops, square edges, bound, weight 27 lbs, 6 feet 2 inches by 2 feet 6 inches, super Pearl River or York ticking.
6	15	Mattress covers, park check, No. 90, to fit mattresses, item No. 5.
7	15	Pillows, feather, first quality, live geese, 20x30 inches, weight 3 pounds, A.C.A. ticking.
8	30	Pillow cases, 23x35 inches, 1-inch hem "Utica Mills."
9	30	Pillow covers, park check, No. 90, to fit pillows, item No. 7.
10	60	Sheets, brown, standard weight, 7-4, 2 1/2 yards long, hemmed and made, Atlantic "A," or equal quality.
11	2	Blocks, breeches buoy, English pattern.
12	2	Blocks, double, 8-inch, inside galvanized iron strapped, lignum-vitae sheaves, with Wellman's duplex roller bushings and loose hooks.
13	1	Block, double, 10-inch, inside galvanized iron strapped, lignum-vitae sheaves, with Wellman's duplex roller bushings and loose hooks.
14	2	Blocks, double, 8-inch, inside galvanized iron strapped, lignum-vitae sheaves, with Wellman's duplex roller bushings and loose hooks and buckets.
15	1	Block, double, 10-inch, inside galvanized iron strapped, lignum-vitae sheaves, with Wellman's duplex roller bushings and loose hooks and buckets.
16	2	Blocks, galvanized iron, combination snatch.
17	1	Block, single, 8-inch, inside galvanized iron strapped, lignum-vitae sheaves, with Wellman's duplex roller bushings and loose hooks.
18	1	Block, single, 10-inch, inside galvanized iron strapped, lignum-vitae sheaves, with Wellman's duplex roller bushings and loose hooks.
19	1	Block, single, 8-inch, inside galvanized iron strapped, lignum-vitae sheaves, with Wellman's duplex roller bushings and loose hooks and buckets.
20	1	Block, single, 10-inch, inside galvanized iron strapped, lignum-vitae sheaves, with Wellman's duplex roller bushings and loose hooks and buckets.
21	3	Blocks, single, 6-inch inside galvanized iron strapped, open galvanized iron sheaves, swivel eye with thimble, ash shell, 18-foot tail of 2 1/4 inch manila.
34	285 lbs	Hawser, 3-inch, bolt rope, best manila, right hand laid, one red yarn throughout the entire length of one strand (150 fathoms).
35	410 lbs	Hawser, 3-inch, bolt rope, best manila, right hand laid, one red yarn throughout the entire length of one strand (235 fathoms).
36	135 lbs	Whip line, 1 1/2-inch, bolt rope, best manila, left hand laid, one red yarn throughout the entire length of one strand (300 fathoms).
37	200 lbs	Whip line, 1 1/2-inch, bolt rope, best manila, left hand laid, one red yarn throughout the entire length of one strand (450 fathoms).

tem No.	Quanity	Description
1	10 lbs	Best manila, long fiber, smooth laid, 6-thread, rope.
3	25 lbs	Best manila, long fiber, smooth laid, 12-thread, rope.
4	75 lbs	Best manila, long fiber, smooth laid, 1 1/4 inch, rope.
5	50 lbs	Best manila, long fiber, smooth laid, 1 1/2 inch, rope.
6	50 lbs	Best manila, long fiber, smooth laid, 2 1/2 inch, rope.
9	70 lbs	Best manila, long fiber, smooth laid, 3 inch, rope.
3	10 lbs	Best Russian hemp, 12-thread, rope.
4	10 lbs	Best Russian hemp, 15-thread, rope.
5	5 lbs	Halyards, signal, No. 7, braided, Italian hemp, rope, in coils.
6	10 lbs	Marline, rope.
7	10 lbs	Spun yarn, 2-yarn, rope.
1	2	Bowls, mixing, yellow, 6-quart.
2	2	Bowls, sugar, without handles, with covers, best ironstone china.
3	3 sets	Cups, coffee without handles, with saucers, best ironstone china (set to consist of 6 cups and 6 saucers).
7	2	Dishes, baking, yellow, 10-inch.
8	2	Dishes, butter, with covers and drainers, best ironstone china, 5-inch.
1	6	Dishes, vegetable, 10-inch, with covers, best ironstone china.
5	1	Jug, stone, 1-gallon.
6	1	Jug, stone, 2-gallon.
7	1	Jug, stone, 3-gallon.
1	2	Pitchers, milk, 1-quart, best ironstone china.
2	2	Pitchers, molasses, 1-pint, heavy glass, white metal covers.
3	2	Pitchers, water, best ironstone china 6's.
4	2 doz	Plates, dinner, 10-inch, best ironstone china.
5	2 doz	Plates, soup, 10-inch, best ironstone china.
1	2	Platters, meat, oval, 14-inches, best ironstone china.
1	2	Saltcellars, pressed glass, plain, heavy, largest size.
5	1 doz	Tumblers, table, pressed glass, plain, extra heavy, largest size.
1	1 1/2 doz	Chairs, office, hard wood, seat in one piece, back of bent wood in one piece, with five upright rungs, one 1/4-inch iron rod, with head and nut, on each side through seat and side rungs.
1	1	Table, extension, 10-ft, ash, brass casters.
1	1	Table cloth, Cotton Cardinal with or without border, 5foot 8 inches x 12 feet.
1	1	Table cover, oil cloth, white marble pattern, 1 1/4 x 4 yards, rolled on 1 1/2-inch roller.
1	12 yds	Towling, crash, light, 18-inch, best quality.
1	12 yds	Towling, crash, heavy, 18-inch, best quality.
1	12	Brackets, brass, 5 1/2 x 7 inches, with brass screws.
2	2	Coal hods, 18-inches, extra heavy galvanized iron, Iron Clad Co.' or Pfeifer's.
1	1	Coffee mill, side, Parker's No. 400.
2	2 sheets	Emery cloth, No. 00, Baeder, Adamson & Co.'s.
2	2 sheets	Emery cloth, No. 1 1/2, Baeder, Adamson & Co.'s.
2	2 sheets	Emery cloth, No. 3, Baeder, Adamson & Co.'s.
1	1	Flour sieve, seamless, tin rim, 12 3/8 inches diameter, No. 18 mesh.
2	2	Forks, carving, rubber handles, with bolsters, Rus ell's or Northampton Cutlery Co.'s.
1	1	Fork, flesh, 18-inches, 3 prong, malleable iron, retinned.

ITEM NO.	QUANITY	DESCRIPTION
18	1	Funnel, corrugated, 1-quart, 4X tin.
19	1	Funnel, corrugated, 1-quart, 4X tin, with brass wirecloth strain.
11	2 sets	Knives and forks, dinner, best shear steel, rubber handles, with metal bolsters, Russell's Northampton Cutlery Co.'s or L.&G. (set to consist of 6 knives and 6 forks).
12	2	Knives, butcher, best shear steel, 7-inch blade, cocoa or beech handles, with metal bolsters, Russell's Northampton Cutlery Co.'s or L.&G.
13	2	Knives, carving, best shear steel, 12-inch blade, cocoa or beech handles, with metal bolsters, Russell's Northampton Cutlery Co.'s or L.&G.
14	1	Knife, mincing, best cast steel, single blade, polished, No. 1, plain handle.
15	1	Knife, putty, 6-inch, square, elastic, riveted handle.
16	2	Match safes, iron, japanned, large, self-closing.
17	1	Measure, lipped, 4X tin, gallon.
18	1	Measure, lipped, 4X tin, quart, graduated measure.
19	2 lbs	Nails, boat, copper, 1-inch.
20	2 lbs	Nails, boat, copper, 1 1/2-inch.
22	5 lbs	Nails, boat, galvanized, Swedish iron, 1-inch.
23	5 lbs	Nails, boat, galvanized, Swedish iron, 1 1/2-inch.
24	5 lbs	Nails, boat, galvanized, Swedish iron, 3-inch.
25	5 lbs	Nails, cut, 6d.
26	5 lbs	Nails, cut, 8d.
27	5 lbs	Nails, cut, 10d.
29	5 lbs	Nails, cut, galvanized, 6d.
30	5 lbs	Nails, cut, galvanized, 8d.
31	5 lbs	Nails, cut, galvanized, 10d.
33	5 lbs	Nails, wire, common, 2d.
34	5 lbs	Nails, wire, common, 4d.
35	5 lbs	Nails, wire, common, 6d.
36	5 lbs	Nails, wire, common, 8d.
37	5 lbs	Nails, wire, common, 10d.
40	5 lbs	Nails, wrought, 6d.
41	5 lbs	Nails, wrought, 8d.
42	5 lbs	Nails, wrought, 10d.
43	5 lbs	Nails, wrought, galvanized, 6d.
44	5 lbs	Nails, wrought, galvanized, 8d.
45	5 lbs	Nails, wrought, galvanized, 10d.
48	2	Padlocks, brass, 4-tumbler, 3 inches long, with drop plates, and duplicate keys.
49	2	Pans, dust, japanned, best heavy tin, ordinary house size, half covered, steel edge.
50	1/2 doz	Paper, sand, Baeder, Adamson & Co.'s, No. 00.
51	1/2 doz	Paper, sand, Baeder, Adamson & Co.'s, No. 1 1/2.
52	1/2 doz	Paper, sand, Baeder, Adamson & Co.'s, No. 3.
53	2	Pepper boxes, planished, 2 1/4 x 3 1/2 inches.
54	1	Rake, garden, 14 teeth, cast steel.
55	1	Scale beam, No. 2, common, japanned, light, 500 pounds capacity.
57	1	Screw, bench, beech or birch wood, 2 1/2-inch, 24 inches long.
60	1/4 gross	Screws, brass, flat head, gimlet points, 3/4-inch, No. 8.
61	1/4 gross	Screws, brass, flat head, gimlet points, 1-inch, No. 10.

EM O.	QUANTITY	DESCRIPTION
3	1/4 gross	Screws, brass, flat head, gimlet points, 1 1/2-inch, No. 14.
5	1/2 gross	Screws, iron, flat head, gimlet points, 1/2-inch, No. 5.
3	1/2 gross	Screws, iron, flat head, gimlet points, 3/4-inch, No. 7.
9	1/2 gross	Screws, iron, flat head, gimlet points, 1-inch, No. 9.
1	1/2 gross	Screws, iron, flat head, gimlet points, 1 1/2-inch, No. 13.
3	1/2 gross	Screws, iron, flat head, gimlet points, 2-inch, No. 15.
4	3	Soap dishes, hanging, galvanized, Central Stamping Co.'s, No. 100, 4 3/8 inches.
5	1 lb	Solder, best half and half.
5	1	Spring balances, improved, 24 pounds by 1/2 pound, with rings and hooks attached.
1	4	Spittoons, indurate fiber, No. 2.
3	2	Spoons, bread, forged iron, tinned, 18-inch.
4	2 doz	Spoons, table, pure white German silver, not less than 18 percent nickel, perfectly plain in style, highly polished and finished, and shall measure 8 1/16 inches, and weigh 20 ounces avoirdupois to the dozen.
5	2 doz	Spoons, tea, pure white German silver, not less than 18 percent nickel, perfectly plain in style, highly polished and finished, and shall measure 5 11/16 inches, and weigh 9 5/32 ounces avoirdupois to the dozen.
6	1 lb	Tacks, copper, in papers, size 1/2-inch, full weight.
7	1 lb	Tacks, copper, in papers, size 5/8-inch, full weight.
9	1 lb	Tacks, galvanized iron, in papers, size 4-ounce, full weight.
1	1 lb	Tacks, black iron, in papers, size 8-ounce, full weight.
5	6	Wash basins, without foot, 11 1/2 inches diameter, copper, stamped tinned inside, with rings.
7	10 lbs	Yellow sheet metal, 18-ounce.
8	1/2 doz	Burners, lantern, No. 1, tubular (for No. 0 tubular lift-wire lantern).
1	1/4 doz	Burners, lantern, No. 1, tubular (long cone and long shaft for No. 0 reflector lantern).
6	1 doz	Chimneys, No. 2, for B.&H. lamps.
7	1/4 doz	Globes, green, for "Dietz" No. 0, lift-wire, tubular lanterns with guards.
1	1/4 doz	Globes, ruby, for "Dietz" No. 0, lift-wire, tubular lanterns with guards.
3	1 doz	Globes, white, for "Dietz" No. 0, lift-wire, tubular lanterns with guards.
1	2	Lamps, hanging, brown or brass finish, length, 29 inches, with metal rings, 1-quart metal font, central draft, with chimney, burner, smoke bell, and tin shade, complete.
3	2	Lamps, table, metal, kerosene burner, with 10-inch tin reflector shade, complete.
3	1	Lamp filler, quart, best heavy block tin, to close airtight.
4	1	Lamp trimmer, "Challenge," No. 40, polished blades.
5	3 doz	Lampwicks, flat, woven, No. 1 (5/8-inch).
6	3 doz	Lampwicks, flat, woven, No. 2 (1-inch).
3	1 doz	Lampwicks, woven, No. 2, for B.&H. lamps.
5	1	Lantern, beach, japanned, with wings and staves and 12 extra light of glass.
1	6	Lanterns, tubular, "Dietz," No. 0, lift-wire, with guards.

ITEM No.	QUANTITY	DESCRIPTION
2	2	Lanterns, Patrol, tubular, "Dietz," No. 0, reflector, with hoods.
3	1	Oil tank, 60-gallon capacity, No. 26 galvanized iron, with pump, front of hood to slide around, painted, letered U.S.L.S.S.
7	1	Medicine chest, with medicines.
2	2	Brushes, dust, best quality, all horsehair, black, 9 1/2-inch block
3	2	Brushes, paint, flat, leather bound, all white Russia bristles, for ordinary painting, size 3 1/2-inch.
5	1	Brush, paint, round, No. 4-0, all white bristles, Clinton's extra, or Whiting's extra Russia.
7	1	Brush, paint, round, No. 5-0, all white bristles, Clinton's extra, or Whiting's extra Russia.
3	2	Brushes, sash tool, No. 2, "Atlantic," wire bound, extra French bristles.
9	2	Brushes, sash tool, No. 3, "Atlantic," wire bound, extra French bristles.
0	1	Brush, varnish, 1-inch, flat, tin bound, French bristles, "Atlantic double thick.
1	1	Brush, varnish, 2-inch, flat, tin bound, French bristles, "Atlantic," double thick.
2	1	Brush, whitewash (heads), brass bound, all white Russia bristles, Clinton's extra, width 8 inches.
4	2 lbs	Drier, patent, Harrison Bros. & Co.'s, in 1-pound cans.
5	1	Glass cutter, steel wheel.
6	25 lbs	Lead, white, in oil, strickly pure, Harrison Bros. & Co.'s.
7	5 gal	Oil, boiled linseed, strickly pure, in 5-gallon cans.
8	3 gal	Oil, raw linseed, strickly pure, in 3-gallon cans.
9	2 gal	Oil, hard finish white, Berry Brothers', Pratt & Lambert's "Excelsior," Acme White Lead and Color Works', or John Lucas & Co.'s, in 1-gallon cans.
1	1 lb	Prussian blue, best, strickly pure, ground in oil, Harrison Bros. & Co.'s, in 1-pound cans.
2	5 lbs	Putty, in 5-pound skins or tins.
3	1 gal	Turpentine, best, in 1-gallon cans.
4	1	Anchor, boat, galvanized iron, weight 16 pounds.
5	1	Anchor, boat, galvanized iron, weight 35 pounds.
6	1 box	Axle grease, 2-pound boxes, "Fraser's" "Manhattan," or "The Four Brothers."
7	6	Bath bricks.
8	1/2 lb	Beeswax, pure yellow.
9	4	Boat hooks, navy, double hooks, ball points, No. 14, Newhall's, with 9-foot staves.
0	1/2 doz	Brooms, corn, best railroad XXX, without seed, not less than 28 pounds to the dozen.
1	6	Brushes, scrubbing, white tampico center, gray wings, 11-inch block
2	2	Brushes, stove, all black bristles, very full, dauber extension, with handles.
3	6	Buckets, fire, No. 30 galvanized, 14-quart.
4	4	Buckets, rubber, No. 2, 10-quart, metal parts of galvanized iron.
5	1 lb	Glue, broken, Peter Cooper's No. 1 1/4, or "Buffalo" No. 1.
6	1	Hand grapnels, galvanized 2 1/2 pounds.
7	1	Hand grapnels, galvanized 4 pounds.
8	12 lbs	Leather, rigging.

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EM O.	QUANITY	DESCRIPTION
55	1	Marline spike, 12-inches.
56	4	Mops, cotton, 1-pound.
57	2	Mop sticks, Taylor's patent.
58	5	Needles, sail, Smith's, No. 11.
59	5	Needles, sail, Smith's, No. 14.
60	5	Needles, sail, Smith's, No. 16.
63	48 ft	Oars, best ash, dressed as required per sample, ends of blades coppered, 8-foot.
65	60 ft	Oars, best ash, dressed as required per sample, ends of blades coppered, 10-foot.
66	120 ft	Oars, best ash, dressed as required per sample, ends of blades coppered, 12-foot.
68	84 ft	Oars, best ash, dressed as required per sample, ends of blades coppered, 14-foot.
69	90 ft	Oars, best ash, dressed as required per sample, ends of blades coppered, 15-foot.
71	72 ft	Oars, sweeps, best ash, dressed as required per sample, ends of blades coppered, 18-foot.
	2	buckets, water, cedar, 10-quart.
77	1/12 doz	Palms, sewing, full hide, mounted, No. 2.
79	2 lbs	Paste, polishing, universal, in 1-pound cans.
80	2 lbs	Rotten stone, lamped.
81	20 lbs	Sal soda.
82	10 lbs	Sapolio.
83	1	Slate, double, 9x13 inches, brass hinges, without panel backs.
84	1 doz	Slate pencils, soapstone.
85	80 lbs	Soap, fresh water, good quality.
87	4 lbs	Sponges, large, coarse, for boat use.
89	1	Tarpaulin, 10x10 feet, No. 6 cotton canvas, tabled, unpainted, brass eyelets 12 inches apart all around.
90	1	Tarpaulin, 12x12 feet, No. 6 cotton canvas, tabled, unpainted, brass eyelets 12 inches apart all around.
91	1 doz	Thole pins, locust, 3/4-inch, 9 inches long.
92	1 doz	Thole pins, locust, 1-inch, 10 inches long.
93	1	Tray, chopping, oval, No. 4.
94	1 lb	Twine, best Andover flax, 3-ply.
95	1 lb	Twine, cotton, sewing, 1/2-pound balls.
96	5 lbs	Waste, cotton, machinery, white picked, No. 1.
98	1	Wheelbarrow, canal or railroad, bolted.
00	1	Ash shifter, "Rival," wood, galvanized wire, for barrels.
01	1	Boiler, 8-quart, cast iron, round, tinned inside, with cover.
02	1	Boiler, 12-quart, cast iron, round, tinned inside, with cover.
05	1	Boiler, wire, retinned, reversible, 13 wires, rivited, 10x9 inches.
06	1	Cake turner, stamped, threaded handle, retinned, 4 1/2x3 1/2 inches
10	25 lbs	Castings for "Beaver" range No. 8-21.
15	1	Colander, family, retinned, feet fast, 12x5 1/8 inches.
20	4	Collars, tin, for 6-inch stovepipe.
25	4	Dampers, cast iron, for 6-inch stovepipe.
26	2	Dippers, cup, stamped, retinned, 5x2 1/2 inches, flaring flat handles.
29	21 lbs	(5) Elbows, stovepipe, No. 28 galvanized iron, round, 6-inch.
35	1 set	Fire bricks for "Beaver" range No. 8-21.

EM O.	QUANTITY	DESCRIPTION
0	1	Griddle, round, bailed, 16-inch.
5	1	Kettle, tea, iron, galvanized, 8-inch, pit bottom.
7	1	Ladle, deep, solid, tinned iron, retinned, 3 3/4-inch, 14-inch flat handle with hook.
9	2	Pans, bake, round, wrought iron, polished, 2 quarts, 8 1/4x2 1/4 inches.
0	1	Pan, bake, round, wrought iron, polished, 4 quart, 10 3/4x2 5/8 inches.
2	1	Pan, bake, round, deep, wrought iron, polished, 2 quarts, 8 5/8x3 inches.
4	1	Pan, bread, 4X tin, stamped, handled, retinned, 15x10 inches.
5	1	Pan, bread, 4X tin, stamped, handled, retinned, 18x12 inches.
6	1	Pan, cake, round, stamped, retinned, shallow, tubed, 8 1/2 inches diameter, 2 1/4 inches deep.
7	1	Pan, cake, round, stamped, retinned, deep, tubed, 11 1/2 inches diameter, 3 3/4 inches deep.
9	1	Pan, dish, round, best heavy tin, stamped, retinned, with handles, 17 quart, 18x6 inches.
0	1	Pan, dripping, smooth iron, best charcoal, 10x15 inches, weight per dozen 19 pounds.
1	1	Pan, dripping, smooth iron, best charcoal, 12x20 inches, weight per dozen 26 pounds.
2	1	Pan, fry, wrought iron, polished, lipped, 10x2 inches.
3	2	Pans, fry, wrought iron, polished, lipped, 14 1/8x2 1/4 inches.
6	1	Pan, mixing, stamped, retinned, 10-quart, 15 1/4x6 1/2 inches.
7	1	Pan, pudding, tin, stamped, retinned, beaded edge, extra deep, 6-quart.
8	1	Pan, pudding, tin, stamped, retinned, beaded edge, extra deep, 10-quart.
9	1	Pan, roast, iron, seamless, 11x16 inches, handled.
1	1	Pan, sauce, cast iron, inside enameled, with cover, 6-quart.
2	1	Pan, stew, tin, stamped, retinned, shallow, plain, 5-quart, 11 5/8x2 5/8 inches.
5	142 lbs	Pipe, stove, No. 18 galvanized iron, 6-inch.
0	1 doz	Plates, pie, tin, 10-inch, stamped, 1 1/4 inches deep.
1	3	Pokers, stove, 26-inch, 1/2-inch iron, with rings and hooks.
2	1	Pot, coffee, 3-gallon, 4X tin, flat copper bottom, handled, bail handle.
3	1	Pot, coffee, 1-gallon, 4X tin, flat copper bottom, handled, bail handle.
4	1	Pot, tea, 2-gallon, 4X tin, flat copper bottom, handled, bail handl
5	1	Pot, tea, 1-gallon, 4X tin, flat copper bottom, handled, bail handl
7	3	Shovels, stove, wrought iron, japanned, "U.S." No. 0, 5x8 1/2x23 inches.
8	1	Steamer, 4X tin, raised cover in one piece, new style, 6-inch.
9	1	Steamer, 4X tin, raised cover in one piece, new style, 9-inch.
0	1 doz	Stove polish, Dixon's, "Rising Sun" or "Phoenix," papers.
1	1	Stove cover lifter, cast iron, japanned, 10-inch.
2	1	Stove, cooking, "Beaver" range No. 8-21, for coal, single oven with furniture complete, including 1 wash boiler, 1 iron pot and cover, 1 iron kettle, 1 iron teakettle, 1 dipper, 1 square tin pan for bread, 1 drip pan, 1 spider, 1 shovel, 1 poker, 1 griddle, 1 round tin pan for pudding, 1 lower joint stovepipe (to connect with 6 inch pipe galvanized)

EM O.	QUANTITY	DESCRIPTION
1	3	Stoves, heating, "Princess Beaver" No. 12, indirect draft (hard coal).
7	21 lbs	Zinc, sheet, 9 gauge (size 36x42 inches).
8	3	Zinc boards, No. 9 zinc, square, 36x36 inches (for heating stove).
9	1	Zinc boards, No. 9 zinc, oblong, 32x42 inches (for heating stove).
0	1	Auger, carpenter, best steel, 1/2-inch, handled, with nut, Russell Jennings' or Pugh's.
1	1	Auger, carpenter, best steel, 1-inch, handled, with nut, Russell Jennings' or Pugh's.
2	1	Auger, carpenter, best steel, 1 1/2-inch, handled, with nut, Russell Jennings' or Pugh's.
4	1/4 doz	Awls, brad, best steel, shouldered, 1/8-inch, without handles.
6	4	Axes, felling, 3-pounds, handled, Ogden's "Yankee."
8	2	Ax handles (felling ax), extra hickory, all white, polished, 32-inch.
9	2	Ax handles (felling ax), extra hickory, all white, polished, 34-inch.
1	1	Bevel, sliding T, No. 4, 10-inch, Disston's.
2	1	Bit, auger, for brace, best solid cast steel, 1/8-inch, Pugh's.
3	1	Bit, auger, for brace, best solid cast steel, 1/4-inch, Pugh's.
4	1	Bit, auger, for brace, best solid cast steel, 1/2-inch, Pugh's.
5	1	Bit, auger, for brace, best solid cast steel, 3/4-inch, Pugh's.
6	1	Bit, auger, for brace, best solid cast steel, 1-inch, Pugh's.
7	1	Bit, plain, screw-driver, 1/2-inch, solid cast steel, standard quality, Russell Jennings' or Pugh's.
8	1	Bit, snail, countersinks, for wood, cast steel, standard quality, Russell Jennings' or Pugh's.
9	1	Bit, rose, countersinks, cast steel, round shank, for brass, standard quality, Russell Jennings' or Pugh's.
0	1	Bit, flat, countersinks, cast steel, for iron, standard quality, Russell Jennings' or Pugh's.
1	1	Brace, Barber's improved, ratchet, No. 32, 10-inch sweep, maple, cherry, or walnut head and handle.
2	1	Brand, metal, U.S.N.B., in 1-inch letters, 18-inch iron handle.
3	1	Chisel, socket firmer, solid cast steel, 1/4-inch, with handle leather tipped, 6 to 6 1/2-inch blade, Buck Bros.
4	1	Chisel, socket firmer, solid cast steel, 1/2-inch, with handle leather tipped, 6 to 6 1/2-inch blade, Buck Bros.
5	1	Chisel, socket firmer, solid cast steel, 1-inch, with handle leather tipped, 6 to 6 1/2-inch blade, Buck Bros.
7	1	Chisel, socket firmer, solid cast steel, 2-inch, with handle leather tipped, 6 to 6 1/2-inch blade, Buck Bros.
8	1	Chisel, cold, solid cast steel, octagon, 1-inch, regular length, Peck, Stow & Wilcox Co.'s.
9	1	Compass, carpenter's, best steel, 6-inch.
0	1/2 doz	Files, saw, slim, tapered, double cut, 5-inch, handled, Kearney & Foot's or Disston's.
1	1/2 doz	Files, saw, tapered, 7-inch, handled, Kearney & Foot's or Disston's.
2	1/2 doz	Files, flat, bastard, 12-inch, Kearney & Foot's or Disston's.
5	1	Gauge, marking, Russell & Erwin Mfg. Co.'s, No. 61.
6	1/6 doz	Gimlets, nail, steel, double cut, wood handles, Shepardson's, No.
7	1/6 doz	Gimlets, nail, steel, double cut, wood handles, Shepardson's, No.

ITEM NO.	QUANTITY	DESCRIPTION
18	1/6 doz	Gimlets, nail, steel, double cut, wood handles, Shepardson's, No.
19	1	Gouge, socket firmer, solid cast steel, 1/2-inch, with handles leather tipped, 6-inch blade, Buck Bros.
10	1	Gouge, socket firmer, solid cast steel, 1-inch, with handles leather tipped, 6-inch blade, Buck Bros.
12	1	Grindstone, No. 2 "Ohio," 20 inches diameter, 2 1/2 inches thick, mounted, complete, with crank and treadle.
13	1	Hammer, claw, adz eye, solid cast steel, weight 1 pound, handled Peck, Stow & Wilcox Co.'s or Clark's.
14	1/6 doz	Handles, beech, for 1/8-inch shouldered brad awls.
15	1	Handle, for claw hammer, extra hickory, all white, polished.
16	2	Handles, for hatchets (ax pattern), extra hickory, all white, polished.
17	2	Handles, for boat hatchets, extra hickory, all white, polished.
18	1	Handle, for pickax, extra hickory, all white, polished.
19	1	Handle, for 8-pound blacksmith's sledge, extra hickory, all white polished.
20	2	Hatchets, ax pattern, (boat), 3 3/4 cut, handled, Collins & Co.'s, No. 2.
21	2	Hatchets, ax pattern, 4 1/2-inch cut, handled, Beatty's, No. 2.
22	2	Hatchets, boat, claw hammer head, handled, Beatty's No. 3 or Collins & Co.'s, No. 6.
24	1	Knife, regular drawing, extra quality, cast steel, 8-inch cut, handles ferruled and capped, Couglass Manufacturing Co.'s.
25	1	Mallets, round, lignum vitae, 4 inches diameter, mortised handles.
27	1	Nail set, cast steel, No. 1.
28	1	Nippers, end cutting, 7-inch, good American warranted.
29	1	Oiler, zinc, "Parmoo," No. 3, brass bottom, double walled cup.
30	2	Pickaxes, railroad pattern, adz eye, steel points, 6-pound, handled, average length 24 1/2 inches, "Trenton."
31	1	Pincers, steel, 7-inch, good American, warranted.
32	1	Plane, jack, best beech, "Sandusky," 16 inches long, Butcher's double iron, 2 1/4-inch.
33	1	Plane, jointer, best beech, "Sandusky," 28 inches long, Butcher's double iron, 2 1/4-inch.
34	1	Plane, smoothing, best beech, "Sandusky," 8 inches long, Butcher's double iron, 2 1/4-inch.
35	1	Pliers, steel, flat nosed, 6-inch, good American, warranted.
36	1	Rasp, wood, 12-inch, half-round, handled, Kearney & Foot's or Disston's.
	1	Rule, carpenter's, boxwood, brass bound, 2-foot, 3 joints, 1 3/8 inches wide, 8ths and 16ths.
39	1	Saw-set, Morrill's No. 1.
40	1	Saw, butchers, 20-inch, extra spring steel blades, beech handle, polished edges, three brass screws, flat back.
43	1	Saw, hand, crosscut, 26-inch, four screws, grained blade, Disston'
44	1	Saw, hand, rip, 28-inch, four improved screws, grained blade, Disston's.
46	1	Saw, wood, with frame, No. 6, Disston's.
47	1	Screw driver, steel, 8-inch, handled, brass ferrules, Stanley's.
48	7	Shovels, best steel, No. 3, handled, Ames'. (needed one for each man to clear snow drifts).

EM O.	QUANITY	DESCRIPTION
9	2	Shovels, round point, best steel, long handled, Ames'.
0	1	Shovel, scoop, Ames', No. 2.
1	1	Sledge, blacksmith's 8-pound, steel face and peen polished, handled, Atha Tool Co.'s No. 29 or "Trenton."
2	1	Soldering tool, 1-pound, handled.
3	1	Spade, best steel, handled, Ames', No. 2.
4	1	Spokeshave, best steel, 3-inch blade, plated, beechwood, with thumbscrew, Bagshaw & Field's or Booth & Mills'.
5	1	Stone, oil, mounted, 8x2x1 1/8 inches, Washita.
6	1	Square, carpenter's steel, "Eagle."
8	1	Wrench, monkey, 12-inch, knife-handle, Coe's.
9	1	Wrench, combination pipe bolt and nut, 12-inch, Jennings & Co.'s.
0	1	Vise, carpenter's parallel, 3 1/2-inch jaw, Parker's or "Trenton" No. 4.
2	1	Barometer, life buoy, aneroid, porcelain dials, square oak frame.
3	2	Boat drags, canvas.
4	2	Breeches buoys, with slings complete, per sample.
5	1/2 M	Cartridge bags, red.
6	1/2 M	Cartridge bags, white.
9	2	Clocks, banner lever, nickel plated, one day, 8-inch dial, time, U.S.L.S.S. in black letters, 3/8-inch, on dial.
2	1	Compass, liquid, boat, with lacquered copper, improved binnacles, complete, 5 7/8x5 7/8x9 1/4 inches.
3	2	Crotches.
4	1 Box	Dials, card, for Inhauser's time detector, 370 dials to box /for use with the old time detectors to be transferred from the Orlean station/.
5	86 ft	Fenders, cork, for boat, 5 inches diameter at center, tapered to 2 1/2 inches at end, covered with No. 4 cotton canvas.
6	1 yd	Flannel, red, all wool, 27 inches wide.
7	1	Flask, powder, heavy copper, 16-ounce capacity, screw top, outsid spring.
9	2	Glasses, binocular, 26", field glass, short body, oxidized slides. movable shades, heavy sole leather case, with strap for hanging; "U.S.L.S.S." to be engraved upon slides and stamped or gilded upon the inner side of case cover.
0	2	Hand carts, "Racine Wagon and Carriage Co." pattern.
1	3	Heaving sticks.
7	15	Life belts, cork, "Abbey" pattern size 38 inches.
8	15	Life belts, cork, "Abbey" pattern size 40 inches.
1	1	Life car.
2	10 lbs	Powder, Hayard's (L.S.S. Standard), 10-pound packages.
5	2	Reels, double, for hand carts.
6	2	Sand anchors.
7	2	Sand anchor pendants.
1	4 doz	Signals, "Coston," patrol.
2	6	Signal holders, "Coston," improved.
3	1	Speaking trumpet, brass, 14-inch, marked "U.S.L.S.S."
4	3	Tally boards, No. 1.
5	3	Tally boards, No. 2.
8	1	Telescope, Bardou & Son's, day and night adjustment, No. 326, 22".
9	2	Thermometers, copper case.

GUN "LYLE" & EQUIPMENT

ANTITY	DESCRIPTION
2	Combination levels.
00	Friction primers.
2	Guns "Lyle," 2 1/2-inch.
2	Gun carriages.
2	Haversacks.
2	Lanyards.
1	Powder measure, 1 oz.
1	Powder measure, 2 oz.
2	Priming wires.
12	Projectiles, 3 1/2 inches.
2	Quoins.
2	Rammers and sponges.
2	Sponge covers.
2	Waist-belts.
2	Wiping rods and worms.
2	Vent-girulets.
2	Vent-punches.
2	Shot-lines, "Whiten," No. 4.
3	Shot-lines, "Whiton," No. 7.
2	Shot-lines, "Whiton," No. 9.
1	Cartridge case, copper.
3	Faking-boxes, size "A."
1	Faking-box, size "B."
1	Hawser-cutler
6	Signal cases, tin (for patrol signals).
set	Signals, tin (International code).
2	Torches and staffs
1	Wagon, surf-boat ($98.00 delivered in New York City).
bbl	Oil, mineral, about 52 gallons, water white, fire test not less than 150° F., flash test not less than 125° F., safe superior quality, strong, tight, well made iron hooped cask bearing stamp of properly authorized inspecting officer, per gallon - 10 cts.
	WINDOW SHADES
	Best Scotch Holland, sage "Hartshow" rollers or equally good, springs and fixtures complete.
4	3 ft 11 in x 2 ft 3 in wide (for crew's quarters).
2	4 ft 11 in x 3 ft 1 1/2 in wide (for crew's quarters).
2	6 ft 7 in x 3 ft 8 in wide (for keeper's room and kitchen).
1	2 ft 6 in x 1 ft 6 in wide (for lockerroom).
1	2 ft 9 in x 2 ft 9 in wide (for lockerroom).
2	6 ft 7 in x 3 ft 2 in wide (for mess room).
1	3 ft 6 in x 2 ft 7 in wide (for pantery).
1	2 ft 9 in x 2 ft 9 in wide (for spare room).
2	3 ft 5 in x 2 ft 3 in wide (for stair case hall 1st floor).
3	2 ft 6 in x 1 ft 6 in wide (for stair case hall 2nd floor).
1	3 ft 6 in x 4 ft 7 in wide (for storm and clothes room).
4	2 ft 6 in x 1 ft 6 in wide (for tower).

BOATS

ANITY	DESCRIPTION
1	Surf row boat, 24 foot, Monomoy model.
1	Surf-sailing boat, 24 foot, Monomoy model.
1	Surf boat wagon

MISCELLANEOUS

1	Library case "No. 52."
1	Book case
1	Desk, oak, roll-top, 4 ft long, 3ft-9 inches high, 30 inches deep with side closet, mounted on large plate casters.
1	table, kitchen, hardwood, 27x42 inches, with drawer.

BOOKS, BLANKS, CIRCULARS, ETC.

9	Regulations as to Uniform of Employees
2	Revised Regulations
1	Official Register
1	International Code of Signals publication
)	Instructions to Mariners in case of Shipwreck
)	Beach Apparatus Drills
)	Articles of Engagement of Surfmen
)	Application for and certificate of Medical Inspection
)	Report of Change in Crew
)	Recognition of Distress Signals
)	Hospital Relief to Keepers and Surfmen
3	Instructions as to care of Marine Glasses
3	Instructions to Surfmen in regard to use of Patrol Clocks
)	Employment of Temporary Surfmen
)	Evidence required with application for benefit of Sec. 7, May 4, 1882
)	Instructions to Employees relative to use of signals
)	Increase of Compensation of Keepers and Surfmen with regulations
	Amending paragraph 151 Revised Regualtions (salvage)
	Limitation of the hours of daily service upon Public Works
	Keepers to Act as Inspectors of Customs
	Keeper's Instructions as to care and use of Patrol Clocks
	Pay of Surfmen for fractional parts of a month
	Keeper's authority to discharge surfmen
	Keeper to make wreck reports, etc.
	Relative to leave of absence of surfmen and keepers
	Regulations in regard to official telegraphing
	Assistance to Weather Bureau, Department of Agriculture
	In aid of the enforcement of quarantine regulations
	Relative to Boating, Hunting, etc.
	Providing for the Enforcement of the Provisions of Executive Order of July 27, 1897, as to removal from the Classified Service. Department Circular No. 122, issued August 11, 1897
	Regulations governing admission to the Grade of Surgman in the Life-Saving Service (Form 396)
	Employment of Substitutes in Life-Saving Service
	"Seventh Man" in Life-Saving Service on the Atlantic Coast

ANTITY	DESCRIPTION
.0	Blank application for examination to the grade of surfman, Life-Saving Service
1	Book, Government Salary tables
1	Pay of Life-Saving crews
1	Benefits provided by Sections 7 and 8, Act of May 4, 1882
0	To Keepers and crews of Life-Saving Stations (Relative to wearing of Lifebelts), Department No. 39, 1876
1	Instructions to District Superintendents and Keepers, Life-Saving Service, relative to forms adopted under Civil Service Rules, No. 188, November 11, 1897
	SIGNALS AND FLAGS
set	International code of signals
1	National Ensign 6 1/3 x 12 feet
1	Square white flag for signaling
1	Square red flag for signaling
1	Star pennant

In 1916 Old Harbor received a Beebe-McLellan self-bailing power surfboat. Its other boats included two Monomoy surfboats and one dinghy at that time.

Taken from Old Harbor Life Saving Station, General Correspondence, #61898, eptember 17, 1897, RG 26, Records of the United States Coast Guard," (National rchives, Washington, D.C.).

APPENDIX E.

Proposals and Specifications for Old Harbor Life-Saving Station, Boathouse and Cellar, 1900

U. S. Life-Saving Service,

Chatham Mass.

August 19th 1900

Superintendents of Construction of Life Saving Stations
No 17 State Street
New York City

Gentlemen

I respectfully report, upon my arrival here I prepared, and issued poster advertisement, and circular letters with Specifications attached, inviting proposals for furnishing the material, and constructing a boathouse to be used in connection with the Old Harbor Station. Written permission from the Select Men of the Town of Chatham to construct boathouse herewith Submitted.

Also advertisement, and circular letters with Specifications attached, have been issued, inviting proposals for furnishing the material, and constructing a cellar at the Old Harbor Station

Respectfully yours
Henry E. Davis
Asst & Supt Constr L.S.S.

NOTICE.

PROPOSAL.

LIFE-SAVING SERVICE,

Assistant to Superintendents of Construction, Life Saving Stations,
ATLANTIC AND LAKE COASTS.

Ocean House
Chatham, Mass.
August 18th 1900.

Sealed proposals will be received by the undersigned, at the above address, until 12 o'clock, noon, 23d instant. For furnishing the material and labor and constructing a bathhouse for the use of the Old Harbor Life Saving Station in accordance with the Specifications hereto attached,

Bidders must state the time when they propose to complete the work

All the material and workmanship must be satisfactory to the superintending officer.

The right is reserved to reject any or all bids, and to waive all defects, if deemed for the interest of the Government.

Proposals should be enclosed in sealed envelopes, addressed to "Assistant to Superintendents of Construction Life-Saving Stations," Chatham, Mass.

and marked, "proposals for Bathhouse for Old Harbor L.S.S. Station

Henry E. Davis
Assistant to Superintendents of Construction,
Life-Saving Stations, Atlantic and Lake Coasts.

To Assistant to Superintendents of Construction, Life-Saving Stations, Atlantic and Lake Coasts,

Chatham
Mass

Sir:

In accordance with the above notice, inviting proposals for material

and subject to the conditions thereof, I propose to furnish material and labor for the construction of a boat-house as above specified in accordance with the Specifications as provided for in the

for the sum of Four Hundred and Twenty-five Dollars $425.00

Name, J. H. Martell

Time to make delivery or complete work September 20th Address, Chatham Mass

Dated, August 23th 1900

Specifications

For

Constructing a Boat house for the use of the Old Harbor Life Saving Station, 3rd. District.

All the material, and labor required on the work including transportation to be provided free of cost to the Government.

All material not otherwise specified to be spruce.

Boat house to be 14 feetwide by 33 feet long, frame measurement.

Foundation posts to be cedar or chestnut, 8" by 5 feet long.

Sills 6" x 6". Corner and front door posts 4" x 6" by 9' 6" long. Studs and Plates 2" x 4" double where shown on drawings. Floor joist 3" x 8". Rafters 2" x 6". Tie joist 2" x 6". Studs and floor joist placed about 1' 6" on center. Rafters 2 feet apart. Boarding for walls and roof to be hemlock or spruce 7/8" thick dressed one side and laid dressed side in. Roof and walls to be finished with best quality cedar shingles, nailed to boarding with 3 1/2 d. galvanized cut nails, to be lap jointed on corners, no corner boards, base and cornice to be as shown on detail sketch. Front doors to be made as shown on detail. Frame to be 1 3/8" thick tenoned and mortised together and covered on the outside with 7/8" tongued, grooved and beaded narrow boards, which are to be blind screwed to the frames with 1 1/2" No. 8 screws and hung with heavy hook hinges 3' 6" long to be secured to the doors with carriage bolts. 8" galvanized hooks and staples to be provided to secure them when open. Bolts to secure them when shut will be furnished by the Government.

2.

The rear door to be 2' 8" by 6' 3" by 1 3/8" thick, 4 panels to be hung with 4" x 4" galvanized butts and provided with suitable brass knob, latch lock, with duplicate keys.

4 windows required to be 8 lights 10" x 12" glass, sash to be 1 3/8" thick, and hung at the top with 2 1/2" x 3" galvanized butts to swing outside, secured when shut with 3" brass hooks and eyes, two hooks to each window.

Face casings for doors and windows to be 1 1/4" thick for windows 4" wide, for doors 5 1/2" wide. Inside casing and jambs to be 7/8" thick, jambs 5", face casings 4" wide.

All finishing lumber, including cornice, base, doors, gable boards and all casings to be of an approved quality of white pine.

Floor to be first Southern pine clear of knots and sap, and blind nailed. Thresholds for doors 2" thick of oak or yellow pine.

All exterior wood work except shingles to receive two coats of paint to correspond in color with that on the Life Saving Station.

The inclined platform to be constructed in accordance with the detail sketch. Platform for rear door to be 4 feet long by/3" wide, 2" thick, one step.

FORM 1814.

VOUCHER FOR GENERAL EXPENSES.

The United States, To D. W. Edwards, Dr.
[Post-office address.]
Chatham, Mass

Date Expense was Incurred.	Authorized by Letter dated April 11, 1900 C.L.R. 67068 2 / 189 .	DOLLARS.	CTS.	SUB-VOUCHER NO.
1900 Sept 24th	For furnishing the material and labor and constructing a boathouse for the use of Old Harbor Life Saving Station according to inclosed specifications and proposal	382	00	
	Approved:- S. E. Maguire			
	Advertised for			
	Less			
	[Articles or services.]		[Received or performed.]	

DUPLICATE.

I CERTIFY that the articles & services above enumerated have been received & performed that they have been duly inspected and were delivered and accepted on the 24th day of September 1900 ; that they were necessary for, and have been, or will be, applied to the use of the Life-Saving Service; that the prices charged are just and reasonable, and do not exceed current market rates.† and in all respects according to accepted proposal

Henry E. Davis
Asst to Supt Constr L.S.S.
Superintendent.

APPROPRIATION: Life Saving Service. 1901.

Approved:

Assistant Secretary.

RECEIVED at Washington, D. C., this ... day of October 1900, 189

of ... Disbursing ..., the sum of

three hundred eighty-two 00/100

dollars, in full of the above account.

$ 382.00

†† D. W. Edwards

WITNESS:

Paid by check on ..., No. ..., dated ..., 189 ,

‡ drawn to the order of Letter transmitting check filed with L. R. 67066

[Delivery or performance.]

* The price per unit of weight or measure should be stated in all cases.
† Insert here "and in all respects according to contract," or "and that the exigency of the service required the immediate
†† To be receipted in black ink in all cases.
‡ This blank to be filled when the bill is in favor of a corporation.

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NOTICE.

PROPOSAL.

LIFE-SAVING SERVICE,

Assistant to Superintendents of Construction, Life Saving Stations,
ATLANTIC AND LAKE COASTS.

Ocean House
Chatham Mass.
August 18th 1900.

Sealed proposals will be received by the undersigned, at the above address, until 12 o'clock, noon, 23d instant. for furnishing the material and labor and construction a cellar under the Old Harbor, Life Saving Station in accordance with the specifications here attached.

Bidders must state the time when they propose to complete the work

All the material and workmanship must be satisfactory to the superintending officer.

The right is reserved to reject any or all bids, and to waive all defects, if deemed for the interest of the Government.

Proposals should be enclosed in sealed envelopes, addressed to "Assistant to Superintendents of Construction Life-Saving Stations," Chatham Mass.

and marked, "proposals for cellar for Old Harbor L.S. Station

Henry E. Davis
Assistant to Superintendents of Construction,
Life-Saving Stations, Atlantic and Lake Coasts.

To Assistant to Superintendents of Construction, Life-Saving Stations, Atlantic and Lake Coasts,

Sir:

In accordance with the above notice, inviting proposals for material

and subject to the conditions thereof, I pro-
pose to To Build Cellar at the Old Harbor Life
Saving Station as proposed for above

as provided for in the

for the sum of one hundred and ninety four dollars

Name, Reuben S Lombard

Time to make delivery or complete work Sept 15th 1900 Address, Chatham

Dated, Aug 22 1900



Specifications
For
Constructing a Brick Cellar under Old Barber, L. S. Station

All material, and labor, including transportation to be provided free of cost to the Government.

Cellar to be about 9 feet Square, inside measurement.

Walls 8 inches thick, to be 6 feet 6 inches deep in the clear.

Bottom to be one course of brick laid edgwise 3/4" apart and the spaces filled with grout, composed of cement and sand.

Entrance from outside to be about 4 feet 6 inches by 5 feet extending from sandsill to 20 inches above grade line.

Walls to be laid in lime and cement mortar.

Inside and outside batten doors of 7/8" matched pine, and door frames of 3" x 4" to be provided. Outside door to be in two parts, door to be hung with 10 inch galvanized T hinges and secured by a suitable padlock hasp and staples.

Steps to be made of 2 inch plank the width of entrance.

Information in relation to any matter not thoroughly understood will be given by the Superintending Officer

APPENDIX F.

Board of Survey Findings, Old Harbor Life-Saving Station, 1945

U. S. COAST GUARD
NAVCG 2582
(Rev. 5-45)

PROCEEDINGS OF A SPECIAL BOARD OF SURVEY

Title .....
No. .....
Date 11 December, 1945

Convened at DCGO, 1ND (Unit) Chatham, Mass. (Place)

by authority of Letter of DCGO1ND to Capt.F. J.Wells,USCG, dated 16 November, 1945 (1-408)

ITEM No.	STANDARD STOCK CAT. No.	ARTICLES (See par. 6, Instructions)	WHEN RECEIVED	QUANTITY	UNIT	UNIT PRICE	COST EXTENSION	CONDITION*	RECOMMENDATION**
1.	--	Old Harbor Lifeboat Station	Unknown	--	--	--	--	11	5 (See below)

1. In compliance with instructions of the DCGO 1ND, the undersigned officers submit the following report concerning the consideration of Old Harbor Lifeboat Station for disposal as surplus to the needs of the CG, after visiting the site of the Station on Monday, 3 December, 1945.

FINDINGS OF FACT:

(a) The Old Harbor Lifeboat Station is located on North Beach 2-3/4 miles north of Chatham Lifeboat Station.

(b) The station was built about 1898 at an estimated cost of $15,000 and has been in an inactive status since July, 1944.

(c) There are four buildings on the premises; a lifeboat station dwelling, boathouse, garage and work shop.

The condition of all buildings is fair, all requiring both interior and exterior conditioning.

The boathouse is 27' x 15' with an additional shed measuring 27' x 10'. It is located on the inlet side of North Beach.

The garage is 30' x 18'.

The work shop is 36' x 14'.

A metal signal tower, an identification marker and a small 2' x 4' oil shed are in good condition.

(d) The land is owned by the U. S. Government.

U. S. COAST GUARD
NAVCO 2582
(Rev. 5-45)

Title [illegible]
No. [illegible]
Date [illegible], 1945

PROCEEDINGS OF A SPECIAL BOARD OF SURVEY

Convened at DCGO, 1ND (Unit) Chatham, Mass. (Place)

by authority of Letter of DCGO1ND to Capt F. M. Meals, USCG, dated 16 November, 1945 (1-408)

ITEM No.	STANDARD STOCK CAT. No.	ARTICLES (See par. 6, Instructions)	†WHEN RECEIVED	QUANTITY	UNIT	UNIT PRICE	COST EXTENSION	CONDITION*	RECOMMENDATION**

FINDINGS OF FACT: (Cont.)

(e) A storm during the last week of November, 1945 isolated the station from the mainland by cutting a 7' channel through North Beach.

OPINIONS:

(a) Land on either side of the station is valued from $[illegible].00 to $640.00 an acre.

(b) An assessor in the town of Chatham, Mass. arbitrarily valued the station dwelling at approximately $5,000.00.

(c) Lookout and operational duties are fully performed by the Orleans and Chatham Lifeboat Stations.

(d) The land and buildings are surplus to the needs of the Coast Guard.

RECOMMENDATIONS:

(a) ~~That the land and buildings be disposed of in the open market to the highest bidder.~~

ACTION OF CONVENING AUTHORITY

1. This property is surplus to the needs of this District.

2. The DCGO does not have in his possession the instrument giving the CG title to or use of this property; accordingly, he forwards the foregoing report without comment as to final disposition of the property.

3. Subject to the foregoing, the proceedings, findings of facts, opinions, and recommendations of the foregoing board of survey, are approved.

W. N. DEEY

WE CERTIFY that we have examined each and all of the above-numerated articles and find their condition is as stated in each case.

The recommendation of the Board as above set forth is approved.

F. M. MEALS, Captain, USCG, *President.*

F. C. HINGSBURG, Captain, USCG, *Member.*

R. S. LECHY, Comdr., USCG, *Member and recorder.*

_____, *Commanding, or District Coast Guard Officer.*

†If fixture, so state. If item was new when received, make appropriate notation.
*See par. 4, Instructions.
**See par. 5, Instructions.

JAN 10 REC'D 16—43574-3

APPENDIX G.

Declaration of Abandonment, Old Harbor Life-Saving Station, 1947

DECLARATION OF ABANDONMENT

WHEREAS, it is provided by section 1 of the Act approved March 3, 1875 (U.S.C. title 14, sec. 96), that

> "The Secretary of the Treasury is hereby authorized whenever he shall deem it advisable, to acquire, by donation or purchase in behalf of the United States, the right to use and occupy sites for Coast Guard stations and houses of refuge, the establishment of which has been or shall hereafter be, authorized by Congress;" and

WHEREAS, pursuant to the authority contained in the Act of June 19, 1886, 24 Stat. 84, the Old Harbor Lifeboat Station, Massachusetts, was authorized to be established, the following described tract or parcel of land along the shore of Chatham Harbor, north one-half mile of Chatham Inlet, was selected to use and occupy as a site for the establishment of the Old Harbor Lifeboat Station:

> Beginning at a stake on the inner beach at mean high water mark of Chatham Harbor, the steeple of the Methodist Church, Chatham, bearing West 25° South and Nickerson's Point bearing North 50° West, and running thence East 29° South 350 feet to a stake at mean high water mark on the sea beach, thence Southerly along said mean high water mark a distance of 600 feet to a stake, thence West 29° North 400 feet to a stake at high water mark of Chatham Harbor and thence Northerly along the shore of Chatham Harbor, a distance of 600 feet to the place of beginning; and

WHEREAS, the United States of America does not now use or occupy, and has no need for or intention of using and occupying the premises as above described;

NOW THEREFORE I, E. H. FOLEY, Jr., Acting Secretary of the Treasury, finding that the interests of commerce and humanity no longer require the use and occupation of the hereinbefore described parcel of land, do hereby relinquish and abandon forever any right, title or interest that the United States acquired in and to said tract or parcel of land.

IN WITNESS WHEREOF, I have hereunto set my hand and have affixed the seal of the Treasury Department this 10th day of February, one thousand nine hundred and forty-seven.

UNITED STATES OF AMERICA

By E. H. Foley, Jr.
Secretary of the Treasury

DISTRICT OF COLUMBIA) SS

I hereby certify that on this tenth day of February, 1947, personally appeared before me E. H. Foley, Jr., to me known to be the person described in and who executed the foregoing declaration of abandonment, and who acknowledged the execution thereof to be his official act and deed and declared that the same be recorded as such.

In witness whereof I have hereunto set my hand and official seal this tenth day of February, 1947.

Edward S. Shankle
Notary Public

My commission expires: October 14, 1947

EDWARD S. SHANKLE NOTARY PUBLIC SEAL DISTRICT OF COLUMBIA

DISTRICT OF COLUMBIA, ss: No. 165906

I, CHARLES E. STEWART, Clerk of the District Court of the United States for the District of Columbia, the same being a Court of Record, having by law a seal, do hereby certify that Edward S. Shankle before whom the annexed instrument in writing was executed, and whose name is subscribed thereto, was at the time of signing the same a NOTARY PUBLIC in and for said District duly commissioned and sworn, and authorized by the laws of said District to take the acknowledgment and proof of deeds or conveyances of lands, tenements, or hereditaments, and other instruments in writing, to be recorded in said District, and to administer oaths; and that I am well acquainted with the handwriting of said Notary Public and verily believe that the signature to said instrument and impression of seal thereon are genuine, after comparison with signature and impression of seal filed in this office.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed the seal of said Court, at the City of Washington, D. C., the 25th day of February A. D. 1947

CHARLES E. STEWART, Clerk.

By [illegible] Deputy Clerk.

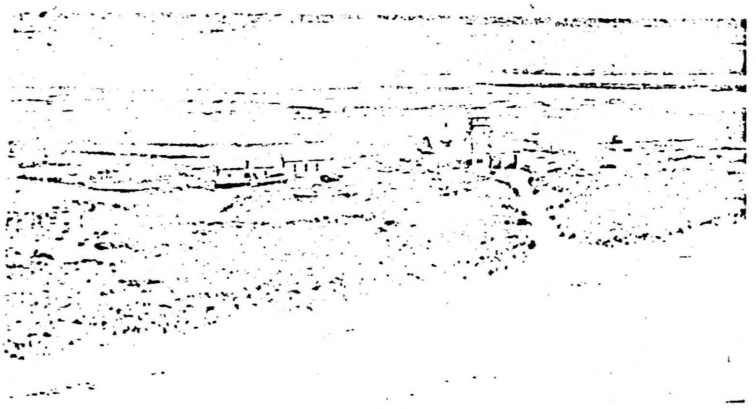
Barnstable, ss.,Received March 24, 1947, at 11 h. 10 m. A.M.,
and is entered with Barnstable County Deeds in Book 667, Page 373.
Attest:-

Dean Lean
Register.

BARNSTABLE REGISTRY OF DEEDS MAR 24 1947 11 h 10 m A.M. RECORDED

APPENDIX H.

Real Estate Prospectus, Old Harbor Life-Saving Station, 1962



Air View Toward Bay



Air View Toward Ocean

4/62

OCEANFRONT SPORTSMAN'S PARADISE

Capacity 25 Guests

580′ on Atlantic Ocean, 1200′ on Pleasant Bay

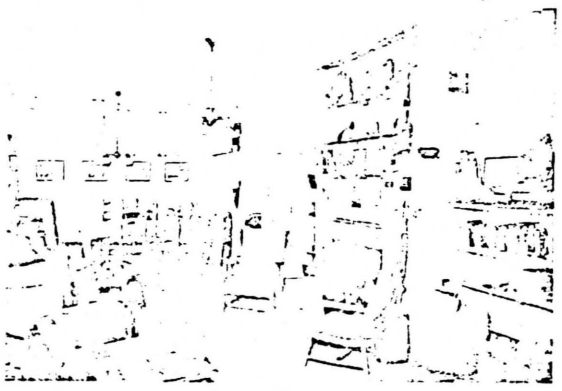
Situated on a long finger of land on famed Nauset Beach, this property enjoys a beautiful location with water views in 3 directions, and long frontage on both the ocean and Pleasant Bay, practically all in sand beach.

For many years Nauset Beach has been considered the finest surf casting area for striped bass and blue fish in the United States. In Pleasant Bay, directly west of the property, the well known "Flounder Hole" has consistently been noted for world record catches of flounder and fluke.

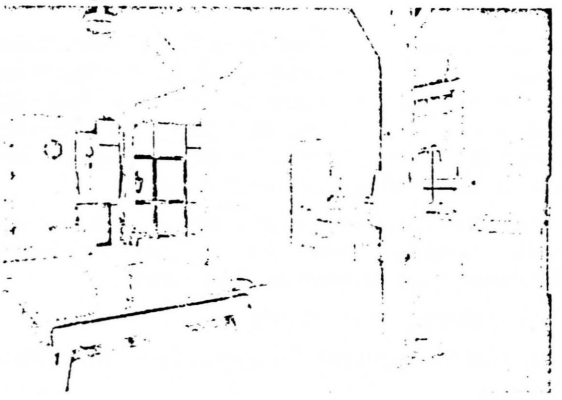
Lying in the direct center of the Atlantic Flyway, the property offers unexcelled geese and duck shooting. In fact the adjacent island of "Monomoy" was taken over as a wild fowl refuge by the U. S. Forestry Service.

With fine swimming on its own sand beaches, and excellent sailing and safe anchorage in Pleasant Bay, every recreational activity is available. The well known Eastward Ho Golf Club is only a 12-minute sail across the Bay.

The main residence has 10 rooms, 3 baths, and with the 2 income cottages with a total of 4 efficiency apartments can accommodate up to 25 people. The property is ideal for a sportsman's club, or a retreat for busy executives.



Living Room in "Old Harbor Station"



Recreation Room



One of the Apartments

TABLE OF FACTS

LOCATION: Chatham on Nauset Beach, Barnstable County, Mass. E. Orleans is 7¼ mile drive; Chatham is 14 miles by car, or 1 mile by boat. Airport at Chatham. Boston, 105 miles; Providence, 110 miles; New York City, 270 miles.

GROUNDS: APPROX. 20 ACRES with 580′ on Atlantic Ocean, and 1200′ on Pleasant Bay. Beautiful sandy beaches. Wide views overlooking picturesque sand dunes to the ocean, and Pleasant Bay on the west. Excellent fishing and duck shooting. Ample land for protection. Most of land in sand dunes with no maintenance problem.

RESIDENCE (known as "Old Harbor Station"): 10 ROOMS (6 bedrooms, 3 baths). Frame construction with shingle exterior, concrete foundation, wood shingle roof. Ample water supply from 2 wells. Gas hot water heater. Own electric power plant with 2 generators—one 5 k.w., the other 10 k.w. Copper and galvanized iron plumbing. 2 gas floor heaters on 1st floor; 2 electric and 1 gas heater on 2d floor.

over

OWNER: Howard J. Rose The Brandt Corp., 50-20 25th St., Long Island City 1, N. Y. Tel.: EMpire 1-9090; res. tel.: YUkon 2-1119.

PROPERTY: Nauset Beach, Chatham, Barnstable County, Mass.

INSPECTION: Key with Warrenton A. Williams, County Road, Eastham, Mass. Tel.: Orleans 658.

DRIVING DIRECTIONS: From East Orleans head directly south on beach for 7¼ miles to

CUT ON THIS LINE

MORTGAGE: Free and Clear

TAXES: Approx. $400

BROKERS: If you wish active help of local broker (not obligatory) on a co-brokerage basis, use:

WARRENTON A. WILLIAMS
County Road
Eastham, Mass.

Standard Commission to Selling Broker. No. 51543 6111

PREVIEWS INCORPORATED • *The National Real Estate Clearing House*

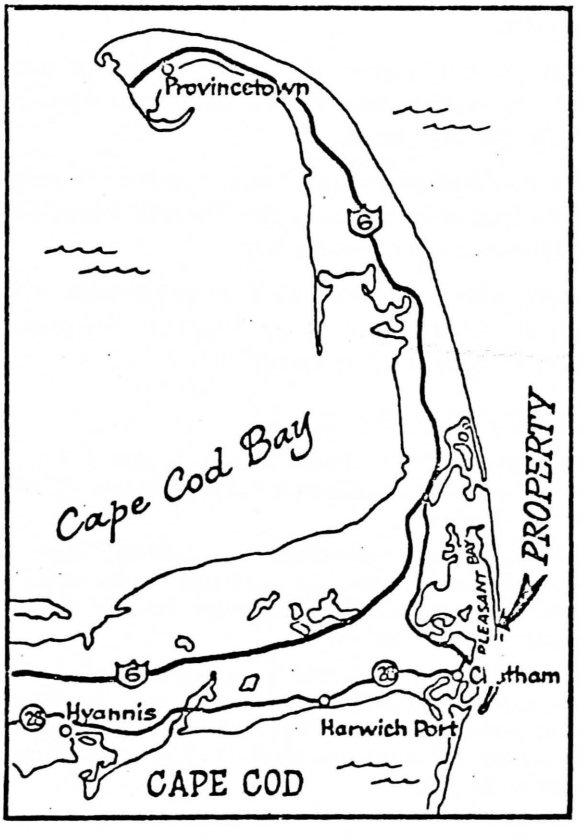
20 Kilby Street
Boston 9, Mass.
CApitol 7-4995

OR

49 East 53rd Street
New York 22, N. Y.
PLaza 8-2630

New York • Boston • Philadelphia • Palm Beach • Chicago • Denver
Fort Worth • Los Angeles • San Francisco • London • Paris • Riviera

CHATHAM
Barnstable County
MASSACHUSETTS



FIRST FLOOR: Entrance Hall with stairway and closet. LIVING ROOM-DINING ROOM (about 30′x15′), with built-in bookcases, large Heatilator fireplace, high ceiling. RECREATION ROOM (36′x24′), with very high ceiling, porcelain sink, refrigerator, shuffleboard on floor, table tennis, etc. Small Storage Room with built-in shelves. BEDROOM (15′x15′), 2 closets. Stall Shower and lavatory off Bedroom. KITCHEN (about 15′x15′) with large Garland gas stove, porcelain sink with disposal, Formica counters, built-in cabinets and drawers.

SECOND FLOOR: 4 BEDROOMS (two 10′x12′, and two 12x15′). Modern Bath with electric heater. 2d Bath with 3 wash bowls, 2 metal stall showers, 3 toilets, 2 heaters (1 electric, 1 gas). Large storage room over Recreation Room (convertible to dormitory).

TOWER ROOMS: BEDROOM (8′x11′). Lookout Room (9′x9′) over.

BASEMENT: Full cellar with cement floor. Well-equipped Work Shop, Larder Room, Power Plant Room. 2 laundry sinks.

2 GUEST COTTAGES: Each 1½ story, frame construction with shingle exterior. Each cottage has two 1½-room Apartments with efficiency kitchens and baths with stall showers on first floor. Each equipped with General Chef combination refrigerator, stove, and sink. Each cottage has 2 Bedrooms and Lavatory on 2d floor. Both have gas and electricity.

OFFERED AT $48,500 [redacted]

UNFURNISHED

PREVIEWS LISTING NO. 51543

Offering is subject to errors, omissions, prior sale, change or withdrawal without notice, and approval of purchaser by owner.

APPENDIX I.

Real Estate Appraisal, Old Harbor Life-Saving Station, 1972

PROPERTY DATA

Appraisal No. 3833
1972

General Description of the Property

The property contains a 10 room frame dwelling of 1 and 2 stories with 3 detached frame summer cottages. It is situated on land having frontage of approximately 600 feet on the Atlantic Ocean along the east bound and approximately 1,500 feet along Pleasant Bay on the west bound and having a land area of 23.3 acres. The property is located on the peninsula known as the North Beach portion of Nauset Beach in Chatham, Massachusetts.

Description of the Improvements

Type	Main Dwelling
Age	Built 1898 according to owner
Condition	Fair - most of buildings - poor on 1st floor walls and ceilings
EXTERIOR	
Construction	Frame
Foundation	Concrete
Walls	Wood shingle
Roof	Wood shingle on 1½ story portion - new asphalt shingle roof on 1 story portion one year ago.
Windows	Frame
Screens	Wood framed
Storm Windows	None
Storm Doors	None
Gutters, Downspouts	Wood/metal
Patio	None
Hatchway	Yes
Miscellaneous	250 gallon underground storage tank for gasoline located at the southwest corner of the main residence. Main gas supply is from storage area for 9 bottle gas tanks located at the southwest corner of the Noreaster cott This serves the two cottages and the main residence with gas.

PROPERTY DATA (cont.)

Description of the Improvements (cont.)

EXTERIOR (cont)

Miscellaneous	A concrete cistern is located along the south wall of the residence as an auxiliary water supply. The downspouts are connected to this cistern. The cistern was originally designed as a fire protection system for the main residence when it was used as a Coast Guard Station.

INTERIOR

Basement	Under all but garage area
Floor	Concrete
Walls	Concrete
Ceiling	Wood joists covered in most areas with wallboard
Heating System	No central heat - fireplace with heatolators provides heat for living room and portions of second floor. Remainder of dwelling heated by portable gas heaters.
Domestic Hot Water	Gas fired automatic water heater in basement plus 40 gallon copper storage tank adapted for external heater
Wiring	Mixed - entire first floor of dwelling. Also piped for gas lamps in most rooms.
Plumbing	Mixed - copper and galvanized iron.
Sewage Disposal	8' x 12' cesspool west of main dwelling.
Water Supply	Two wells - one 11 feet deep and one 14 feet deep under basement. One well provides excellent water while the other is subject to brackish water at times of spring tides. Provides water for main dwelling and two cottages near it.
Equipment	Two Generators 1 - 3 K.W. A.C. 110 V A.C. (portable) 1 - 10 K.W. A.C. 220 V A.C.
Miscellaneous	Basement partitioned into storage areas. 2 enameled set-tubs. Lighting throughout dwelling is mixture of incandescent bulbs and gas fired lamps on first floor and incandescent bulbs on 2nd floor.

Description of the Improvements (cont.)

INTERIOR
First Floor

Condition	Fair - walls and ceiling poor in several areas of living room, bedroom and kitchen.

Kitchen

Walls	Plaster/wainscoting - considerable patchwork
Ceiling	Plaster - considerable patchwork
Floor	Some linoleum - some rubber tile
Cabinets	Wood along west wall - counter space beneath these approximately 20' long - formica top.
Sink	Enamel with disposal
Elec. Stove Conn.	No
Pantry	None
Fixtures	Large Garland gas range of commercial size with pot rack.
Miscellaneous	Large Servel Gas refrigerator - old. Stainless steel sheathing behind range with metal exhaust hood and fan.

Living Room

Walls	Wood sheathing to 40" high with plaster above.
Floor	Both linoleum and tile
Ceiling	Plaster
Fixtures	Both incandescent and gas fired lamps.
Miscellaneous	Room 35 - 40 feet long - large brick fireplace - shelving to ceiling near fireplace.

Bedrooms

Number	One on first floor - approximately 14 x 15 feet
Walls	Painted plaster - needs work in several places - chair rail around room.
Ceilings	Plaster - generally poor condition
Floors	Linoleum covered
Closets	One
Miscellaneous	Wall gas heater

Description of the Improvements (cont.)

INTERIOR (cont)

Bath	Off bedroom along north wall
Walls	Plaster
Ceiling	Plaster
Floor	Linoleum
Fixtures	Toilet and lavatory
Miscellaneous	This bath is off the bedroom. A closet of the bedroom has been converted to house a metal shower stall with terrazzo tile floor.
Recreation Room	Off living room to north.
Floor	Matched boards
Walls	Horizontal matched varnished boards
Ceiling	Matched varnished boards

Miscellaneous

This area was originally the boat room for surfboats. It has two sets of large hinged wooden doors which open to the east. One of these openings had screening also.

There is a corner enclosure approximately 4' x 8' long containing radio equipment, spare parts, etc.

The floor is marked for shuffleboard and the walls have racks for fishing rods, duck decoys, etc.

Second Floor	Access via winding staircase with plastered walls and ceiling in poor condition. A long hall leads from the stairs toward the rear of the dwelling. There are sixteen steps in the staircase.
Bathroom - off middle of hall	
Walls	Plaster/wainscoting - some fibre board wall replacement.
Floor	Linoleum
Ceiling	Fibre board
Lighting	One wall lamp and one overhead fixture
Fixtures	Modern tub with shower nozzle in wall above, open sink with formica counter top area; standard porcelain toilet bow and tank.
Heat	Portable electric heater
Miscellaneous	Small linen closet off hall near bathro

INTERIOR (cont)
Second Floor

Bathroom - At end of hall

Walls	Plaster with dry wall base - poor condition.
Floor	Linoleum covered
Ceiling	Painted dry wall
Lighting	Two wall fixtures, one overhead fixture
Fixtures	Two metal shower stalls with metal floors 2 partitioned toilets 3 lavatories against wall
Note:	Original bathroom of station

Bedroom #1 - Off narrow hallway

Walls	Fibre board and plaster - fair condition
Floor	Linoleum covered
Ceiling	Plaster - pitched, two small windows on west wall.
Miscellaneous	This room is small, allowing for double bed and dresser with very little extra floor space.

Bedroom #2 - Off right of hallway

Floor	Linoleum covered
Walls	Plaster/wood sheathing
Ceiling	Painted plaster
Closet	Small open closet area

Bedroom #3 - Off hallway to left

Floor	Linoleum covered
Walls	¼ painted plaster, poor condition; 3/4 of wall new unpainted fibre board
Ceiling	Plaster
Lighting	One wall fixture, three wall outlets

Bedroom #4 - Off hallway to left

Floor	Linoleum covered
Walls	Plaster and fibre board - poor condition
Ceiling	Plaster
Closet	Open storage area

Second Floor

Storage Area - over recreation room

Open area	
Floor	Rough flooring
Ceiling	Pitched, roof rafters
Walls	Open studding
Miscellaneous	A trap door in the floor allows access via ship's ladder to garage below

Tower

The staircase which led from the first to the second floor continues in fashion to a third floor level in what used to be the lookout tower of the Coast Guard Station. This third floor level is approximately 10 feet square and has been apparently used as an additional bedroom. There is an electric wall fixture in this room. From this level, a narrow step ladder allows access to the top of the tower which has a lookout room. This tower room commands a 360° view of the surrounding area, and is approximately 10 feet square. It has unmatched board flooring, walls and ceiling.

Two Detached Cottages - These were apparently converted from garage or boat storage use.

A) The Nor'easter

EXTERIOR

Foundation	Concrete block pillars
Walls	Wood shingles, painted
Roof	Steeply pitched, wood shingles, brick chimney
Doors	Two large hinged wooden doors (garage size) on north end of building - screening behind. Three regular doors on east side of building.
Miscellaneous	Septic tank west of building. Fair condition

INTERIOR

Contains two efficiency apartments on the first floor and two bedrooms with a common bath and separate entrance on the second floor. Each apartment has a combination stove, sink and electric refrigerator and separate gas refrigerator.

The apartments consist of the following:

MAIN ROOM

Floors	Rough boards, partial linoleum covering
Walls	Fibre board
Ceilings	Fibre board - poor condition

Adjoining Bathroom

Floors	Rubber tile
Walls	Fibre board, unpainted
Ceiling	Fibre board, unpainted
Fixtures	Toilet, sink & metal shower stall with concrete floor

SECOND FLOOR - 2 bedrooms with common bath

Bedrooms

Walls	Open stud
Ceiling	Pitch roof, open rafters
Floors	Rough flooring
Closet	Small closet each room

Bathroom

Walls	Open stud with some dry wall
Floor	Rough flooring
Ceiling	Open rafters
Fixtures	Toilet and lavatory
Heat	A gas fired floor furnace under the

Bathroom (cont)

Heat (cont)	stairs leading to the second floor heats all rooms.

B) The Sou'easter

EXTERIOR

Foundation	Concrete block pillars
Walls	Painted wood shingles
Roof	Wood shingles
Miscellaneous	Exterior wood stairway to second floor on east side of building. Cottage in fair condition. Hinged doors north side.

INTERIOR

Contains two efficiency apartments on first floor and two rooms with common bath, a separate exterior entrance on the second floor. Construction is idential with that found in the Nor'easter and described above. The only difference is that the two rental units on the first floor may be combined in this building with each other as with the second floor rooms. Same equipment - both gas and electric. Baths have toilet, sink and shower stall. Cottage has separate septic tank and gas and electricity hookup.

SIGNAL TOWER

A steel supported signal tower approximately 75 feet high is situated northeast of the main dwellings and set back behind the dunes. This tower is now apparently used as a flag pole.

FRAME STORAGE SHED

A frame storage shed, approximately 6' x 6' and 45" high in size, supported on four wooden posts and having double hinged doors on the front, is situated east of the two summer cottages.

History

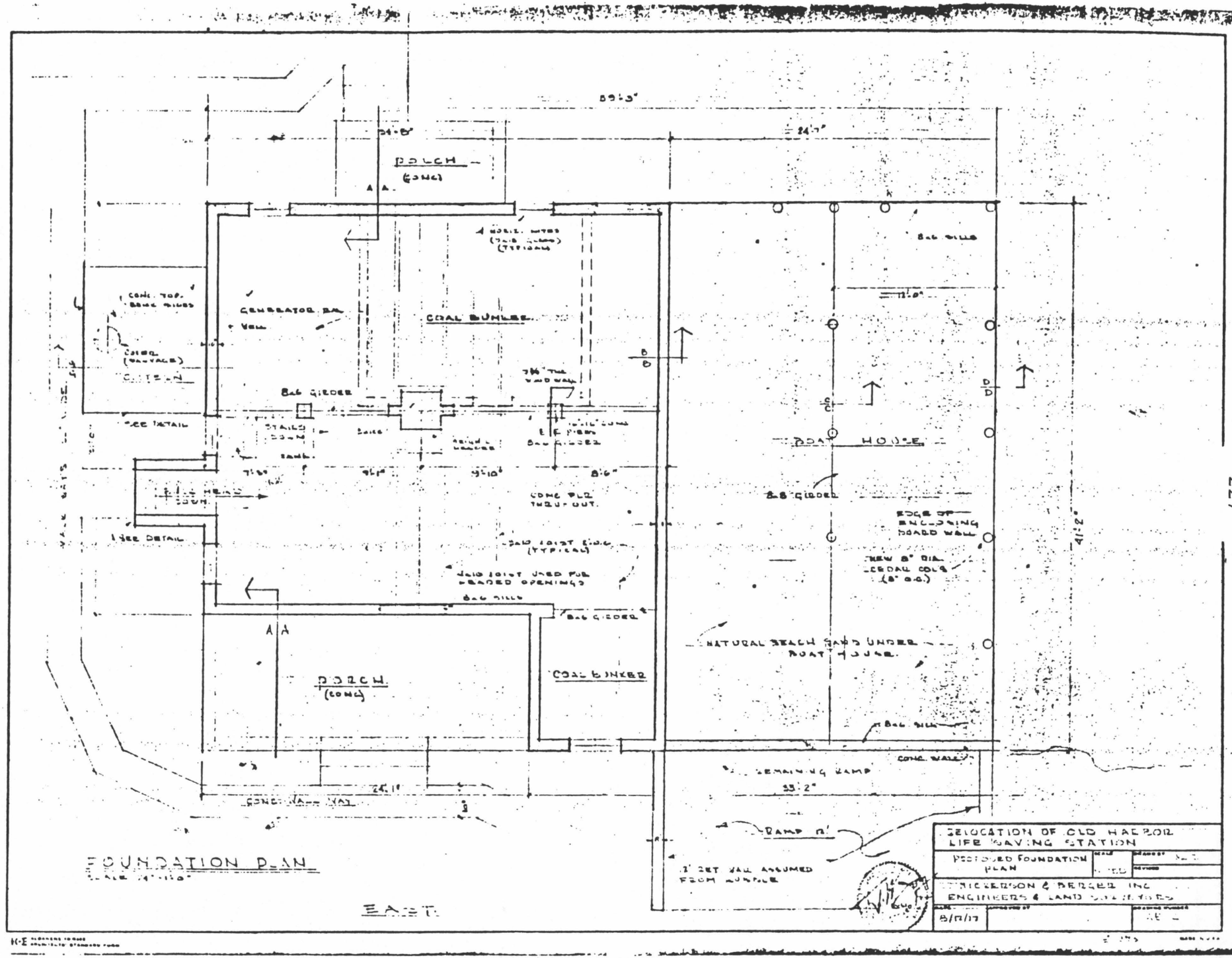
The subject property was built and originally used as a Coast Guard Station. The Coast Guard reportedly abandoned the property on February 10, 1947, and on March 24, 1957 it was sold to a George Bearse. The property remained in the ownership of Mr. Bearse until October 19, 1958 when it was transferred to the present owner by means of a deed recorded in Book 1022, Page 550 of the Barnstable County Registry of Deeds. Records indicate that there have been no transfers of the property within the past five years.

Assessed Value and Annual Tax Load

Lot 34	1971	1970	1969
Land - 19.7 acres	$ 1,150	$ 1,150	$ 1,150
Buildings - 5	$10,050	$10,050	$10,050
Personal Property	$ 1,500	$ 1,500	$ 1,500
Total Assessment	$12,700	$12,700	$12,700
Tax Rate/thousand	$47.00	$43.50	$38.50
Total Assessment	$596.90	$552.45	$488.95

APPENDIX J.

Sub-contractual Plans and Drawings Relating to the Relocation of Old Harbor Life-Saving Station


PORCH
(CONC)
COAL BUNKER
BOAT HOUSE
COAL BUNKER
PORCH
(CONC)
EAST
FOUNDATION PLAN
RELOCATION OF OLD HARBOR LIFE SAVING STATION
PROPOSED FOUNDATION PLAN
NICKERSON & BERGER INC
ENGINEERS & LAND SURVEYORS
8/17/17

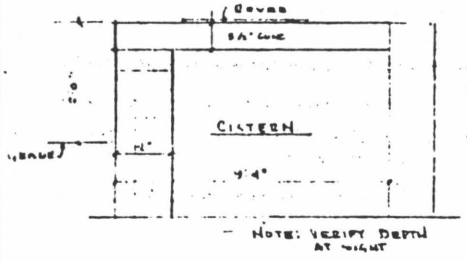
CONSTRUCTION NOTES:

DIMENSIONS ALL DIMENSIONS TO BE VERIFIED FROM EXIST'G. FOUNDATION BEFORE CONSTRUCTING NEW FOUNDATION.

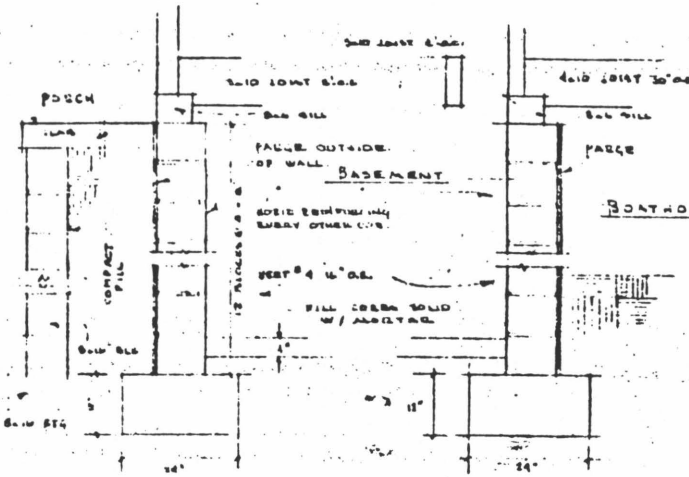
PRESERVATION OF AUTHENTIC DETAILS CONTRACTOR WILL SUBMIT SUFFICIENT SHOP DRAWS & DETAILS, INCLUDING SAMPLE PANELS, IF REQ'D. BY CONTRACTING OFFICER, OF ALL EXTERIOR FOUNDATION ELEVATIONS INDICATING HOW HE INTENDS TO REPRODUCE VISUAL DETAILS TO CONFORM WITH REQUIREMENTS OF DESIGNATED HISTORIC BUILDINGS.

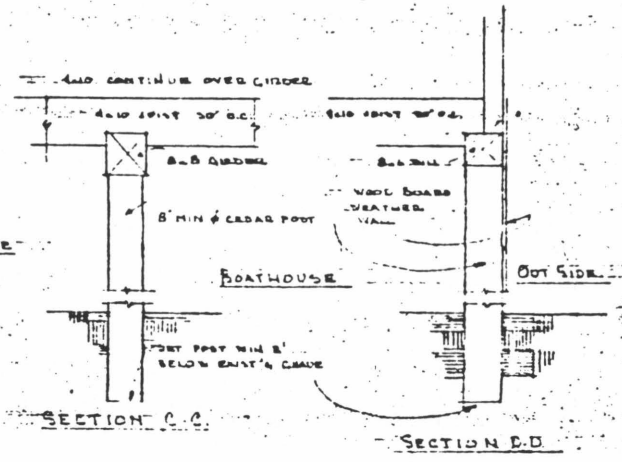
FOUNDATION CONSTRUCTION THE CONTRACTOR AT HIS OPTION MAY SUBMIT FOR APPROVAL CAST-IN PLACE CONCRETE FOR FOUNDATION WALLS IF THE AWARDING AUTHORITY IS SATISFIED THE PLACEMENT METHODS WILL PRODUCE A PRODUCT OF EQUAL STRUCTURAL STABILITY.

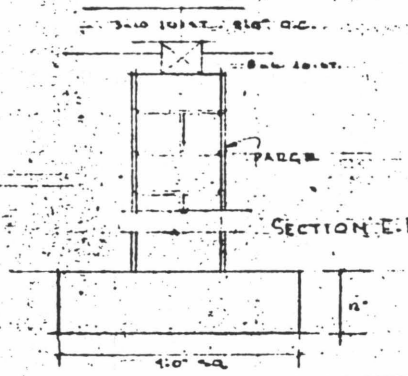
PROTECTION ALL MATERIALS & COMPLETED WORK SHALL BE PROTECTED AT ALL TIMES AGAINST THE ELEMENTS UNTIL APPROVED & ACCEPTED BY THE CONTRACTING OFFICER.



CISTERN SECTION
3/4"=1'0"







SECTIONS 3/4"=1'0"

RELOCATION OF OLD HARBOR LIFE SAVING STATION.

FOUNDATION SECTIONS

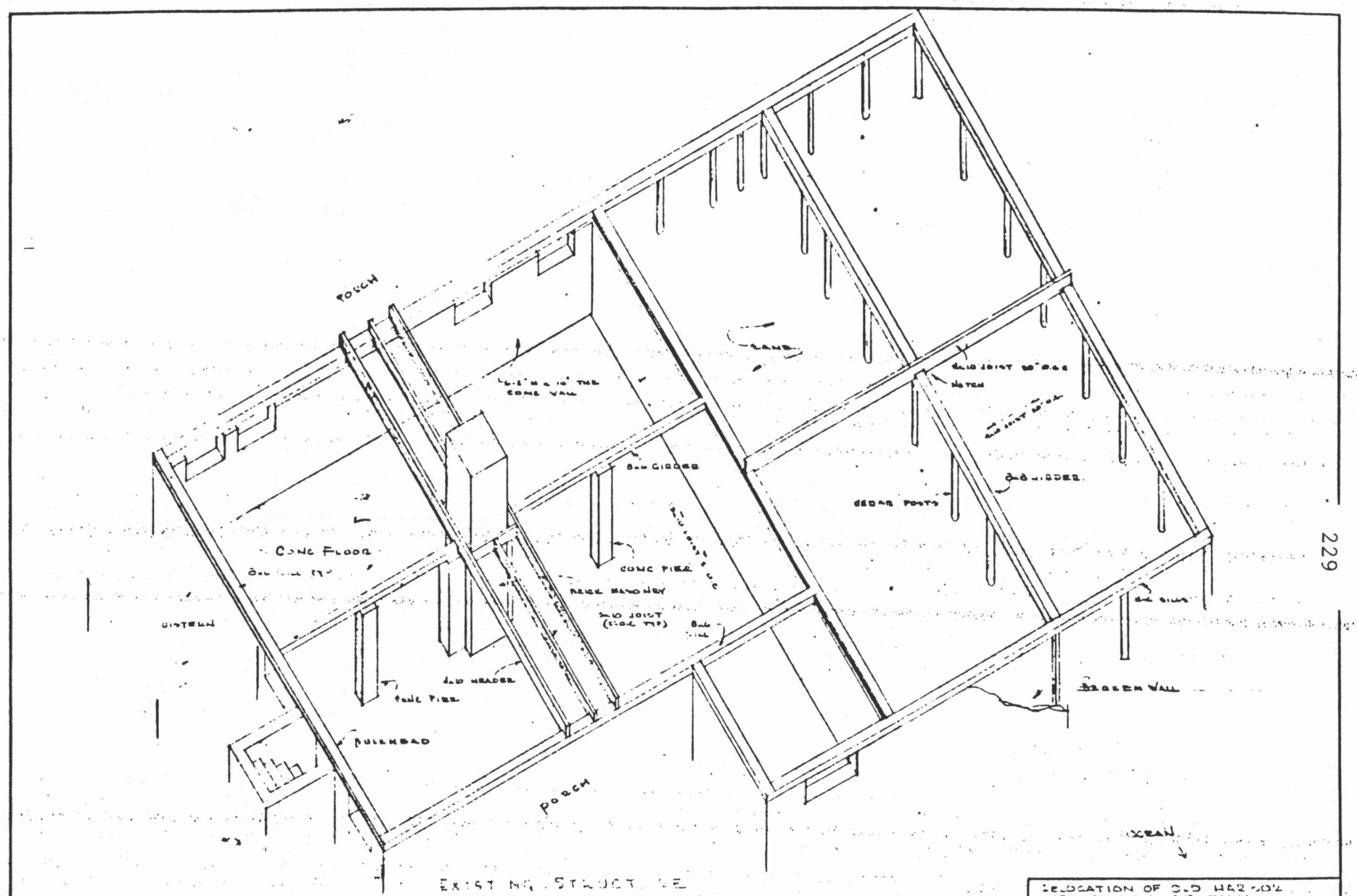
NICKERSON & BERGER INC. ENG. ARCHS. & LAND SURVEYORS

DATE 6-2-77

DRAWING NUMBER AE-3

E 3275

228



EXISTING STRUCTURE
SCHEMATIC FRAME PLAN
SCALE 1/4"=1'-0"

RELOCATION OF OLD HARBOR
LIFE SAVING STATION
EXISTING FLOOR FRAME
NICKERSON & BERGER INC.
ENGINEERS & LAND SURVEYORS
3/2/77

229

K-E

TYPICAL TEMPORARY SUPPORT OF PORCH ROOFS:

PROVIDE 4"×4" DIAGONALS FROM OUTER PORCH BEAM TO BUILDING SILL AT OR NEAR EACH EXISTING PORCH POST. TIE BACK DIAGONALS AT THEIR TOPS WITH TAUGHT CABLES THROUGH THE BUILDING WALL (AT WINDOW OR DOOR OPENINGS WHERE POSSIBLE). THE CABLES ARE TO BE FASTENED TO 4"×4" HORIZONTAL WHALERS ABOUT 7'-0" ABOVE THE FLOOR ENGAGING AT LEAST 2 STUDS.

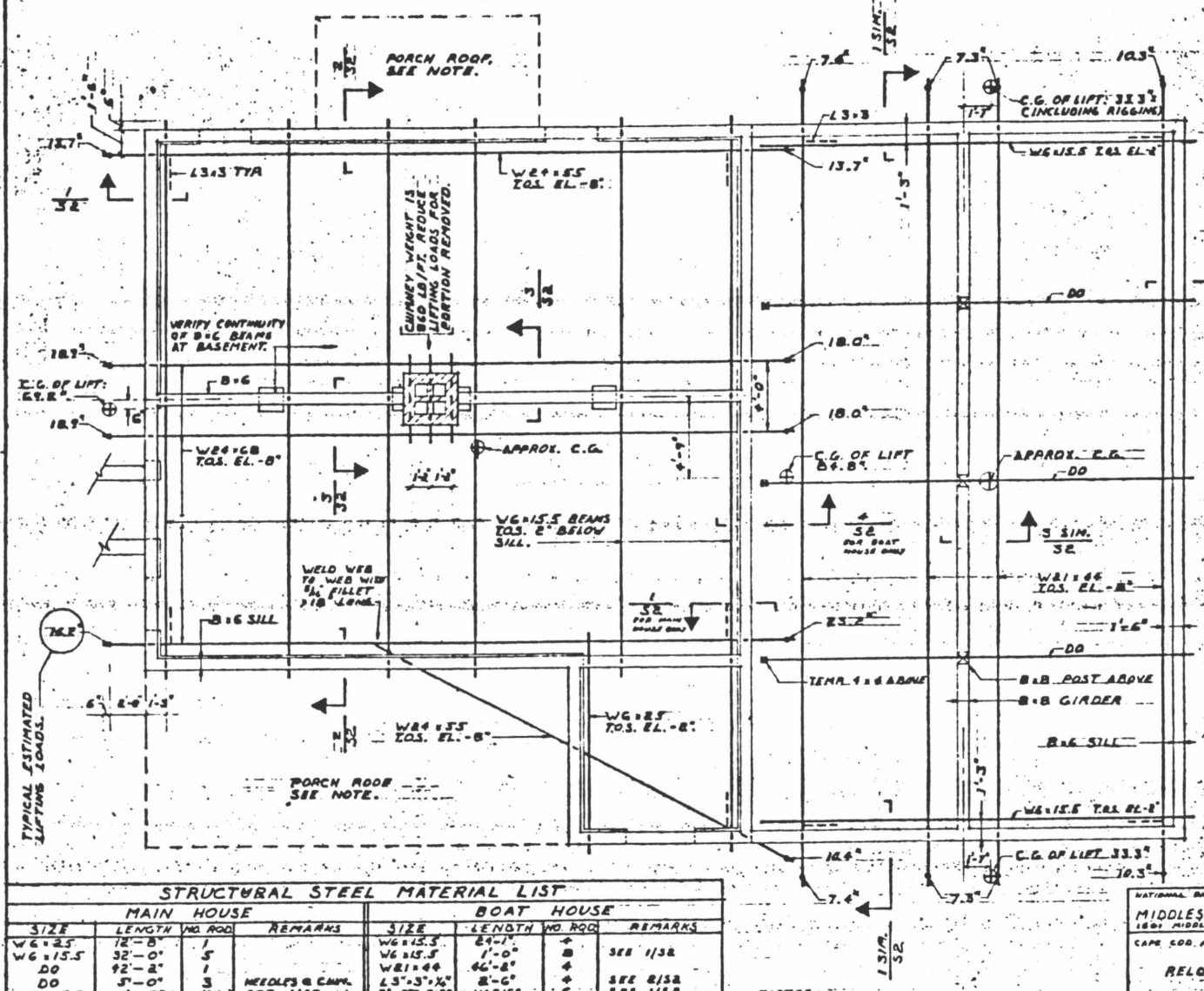
NOTE:

ALL ESTIMATED LOADS ASSUME PLASTER ON BASEMENT & 1ST FLOOR CEILINGS HAS BEEN REMOVED, AND THAT 50% OF PLASTER ON THE TOWER WALLS HAS BEEN REMOVED.

ESTIMATED LOADS

MAIN HOUSE:	
4 STORY BUILDING	86.0*
3 STORY TOWER	88.6*
36 FT. CHIMNEY	31.0*
STEEL GRILLAGE	16.0*
RIGGING	3.0
TOTAL:	134.0*

BOAT HOUSE:	
1 STORY BUILDING	54.6*
STEEL GRILLAGE	10.0*
RIGGING	2.0*
TOTAL:	66.6*



STRUCTURAL STEEL MATERIAL LIST

MAIN HOUSE				BOAT HOUSE			
SIZE	LENGTH	NO. REQ.	REMARKS	SIZE	LENGTH	NO. REQ.	REMARKS
W6×25	12'-8"	1		W6×15.5	24'-1"	+	
W6×15.5	32'-0"	5		W6×15.5	1'-0"	8	SEE 1/S2
DO	92'-2"	1		W21×44	46'-8"	4	
DO	5'-0"	3	NEEDLES @ CAMP.	L3"×3"×¼"	2'-6"	+	SEE 2/S2
W6×15.5	1'-0"	11	SEE 1/S2	3"ø STD. PIPE	VARIES	6	SEE 1/S2
W24×55	39'-8"	1					
W24×55	27'-3"	1					
W24×68	39'-8"	3					
L3"×3"×¼"	2'-6"	5	SEE 2/S2				
3"ø STD PIPE	VARIES	7	SEE 1/S2				

NOTES.

1. STRUCTURAL STEEL SHALL CONFORM TO ASTM A36.
2. WELDING SHALL BE DONE BY A CERTIFIED WELDER & CONFORM TO AWS STANDARDS.
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS.
4. FOR ADDITIONAL NOTES ON BUILDING SEPARATION AND OTHER PROCEDURES, SEE LETTER DATED 10-26-77

NATIONAL PARK SERVICE — U.S. DEPARTMENT OF THE INTERIOR
BOSTON — MASSACHUSETTS

MIDDLESEX CONTRACTORS & RIGGERS, INC.
1601 MIDDLESEX ST. LOWELL, MASS. 01851

CAPE COD NATIONAL SEASHORE — PROVINCETOWN, MASS.

RELOCATION OF OLD HARBOR LIFE SAVING STATION

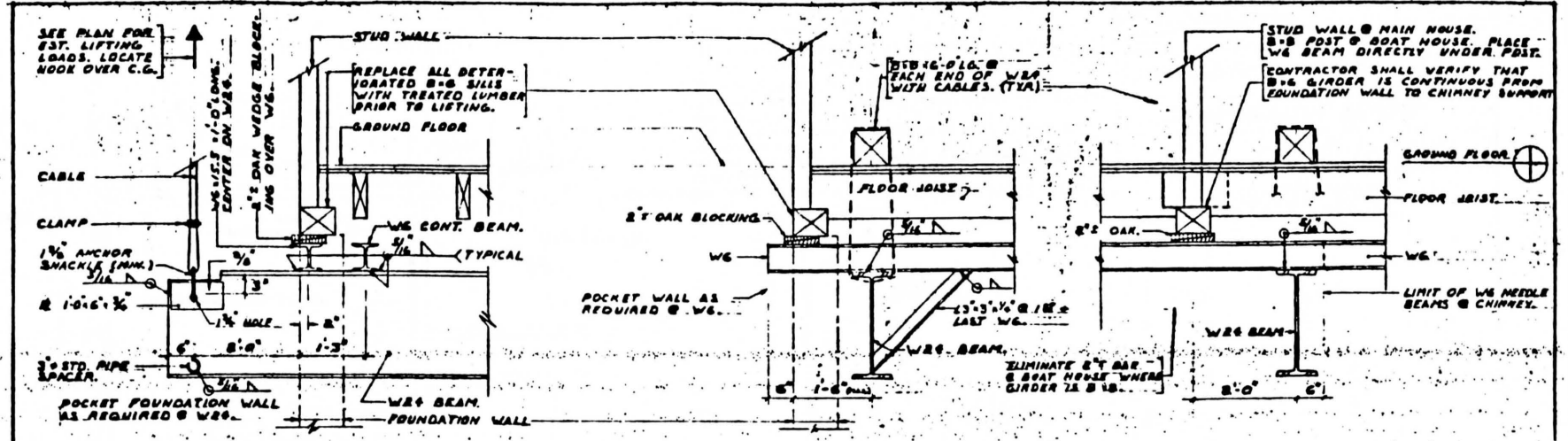
LIFTING GRILLAGE LAYOUT PLAN

SCALE: ⅜" = 1'-0"

DATE: 10-26-77

JOHN BORN ASSOCIATES
CONSULTING ENGINEERS
3 WALNUT AVENUE
CAMBRIDGE, MASS. 02140

DWG. S1



231

NATIONAL PARK SERVICE BOSTON — U.S. DEPARTMENT OF THE INTERIOR MASSACHUSETTS

MIDDLESEX CONTRACTORS + RIGGERS, INC.
180 MIDDLESEX ST. LOWELL, MASS. 01852

CAPE COD NATIONAL SEASHORE — PROVINCETOWN, MASS.

RELOCATION OF OLD HARBOR LIFE SAVING STATION

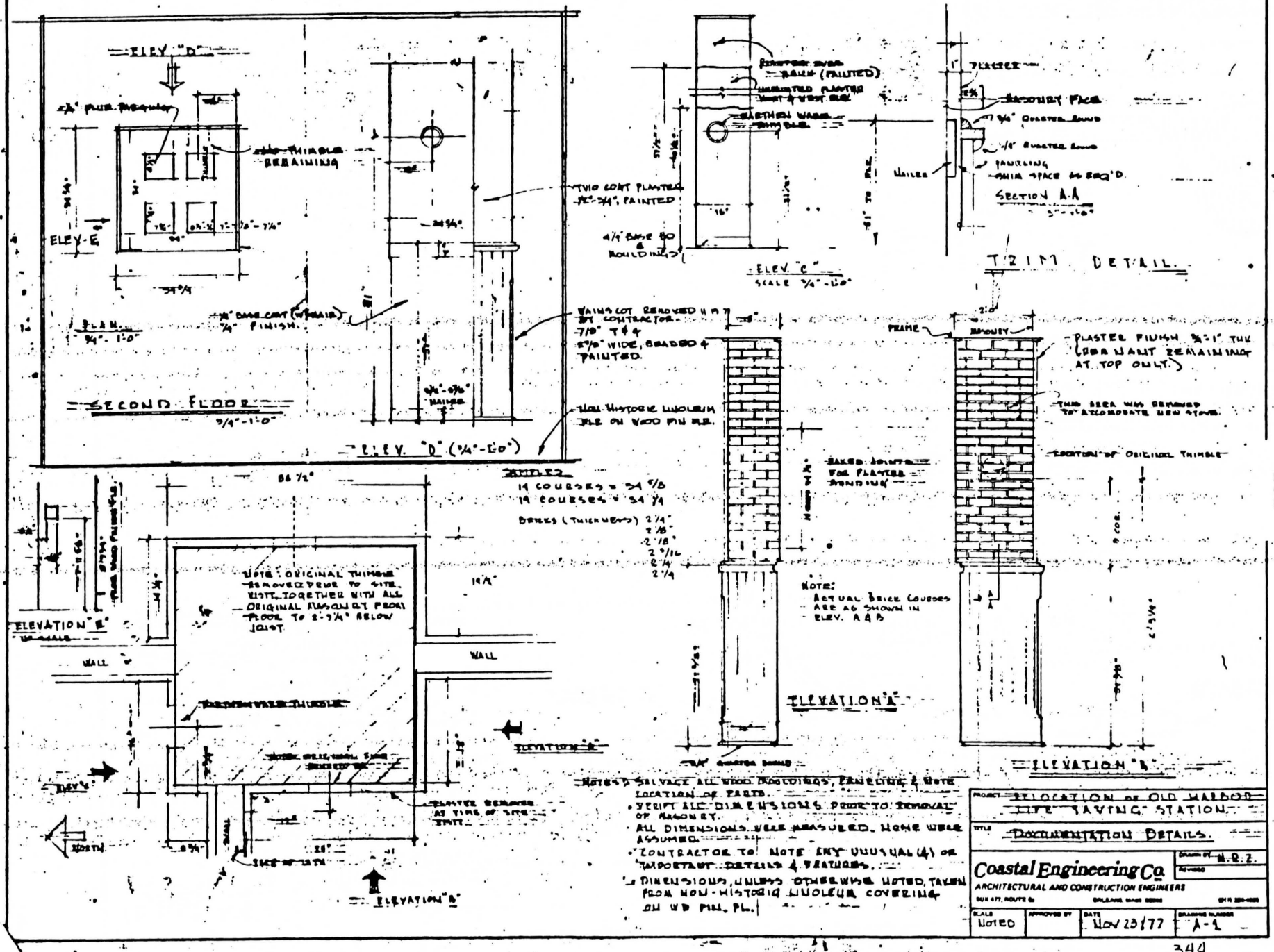
SECTIONS AND RIGGING DETAILS.

SCALE: 3/8"=1'-0"

DATE: 10-26-77

JOHN BORN ASSOCIATES
CONSULTING ENGINEERS
3 WALNUT AVENUE
CAMBRIDGE, MASS. 02140

DWG. NO. 52



NOTES: SALVAGE ALL WOOD MOULDINGS, PANELING & TRIM LOCATION OF PARTS.

- VERIFY ALL DIMENSIONS PRIOR TO REMOVAL OF MASONRY.
- ALL DIMENSIONS WERE MEASURED. NONE WERE ASSUMED.
- CONTRACTOR TO NOTE ANY UNUSUAL (&) OR IMPORTANT DETAILS & FEATURES.
- DIMENSIONS, UNLESS OTHERWISE NOTED, TAKEN FROM NON-HISTORIC LINOLEUM COVERING ON WD FIN. FL.

PROJECT: RELOCATION OF OLD HARBOR LIFE SAVING STATION

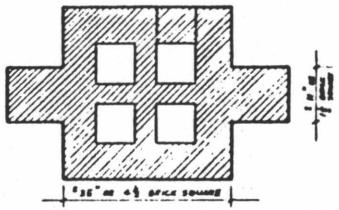
TITLE: Documentation Details.

Coastal Engineering Co.
ARCHITECTURAL AND CONSTRUCTION ENGINEERS

DRAWN BY: M.B.Z.
REVISED

SCALE: NOTED | APPROVED BY | DATE: Nov 23/77 | DRAWING NUMBER: A-1

BASEMENT SECTION

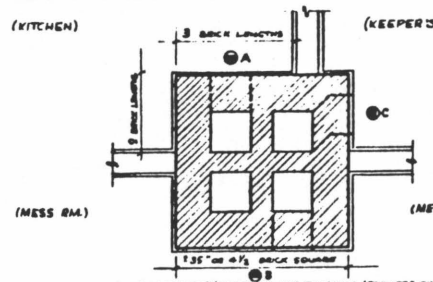


BUILD IN EARTHENWARE THIMBLE (PROVIDED BY GOVT) AS NEARLY FLUSH WITH BRICK FACE AS POSSIBLE AT REV. FLOOR SLAB TO ℄. NEATLY FILLING ALL VOIDS BEHIND RIM WITH MORTAR.

ONE-AND-A-HALF BRICK SQUARE PIERS SHALL BE BUILT INTO CHIMNEY TO RECEIVE END OF FIRST FLOOR GIRDERS.

PROVIDE AND INSTALL ONE (1) CLEANOUT OPNG., DOOR, AND CEMENT INCLINE INSIDE FLUE FOR EACH OF THE FOUR (4) FLUES, TO BE 3'-0" MAX. FLOOR SLAB TO OPNG.

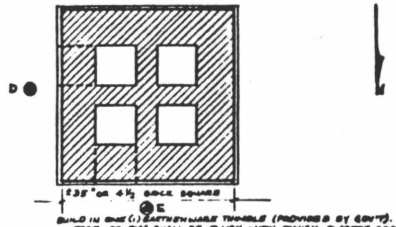
FIRST FLOOR SECTION



BUILD IN THREE (3) EARTHENWARE THIMBLES (PROVIDED BY GOVT). FACE OF RIM SHALL BE FLUSH WITH FINISH PLASTER COAT OR APPROX. 1/16" FROM BRICK FACE. RIM FACE OF NORTH ROOM (MESS RM.) THIMBLE SHALL BE FLUSH WITH 7/8" THICK WOOD WAINSCOTING (NOT INCLUDED IN CONTRACT WORK) SET ON 1/4" THICK WOOD NAILERS PROVIDED AND INSTALLED BY CONTRACTOR.

PARGE ENTIRE OUTSIDE OF CHIMNEY STACK WITH ALLOWANCES FOR WOODWORK.

SECOND FLOOR SECTION



BUILD IN ONE (1) EARTHENWARE THIMBLE (PROVIDED BY GOVT). FACE OF RIM SHALL BE FLUSH WITH FINISH PLASTER COAT OR APPROX. 1/16" FROM BRICK FACE.

BUILD IN OPNG. FOR VENTILATION REGISTER (UNIT NOT INCLUDED IN CONTRACT WORK).

PARGE ENTIRE OUTSIDE OF CHIMNEY STACK TO UNDERSIDE OF ROOF BOARDING WITH ALLOWANCES FOR WOODWORK.

NOTES:

EXTERIOR BRICK COURSING (85 COURSES) - ABOVE THE ROOF LINE - SHALL MATCH THE ORIGINAL IN EVERY RESPECT

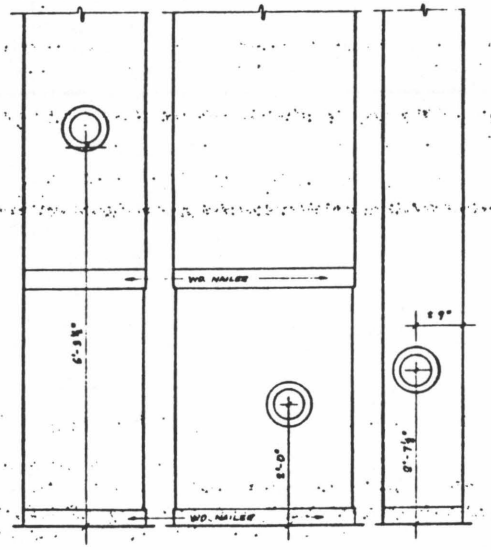
EACH OF FOUR (4) FLUES SHALL RECEIVE 12" PARGING THE FULL HGT.

WORK AND MATERIALS EXCLUDED FROM CONTRACT WORK:

REMOVAL OF KITCHEN WAINSCOTING AND ITS REPLACEMENT
REPLACEMENT OF 2ND FL. WAINSCOTING
FIVE (5) EARTHENWARE THIMBLES
FINISH PLASTER COAT ABOVE WAINSCOTING

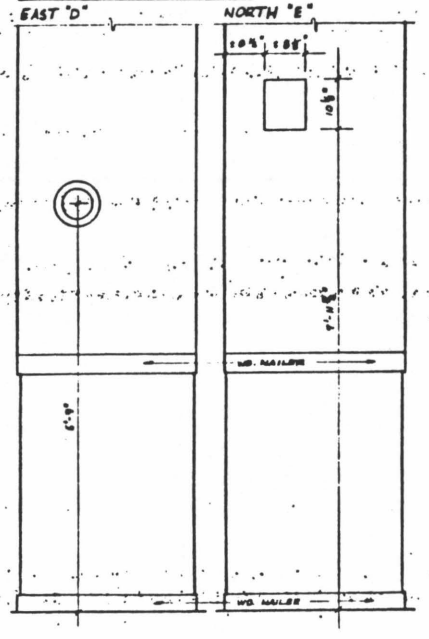
FIRST FLOOR ELEVATIONS

KITCHEN "A" MESS RM "B" KEEPER'S QUARTERS "C"



SECOND FLOOR ELEVATIONS

EAST "D" NORTH "E"

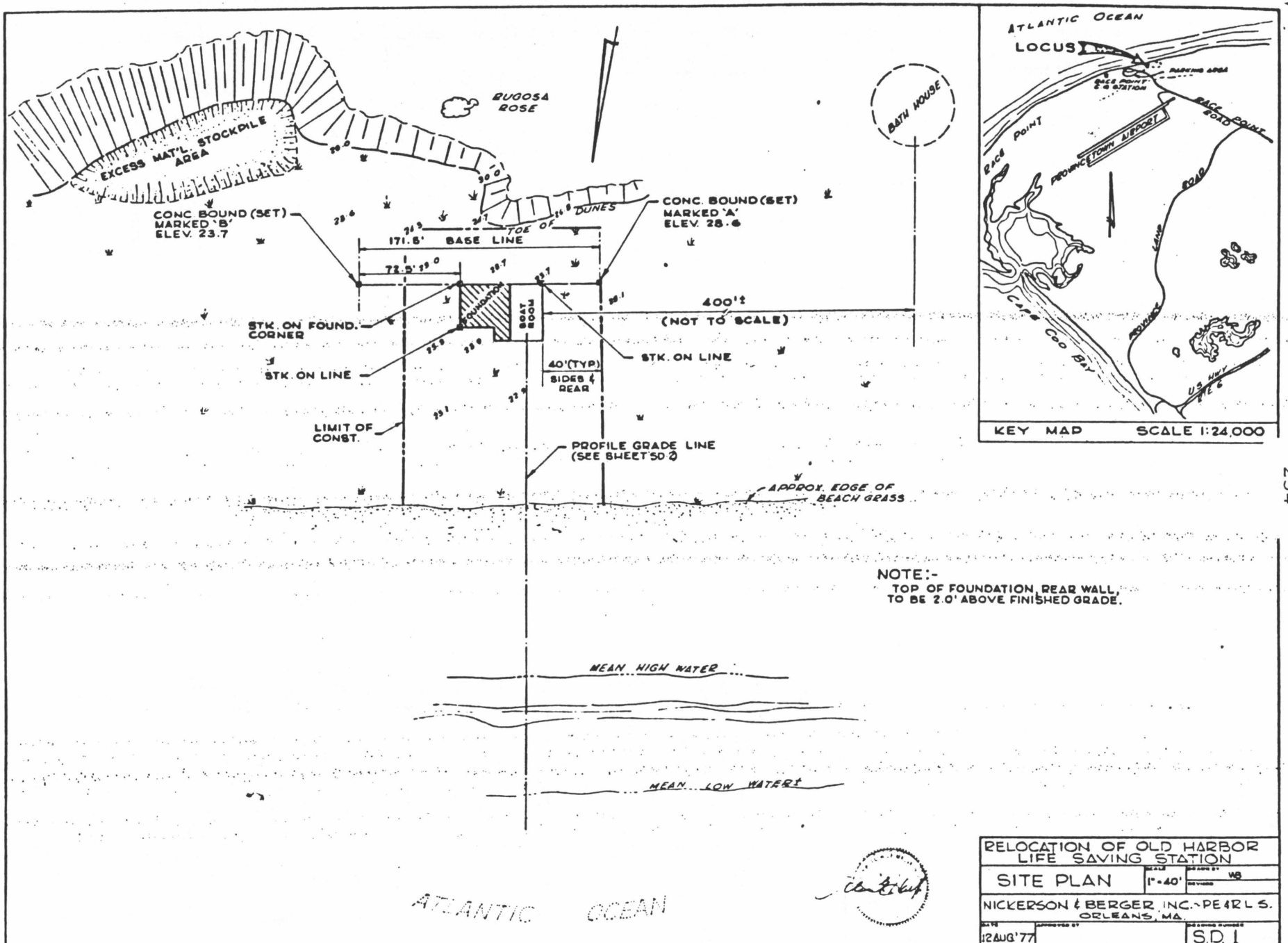


CHIMNEY RECONSTRUCTION

SCALE: 3/4" = 1'-0"
6/16/78

DRAWN BY: MARSHA L FADER

UNDER DIRECTION OF THE NATIONAL PARK SERVICE, UNITED STATES DEPARTMENT OF THE INTERIOR	NAME AND LOCATION OF STRUCTURE OLD HARBOR LIFE SAVING STATION BARNSTABLE COUNTY, PROVINCETOWN, MASSACHUSETTS	SURVEY NO.	HISTORIC AMERICAN BUILDINGS SURVEY SHEET 1 OF 1 SHEETS

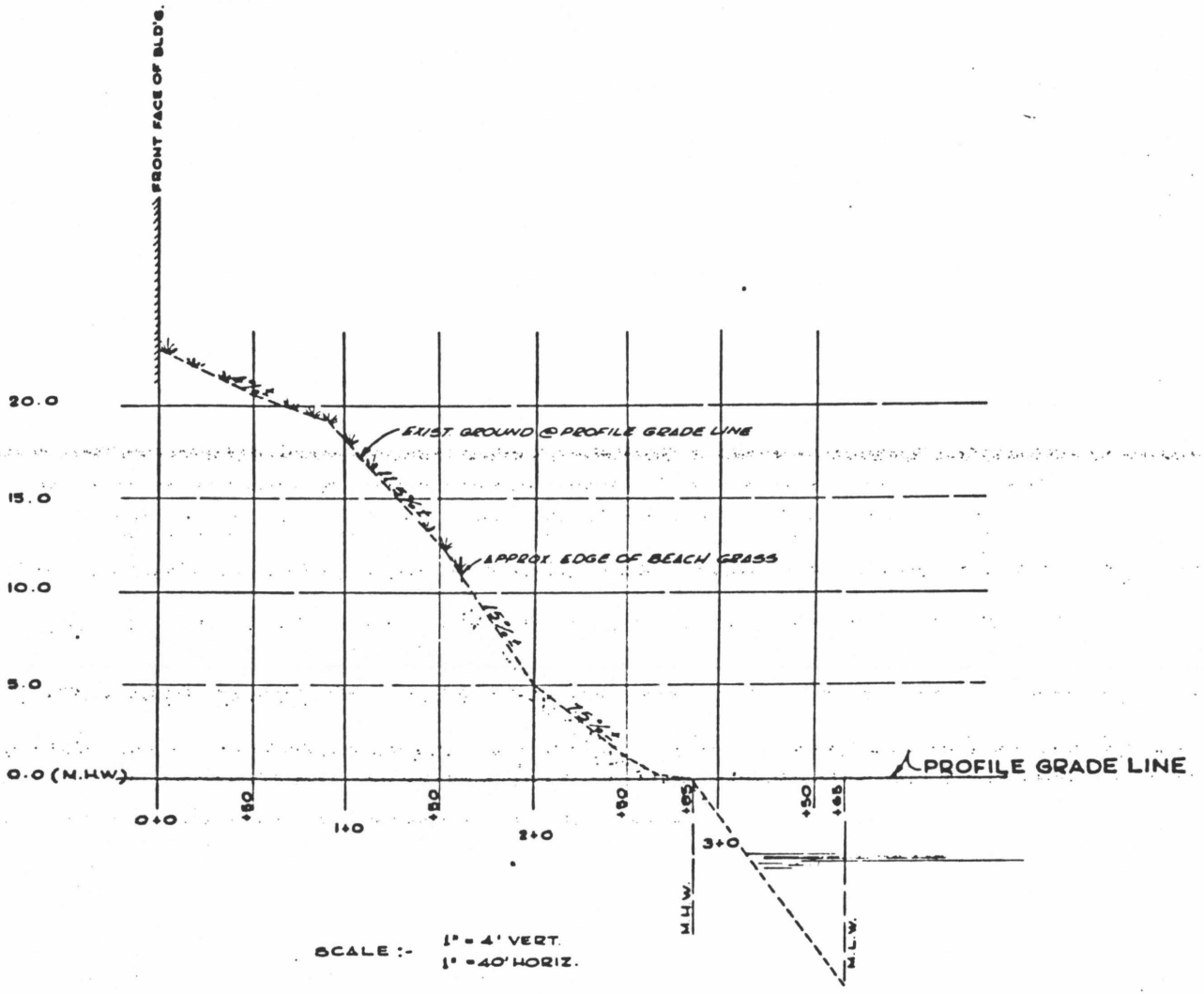


NOTE:-
TOP OF FOUNDATION, REAR WALL, TO BE 2.0' ABOVE FINISHED GRADE.

RELOCATION OF OLD HARBOR LIFE SAVING STATION		
SITE PLAN	1"=40'	WB
NICKERSON & BERGER, INC. - PE & R L S. ORLEANS, MA.		
12AUG'77		S.D. 1

234

4421



RELOCATION OF OLD HARBOR LIFE SAVING STATION

SITE PROFILE | SCALE AS SHOWN | DRAWN BY WB

NICKERSON & BERGER, INC. ~ P.E. & R.L.S.
ORLEANS, MA.

DATE 12 AUG '77 | APPROVED BY | DRAWING NUMBER SD. 2

K-E ALBANENE LINEN
MADE IN U.S.A.

4-31

APPENDIX K.

Specifications for Relocating Old Harbor Life-Saving Station

INDEX TO ARTICLES OF THE GENERAL REQUIREMENTS

SECTION 01010 - SUMMARY OF WORK

1. DESCRIPTION
2. LOCATION
3. ACCESS
4. SITE VISITATION
5. LAYOUT OF WORK
6. ARCHEOLOGICAL SALVAGE
7. PRECONSTRUCTION CONFERENCE
8. SITE CONFERENCE
9. COMPLETION

SECTION 01300 - SUBMITTALS

1. SUBMISSION PROCEDURE
2. PROJECT SUPERVISOR'S APPROVAL
3. SHOP DRAWINGS
4. SAMPLES
5. PROGRESS SCHEDULE
6. REVIEW OF SCHEDULE

SECTION 01500 - TEMPORARY FACILITIES

1. SIGNS, SIGNALS, AND BARRICADES
2. STORAGE FACILITIES
3. SANITARY FACILITIES
4. FIELD OFFICE

SECTION 01560 - SPECIAL CONTROLS

1. PRESERVATION OF EXISTING STRUCTURE
2. PRESERVATION OF NATURAL FEATURES
3. CUTTING AND PATCHING
4. HOUSEKEEPING
5. DISPOSAL OF RUBBISH
6. AIR AND WATER POLLUTION CONTROL
7. FIRE PREVENTION AND PROTECTION

SECTION 01700 - PROJECT CLOSEOUT

1. CLEANING
2. SUBSTANTIAL COMPLETION AND FINAL INSPECTION
3. ACCEPTANCE OF THE WORK

SECTION 01010 SUMMARY OF WORK

1. DESCRIPTION: The principal features of the work include the relocation of a two-story building with attached three-story tower and one-story boathouse, approximately 40 feet X 60 feet; demolition and removal of concrete foundation; site preparation; construction of a new concrete foundation; and boarding up of all openings and construction of cellar windows.

All work will be performed under a single fixed-price contract.

2. LOCATION: Old Harbor Life Saving Station, Cape Cod National Seashore, Chatham, Massachusetts will be moved to Race Point, Cape Cod National Seashore, Provincetown, Massachusetts.

3. ACCESS: Access to the site will be from Route 6, onto Main Street and Beach Road in Orleans; approximately 6 miles south from the Orleans Beach town parking lot on a sand route; barge access by water.

A. Parking: Contractor's vehicles and equipment shall be parked with precautionary measures taken to avoid damaging sand dunes and beach grass.

B. Hauling Restrictions: Comply with all legal load restrictions in the hauling of materials on public roads beyond the limits of the project. Load restrictions on park roads are identical to the state load restrictions with such additional regulations as may be imposed by the Park Superintendent. Special permits will not relieve the Contractor of liability for damage which may result from the moving of equipment.

Comply with all Cape Cod National Seashore sand routes and those access routes marked on site drawings.

4. SITE VISITATION: Interested bidders are required to visit the job sites before bidding to familiarize themselves with the conditions of the sites. Inspection shall be arranged in advance with the Park Superintendent (Tel. 617-349-3785) for non-holiday, weekdays, between the hours of 8:30 a.m. and 4:30 p.m.

5. LAYOUT OF WORK:

A. Project Supervisor will set a base line and bench mark for each area of the work. Contractor shall lay out the work by accurately measuring from these controls. All work improperly located due to Contractor's errors or omissions shall be corrected by him at no additional expense to the Government.

B. Contractor shall preserve controls thus established. Controls originally set by Project Supervisor which are destroyed by Contractor will be replaced by Project Supervisor, with the cost of replacement deducted from Contractor's final payment.

C. Locations and elevations indicated on the drawings are subject to final field adjustment by Project Supervisor prior to construction. Contractor shall immediately notify the Project Supervisor of apparent errors discovered on the drawings or in the initial stakeout. If changes in stakeout are required, Contractor shall cooperate with Project Supervisor in prompt establishment of the field control for altered or adjusted work.

6. ARCHEOLOGICAL SALVAGE: If any features of archeological significance are uncovered, the Project Supervisor shall have the right to stop the work until the finds are examined, and recorded if necessary. The Contractor will be compensated for such additional costs as may be incurred as provided in the General Provisions of the Contract.

All items discovered, which in the opinion of the Project Supervisor have historic significance, shall remain the property of the Government and shall be delivered to the Project Supervisor or stored where directed by him.

7. PRECONSTRUCTION CONFERENCE: As soon as possible after issuance of Notice to Proceed and prior to commencement of work, the Contracting Officer will arrange an on-site meeting with the Contractor. The meeting agenda will include the following:

Correspondence procedures
Designation of responsible personnel
Labor standards provisions
Payroll reports
Changes
Payments to Contractor
Subcontractors
National Park Service regulations
Accident prevention
Project schedule
Submittal of shop drawings, project data, and samples

8. SITE CONFERENCE: Prior to the commencement of work, the Project Supervisor will arrange a meeting with the Contractor, the Contractor's employees, and the National Park Service Project Coordinator. This on-site meeting, both separate and different from the Preconstruction Conference, will include a review of the project schedule, the existing historic building and grounds, special controls, designation of responsible personnel, supervision and maintenance of all records.

9. COMPLETION: All work shall be completed to the satisfaction of the Project Supervisor in accordance with the specifications within 30 calendar days from date of receipt of Notice to Proceed.

END

SECTION 01300 SUBMITTALS

1. SUBMISSION PROCEDURE: At least two weeks before Contractor's need for approval, submit 4 copies or 4 specimens (unless a different number is specified in the individual section) of all submittals required under this section to Project Supervisor. Identify all submittals on National Park Service form DSC-1(CS). When approved, one copy will be returned to Contractor. The listing of submittals given below is intended to be as complete as possible. However, Project Supervisor reserves the right to request additional submittals. No materials requiring Project Supervisor's approval shall be delivered to the site until approval has been given.

2. PROJECT SUPERVISOR'S APPROVAL: Project Supervisor will indicate his approval or disapproval of the submittals and if not approved as submitted will indicate his reasons therefor. Any work done prior to such approval shall be at Contractor's risk.

3. SHOP DRAWINGS:

A. Definition: The term "shop drawings" includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by Contractor to explain in detail specific portions of the work required by the Contract.

B. Contractor's Review and Approval: Contractor shall coordinate all such drawings, and review them for accuracy, completeness and compliance with contract requirements and shall indicate his approval thereon as evidence of such coordination and review. Shop drawings submitted to Project Supervisor without evidence of Contractor's approval may be returned for resubmission.

C. Approval by Project Supervisor: Such approval shall not relieve Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this Contract, except with respect to variations described and approved in accordance with Paragraph D below.

D. If shop drawings show variations from the contract requirements, Contractor shall describe such variations in writing, separate from the drawings, at the time of submission. All such variation must be approved by the Project Supervisor.

E. Shop Drawings Required:

SECTION	DESCRIPTION
02021	Finished grading plan
02101	Moving Plans and Procedures
	Equipment Schedule, including name of boat, number to be used, horse-power of tug, length and beam of boat, light draft and loaded draft
06098	Sheathing for door and window openings
	Cellar sash

4. SAMPLES: Samples required:

SECTION	DESCRIPTION
03302	Concrete mix design
04201	Exterior concrete pargetting finish, sample wall panel

5. PROGRESS SCHEDULE: As soon as possible after receiving Notice of Award and before any work is begun, submit a Progress Schedule (normally in bar chart form) showing estimated starting and completion dates for each part of the work.

6 REVIEW OF SCHEDULE: The Progress Schedule shall be subject to review and modification by the Project Supervisor both for format and content.

END

SECTION 01500 TEMPORARY FACILITIES

1. SIGNS, SIGNALS, AND BARRICADES: Provide, erect, and maintain barricades, lights, danger signals, and warning signs, and take all necessary precautions for the protection of the work and safety of the public. Comply with all navigation regulations.

2. STORAGE FACILITIES: Confine storage of materials to designated areas within the project work limits.

3. SANITARY FACILITIES:

A. Provide and maintain facilities in compliance with applicable state and local laws, codes, and ordinances.

B. Provide cool, potable water for construction personnel in locations convenient to work stations.

C. Completely remove temporary facilities on completion of work.

4. FIELD OFFICE: If Contractor elects to establish an office for his own use, the size, location, and construction shall be subject to approval. Remove at completion of work.

END

SECTION 01560 SPECIAL CONTROLS

1. PRESERVATION OF EXISTING STRUCTURE: This is a historic building. Provide maximum protection, take all reasonable means, and exercise special care to prevent damage to the entire building. Should the structure, despite protective measures, be damaged by Contractor's operations, he shall repair or replace damaged areas to match as closely as possible the original condition. Such repairs shall be done at no additional expense to the Government and to the satisfaction of the Project Supervisor.

2. PRESERVATION OF NATURAL FEATURES: Confine all operations to within the work limits of the project. Exercise special care to maintain natural surroundings undamaged. Restore natural features as nearly as possible to original condition at no additional expense to the Government.

3. CUTTING AND PATCHING: Cut and remove all material with extreme care, and in an approved manner, and carefully store and protect the removed material while work is underway.

4. HOUSEKEEPING:

A. Keep project neat, orderly, and in a safe condition at all times. Immediately remove all hazardous rubbish. Do not allow rubbish to accumulate. Provide on-site containers for collection of rubbish or dispose of it at frequent intervals during progress of work.

B. Keep volatile wastes in covered containers outside the building.

5. DISPOSAL OF RUBBISH: Dispose of waste materials, legally, at public or private dumping areas outside the park. Do not bury wastes on-site.

6. AIR AND WATER POLLUTION CONTROL:

A. Take all necessary reasonable measures to reduce air and water pollution by any material and equipment used.

B. Building Safety: Smoking within the building and immediate surrounding area is prohibited. No welding or cutting by torch shall be performed in the structure. A designated area for smoking shall be selected by the Project Supervisor.

C. Fire Protection Equipment Required: Provide and maintain suitable fire protection equipment. Furnish a minimum of one UL 2A, 2-$\frac{1}{2}$ gallon water type, stored pressure extinguisher, and one UL Class 10,

Type I, 15 pound B:C carbon dioxide extinguisher for each 3000 square feet of building area or major fraction thereof. Travel distance from any work station to the nearest extinguisher shall not exceed 100 feet.

END

SECTION 01700 PROJECT CLOSEOUT

1. CLEANING: Remove all tools, equipment, surplus materials, and rubbish. Repair marred surfaces and remove grease, dirt, stains, and foreign materials from interior and exterior finished surfaces. At the time of final inspection, project shall be thoroughly clean and ready for occupancy.

2. SUBSTANTIAL COMPLETION AND FINAL INSPECTION: Submit written certification that project, or designated portion of project, is substantially complete and request, in writing, a final inspection. Project Supervisor will make an inspection within 10 days of receipt of request.

Should Project Supervisor determine that the work is substantially complete, he will prepare a punch list of deficiencies that need to be corrected before final acceptance, and issue a notice of substantial completion with the deficiencies noted.

Should Project Supervisor determine that the work is not substantially complete, he will immediately notify Contractor, in writing, stating reasons. After Contractor completes work, he shall resubmit certification and request for final inspection.

3. ACCEPTANCE OF THE WORK: After all deficiencies have been corrected, a Letter of Final Acceptance will be issued. If only designated portions of the project have been inspected, a Letter of Partial Acceptance will be issued for that portion of the work.

Acceptance may be given prior to correction of deficiencies which do not preclude operation and use of the facility; however, final payment will be withheld until all deficiencies are corrected.

Until receipt of Letter of Final Acceptance, Contractor shall be responsible for the work of this Contract.

END

SECTION 02021 SITE PREPARATION

PART 1: GENERAL

1-1 DESCRIPTION: The work of this section consists of site work related to the preparation of the new site to accommodate new foundation and grading after completion of the building move. Work includes site preparation, excavation and backfilling, disposal of excess material and other incidentals necessary to prepare the new site for contract work.

1-2 RELATED WORK SPECIFIED ELSEWHERE: Structure Moving - Section 02101; Demolition - Section 02113; Concrete Work - Section 03302.

1-3 JOB CONDITIONS: Bidders are expected to examine the site to determine the character of the terrain to be encountered and the nature of the work in general. All excavation required is unclassified.

1-4 PROTECTION: All areas outside the "Limit of Construction" to be left in an undisturbed state. Any use of areas outside of "Limits of Construction" must be submitted for approval by the Project Supervisor.

PART 2: MATERIALS

2-1 EARTH: Material used for backfill and grading to be taken from excavated surplus, free from debris, beach grass or other deleterious materials. No borrow material will be required.

2-2 LANDSCAPING: No finish landscaping or soil stabilization other than normal backfill and grading is intended under this contract.

PART 3: EXECUTION

3-1 CLEARING: Scrape all material within "Limits of Construction" clear of beach grass, flotsom, etc.

3-2 EXCAVATION: Excavate to such width and depth as necessary to install foundation and perform masonry work and to allow moving of structure to its final location. If required provide adequate shoring and/or bracing to maintain excavation in a safe, stable condition.

3-3 FOOTINGS: Excavation for footings shall be done by hand. Side forms must be used in the forming and casting of concrete footings. Care must be taken to protect forms from drifting, wind-blown or caving sand.

3-4 BACKFILLING: Upon completion of foundation and placement of concrete basement floor, backfill with earth as specified in Article 2-1. Sand fill material placed in layers of 18" maximum by light mechanized equipment. Exercise care in placing backfill to minimize damage to foundation. Conventional compaction methods are not required. Bring finished grade to elevations referred to in Article 3-5 and slope gently from building foundation.

3-5 FINISHED ELEVATIONS: The Contractor shall carefully examine the existing site of the Old Harbor Station in Chatham and submit for approval finished grading plan for the relocated site in Provincetown. The intention is to reproduce site elevations which most accurately represent those of the original site, within the "Limits of Construction" shown on the plans.

3-6 CLEANUP: Upon completion of work remove all debris, temporary roads or facilities, and leave the entire area clean and in an acceptable condition ready for landscaping or planting by others.

END

SECTION 02101 STRUCTURE MOVING

PART 1: GENERAL

1-1 DESCRIPTION: The work of this section consists of moving a two-story wood frame building with attached one-story boathouse and three-story tower.

1-2 RELATED WORK SPECIFIED ELSEWHERE: Carpentry - Section 06098.

1-3 SUBMITTALS: In accordance with Section 01300, submit plans and procedures for moving, including schedule of work and equipment. An alternate plan of action for responding to adverse weather and tide conditions shall be included.

1-4 JOB CONDITIONS:

A. Building Protection: The Contractor shall safely deliver the building to the new site in the same condition as turned over to him at the old site. The Project Supervisor shall be the judge of satisfactory delivery. Detailed inspection shall be jointly conducted by the Project Supervisor and the Contractor to photograph and log all defects and damage existing at commencement of contract.

B. Environmental Protection: The Contractor shall take all reasonable measures necessary to protect the sand dunes, beach grass and other vegetation, and shore line areas during and as a result of the moving procedure. Use of moving equipment shall be limited to the area immediately surrounding the building, the barge entry shore area up to 130 feet in width, and those areas specifically noted on the Race Point Site Plan. Any environmental disturbance shall be returned as close as possible to its original appearance.

C. Coordination/Scheduling: The Contractor shall maintain an intimate knowledge of wind, temperature, and tide conditions and general weather forecasts. Scheduling for the move shall aim for a Spring Tide, such as October 14, 15, 16.

D. Bathymetry: The high energy nature of the beach in Chatham and Provincetown may necessitate the preparation of ocean contouring charts (to a 1-foot interval) for navigation purposes.

PART 2: MATERIALS: The Contractor shall furnish all materials, tools, and equipment necessary to accomplish the relocation of the Old Harbor Life Saving Station.

PART 3: EXECUTION

3-1 PROCEDURE AT EXISTING SITE:

A. The Contractor shall plan the route of the move and access of equipment so as to prevent unnecessary dislocation of site features.

B. Disconnect existing utilities.

C. Install window and door coverings of plywood in a manner approved by the Project Supervisor.

D. Install plywood boxing to cover exterior brick chimney and secure with metal strapping. Remove first floor added fireplace jambs and hearth, leaving original chimney flue structure only. Needle underside of chimney to sever at cellar and provide reinforcement as needed. Salvage all chimney cellar brick and deliver to Project Supervisor for storage.

E. Design and install any necessary shoring, taking care not to damage any portion of the structural system or architectural finish material. Any drilling or cutting shall first be approved by the Project Supervisor.

F. Jack-up building onto moving equipment. The Contractor shall estimate the weight of the structure plus safety factors and provide equipment of adequate capacity and in good condition to safely relocate the building without excessive strain on the structure.

3-2 MOVING PROCEDURE:

A. The Contractor shall obtain all necessary permits and coordinate all arrangements necessary for the moving of the building off of its present site, along the selected route, and onto the new site. The Contractor shall ascertain from the Project Supervisor whether permits for possible dredging have been obtained. The Contractor shall arrange for the placing of barricades, stationing of flagmen, and all other procedures for the relocation.

B. The Contractor shall be responsible for instituting the approved alternate plan of action in the event of adverse conditions. The Contractor shall be responsible for repair or replacement of any or all damaged features at existing and new sites and along the moving route.

3-3 TEMPORARY SHORING: Upon completion of move, remove any temporary shoring no longer needed.

3-4 CLEAN-UP: Clean-up debris remaining from moving procedures at all sites. Return sites as close as possible to their original appearance.

END

SECTION 02113 DEMOLITION

PART 1: GENERAL

1-1 DESCRIPTION: The work of this section consists of the demolition and removal of the existing Chatham site concrete foundation and floor slab and filling of the void.

1-2 RELATED WORK SPECIFIED ELSEWHERE: Structure Moving - Section 02101.

1-3 QUALITY ASSURANCE: Standards, American National Standards Institute (ANSI).

1-4 JOB CONDITIONS: Restrict use of equipment to area immediately surrounding the building. Take all measures to protect the sand dunes and vegetation.

PART 2: MATERIALS

2-1 DESIGNATED SALVAGE MATERIALS: Base of brick chimney, cistern brick and cover, and any additional items directed by the Project Supervisor.

PART 3: EXECUTION

3-1 PREPARATION:

A. Perform all work necessary to protect the public, nearby properties, utilities, and the natural environment.

B. Remove abandoned utilities; drain cistern.

3-2 DEMOLITION AND REMOVAL: Comply with the safety requirements for demolition, ANSI A10.6. Directions for execution of the work will be changed and supplemented by the Project Supervisor as necessary. Salvage designated materials without damage and store where directed.

3-3 DISPOSAL: The Contractor shall haul away all foundation wall, floor, and cistern material in the most economical and environmentally safe manner. The Contractor shall take responsibility for obtaining all required permits for disposal of the concrete.

3-4 BELOW GRADE AREAS AND VOIDS: The intent will be to effect a reasonably level appearance and to rely upon the activity of this high energy shore to complete a natural configuration. Fill will be obtained from the area immediately in front (east) of the building, which is the area being worked on dynamically by the ocean. No fill shall be obtained from the immediate perimeter area of the building.

3-5 CLEAN-UP: Leave area free of rubbish and debris.

END

SECTION 03302 CONCRETE WORK

PART 1: GENERAL

1-1 DESCRIPTION: The work of this section consists of construction of reinforced concrete footings, basement floor, and porch slabs and any other exposed concrete work required to reproduce the existing appearance of the Old Harbor Life Saving Station at its proposed new location.

1-2 RELATED WORK SPECIFIED ELSEWHERE: Masonry Work - Section 04201; Site Preparation - Section 02021.

1-3 QUALITY ASSURANCE: All concrete work to conform to the American Concrete Institute standards and all materials to conform to applicable ASTM designations.

1-4 SUBMITTALS: In accordance with Section 01300. Submit list of materials to be used under this section for approval. Concrete design mixes and methods of concrete production must be approved by the Project Supervisor.

1-5 JOB CONDITIONS:

A. Protection of concrete and concreteing practices as per ACI 614, ACI 605, and ACI 306.

B. Curing shall be done in accordance with ACI recommendations. The Contractor must submit for approval his proposal for proper protection and curing of all concrete work.

PART 2: MATERIALS

2-1 PORTLAND CEMENT: ASTM C150, Type I or Type II.

2-2 FINE AND COARSE AGGREGATES: ASTM C33.

2-3 WATER: Potable.

2-4 ADMIXTURES: ASTM C260, air entraining.

2-5 STEEL REINFORCEMENT: ASTM A615, Grade 40. Include all necessary accessories to conform to CRSI installation procedures.

2-6 FORMS: Steel, wood, plywood, or other approved material.

PART 3: EXECUTION

3-1 CONCRETE MIX: ACI 304, Compressive strength, 28 days, 3,000 psi; slump, maximum of 4 inches; air entrainment 6%, plus or minus 1½%.

3-2 MIXING: ASTM C94, ready-mixed. Site batched concrete to meet approval of Project Supervisor, quality to equal that of ASTM C94.

3-3 FORMWORK: ACI 347. Construct forms true to line and grade, sufficiently rigid to prevent displacement. Clean and oil forms before placing concrete. Dampen soil prior to placing of concrete.

3-4 PLACING MATERIALS:

A. Reinforcing: ACI 318. Place in all footings three (3) continuous #5 reinforcing bars, continuous, horizontally and vertical bars 16 inches on center to protrude 24 inches into concrete block courses above, vertical rods to be #4. Vertical bars to be bent with one 8 inch leg and one 36 inch leg. Vertical bars to be tied to horizontal footing rods.

3-5 CURING: Minimum of 7 days. Use wet sand or burlap. Keep moist. Curing compounds may be used if approved.

3-6 CONCRETE TESTING: The Contracting Officer reserves the right to have concrete quality-tested. Sub-standard material shall be removed and replaced at no additional expense to the Government. ACI 318.

3-7 CLEAN-UP: Remove excess materials, tools, equipment; leave area in clean and satisfactory condition.

END

SECTION 04201 MASONRY WORK

Part 1: GENERAL

1-1 DESCRIPTION: The work of this section consists of the following:

Solid reinforced concrete block masonry foundation;
Cement stucco pargetting of exterior of all walls;
Reconstruction of brick cistern; and
Chimney foundation and carrying beam support foundations.

1-2 QUALITY ASSURANCE: Materials to conform to ASTM designations; methods to be consistent with accepted practice as outlined by the Portland Cement Association, Concrete Masonry Handbook, and applicable NCMA standards.

1-3 JOB CONDITIONS: In order to minimize any impact on the fragile environment at the site of the new foundation, concrete block masonry with a cement stucco facade is specified instead of poured-in-place concrete as used at the Chatham site. The Contractor, therefore, shall take care in construction of the new foundation to reproduce as accurately as possible the same visual appearance as existed at the Chatham site. Sample wall panel shall be required for the Project Supervisor's approval of finish appearance.

All masonry work shall be protected from extreme heat and cold as per NCMA recommendations. Damp curing of concrete masonry is required for a minimum of three days after installation.

PART 2: MATERIALS

2-1 CONCRETE BLOCK: These masonry units shall be 10" thick for building foundation walls and 8" thick for other foundation walls under porches, steps, and cellar entry. Block to meet ASTM C90, Grade N, normal weight concrete with minimum compressive strength of 1500 psi and maximum water absorption of 13 pcf.

2-2 MORTAR:

A. Materials: Portland Cement, ASTM C 150, Type I, II, or III. Masonry Cement, ASTM C 91. Fine aggregate, ASTM C 144. Water, potable.

B. Composition: Ingredients measured by volume; Type PM, as per ASTM C 476:

1 part	Portland Cement
1 part	Masonry Cement
6 parts	Sand

C. Mortar color: Match color of existing mortar in cistern. Color match necessary only for exposed masonry.

2-3 REINFORCING:

A. Steel reinforcing bars in walls shall be deformed rods, ASTM 305, grade 40.

B. Masonry wall joint reinforcement shall be as manufactured by Dur-O-Wall, Keystone Steel & Wire, or approved equal, conforming to ASTM A82.

2-4 PORTLAND CEMENT STUCCO: Type FM consisting of:

1 part Masonry Cement

3 parts Sand

These proportions shall be used for both first and second coat in two-coat cement stucco application. Material specification as in Article 2-2.

2-5 BRICK: Other than salvaged brick, for use in unexposed brickwork. Nominal $2\frac{1}{4}$ x 3 x 8 inch cored brick, ASTM 216, Grade SW, color to match existing.

PART 3: EXECUTION

3-1 MIXING MORTAR, SETTING OF MASONRY UNITS AND STUCCO WORK: All work to be executed according to standard accepted practice as outlined by the Portland Cement Association, Concrete Masonry Handbook, NCMA, and ANSI A42.2.

3-2 BEDS, JOINTS, AND TOOLING: As approved by the Project Supervisor.

3-3 CONSTRUCTION OF REINFORCED MASONRY WALL:

A. All concrete masonry units to be thicknesses as per Article 2-1 and laid in a full bed of mortar.

B. Horizontal prefabricated wall joint reinforcement shall be installed in every second course, properly lapped and bonded. Vertical reinforcement to be #4 reinforcing rods 16 inches on center.

C. A continuous reinforced bond beam shall be cast around the top of porch wall only, two #4 rods continuous, keyed to foundation.

D. All block cores in all walls shall be completely filled with grout mortar to lock all masonry and reinforcement together into a solid reinforced concrete masonry wall.

3-4 CONSTRUCTION OF CEMENT STUCCO VENEER:

A. Exterior face of entire foundation to receive two-coat cement stucco plaster over concrete masonry units to a minimum thickness of 5/8 inches. Mixing and placing shall conform to recommended practice covered under ANSI A42.2.

B. Purpose of cement stucco is to act as waterproofing for foundation. Attention must be given to assure a uniform and tight water-resistant job.

C. Cement stucco plaster work above grade to match appearance of existing foundation at Chatham site, see Article 1-3.

3-5 CONSTRUCTION OF BRICKWORK:

A. Brick cistern construction and materials to match existing.

B. Brickwork above grade to be salvaged brick from Chatham site. Brick below grade may be as per Article 2-5 or salvaged material. Cistern to be constructed to be watertight.

3-6 CLEANING: Immediately after laying, while mortar is fresh, clean all face brick and concrete masonry units of mortar stains. Before final acceptance all masonry must be cleaned so the surface is acceptable to the Project Supervisor.

3-7 CURING: All masonry construction to be carefully protected from temperature extremes and entry of rainwater. It shall be covered and cured as per Article 1-3. Top of all masonry walls to be kept covered at all times until building is moved onto them.

END

PART 1: GENERAL

1-1 DESCRIPTION: The work of this section consists of rough carpentry for possible temporary shoring and sheathing of all openings in the building.

1-2 RELATED WORK SPECIFIED ELSEWHERE: Structure Moving - Section 02101.

1-3 QUALITY ASSURANCE:

A. Standards: American Institute of Timber Construction (AITC), Architectural Woodwork Institute (AWI), Federal Housing Administration (FHA), and manufacturers' printed recommendations.

B. Grading: Mark or certificate required for all wood, use only recognized official marks of association under whose rules it is graded.

1-4 SUBMITTALS: In accordance with Section 01300, submit plans for installing plywood covering on door and window openings; description of cellar sash.

1-5 PRODUCT HANDLING: Store lumber and millwork, where directed, off the ground, with protective covers. Do not expose wood to extreme changes of temperature and humidity.

PART 2: MATERIALS

2-1 SHORING LUMBER: No. 2 Grade, Douglas Fir or No. 1 Grade, Southern Pine. An approved local species, No. 3 or No. 2 Southern Pine may be used for nonstructural framing.

2-2 PLYWOOD SHEATHING: 4 feet by 8 feet, Standard EXT-DFPA, $\frac{1}{2}$ inch thickness.

2-3 CELLAR SASH AND CASINGS: Shall match the original 4 cellar sash and casings.

2-4 WOOD POSTS: 8 inch minimum diameter cedar posts, as indicated on drawings AE-1,-2,-3, or approved equal.

2-5 WOOD SILL REPLACEMENTS: 8 inches by 6 inches, pressure-treated, to match existing, as needed.

PART 3: EXECUTION

3-1 SHORING: Install shoring where required. No cutting or drilling without Project Supervisor approval. The Contractor shall take care not to damage architectural finish materials.

3-2 SHEATHING: Install plywood sheathing in all openings in accordance with approved plan. Do not drive nails or drill holes in existing material without approval of the Project Supervisor.

3-3 SASH: Install cellar casings and sash to match the riginal such casing and sash as directed by the Project Supervisor.

3-4 WOOD POSTS: Install posts in accordance with locations shown on drawing AE-1, to match the original layout.

3-5 WOOD SILL REPLACEMENTS: Install only as needed, where deterioration has occurred, possibly in two (east) locations only. Size and joining shall match the original.

END

APPENDIX L.

Specifications for Plastering and Painting of Old Harbor Life-Saving Station, Cape Cod National Seashore, July 1979

UNITED STATES GOVERNMENT

memorandum

DATE: July 31, 1979

REPLY TO ATTN OF: Regional Historical Architect, NAR

SUBJECT: Transmittal of Specifications for Plastering & Painting of Old Harbor Life Saving Station, Cape Cod National Seashore

TO: Contracting Officer, NAR

Enclosed is a set of specifications for contractural work at Old Harbor Life Saving Station. It is estimated that the work should take 240 days for completion and cost approximately $10,000. The project has been funded out of the FY 1979 program and is chargeable to account number 1730-7070-404.

John Darcy has been assigned as the Project Supervisor and Andrea Gilmore has been assigned as the Project Coordinator by the North Atlantic Historic Preservation Center. Any questions concerning the technical nature of this work should be referred to Mr. Darcy (617/487-3988) or Ms. Gilmore (617/242-1977).

Since the proposed work will not involve unknown quantities nor unknown conditions, it is recommended that the project be advertised on a fixed-price basis.

Please forward 2 copies of the bid package to the Preservation Center and 2 copies to Cape Cod National Seashore.

Blaine

E. Blaine Cliver

Enclosure
cc: Herbert Olsen, CACO NHS
David Price, CACO NHS
NAHPC Files

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

OPTIONAL FORM NO. 10
(REV. 7-76)
GSA FPMR (41 CFR) 101-11.6
5010-112

CONTRACT BID SCHEDULE

PLASTERING & PAINTING OF INTERIOR WALLS
AT OLD HARBOR LIFE SAVING STATION
Provincetown, MA
Cape Cod National Seashore
Account No. 1730-7070-404

Submit bid for all items. In case of error in the extension of prices, unit price governs. In case of error in summation, the total bid amount governs.

ITEM NO. / SECTION		
1 / 09160	Plastering ----------	Lump Sum = $ _____
2 / 09902	Painting ----------	Lump Sum = $ _____
	TOTAL BID (Items 1 and 2) ----------	= $ _____

Award will be made to one bidder in accordance with Clause 10 of the Instructions to Bidders.

END

SECTION 01010 SUMMARY OF WORK

1. DESCRIPTION: The work of this project shall consist of plastering and painting the first floor rooms, the second floor staircase hall and the third floor tower room of the Old Harbor Life Saving Station in Provincetown, Massachusetts. The first floor rooms include: Mess Room, Storm Clothes Room, Kitchen, Pantry, Kitchen Entry, Keeper's Room, Office and Staircase Hall. In the boat room the window frames and sash shall be painted. No plastering shall be done in the boat room.

The plaster shall be applied to expanded metal lath and shall be a two-coat application of a gypsum plaster and sand mix. Painting shall consist of applying two coats of paint to the ceilings, walls and trim of the rooms. Trim includes the door and window mouldings, window sash, doors, chair rails, baseboards, cupboards, and wainscoting. All plastering and painting shall be done according to the requirements outlined in these specifications.

2. LOCATION: Cape Cod National Seashore, Race Point, Provincetown, Massachusetts, 1/8 mile south of the Cape Cod National Seashore Parking Lot at Race Point, approximately 3 miles east of U.S. Mid-Cape Highway 6.

3. EXAMINATION OF SITE: The Contractor shall be held to have examined the work site and to have satisfied himself as to the conditions under which he will be pledged to operate or that in any manner will affect the work of this Contract. The job site may be inspected only between 8:00 A.M. and 4:00 P.M. on non-holiday weekdays and advance arrangements with the Project Supervisor are suggested (John Darcy, 1-617-487-3988).

4. PERMITS: The Contractor will be responsible for all building permits required by the Town of Provincetown.

5. ACCESS: From the Cape Cod National Seashore Parking Lot, Race Point, across approximately 1/8 mile of beach sand.

6. PARKING: No Contractor's employees' motor vehicles will be allowed on the site. None of the Contractor's vehicles will at any time block free access into the site in case of a fire emergency.

7. HAULING RESTRICTIONS: To comply with all legal road restrictions on public roads. Additional restrictions may be imposed by the Project Supervisor. Special permits will not relieve the Contractor of liability for damage which may result from the moving of equipment.

8. WORKING HOURS: Work shall not be performed on weekends or holidays, nor before 7:30 a.m., nor after 4:30 p.m., unless prior arrangements with the Project Supervisor are made.

9. PRECONSTRUCTION CONFERENCE: Before the work begins, the Contracting Officer will arrange a meeting with the Contractor to discuss the work in general, including administrative matters, National Park Service policy and regulations, safety and accident prevention, questions the Contractor may have and points that need to be resolved before the work commences. The Contractor's job foreman is requested to attend this conference. An informal meeting will be conducted at the site on the first day of work for the orientation of contractor's forces.

10. COORDINATION OF WORK: The Contractor shall coordinate his work with the Project Supervisor to enable the historic site to be effectively administered. Notification prior to starting work shall be given the Project Supervisor.

11. ACCIDENT REPORTS: All accidents, if any, must be reported immediately to the Project Supervisor or the Site Superintendent. All accidents are to be recorded on Accident Report Form DI-1-34.

12. EQUIPMENT ERECTION: All scaffolds, ladders, hoist and equipment shall be safely erected and used to protect workmen, walls and park visitors. The Contractor shall comply with the Department of Labor, Occupational Safety and Health Administration (OSHA) regulations.

13. SMOKING REGULATIONS: Smoking will be permitted only in an area designated by the Project Supervisor. It shall be the Contractor's responsibility to keep this area clean at all times.

14. PROTECTION OF EXISTING UTILITIES, STRUCTURES AND PLANTINGS: The Contractor shall take all precautions necessary to protect the existing historic structure and the surrounding landscape features and plants at all times.

15. ARTIFACTS: Any and all artifacts or items with historic significance that are uncovered or removed shall become the property of the Government. The determination shall be made by the Project Supervisor as to the disposition of these objects.

16. REFERENCE STANDARDS: The various sections of the specifications list standards, specifications, codes, etc., that govern the quality of materials and workmanship required. The Contractor shall have a copy of each of the reference standards available for use. "Latest edition" is the edition in effect 30 days prior to the date of advertisement.

17. COMMENCEMENT OF WORK: Plastering shall begin within seven calendar days after receipt of Notice to Proceed. Painting shall not begin before April 15, 1980.

18. COMPLETION: All work shall be completed to the satisfaction of the Project Supervisor in accordance with the specifications within 240 calendar days from date of receipt of Notice to Proceed.

END

1. DESCRIPTION: The intent of this section is to provide miscellaneous materials, labor, and equipment of minor nature for items not identified by the Contract Documents, necessary for the successful completion of the work.

2. WRITTEN ORDERS: No work shall be done under this section until a written order is received by Contractor. Any request for an order after unauthorized work has been performed will be denied.

3. RECORDS: Contractor shall furnish cost invoices, including delivery cost, for all materials and supplies provided under this section. At the end of each day, Contractor and Contracting Officer shall compare and sign, in duplicate, records of all work performed on a force account basis with each retaining a copy.

4. PAYMENT: Payment for this work shall be in accordance with Clause 3 "Changes" of the General Provisions.

END

1. PROCEDURE FOR SUBMISSION: The Contractor shall submit to the Contracting Officer or his representative, for review and approval, four facsimilies of samples, catalog cuts, etc. of all submittals identified in this section, 14 days prior to contractor's needs. The listing of submittals given below is intended to be as complete as possible; however, the Contracting Officer or his representative reserves the right to request additional submittals. No materials requiring the Contracting Officer or his representative's approval shall be delivered to the site until approval has been given. Such approval shall not relieve the Contractor from his responsibility for any errors or omissions in complying with the requirements of this contract.

2. CONTRACTING OFFICER'S APPROVAL: The Contracting Officer or his representative will indicate his approval or disapproval of the submittals in writing and his reasons therefor. One copy of the approved submittals will be returned to the Contractor. If the Contractor wishes additional copies returned, he may submit more than four copies, in which case the extra copies will be returned to the Contractor. Any work done prior to such approval shall be at the Contractor's risk.

3. SUBMITTALS: Submit samples, catalog cuts, etc. for the following material:

A. Plaster Materials: Gypsum plaster and sand shall be delivered to the site in unopened bags and will be checked and approved at the site by the Project Supervisor. One label from the gypsum plaster and the sand shall be submitted to the Project Supervisor.

B. Plaster Sample: Contractor shall prepare on five-foot square section of plaster on one of the walls at the site. The plaster mix used for this sample will be the same as the mix used for the plaster throughout the building. Approval of this plaster sample by the Project Supervisor must be received before the Contractor shall proceed with the plastering of the rooms identified in these specifications.

C. Color Samples: The Contractor shall submit for approval two samples of each paint color specified on an 8" x 10" sheet of stiff paper having a white background. Samples are to be identified with the correct Munsell color number, the brand of paint, the location of where paint will be used and the date. In the event that any paint color samples are rejected by the Project Supervisor, the Contractor will resubmit new paint samples for approval and will be required to repeat submitting samples until approval is given in writing by the Project Supervisor. Colors for the paint samples required will be submitted to the Contractor at the Preconstruction Meeting.

D. Paint: Submit label from paint container or information supplied by the paint manufacturer on each separate paint coating used: alkyd prime and finish coats.

E. Paint Thinner: Submit information on the type of paint thinners required on paint manufacturer's recommendations for each paint coating used.

F. Progress Schedule: As soon as possible after receiving Notice of Award and before any work is begun, submit a Progress Schedule (normally in bar chart form) showing estimated starting and completion dates for each part of the work. This schedule will be subject to review and modification by the Project Supervisor for format, content, and continued updating.

END

1. BARRICADES, DANGER, WARNING AND DETOUR SIGNS: The Contractor shall provide, erect and maintain all necessary barricades, suitable and sufficient warning lights, signals or signs and take all necessary precautions for the protection of the work and safety of the public. All barricades or obstructions shall be illuminated at night and all safety lights shall be kept burning from sunset to sunrise. All barricades and signs used by the Contractor shall conform to the standard design, generally accepted for such purposes and payment for all such services and materials shall be considered as included in the other pay items of the contract. A Contractor's sign, if used, shall be approved by the Project Supervisor.

2. AIR AND WATER POLLUTION CONTROL: The Contractor shall take all necessary, reasonable measures to reduce air and water pollution. Use of spark arresters on powered equipment shall be provided. No burning debris will be permitted. Trash shall be picked up daily and disposed of off the site.

3. FIRE SUPPRESSION

A. Spark Arresters: All gasoline and diesel-powered equipment used for construction at off-highway locations with potential forest or grass fire hazard shall be equipped with spark arresters approved by the U.S. Forest Service. Areas and periods of potential fire hazard will be determined by the Project Supervisor and written notice of such determinations will be given to the Contractor.

B. Burning Permits: No burning of waste construction material, debris, etc., will be permitted without written authorization from the Project Supervisor. This authorization will state the type and quantity of incendiary material, the time and location of burning, and the general burning regulations of the Park.

4. TEMPORARY FACILITIES:

A. Storage: Storage of the plastering materials and paint will be permitted in the basement of the life saving station in an area designated by the Project Supervisor. It will in no way interfere with the daily maintenance work of the site. Contractor shall protect the floor by placing a polyethylene sheet under a large canvas drop cloth. Area to be kept clean and orderly at all times and free from combustible materials and inflammable liquids.

B. Water and Electricity: Electricity is available at the site. Water is not available. The Contractor shall provide cool, potable water for mixing the plaster and for construction personnel.

C. Toilet: A toilet is not available at the site. The nearest public toilet is 1/8 mile away at the Cape Cod National Seashore, Race Point Parking Lot.

D. Telephone: A telephone is not available at the site.

5. FIRE PROTECTION: The Contractor shall keep at least two CO_2 fire extinguishers on the job at all times during the duration of work.

6. PRESERVATION OF EXISTING WORK: Special attention will be given to the historic fabric of the structure. Approval from the Project Supervisor shall be required before any of the historic fabric is altered or removed.

END

1. FINAL INSPECTION: When all work comprised in this Contract is completed or designated portions of the project are completed, the Contractor shall notify the Contracting Officer in writing and request a final inspection. The Contracting Officer shall arrange to make an inspection within ten days of receipt of request.

Should Contracting Officer or his representative determine that the work is not substantially complete, he will immediately notify the Contractor in writing stating reasons. After Contractor completes the work, he shall resubmit in writing stating that the work has been completed and request a final inspection.

2. ACCEPTANCE OF WORK: After all deficiencies have been corrected, a Letter of Final Acceptance will be issued. Acceptance may be given prior to correction of deficiencies which do not preclude the operation and use of the facility; however, final payment will be withheld until all deficiencies are corrected.

3. GUARANTEES: As specified in individual sections.

4. CLEAN-UP: The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by his operations. At the completion of the work, he shall remove all equipment, tools, and surplus materials, and shall completely clean the premises, removing and disposing of all debris and rubbish, and cleaning all stains, spots, marks, dirt, smears, etc. When work premises are turned over to the Government, they shall be thoroughly clean and ready for immediate use.

END

SECTION 09160 PLASTERING

1. GENERAL:

A. Description: The work in this section consists of plastering, with a gypsum and sand mix, the interior rooms of the first floor, the staircase hall of the second floor and the tower room of the third floor. The sum of the areas to be plastered is approximately 2700 sq.ft. Plaster shall be keyed to metal lath that has been installed by the National Park Service. Plaster shall consist of a two-coat application - a scratch coat and a base coat with a sand float finish. Plaster shall be approximately 3/4 inch thick. Horizontal bands of the original plaster, at the top of the walls, approximately 10 inches wide, shall be preserved in most rooms. New plaster shall meet, but not overlap, the original plaster. New plaster shall match the original plaster in thickness and surface qualities.

B. Coordination of Work: The Contractor shall notify the Project Supervisor at least 48 hours prior to starting work.

C. Related Work Specified Elsewhere: Submittals, Section 01300.

D. Plaster Sample: A five-foot square area, designated by the Project supervisor, shall be plastered and approved by the Project Supervisor, before proceeding with the plastering of the areas identified in this specification. This plaster sample shall be made of the same mix and shall have the same surface characteristics as all the plaster to be used throughout the building. The plaster sample shall be maintained for the duration of the project to compare and evaluate the later plaster work.

2. MATERIALS:

A. Plaster:

(1) U.S.G. "Red Top" gypsum plaster (WC), ASTM C28 - gypsum neat plaster, Federal Specification No. SS-P-00402B, Type II.

B. Aggregate: Sand.

(1) ASTM C35.

(2) Sand for float finish (base coat) shall be graded white silica passing a 30 mesh screen.

C. Water: Clean and potable when used, obtained from a main providing drinking water.

D. Composition: The exact composition of the scratch and base coats shall be determined by the contractor and approved by the Project Supervisor.

The ratio of sand to gypsum plaster shall not exceed the maximum recommended proportions for "Use of Aggregates with Gypsum Plasters" established by U.S. Gypsum. Plaster shall be mixed as stiff as possible for application.

3. EXECUTION:

A. Metal lath, grounds, corner beads, etc. shall be installed prior to plastering by the National Park Service. Should the contractor determine that additional supports or guides are necessary, approval from the Project Supervisor must be received before they are installed.

B. All surfaces not to be plastered shall be properly protected while plastering work is being done.

C. No plastering shall be done when the temperatures in the rooms to be plastered drops below 55°F. If the temperature should drop below 55°F, the Project Supervisor should be notified.

D. Rooms to be plastered shall be properly ventilated by keeping the windows open sufficiently to provide adequate air circulation.

E. Relative humidity in the rooms to be plastered shall be approximately 50%. If the relative humidity is significantly below or above 50%, the Project Supervisor shall be notified.

F. Scratch coat: Apply scratch coat to metal lath. Scratch coat should be approximately 1/4 inch thick, measured from the face of the base material.

G. Before scratch coat sets, rake and cross rake.

H. Allow scratch coat to set firm and hard.

I. Apply brown coat to scratch coat. Brown coat should be approximately 1/2 inch thick. Brown coat should be brought out to the grounds and straightened with a rod.

J. Brown coat should be smoothed with a darby.

K. Brown coat should be finished with a wood or cork float to a rough aggregate surface that matches the surface characteristics of the original plaster.

L. Plaster shall be allowed to cure thoroughly before final inspection. It is estimated that curing will take 30 days.

4. COMPLETION:

A. Condition of Finished Work: Finished work shall match the existing plaster in the life saving station. New plaster shall be of the same

thickness and possess the same surface qualities. Where new plaster joins sections of the existing plaster, surfaces should be flush and the surface texture of the existing plaster matched as closely as possible. Plaster work shall be considered complete when the moisture content of the plaster measures 20% or below, on a standard moisture meter.

B. Condition of Site: Upon completion of the plastering, the contractor shall remove from the building and site all materials and debris created by him and leave the site in a clean condition and ready for painting.

C. Damages: Damages resulting from plastering activity shall be replaced by the contractor at his expense under the direction of the Project Supervisor.

D. Inspection: After completion of the painting, the contractor shall notify the project supervisor and the job will be inspected for final approval before final payment is made.

END

SECTION 09902 HISTORICAL PAINTING

1. GENERAL

A. Description: The work in this section shall include the painting of the interior rooms of the first floor, the staircase hall of the second floor, the tower room of the third floor, and window sash and frames in the boat room; and all related items necessary to produce a complete and satisfactory job as indicated in these specifications. The rooms identified above shall be painted according to a specific color scheme. Four paint colors shall be used in each room as follows: the ceiling, a cornice band, the plaster wall, and the wood wainscot. Color schemes will differ between rooms.

B. Coordination of Work: The Contractor shall notify the Project Supervisor at least 48 hours in advance prior to starting work.

C. Related Work Specified Elsewhere: Submittals, Section 01300.

D. Color Samples: Color chips for paint colors will be furnished to the Contractor by the National Park Service, except where the Contractor shall match the existing colors. The approved color shall be that which is applied last and is the finish color. Final color selection will be made by the Project Supervisor before final painting at no increase in the contract price.

E. Touch-Up Paint: At conclusion of work, the Contractor shall provide the Cape Cod National Seashore with one quart of each of the finish color paints used in sealed cans clearly marked as to color, date and application.

2. MATERIALS

A. General: The term "paint" as used herein includes emulsions, latex, kalsomine, enamels, oil paints, sealers, stains, varnishes and similar coatings.

All paints shall be supplied by the Contractor and be of recent manufacture, readily stirred up for application and suitable for application without dilution unless specifically directed on the label. When so directed, thinning is to be minimum specified. All materials shall be delivered in the original unopened containers, shall be of the highest quality and where so specified shall conform to applicable Federal Specifications. Furnish affidavits from manufacturers, if requested by the Project Supervisor, certifying that materials delivered to the project conform to the requirements of these specifications. Paint containing an alcohol base such as "Park" Shellac or "Bin" will not be permitted on the job.

B. Products:

(1) Wood Trim Primer: Interior paint, oil alkyd such as, or equal to, Benjamin Moore "Moore's Alkyd Enamel Underbody".

(2) Plaster Primer: Interior paint, oil alkyd such as, or equal to, Benjamin Moore "Moore's Alkyd Primer Sealer".

(3) Wood Trim and Plaster Finish: Interior paint, oil alkyd such as, or equal to, Benjamin Moore "Moore's Alkyd Dulamel".

(4) Caulking: Silicone base material, tinted to match color of paint. Similar to D.A.P. or General Electric products.

(5) Thinners: As recommended by the paint manufacturer.

(6) Paint Brushes: Pure bristle for paint application.

3. EXECUTION

A. Before painting begins, floors and all other areas not to be painted shall be covered.

B. Surface Preparation: Perform preparation and cleaning procedures in strict accordance with the paint manufacturer's instructions and as herein specified for each particular substrate condition.

(1) Fastenings: Drive all loose nails in tight, set loose screws and other fastening devices securely in place.

(2) Hardware: Leave all historic hardware in place and carefully paint around it. Hardware that will not be damaged by removing will be permitted to be removed. Tag each hardware item and return to its original location after work is completed.

(3) Removal of Loose Paint: Remove all loose and alligatored paint by scraping with hand tools; no electric sanders or brushes will be used. Use of a liquid paint remover will be permitted if approval is given by the Project Supervisor.

(4) Sanding:

(a) Wood: All wood surfaces shall be hand-sanded prior to applying paint in order to remove any surface gloss that would hinder adhesion. Feather-edge all painted areas that are chipped.

(b) Mildew Removal: Areas where mildew has caused discoloration shall be cleaned with the following solution: 2/3 cup trisodiumphosphate; 1/3 cup detergent; 1 quart household bleach; and sufficient warm water to make a gallon of solution.

C. Materials Preparation:

(1) Mix and prepare painting materials in accordance with manufacturer's directions or those specified herein. Store materials in tightly covered containers.

(2) Stir materials, as recommended by the manufacturer's directions before application to produce a mixture of uniform density and stir as required during application of the materials. Do not stir surface film into the materials. Remove the film and, if necessary, strain the material before using.

D. Application:

(1) Apply paint in accordance with the manufacturer's directions. Use applicators and techniques best suited for the type of material being applied and as approved by the Project Supervisor.

(2) Workmanship: All work shall be performed by skilled mechanics in a workmanlike manner.

(3) Coating Application: All coatings to be smoothly and evenly spread on or flowed on and shall be free from runs, sags, crawling or other defects.

(a) No succeeding coats shall be applied until the preceding coat is thoroughly dry. Finishes on smooth surfaces shall be carefully sanded between coats. Where coverage is incomplete or not uniform, additional coats shall be applied. Allow at least 24 hours between coats.

(b) All paint shall be applied by brush; use of rollers or sprays will not be permitted. Brushes will be pure bristle only, no nylon bristle shall be used with oil paint.

(c) All brush strokes shall conform in character and direction to those of the previous painting, unless otherwise directed by the Project Supervisor.

(4) Caulking: Putty, caulk, or spackle as required shall be applied after surfaces are primed and primer is dry.

(5) Surface Condition: All surfaces to be painted shall be clean and in proper condition to accept and assure the adhesion and proper functioning of the coating specified. This cleaning includes removal of all dust and debris in adjacent corners and surfaces that could interfere with the appearance and/or durability of the finished product.

(6) Generally, two coats of paint are to be applied.

(a) Apply one base coat of long alkyd primer paint to all wood and plaster surfaces.

(b) Apply one coat of long alkyd finish paint to all wood and plaster surfaces. Apply additional coats of finish paint when undercoats, stains, or other conditions show through the final coat of paint, until the paint film is of uniform finish, color and appearance.

(7) Finish doors on side edges the same as the exterior faces. Do not paint the tops and bottoms of the doors.

(8) All windows to be left free, where applicable, in an operable condition, during and after application of paint.

4. PAINTING SCHEDULE: The Contractor shall be provided with drawings of the rooms, colored to identify the colors that the different parts of the rooms are to be painted. Detailed verbal descriptions of the paint colors that the different parts of the rooms are to be painted and the Munsell color notations for these colors will be submitted to the Contractor at the time of the preconstruction conference.

5. COMPLETION

A. Condition of Finished Work:

(1) Paint: Finished work shall be free of all dust, debris, or damage resulting from any activity under this specification. All moving parts such as doors, windows, shutters and blinds, hardware, etc., shall be left in proper working order; meaning without scraping, binding, etc. Window glass shall be free of all paint spills, streaks, runs, etc., and shall be free of streaks from putty or caulking; shall be clean.

B. Condition of Site: Upon completion of project, the Contractor shall remove from the building and site all materials and debris created by him and leave the site in a clean and finished condition acceptable to the Project Supervisor.

C. Signs: Provide "Wet Paint" signs as required to protect newly painted surfaces. Remove temporary protective wrappings after completion of painting operations.

D. Damages: Damages resulting from painting activity shall be replaced by the Contractor at his expense under the direction of the Project Supervisor.

E. Inspection: After completion of the painting, the Contractor shall notify the Project Supervisor and the job will be inspected for final approval before final payment is made.

END

APPENDIX M.

Specifications for Installation of an Intrusion-Alarm System for Old Harbor Life-Saving Station, August 1978

1. DESCRIPTION: The work of this project consists of the supply and installation of an intrusion system installed in the Old Harbor Life Saving Station at the Province Lands Area of the Cape Cod National Seashore.

2. LOCATION: Race Point Beach (near bathhouse)

3. EXAMINATION OF SITE: The Contractor shall be held to have examined the work site and to have satisfied himself as to the conditions under which he will be pledged to operate or that in any manner will affect the work of this Contract. The job site may be inspected only between 8:00 a.m. and 4:00 p.m. on non-holiday weekdays, and advance arrangements with the Park Superintendent are suggested. (Telephone 617/349/3785)

4. PERMITS: As required under National Building Code.

5. ACCESS: From Route 6 on Race Point Road to parking lot, then over beach (approx. 60-70 yards) to building.

   A. Parking: Contractor's employees' motor vehicles will be allowed to park in the Race Point Beach visitor parking lot. None of the contractor's or contractor employees' vehicles will at any time block free access to any area or building in case of fire or emergency.

   B. Hauling Restrictions: To comply with all legal road restrictions on public roads. Additional restrictions may be imposed by the Project Supervisor. Special permits will not relieve the Contractor of liability for damage which may result from the moving of equipment.

6. WORKING HOURS: Work shall not be performed on weekends or holidays nor before 7:30 a.m. nor after 4:30 p.m., unless prior permission is received and arrangements with the Project Supervisor are made.

7. PRE-CONSTRUCTION CONFERENCE: Before the work begins, the Contracting Officer will arrange for a meeting with the Contractor to discuss the work in general, including administrative matters, National Park Service policy and regulations, safety and accident prevention, questions the Contractor may have, and points that need to be resolved before the work commences. The Contractor's job superintendent is requested to attend this conference. An informal meeting will be conducted at the site on the first day of work for the orientation of Contractor's forces.

8. COORDINATION OF WORK: The Contractor shall coordinate his work with the Project Supervisor to enable the historic site to be effectively administered. Notification prior to starting work shall be given the Project Supervisor.

9. ACCIDENT REPORTS: All accidents, if any, must be reported immediately to the Project Supervisor or the Park Superintendent. All accidents are to be recorded on Accident Report form, DI-1-34.

10. EQUIPMENT ERECTION: All scaffolds, ladders, hoist and equipment shall be safely erected and used to protect workmem, walls, and park visitors. The Contractor shall comply with the Department of Labor, Occupational Safety and Health Administration (OSHA) regulations.

11. SMOKING REGULATIONS: Smoking will not be permitted in the buildings but only in an area designated by the Project Supervisor. It shall be the Contractor's responsibility to keep this area clean at all times.

12. PROTECTION OF EXISTING UTILITIES, STRUCTURES AND PLANTINGS: The Contractor shall take all precautions necessary to protect the existing historic structure and the surrounding landscape features and plants at all times; all damaged lawn areas repaired and left in a condition similar to that found before work commenced.

13. ARTIFACTS: Any and all artifacts or items with historic significance that are uncovered or removed shall become the property of the Government. The determination shall be made by the Project Supervisor as to the disposition of these objects.

14. REFERENCE STANDARDS: The various sections of the specifications list standards, specifications, codes, etc., that govern the quality of materials and workmanship required. The Contractor shall have a copy of each of the reference standards available for use. "Latest edition" is the edition in effect 30 days prior to the date of advertisement.

15. COMMENCEMENT OF WORK: Work shall begin within ten calendar days after receipt of Notice to Proceed but not before September 17, 1979.

16. COMPLETION: All work shall be completed to the satisfaction of the Project Supervisor in accordance with the specifications within 30 calendar days from date of receipt of Notice to Proceed with the exception of installation of radio transmitter, which shall be completed within 70 calendar days from date of receipt of Notice to Proceed.

END

1. PROCEDURE FOR SUBMISSION: The Contractor shall submit to the Contracting Officer or his representative, for review and approval, four facsimilies of samples, catalog cuts, etc., of all submittals identified in this section, 7 days prior to Contractor's needs. The listing of submittals given below is intended to be as complete as possible; however, the Contracting Officer or his representative reserves the right to request additional submittals. No materials requiring the Contracting Officer's or his representative's approval shall be delivered to the site until approval has been given. Such approval shall not relieve the Contractor from his responsibility for any errors or omissions in complying with the requirements of this contract.

2. CONTRACTING OFFICER'S APPROVAL: The Contracting Officer or his representative will indicate his approval or disapproval of the submittals in writing and his reasons therefor. One copy of the approved submittals will be returned to the Contractor. If the Contractor wishes additional copies returned, he may submit more than four copies, in which case the extra copies will be returned to the Contractor. Any work done prior to such approval shall be at the Contractor's risk.

3. SUBMITTALS: Submit samples, catalog cuts, etc., for the following material.

   A. Complete technical literature for system including a description of all components and name of manufacturer.

1. BARRICADES, DANGER, WARNING AND DETOUR SIGNS: The Contractor shall provide, erect, and maintain all necessary barricades, suitable and sufficient warning lights, signals or signs and take all necessary precautions for the protection of the work and safety of the public. All barricades or obstructions shall be illuminated at night and all safety lights shall be kept burning from sunset to sunrise. All barricades and signs used by the Contractor shall conform to the standard design, generally accepted for such purposes and payment for all such services and materials shall be considered as included in the other pay items of the contract. A Contractor's sign, if used, shall be approved by the Project Supervisor.

2. AIR AND WATER POLLUTION CONTROL: The Contractor shall take all necessary, reasonable measures to reduce air and water pollution. Use of spark arresters on powered equipment shall be provided. No burning debris will be permitted. Trash shall be picked up daily and disposed of off the site.

3. FIRE SUPPRESSION:

   A. Spark Arresters: All gasoline and diesel-powered equipment used for construction at off-highway locations with potential forest or grass fire hazard shall be equipped with spark arresters approved by the U.S. Forest Service. Areas and periods of potential fire hazard will be determined by the Project Supervisor and written notice of such determinations will be given to the Contractor.

   B. Burning Permits: No burning of waste construction material, debris, etc., will be permitted without written authorization from the Project Supervisor. This authorization will state the type or quantity of incendiary material, the time and location of burning, and the general burning regulations of the Park.

4. TEMPORARY FACILITIES:

   A. Storage: Storage of equipment will be permitted in an area to be designated by the Project Supervisor. It will in no way interfere with the daily maintenance work of the site. Contractor shall protect the floor by placing a polyethylene sheet under a large canvas drop cloth. Area to be kept clean and orderly at all times and free from combustible materials and inflammable liquids.

   B. Water and Electricity: Not available at the site, but available at bathhouse.

   C. Toilet: Available near location of work at bathhouse.

   D. Telephone: Pay telephone available at bathhouse.

5. FIRE PROTECTION: The Contractor shall keep at least two CO_2 fire extinguishers on the job at all times during the duration of work.

6. PRESERVATION OF EXISTING WORK: Special attention will be given to the historic fabric of the structure. Obtain approval from the Project Supervisor before any removal or cutting of the fabric is required.

END

SECTION 01700 PROJECT CLOSEOUT

1. FINAL INSPECTION: When all work comprised in this Contract is completed or designated portions of the portions of the project are completed, the Contractor shall notify the Contracting Officer in writing and request a final inspection. The Contracting Officer shall arrange to make an inspection within ten days of receipt of request.

   Should the Contracting Officer or his representative determine that the work is not substantially complete, he will immediately notify the Contractor in writing, stating reasons. After Contractor completes the work, he shall resubmit in writing stating that the work has been completed and request a final inspection.

2. ACCEPTANCE OF WORK: After all deficiencies have been corrected, a Letter of Final Acceptance will be issued. Acceptance may be given prior to correction of deficiencies which do not preclude the operation and use of the facility; however, final payment will be withheld until all deficiencies are corrected.

3. GUARANTEES: As specified in individual sections.

4. CLEANUP: The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by his operations. At the completion of the work, he shall remove all equipment, tools, and surplus materials, and shall completely clean the premises, removing and disposing of all debris and rubbish, and cleaning all stains, spots, marks, dirt, smears, etc. When work premises are turned over to the Government, they shall be thoroughly clean and ready for immediate use.

END

1. WORK TO BE PERFORMED:

A. Provide all labor, materials, plant, equipment, transportation, appurtenances, and services necessary to properly complete and test an intrusion system for one building located within the Cape Cod National Seashore of the National Park Service. System shall alarm when door(s) is opened.

B. The items of work in this SECTION include, but are not limited to:

1. The complete installation of all intrusion sensing devices including wiring of such devices to the panel;

2. The installation of all transmitting devices including coordination of telephone company hookup;

3. One (1) year guarantee on system with price for a service and maintenance agreement at end of guarantee

2. RELATED WORK

The following related work is not included in this contract:

1. Painting of electric conduit and boxes, where required, shall be by others.

2. Telephone company systems including wire, cable, equipment and instruments will be furnished and installed by the telephone company. Contacting the telephone company and the coordination of the telephone company work shall be the responsibility of the contractor.

3. TESTS

Upon complete installation of system, the Contractor shall test the system to determine that it is functioning properly, shall then train two persons designated by the Contracting Officer's designated representative in the operation of the system, and shall submit copies of all instruction manuals for the operation of all system components.

4. MATERIALS AND WORKMANSHIP

A. All materials and workmanship shall be the best of their respective kinds and in full accord with the best current practices. All material installed under this contract shall be new.

B. All equipment described herein, unless otherwise specified, shall be compatible.

C. The Contractor shall assume full responsibility for receiving, storage and handling of all material and equipment under this subcontract. Any damaged material or equipment shall be replaced with new if so directed by the Contracting Officer's designated representative.

5. GUARANTEE:

A. The total system shall be guaranteed for a period of one year from the acceptance by the Government against defective materials, design and workmanship, and any costs to make good, including cutting and patching, incurred during the period of the guarantee, shall be born by the Contractor.

B. In the event of any failure of the system during the guarantee period, the defective segment shall be replaced promptly with new materials or equipment upon notice by the Contracting Officer's designated representative.

C. At the completion of the work, furnish Contracting Officer's designated representative with warranties of all equipment and systems.

D. At the completion of the work, furnish Contracting Officer's designated representative or his appointee in the arrangement, location and operation of the system including a drawing showing the location of equipment.

6. CLEANUP:

A. All materials and equipment shall be protected until the work is completed. All exposed surfaces shall be cleaned free of dust and marks at the completion of the job. The interiors of all boxes and cabinets shall be left clean.

B. All debris resulting from the work under this contract shall be removed at the instruction of the project supervisor. All spaces shall be left clean at the end of each day.

7. SYSTEM AND MATERIALS:

The intrusion systems shall consist of magnetic contacts on all exterior and interior doors. Wiring runs shall be coordinated with the Project Supervisor. Building shall have a panel with a twenty (20) second entrance and exit time delay, and the control switch shall be

located on the building's interior in a concealed location to be determined by the Project Supervisor, near the rear entrance door. Alarm conditions shall activate a siren mounted on the interior of the building. Transmission of alarm shall be by dialer and radio and shall be compatible with the existing park system.

The radio transmission system shall consist of one 10-watt transmitter set at a frequency of 172.525 T. mega hertz, battery operated with 110 volt battery automatic recharging capability. Radio message shall be encoded separately as part of the existing park system for this building with a tone encoding device having a fifteen (15) second cutout time. Encoding device shall be compatible with existing park system. Radio shall be equipped with a unity gain antenna, matched to the radio and frequency, and mounted in a second floor space of the building.

Dialer shall be two (2) track, with a five (5) telephone number capability on each track, automatic battery backup, with a line seizure module for each line. The dialer shall be connected to the one incoming line for that building.

The equipment shall be equal to that manufactured by Alarm Device Manufacturing Company (ADEMCO) of Syosset, L.I., New York, unless otherwise specified. The equipment shall consist of:

1 Radio with antenna--TT-400 as manufactured by Motorola or equal

approx. 10 magnetic door contacts (concealed in door stile so as not to be visible)

1 Dialer with line seizure modules

1 siren--No. 65-6, 6 volt with power drive module as required, as manufactured by ADEMCO or equal

1 tone alert encoder as manufactured by Plectron of Lincoln, Nebraska, or equal

1 control panel with control switch and 20-second entrance/exit delay, capable of controlling intrusion circuits, and activating a siren, radio transmitter and dialer.

1 power pack, No. 83, as manufactured by ADEMCO or equal.

1 6-volt Gel Cell rechargeable unit

All equipment shall be fully guaranteed, and this guarantee shall become effective from the day of installation, and this guarantee shall be in effect for one year following that date. When in normal operation, if the equipment is found to be below manufacturer's specification, repair and replacement of equipment shall be provided at no additional cost. Repairs shall be started within twenty-four hours and completed without delay.

END

APPENDIX N.

Finishes Analysis

EXTERIOR FINISHES

A. Historical Background

A detailed paint analysis was not performed for the Old Harbor Life-Saving Station, primarily because the original specifications contain a great deal of information about original paint colors used.

These specifications state that "a French gray" paint was to be used on all "cornices, trimmings, moldings, casings, piazza and porch posts, railings, steps, and ceilings of piazza and porch." A "blue black" was to be used on the exterior of the sash. A "light Colonial yellow" was to be used on the "remainder of outside work, including doors." One exception to this was the doors of the Boat Room, which were to be painted "both sides" with the "light olive color" used so extensively on the interior of the lifesaving station.

B. Restoration Work

During the first phase of the restoration work, the Project Supervisor performed paint analysis in an effort to provide commercially available equivalents to the historic colors. The records indicate that the "French gray" was matched to the Munsell color system no. PB 7/1, and to California Paint #44-10M. The "blue black" was matched to Dutch Boy "Gibralter Black," #180/c. No record exists of a commercial match for the "light Colonial yellow." However, such a color was applied to the two reproduction exterior doors, D101 and D113; it remains in place today. The "light olive color" was not matched at that time, apparently because the doors on which it would have been used were not being restored then.

C. Conclusions

The California and Dutch Boy paints should continue in use at Old Harbor. The light yellow on the two reproduction doors should be color-matched in situ before these doors--damaged by vandals--are repaired or replaced. This yellow color should be used on the three exterior doors of the main building, and probably on the latticework beneath the porches. The light-olive color matched during the interior paint analysis to Munsell no. 5Y 5/4, and to Benjamin Moore GB-67, should be used on the exterior of the Boat Room doors.

D. Summary of Recommended Finishes

Element	Color
cornices and fascia boards moldings doorway and window architraves posts, balustrades, steps, and ceilings of front and rear porches	gray California #44-10M
sash	blue black Dutch Boy #180/c
doors of main building lattice beneath porches	light yellow to be determined
Boat Room doors	light olive Benjamin Moore GB-67

INTERIOR FINISHES

A. Objective

The purpose of this report was to determine, by analysis of paint samples and historical documentation, the original paint colors and paint types used at the Old Harbor Life-Saving Station. This information was needed for the ca.-1980 interior painting contract. Although only the rooms on the first floor and the stair halls on all four levels were to be painted, this study also ascertained the original paint colors for the other rooms in the station.

Strictly speaking, the later paint schemes used at Old Harbor were not a concern of this study. However, since these could easily be determined, and since they could prove helpful in dating alterations made to the lifesaving station, they also were recorded.

B. Procedure

Sampling

A total of 124 paint samples were taken from the interior rooms of the lifesaving station. The approximate locations of these samples are recorded in Section C.

Early in the process of paint sampling, it was discovered, with the use of a 10x hand lens, that all of the rooms originally displayed a four-color paint scheme. This paint scheme involved a different color for the ceiling, cornice band, plaster wall surfaces, and woodwork of each room. Therefore, samples were taken from all four areas in every room. One additional sample was taken from each room, to help determine the width of the painted cornice band.

Paint samples were removed with an X-acto knife and placed in coin envelopes. Each sample was assigned an identification number based on the Integrated Research Organization System (IROS) used by the Cultural Resources Center. In this system, a typical sample identification number will include a four-letter park code, a one- or two-digit structure code, a letter denoting the type of sample, and a three-digit number unique to that sample. For the Old Harbor Life-Saving Station, the park code is CACO, while the structure code is 89. The letter "P" denotes a paint sample; the letter "M" identifies a mortar sample; and so on. Thus, the sample "CACO 89 P001" would be the first paint sample taken at the lifesaving station. Since all of the samples cited in this report are from the station, the number of the samples have been

abbreviated to include only the type and number of sample (i.e., P001).

Field Observations and Notes

Measurements were taken of the width of the cornice bands, which differ from room to room. These measurements were recorded in a field notebook. Sketches were drawn for typical paint schemes of rooms with a wainscotted dado, and of rooms without a dado, but only a chair rail (see Section J).

Laboratory Analysis

Preparation of Samples. The paint samples were examined with a 10x-70x binocular zoom microscope. Individual samples were fractured to expose a fresh surface. Representative samples from each of the rooms were mounted in wax-filled petri dishes.

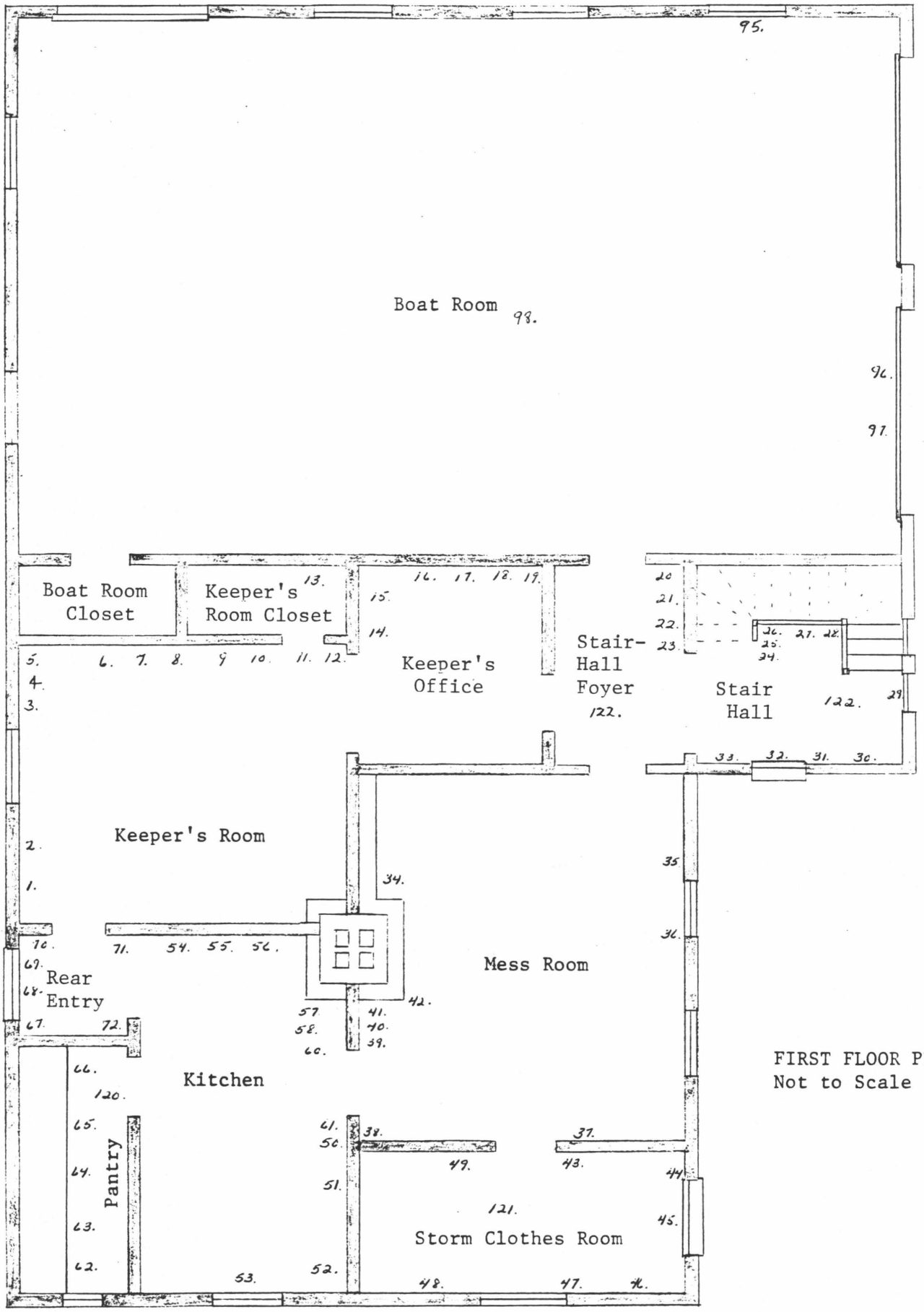
Recording of Chromochronologies. The paint layers of the representative samples were recorded on standardized work sheets (see Section E).

Performance of Chemical Analysis. Two basic chemicals were used to identify the types of paint found in the samples: sodium sulfide, to identify lead-based paints, and methylene chloride, to identify latex paints. Samples were spot-tested with these chemicals, and the resultant color and physical changes were noted.

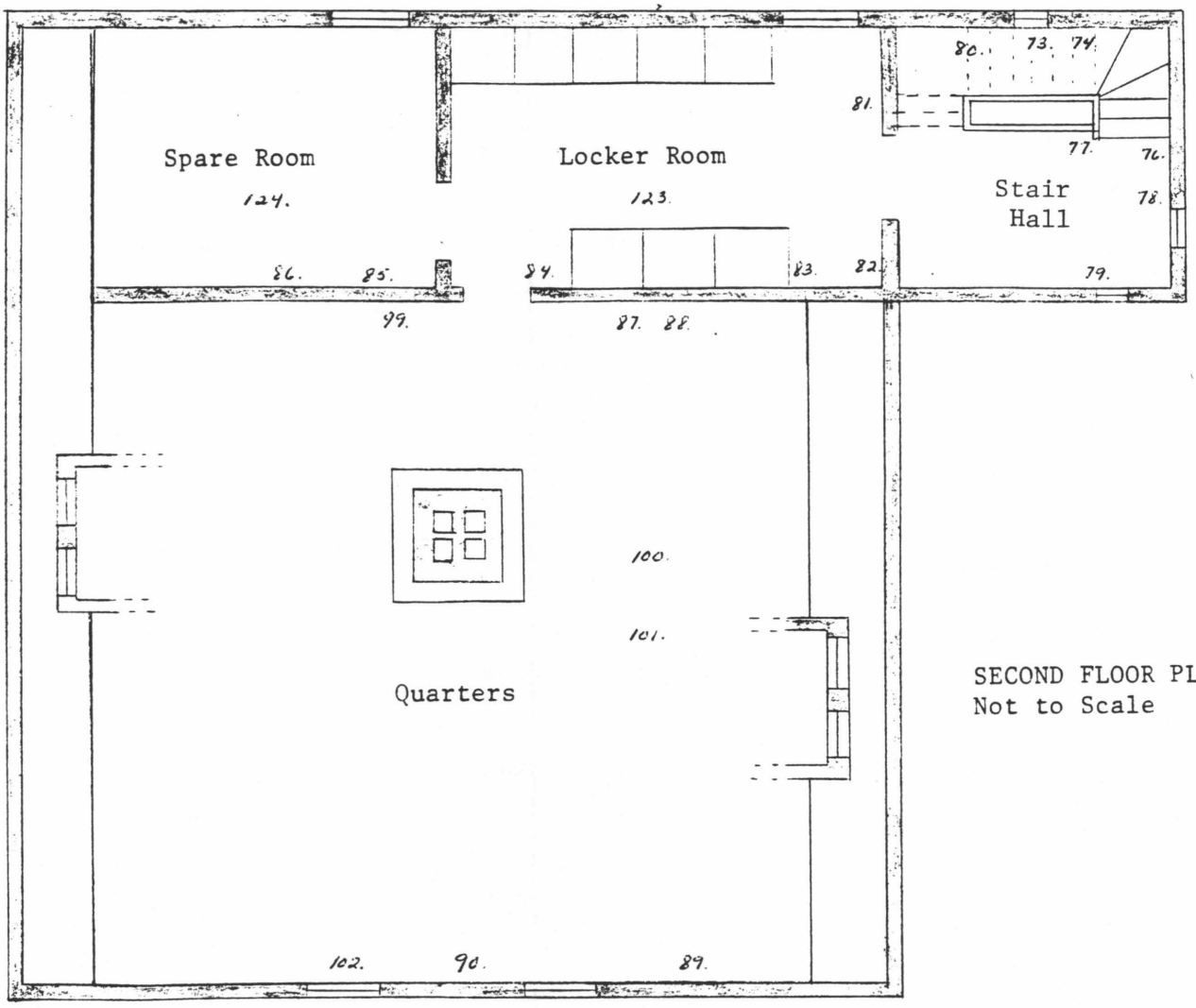
Photography. Paint samples were photographed with a Nikon camera mounted on the microscope, using Kodak Ektachrome 160 Tungsten ET-135 film. Color slides and color prints were made of the paint samples.

Color Matching. Paint colors were matched with the microscope, using a blue filter, and quartz halogen lamps for illumination, to colors in the Munsell color notation system. When possible, the colors were also matched to commercially available Benjamin Moore or California paint colors. The spectrophotometric curves of the Munsell colors were plotted on trichromatic computing forms, using a single-beam spectrophotommeter. From these curves, the tristimulus values for the colors were calculated.

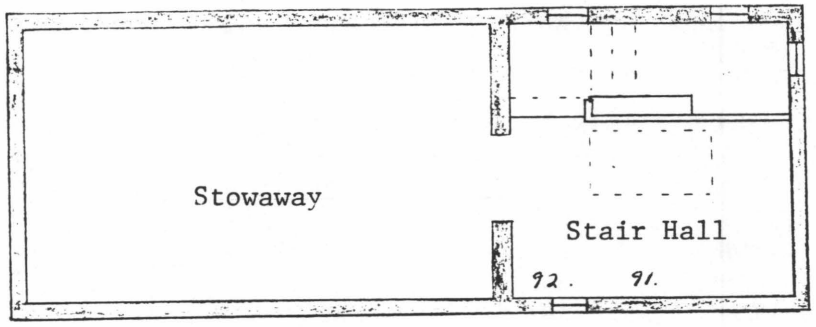
C. Locations of Paint Samples



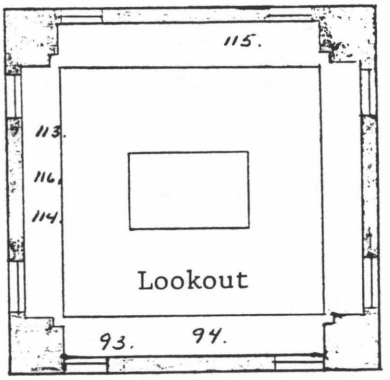
FIRST FLOOR PLAN
Not to Scale



SECOND FLOOR PLAN
Not to Scale



THIRD FLOOR TOWER



FOURTH FLOOR TOWER

D. Chromochronologies of Representative Samples

Mess Room

Paint Layer	Ceiling (P040)	Cornice Band (P034)	Walls (P038)	Wooden Trim (P037)
1st	light gray	orange	tan	olive
2nd	light gray	light yellow	light yellow	olive
3rd	[plastered]	light blue	light blue	light blue
4th		salmon	salmon	white
5th		salmon	salmon	white
6th		pink	pink	white
7th		salmon	salmon	light blue
8th		salmon	salmon	white
9th		white	white	

Storm Clothes Room

Paint Layer	Ceiling (P021)	Cornice Band (P048)	Walls (P046)	Wooden Trim (P047)
1st	light gray	maroon	yellow	olive
2nd	light gray	light yellow	light yellow	olive
3rd	[plastered]	salmon	salmon	light blue
4th		pink	pink	light blue
5th		salmon	salmon	white
6th		salmon	salmon	white
7th		salmon	salmon	white

Kitchen

Paint Layer	Ceiling (P060)	Cornice Band (P050)	Walls (P051)	Wooden Trim (P054)
1st	light gray	blue-green	light brown	olive
2nd	olive	light yellow	light yellow	olive
3rd	[plastered]	off-white	off-white	light blue
4th		gray	light gray	light blue
5th		salmon	salmon	light blue
6th		salmon	salmon	white
7th		salmon	salmon	white
8th		salmon	salmon	white
9th		pink	pink	white
10th		pink	pink	white
11th		salmon	salmon	white
12th		salmon	salmon	white

Kitchen (con't.)

Paint Layer	Ceiling (P060)	Cornice Band (P050)	Walls (P051)	Wooden Trim (P054)
13th		salmon	salmon	white
14th		salmon	salmon	white
15th		light yellow	light yellow	light yellow
16th		light blue	light blue	light blue

Pantry

Paint Layer	Ceiling (P120)	Cornice Band (P063)	Walls (P064)	Wooden Trim (P065)
1st	light olive	orange	light brown	olive
2nd	olive	light yellow	light yellow	olive
3rd	[plastered]	cream	cream	light blue
4th		off-white	off-white	light blue
5th		salmon	salmon	white
6th		salmon	salmon	white
7th		salmon	salmon	white
8th		pink	pink	[appears to
9th		white	white	be missing
10th			white	some white
11th		[probably not	white	layers]
12th		a complete	white	
13th		sample]	light blue	light blue

Rear Entry

Paint Layer	Ceiling (P072)	Cornice Band (P067)	Walls (P068)	Wooden Trim (P069)
1st	light gray	orange	tan	olive
2nd	olive	light yellow	light yellow	olive
3rd	[plastered]	light yellow	light yellow	light blue
4th		off-white	off-white	light blue
5th		salmon	salmon	white
6th		salmon	salmon	white
7th		pink	pink	cream
8th		pink	pink	[appears to
9th		salmon	salmon	be missing
10th		salmon	salmon	some white
11th		salmon	salmon	layers]
12th		light yellow	light yellow	light blue
13th		light blue	light blue	cream

Keeper's Room

Paint Layer	Ceiling (P010)	Cornice Band (P005)	Walls (P006)	Wooden Trim (P003)
1st	light gray	maroon	lime	olive
2nd	light gray	light yellow	light yellow	olive
3rd	light yellow	white	white	light blue
4th	white	salmon	salmon	white
5th	white	pink	pink	light blue
6th	salmon	salmon	salmon	
7th	[never	salmon	salmon	
8th	plastered]	white	white	

Keeper's Office

Paint Layer	Ceiling (P015)	Cornice Band (P014)	Walls (P016)	Wooden Trim (P019)
1st	light gray	maroon	lime	olive
2nd	light yellow	light yellow	light yellow	olive
3rd	white	gray-brown	brown	light blue
4th	salmon	salmon	salmon	light blue
5th			pink	white
6th			salmon	light blue
7th			salmon	
8th			white	

Stair-Hall Foyer

Paint Layer	Ceiling (P122)	Cornice Band (P022)	Walls (P021)	Wooden Trim (P023)
1st	light gray	deep purple	tan	olive
2nd	light gray	light yellow	light yellow	olive
3rd	light blue	white	white	light blue
4th	salmon	salmon	salmon	white
5th	salmon	salmon	salmon	white
6th	salmon	salmon	salmon	white
7th	salmon	pink	pink	white
8th	salmon	salmon	salmon	white
9th	[never	salmon	salmon	
10th	plastered]	salmon	salmon	

First-Floor Stair Hall

Paint Layers	Ceiling (P030)	Cornice Band (P074)	Walls (P026)	Wooden Trim (P029)
1st	light gray	deep purple	tan	olive
2nd	light gray	deep purple	tan	olive
3rd	white	light yellow	light yellow	light blue
4th	light blue	white	white	white
5th	salmon	gray	salmon	white
6th	salmon	salmon	salmon	white
7th	salmon	salmon	salmon	white
8th	pink	pink	pink	
9th	salmon	salmon	salmon	
10th	[never	salmon	salmon	
11th	plastered]	white	white	

Quarters

Paint Layer	Ceiling (P101)	Cornice Band (P087)	Walls (P088)	Wooden Trim (P113)
1st	olive	blue	lime	olive
2nd	olive	light yellow	light yellow	olive
3rd	[plastered]		off-white	light blue
4th			salmon	white
5th			pink	white
6th			salmon	white
7th			salmon	white
8th			white	

Spare Room

Paint Layer	Ceiling (P124)	Cornice Band (P085)	Walls (P086)	Wooden Trim (no sample)
1st	olive	blue	yellow	olive
2nd	light blue	light yellow	light yellow	light blue
3rd			salmon	
4th			white	

Locker Room

Paint Layer	Ceiling (P123)	Cornice Band (P081)	Walls (P084)	Wooden Trim (P082)
1st	olive	blue	tan	olive
2nd	light blue	light yellow	light yellow	olive
3rd		off-white	off-white	light blue
4th		pink	pink	white
5th		salmon	salmon	white
6th		salmon	salmon	white

Second- and Third-Floor Stair Halls

Paint Layer	Ceiling (P075)	Cornice Band (P074)	Walls (P077)	Wooden Trim (P079)
1st	olive	deep purple	tan	olive
2nd	olive	deep purple	tan	olive
3rd	light blue	light yellow	light yellow	light blue
4th		off-white	off-white	light blue
5th		salmon	salmon	white
6th		salmon	salmon	white
7th		pink	pink	white
8th		salmon	salmon	[appears to
9th		salmon	salmon	be missing
10th		salmon		some layers]

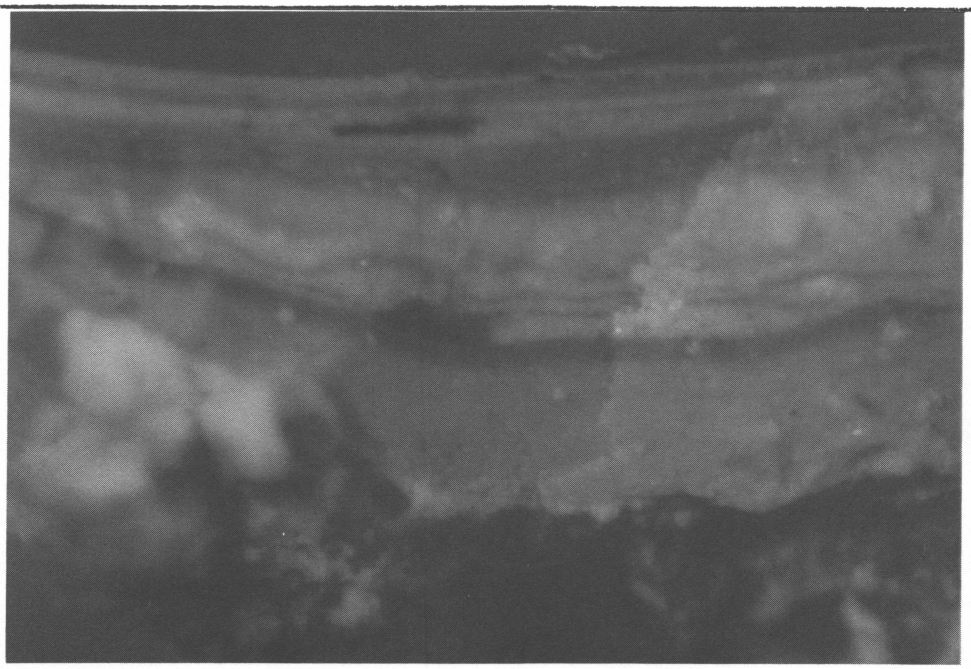
Lookout

Paint Layer	Ceiling (P095)	Cornice Band (P093)	Walls no sample	Wooden Trim (P094)
1st	olive	olive	[wooden	olive
2nd	olive	olive	paneling	olive
3rd	light blue	light blue	same as	light blue
4th		light blue	wooden	light blue
5th		dark pink	trim]	dark pink
6th		salmon		salmon
7th		pink		pink
8th		salmon		salmon
9th		salmon		white

E. Work Sheets for Representative Samples

SITE Cape Cod National Seashore
South Wellfleet, MA

LOCATION Old Harbor L.S.S.
DATE July, 1979



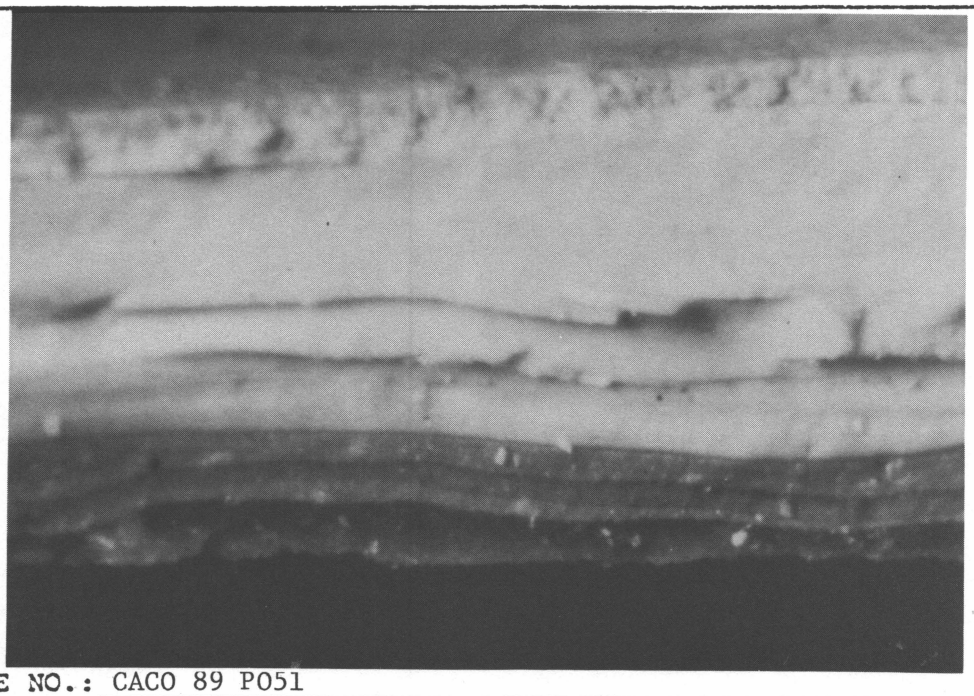
SAMPLE NO.: CACO 89 P048
LOCATION: Plaster, area where cornice/body paint meet
Storm Clothes Room
APPROXIMATE NUMBER OF LAYERS: 10
SUBSTRATE: Plaster

CHROMOCHRONOLOGY:
- No reaction to chemical testing
* Reaction to Na_2S / Reaction to HCL
x Turns brown or black slowly with Na_2S

1.	yellow x	21.	
2.	off-white *	22.	
3.	tan *	23.	
4.	light yellow *	24.	
5.	salmon *	25.	
6.	pink x	26.	
7.	pink x	27.	
8.	salmon *	28.	
9.	salmon *	29.	
10.	salmon *	30.	
11.		31.	
12.		32.	
13.		33.	
14.		34.	
15.		35.	
16.		36.	
17.		37.	
18.		38.	
19.		39.	
20.		40.	

SITE Cape Cod National Seashore
South Wellfleet, MA

LOCATION Old Harbor L.S.S.
DATE July, 1979



SAMPLE NO.: CACO 89 P051
LOCATION: Kitchen wainscoting, east wall

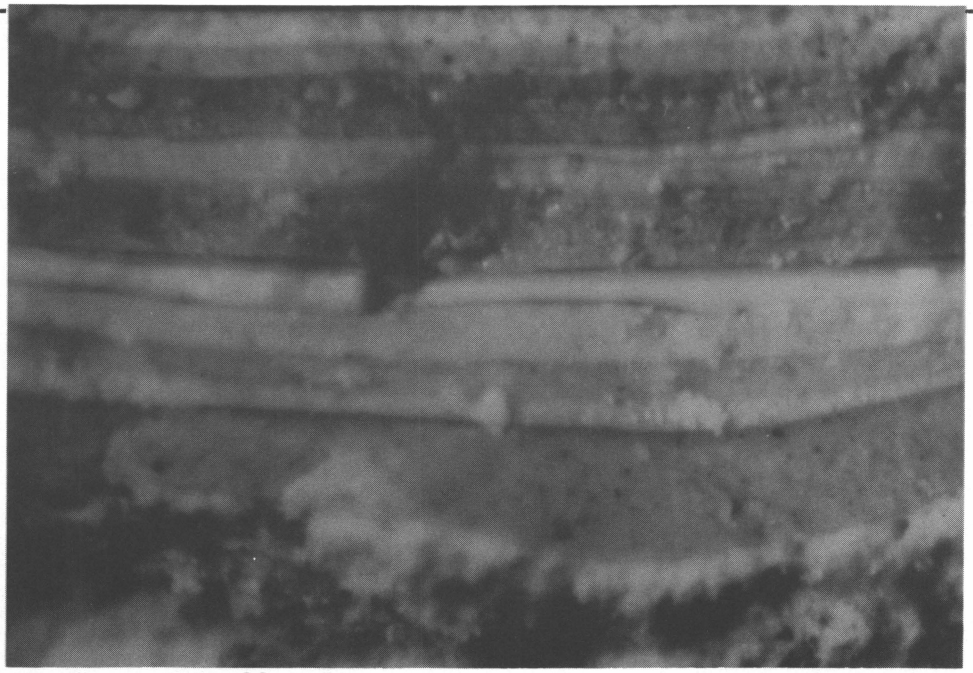
APPROXIMATE NUMBER OF LAYERS: 20
SUBSTRATE: Wood

CHROMOCHRONOLOGY:
- No reaction to chemical testing
* Reaction to Na_2S / Reaction to HCL
x Turns brown or black very slowly with Na_2S

1.	tan	*		21.	
2.	olive	-		22.	
3.	tan	*		23.	
4.	olive	-		24.	
5.	light blue	*		25.	
6.	blue/green	*		26.	
7.	light blue	x		27.	
8.	light blue	x		28.	
9.	white	*		29.	
10.	white	*	dirt	30.	
11.	white	*	dirt	31.	
12.	white	*	cleavage	32.	
13.	white	*	cleavage	33.	
14.	white	*		34.	
15.	white	*		35.	
16.	white	*		36.	
17.	white	*		37.	
18.	white	-	cleavage	38.	
19.	light yellow	-		39.	
20.	light blue	-		40.	

SITE Cape Cod National Seashore
South Wellfleet, MA

LOCATION Old Harbor L.S.S.
DATE July, 1979



SAMPLE NO.: CACO 89 P054
LOCATION: Kitchen, plaster, north wall

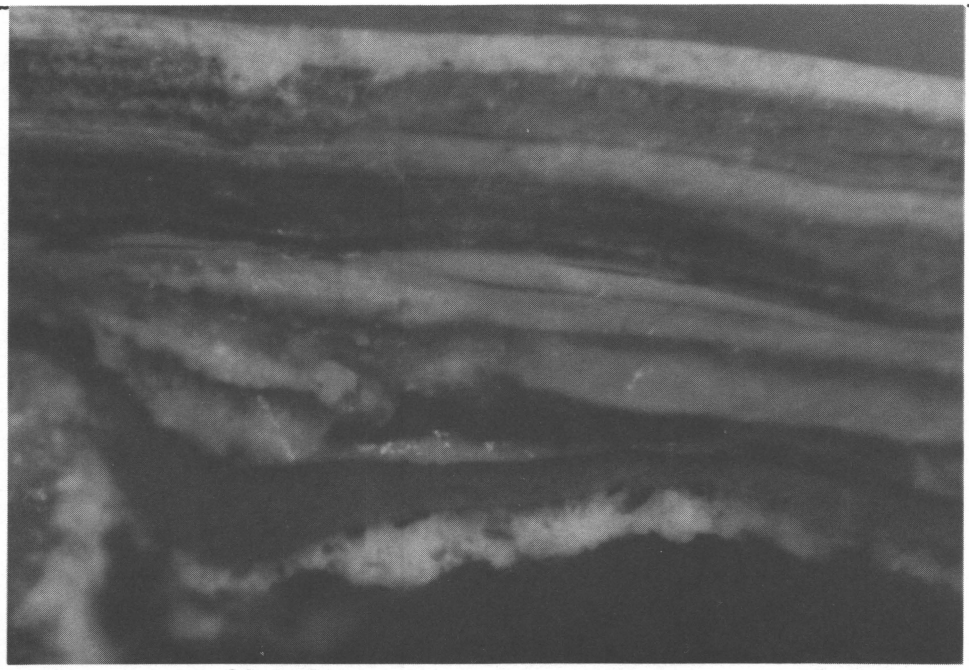
APPROXIMATE NUMBER OF LAYERS: 21
SUBSTRATE: Plaster

CHROMOCHRONOLOGY: - No reaction to chemical testing
* Reaction to Na_2S / Reaction to HCL
Turns brown or black slowly with Na_2S

1.	light brown	X		21.	light blue -
2.	cream	*	discoloration	22.	
3.	yellow	*		23.	
4.	cream	*		24.	
5.	off-white	-		25.	
6.	off-white	-		26.	
7.	light gray	*		27.	
8.	salmon	*		28.	
9.	salmon	*		29.	
10.	salmon	*		30.	
11.	salmon	*		31.	
12.	salmon	*		32.	
13.	pink	x		33.	
14.	pink	*		34.	
15.	pink	*		35.	
16.	salmon	*		36.	
17.	salmon	*	dirt	37.	
18.	salmon	*	dirt	38.	
19.	salmon	*		39.	
20.	white	/		40.	

SITE Cape Cod National Seashore
South Wellfleet, MA

LOCATION Old Harbor L.S.S.
DATE July, 1979



SAMPLE NO.: CACO 89 P050
LOCATION: Kitchen plaster, cornice band, east wall

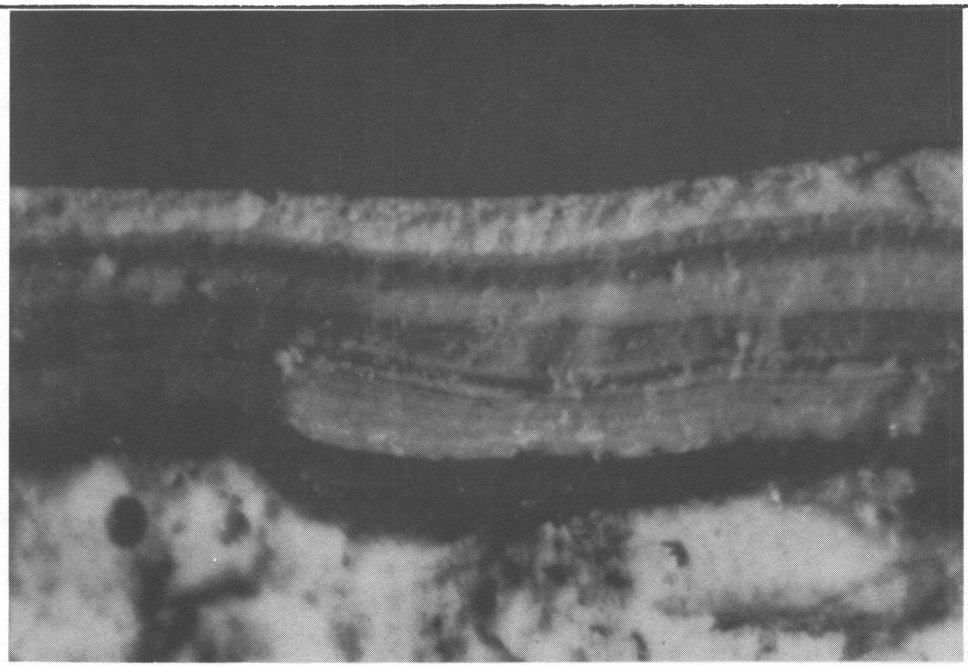
APPROXIMATE NUMBER OF LAYERS: 24
SUBSTRATE: Plaster

CHROMOCHRONOLOGY: - No reaction to chemical testing
* Reaction to Na_2S / Reaction to HCL
x Turns brown or black slowly with Na_2S

1.	green/blue	*			
2.	tan	*	discoloration		
3.	light yellow	*	discoloration		
4.	yellow	*			
5.	dark gray	*	very thin layer		
6.	off-white	-			
7.	off-white	-	cleavage		
8.	dark gray	*			
9.	salmon	*			
10.	salmon	*	dirt		
11.	salmon	*	dirt		
12.	salmon	*	dirt		
13.	salmon	*	dirt		
14.	salmon	*	dirt		
15.	salmon	*	dirt		
16.	pink	x			
17.	pink	*	slight cleavage		
18.	pink	*	cleavage		
19.	salmon	*	discolortation		
20.	salmon	*	dirt		
21.	salmon	*	dirt		
22.	salmon	*	dirt		
23.	salmon	*			
24.	light blue	-			
25.					
26.					
27.					
28.					
29.					
30.					
31.					
32.					
33.					
34.					
35.					
36.					
37.					
38.					
39.					
40.					

SITE Cape Cod National Seashore
South Wellfleet, MA

LOCATION Old Harbor L.S.S.
DATE July, 1979



SAMPLE NO.: CACO 89 P063
LOCATION: Pantry, plaster, cornice band, west wall

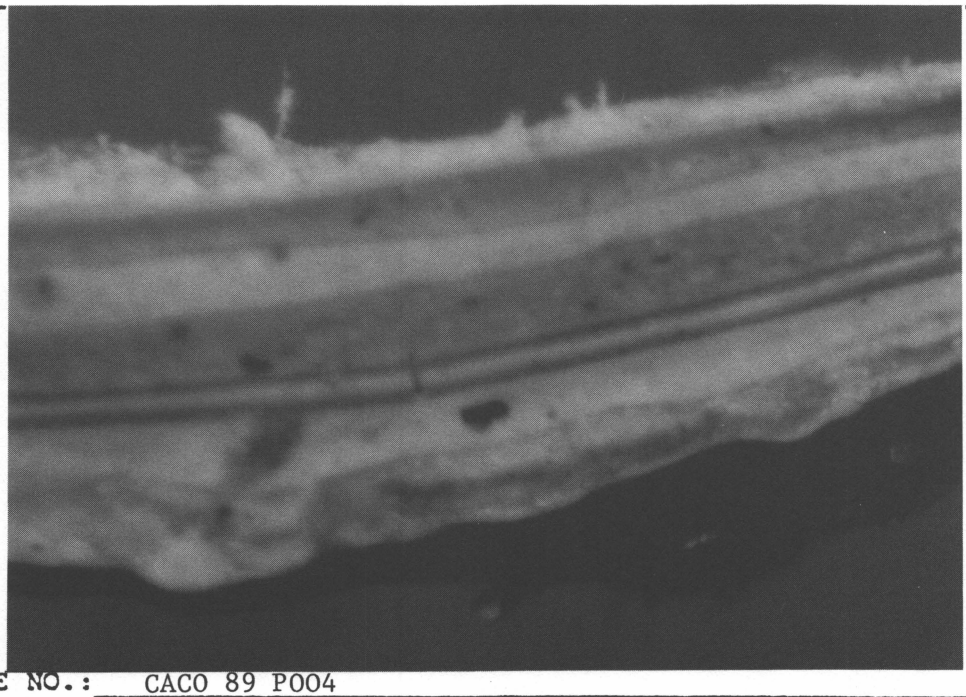
APPROXIMATE NUMBER OF LAYERS: 17
SUBSTRATE: Plaster

CHROMOCHRONOLOGY:
- No reaction to chemical testing
* Reaction to Na_2S / Reaction to HCL
x Turns brown or black with Na_2S

1.	orange x	21.	
2.	white *	22.	
3.	cream *	23.	
4.	light yellow *	24.	
5.	cream *	25.	
6.	gray *	26.	
7.	off-white -	27.	
8.	off-white -	28.	
9.	gray *	29.	
10.	salmon *	30.	
11.	salmon *	31.	
12.	salmon *	32.	
13.	salmon *	33.	
14.	pink *	34.	
15.	white -	35.	
16.	white -	36.	
17.	blue/green -	37.	
18.		38.	
19.		39.	
20.		40.	

SITE Cape Cod National Seashore
South Wellfleet, MA

LOCATION Old Harbor L.S.S.
DATE July, 1979



SAMPLE NO.: CACO 89 P004
LOCATION: Keeper's Room, plaster, west wall, cornice band

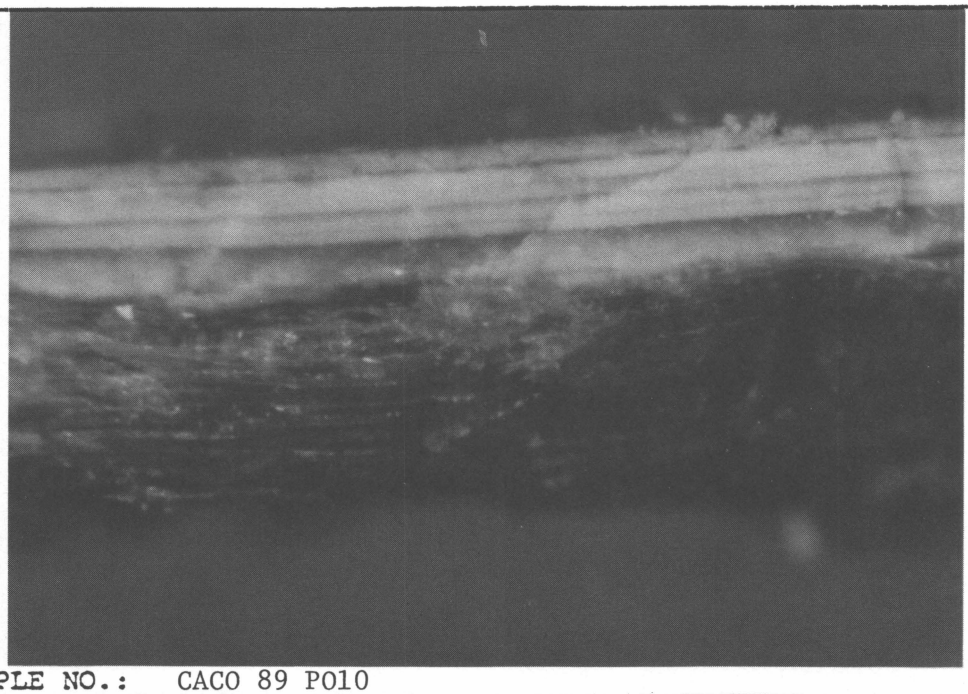
APPROXIMATE NUMBER OF LAYERS: 14
SUBSTRATE: Plaster

CHROMOCHRONOLOGY:
- No reaction to chemical testing.
* Reaction Na_2S / Reaction to HCL
x Turns brown or black very slowly Na_2S

1.	maroon -		F	21.	
2.	lime green -		P	22.	
3.	lime green -		F	23.	
4.	off-white *		P	24.	
5.	cream *		F	25.	
6.	white -	dirt	F	26.	
7.	salmon *	dirt	P	27.	
8.	salmon *		P	28.	
9.	salmon *		F	29.	
10.	pink x		F	30.	
11.	salmon *		P	31.	
12.	salmon *		F	32.	
13.	salmon *		F	33.	
14.	white /		F	34.	
15.				35.	
16.				36.	
17.				37.	
18.				38.	
19.				39.	
20.				40.	

SITE Cape Cod National Seashore
South Wellfleet, MA

LOCATION Old Harbor L.S.S.
DATE July, 1979



SAMPLE NO.: CACO 89 P010
LOCATION: Keeper's Room, ceiling

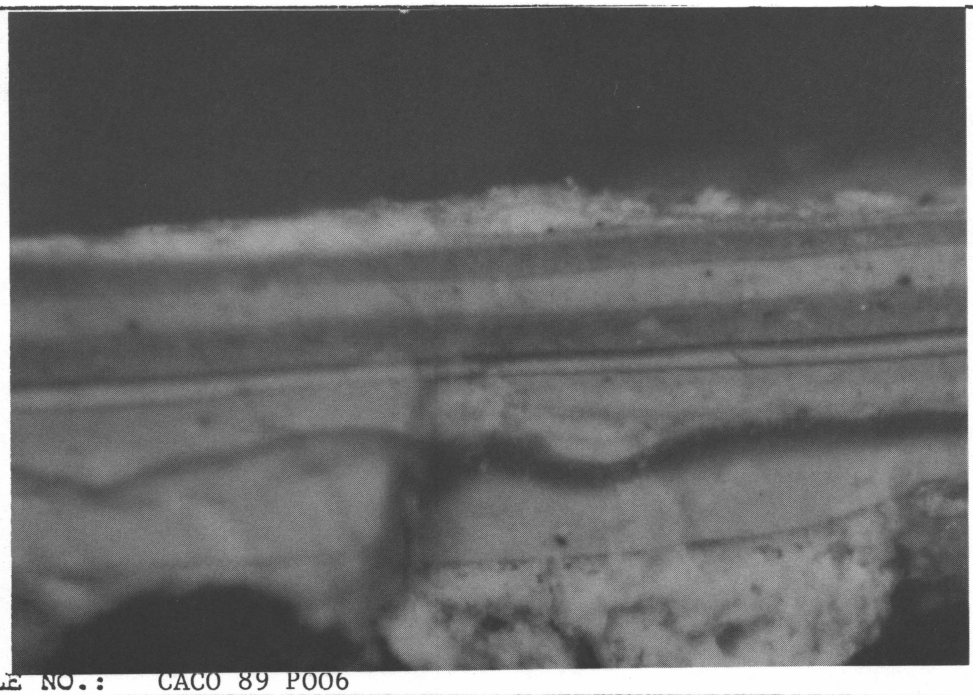
APPROXIMATE NUMBER OF LAYERS: 7
SUBSTRATE: Wood

CHROMOCHRONOLOGY:
- No reaction to chemical testing
* Reaction to Na_2S / Reaction to HCL
x Turns brown or black very slowly Na_2S

1.	white	*		P	
2.	light gray	x	dirt	F	
3.	light gray	x	dirt	F	
4.	light yellow	*		F	
5.	white	x		F	
6.	white	x	cleavage	F	
7.	salmon	*		F	
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					
31.					
32.					
33.					
34.					
35.					
36.					
37.					
38.					
39.					
40.					

SITE Cape Cod National Seashore
South Wellfleet, MA

LOCATION Old Harbor L.S.S.
DATE July, 1979



SAMPLE NO.: CACO 89 P006
LOCATION: Keeper's Room, plaster, north wall

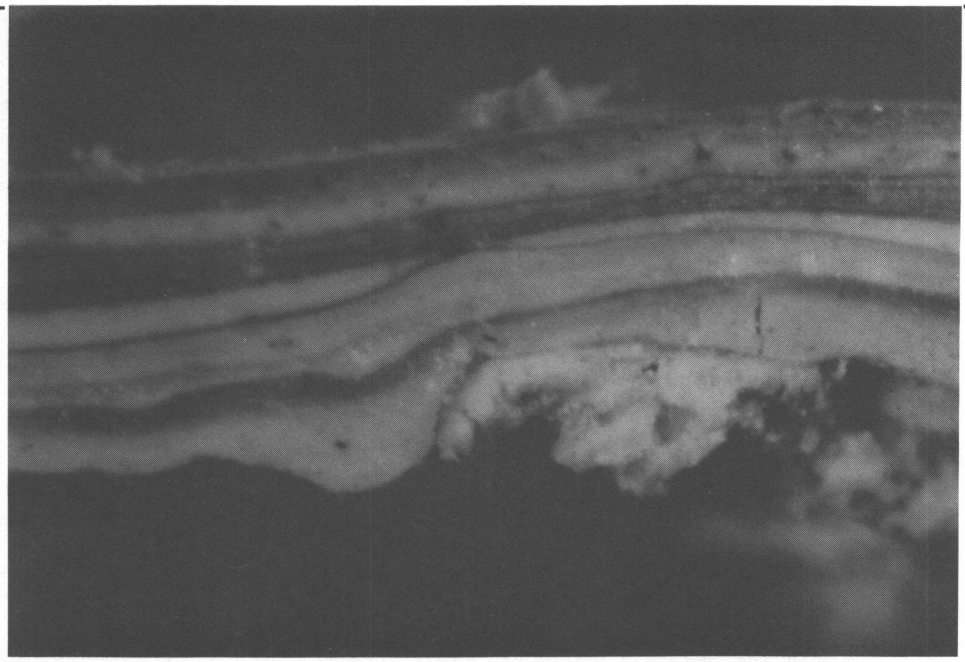
APPROXIMATE NUMBER OF LAYERS: 13
SUBSTRATE: Plaster

CHROMOCHRONOLOGY:
- No reaction to chemical testing
* Reaction to Na_2S / Reaction to HCL
x Turns brown or black very slowly with Na_2S

1.	green	-			21.
2.	green	-		F	22.
3.	off-white	*	dirt	P	23.
4.	tan	*		P	24.
5.	light yellow	*	dirt	F	25.
6.	white	-	dirt	F	26.
7.	salmon	*		P	27.
8.	salmon	*		F	28.
9.	pink	x		F	29.
10.	salmon	*		P	30.
11.	salmon	*		F	31.
12.	salmon	*		F	32.
13.	white	/		F	33.
14.					34.
15.					35.
16.					36.
17.					37.
18.					38.
19.					39.
20.					40.

SITE Cape Cod National Seashore
South Wellfleet, MA

LOCATION Old Harbor L.S.S.
DATE July, 1979



SAMPLE NO.: CACO 89 P021
LOCATION: East Wall, Stair-Hall Foyer, plaster

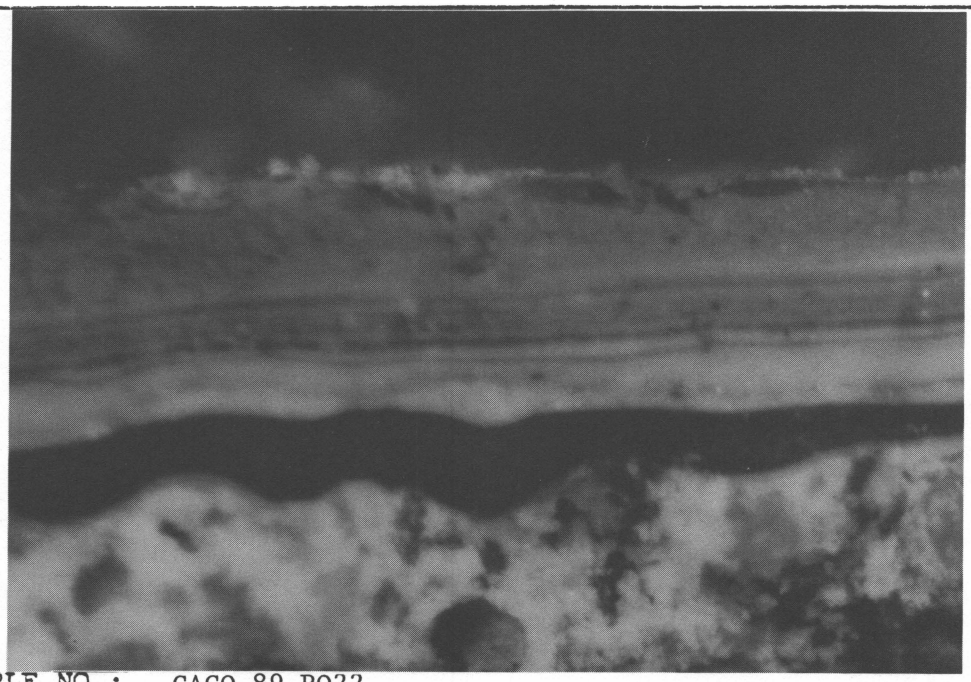
APPROXIMATE NUMBER OF LAYERS: 14
SUBSTRATE: Plaster

CHROMOCHRONOLOGY:
- No reaction to chemical testing
* Reaction to Na_2S / Reaction to HCL
x Turns brown or black very slowly with Na_2S

1.	tan	x		21.	
2.	cream	x	paint discoloration	22.	
3.	light yellow	*		23.	
4.	white	*	dirt	24.	
5.	white	*		25.	
6.	salmon	*	dirt	26.	
7.	salmon	*	dirt	27.	
8.	salmon	*	dirt	28.	
9.	salmon	*	dirt	29.	
10.	salmon	*	dirt	30.	
11.	pink	x		31.	
12.	salmon	*		32.	
13.	salmon	*		33.	
14.	salmon	*		34.	
15.				35.	
16.				36.	
17.				37.	
18.				38.	
19.				39.	
20.				40.	

SITE Cape Cod National Seashore
South Wellfleet, MA

LOCATION Old Harbor L.S.S.
DATE July, 1979



SAMPLE NO.: CACO 89 P022
LOCATION: East wall, Stair-Hall Foyer

APPROXIMATE NUMBER OF LAYERS: 14
SUBSTRATE: Plaster

CHROMOCHRONOLOGY:
- No reaction to chemical testing
* Reaction to Na_2S / Reaction to HCL
x Turns brown or black slowly with Na_2S

1.	white	*		21.	
2.	deep purple	-		22.	
3.	cream	*		23.	
4.	light yellow	*		24.	
5.	white	*		25.	
6.	white	*	cleavage	26.	
7.	salmon	*	dirt	27.	
8.	salmon	*	dirt	28.	
9.	salmon	*		29.	
10.	salmon	*		30.	
11.	pink	x	dirt	31.	
12.	salmon	*		32.	
13.	salmon	*		33.	
14.	salmon	*		34.	
15.				35.	
16.				36.	
17.				37.	
18.				38.	
19.				39.	
20.				40.	

SITE Cape Cod National Seashore
South Wellfleet, MA

LOCATION Old Harbor L.S.S.
DATE July, 1979



SAMPLE NO.: CACO 89 P081
LOCATION: Locker Room, plaster, cornice band, east wall

APPROXIMATE NUMBER OF LAYERS: 10
SUBSTRATE: Plaster

CHROMOCHRONOLOGY:
- No reaction to chemical testing
* Reaction to Na_2S / Reaction to HCL
x Turns brown or black with Na_2S

1.	blue x	21.	
2.	cream * oil	22.	
3.	yellow *	23.	
4.	gray *	24.	
5.	off-white -	25.	
6.	off-white -	26.	
7.	gray *	27.	
8.	pink *	28.	
9.	salmon *	29.	
10.	salmon *	30.	
11.		31.	
12.		32.	
13.		33.	
14.		34.	
15.		35.	
16.		36.	
17.		37.	
18.		38.	
19.		39.	
20.		40.	

F. Observations

Original Paint

Samples taken from the ceiling elements and cornice bands of many rooms contain only two layers of paint. This is significantly fewer than the number of layers in samples from the walls and woodwork of the same rooms. This fact can be explained by the historical documentation (see Section G), which indicates that many rooms received a hung plaster ceiling ca. 1910. These rooms purportedly were the Mess Room, the Storm Clothes Room, the Kitchen, the Pantry, the Rear Entry, and the Quarters. The paint samples support this documentation. They also indicate that the Stair-Hall Foyer did not receive a ceiling--a point on which the documentation is unclear.

Several second-floor rooms also have only two layers of paint on their ceiling elements. These are the Locker Room and the Spare Room. However, there is no indication that either of these rooms had plaster ceilings. The lack of ceiling paint in the Spare Room is probably attributable to infrequent painting. The lack of ceiling paint in the Locker Room may be due to the same cause, or to recent paint-stripping efforts.

On wooden elements within the rooms, a primer and a finish coat were used originally. These elements included the ceiling and trim. On the plaster walls, the body color and cornice-band color were originally applied as one thick coat each.

In all of the paint samples examined, the surface of the original paints had discolored significantly. In some paint samples, the discoloration appeared to be a distinct layer, while in others, it appeared to have been absorbed thoroughly into the original paint layer. The discoloration, seen best on the light-colored original paints, is a yellowish-brown color. Viewed under the microscope, the areas of discoloration are shinier than the surrounding paint layers. These physical characteristics, coupled with the chemical testing described below, indicate that the original paints were treated with a coat of oil, probably linseed oil. Whether or not this was done as soon as the paint was applied is impossible to tell. However, it must have been done fairly soon after the original painting was completed, because in the areas that were covered by the hung plaster ceiling, at least two coats of finish paint were applied in 10 years.

Subsequent Finishes

The later interior paint schemes for the rooms of the life-saving station are identified in Section D. The treatment of the plaster ceilings is unknown, since they have since been removed. However, some conclusions can be drawn from ceiling paint samples taken from rooms that did not receive plaster ceilings.

The use of a painted cornice band was not evident in any of the later paintings: the first posthistoric paint schemes tended to have one color on the ceiling, one color on the plaster walls, and a third color on the wooden trim. Still later paint schemes were even simpler, with the ceiling being painted the same color as the walls.

All of the wooden trim in the rooms, excluding the ceiling, was repainted olive green in the first posthistoric painting campaign. It subsequently was painted light blue, and then white repeatedly.

When spot-tested with sodium sulfide, the original paints turn light brown, indicating that they contain some lead, but are not lead-based paints. The brown-color reaction suggests that they contain some zinc, which was confirmed by the historical documentation (see Section G). The surfaces of the original paints, which had been covered by a coat of oil, also turned brown, but at a slower rate than the lower part of the original paint layers.

The majority of later paints used inside the lifesaving station are lead-based. Exceptions to this are some of the later layers of white paint on the wooden trim, and a final layer of whitewash on the plaster surfaces of the Mess Room, Keeper's Room, Keeper's Office, and First-Floor Stair Hall. Modern (probably latex) paints were identified by spot-testing with methylene chloride. Methylene chloride causes modern, and especially latex, paints to wrinkle and curl. The layer of whitewash was identified by spot-testing with hydrochloric acid, which causes a bubbling reaction upon contact with paints containing calcium carbonate. Specific identification of the chemical reaction of each of the paint layers tested is noted on the work sheets for the samples tested (see Section E).

G. Historical Documentation

The specifications for the building of the Old Harbor Life-Saving Station in 1897-98 state the following about the preparation of surfaces to be painted, and the colors of paint that were to be used. General requirements for both exterior and interior painting read as follows:

> All woodwork for painting and oiling be prepared by properly rubbing down, puttying up, etc.
>
> All knots properly killed with shellac, nails set, and work oiled before puttying up.
>
> All paint work to be of the best material, with a mixed white lead and zinc base, using a large proportion of oil, and the smallest practicable portion of spirit or drier.
>
> Only pure linseed oil to be used.

Detailed requirements for the interior painting further stated that:

> All work usually painted to have three coats.
>
> The following are to be French Gray: Boards and exposed timber of first-story ceilings.
>
> The following a light olive tint: Doors, sash, all standing finish, casings, dado, base, chair rail, sheathing, pantry, cupboard, shelves, underside of stowaway floor and timbers, underside of roof and timbers, second-story ceiling and timber of tower, third story and watch room of tower, including walls, ceilings, and exposed timbers, sheathing, stepladder, string casings, and exposed woodwork of all stairs, (excepting the hard-wood work, which will be oiled two coats and rubbed down) crew's lockers, mantels, standing finish. All upper hard-wood floors, including piazza, to be oiled two coats in the proportion 1 turpentine to 8 raw oil.

The specifications go on to say that the Boat Room was to be painted as follows:

> Doors both sides, sash (inside) and trimming about them to be painted light olive.
>
> Excepting as above specified, there will be no paint work inside the Boat Room. Plank to platform and runways will not be painted.

The specifications contain no information about paint that was to be applied to the plaster surfaces. In the section of the specifications entitled, "Lath and Plaster," it states that "Sufficient yellow ochre to be mixed with the sand coat to finish a light canary tint." This statement indicates that the plaster originally was to be tinted, rather than painted.

In addition to the specifications for the building of Old Harbor, some historical documentation for the interior painting of the station is found in the official correspondence and in the Old Harbor journal, or log books. A group of correspondence dated 1903 discusses the ordering, by the General Superintendent of the Life-Saving Service, of 60 gallons of paint for the Old Harbor station. The paint ordered was "Town and Country" Ready-Mixed Paint, made by Harrison Brothers and Company. No information about the colors of the paint ordered or where it was to be used is contained in this correspondence.

The Old Harbor journal contains the following information about interior painting:

1899 - March 15 & 20 - crew painting station inside
1899 - April 17 - crew painting station inside
1904 - May 14, 21, 23, 25, 26, 27, 28, 30 - crew painting station inside
1917 - September 25 - crew employed painting sleeping room, expending 2 gallons of light naval green paint
1917 - September 29 - crew employed painting hall, from tower to lower floor, expended 1 1/2 gallons light navy green paint. No. 34
1935 - December 13 - Permission was granted to paint the interior of the station building in accordance with new regulations

These entries indicate that the interior painting of the Old Harbor Life-Saving Station was done by the crew, and that color schemes--at least in 1935--were dictated by government regulations.

H. Conclusions

Original Color Schemes

Physical evidence gathered at the site and derived from the paint samples analyzed indicates that the interiors of the rooms at Old Harbor were originally painted with a four-part color scheme. This paint scheme consisted of different colors for the ceiling, cornice band, walls, and wooden trim. On the first floor, all of the ceilings were painted light gray, while the wooden trim was painted olive green. The cornice bands and walls were painted different colors in each room. In the second-floor rooms, and in the third-floor stair hall, the ceilings and the wooden trim were painted olive green; the cornice bands and the walls were painted different colors. In the fourth-floor Lookout, the walls are paneled with wood; this, and ceiling, and the wooden trim were all painted olive green, with no cornice band.

As stated above, the original specifications for the building of the lifesaving station did not call for the plaster walls to be painted. However, several pieces of physical evidence indicate that this part of the painting specifications was not followed. First, examination of the sanded finish coat of plaster indicates that it never was tinted yellow, as originally specified. This suggests that the plaster was never intended to be left unpainted. Second, at least two finish coats of paint were applied to the ceilings in the 10 years between the construction of the station and the installation of hung plaster ceilings ca. 1910. Only if the ceilings had been painted originally would this timetable make sense. Third, the layer of oil that was applied to the original paint on the ceilings and wooden trim also is found on the first paint layers on the plaster surfaces.

Having compared and evaluated the physical evidence and the historical documentation for the original interior paint colors, the four-part paint scheme--with painted plaster walls--was specified for the restoration painting. Based on the chemical testing of the paints, oil alkyd paints were specified. These paints have surface characteristics that are similar to those of the oiled lead/zinc paints.

Subsequent Color Schemes

Comparing the chromochronologies with the historical documentation, it seems probable that the 1904 painting campaign applied the second coat of olive green to the woodwork, and the light yellow--without cornice band--to the plaster walls. The 1917 painting work used "light naval green," which apparently corresponds to the light blue found as the third trim paint color in all rooms (except for the Spare Room, where it was the second layer). The new regulations of 1935 may have ushered in the period of salmon walls and white woodwork.

I. Summary of Recommended Finishes

SITE Cape Cod National Seashore
Wellfleet, Massachusetts

LOCATION Old Harbor L.S.S.
DATE 9-18-79

PERIOD OF RESTORATION: 1897
LAYER SELECTION: One
COMMENTS: This color was used for the cornice band in the Stair-Hall Foyer, the First-Floor Stair Hall, the Second-Floor Stair Hall, and the Third-Floor Stair Hall.

PROBABLE PIGMENT:
PROBABLE MEDIUM: linseed oil
COLOR NOTATION: MUNSELL: 10RP 3/2
SPECTROPHOTOMETRIC COEFFICIENTS:
x .266, y .465, Y 15.12

RECOMMENDATIONS:
COLOR: Deep Purple (special match)
PAINT TYPE: long oil alkyd (interior)
VISUAL CHARACTERISTICS: high gloss, smooth finish



DOCUMENTATION:
SLIDE NOS.:
OTHER:

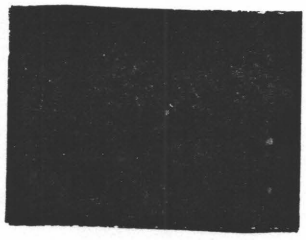
SITE Cape Cod National Seashore
Wellfleet, Massachusetts

LOCATION Old Harbor L.S.S.
DATE 9-18-79

PERIOD OF RESTORATION: 1897
LAYER SELECTION: One
COMMENTS: This paint color was used for the cornice band in the Keeper's Room, the office and the Storm Clothes Room.

PROBABLE PIGMENT:
PROBABLE MEDIUM: linseed oil
COLOR NOTATION: MUNSELL: 7.5R 2/6
SPECTROPHOTOMETRIC COEFFICIENTS:
x .449, y .273, Y 3.341

RECOMMENDATIONS:
COLOR: Maroon (special color match)
PAINT TYPE: long oil alkyd (interior)
VISUAL CHARACTERISTICS: high gloss, smooth finish



DOCUMENTATION:
SLIDE NOS.:
OTHER:

SITE Cape Cod National Seashore
Wellfleet, Massachusetts

LOCATION Old Harbor L.S.S.
DATE 9-18-79

PERIOD OF RESTORATION: 1897
LAYER SELECTION: One
COMMENTS: This color was used on the plaster walls in the following rooms: Keeper's Room, Office, and the quarters.

PROBABLE PIGMENT:
PROBABLE MEDIUM: linseed oil
COLOR NOTATION: MUNSELL: 5GY 9/4
SPECTROPHOTOMETRIC COEFFICIENTS:
x .338, y .373, Y 80.464

RECOMMENDATIONS:
COLOR: Lime Green (Benjamin Moore YL-71)
PAINT TYPE: long oil alkyd (interior)
VISUAL CHARACTERISTICS: high gloss, smooth finish

DOCUMENTATION:
SLIDE NOS.:
OTHER:

SITE Cape Cod National Seashore
Wellfleet, Massachusetts

LOCATION Old Harbor L.S.S.
DATE 9-18-79

PERIOD OF RESTORATION: 1897
LAYER SELECTION: One
COMMENTS: This paint color was used on the plaster walls of the Storm Clothes Room and Spare Room.

PROBABLE PIGMENT:
PROBABLE MEDIUM: linseed oil
COLOR NOTATION: MUNSELL: Munsell 2.5Y 8.5/8
SPECTROPHOTOMETRIC COEFFICIENTS:
x .368, y .354, Y 65.963

RECOMMENDATIONS:
COLOR: Yellow (special color match)
PAINT TYPE: long oil alkyd (interior)
VISUAL CHARACTERISTICS: high gloss, smooth finish

DOCUMENTATION:
SLIDE NOS.:
OTHER:

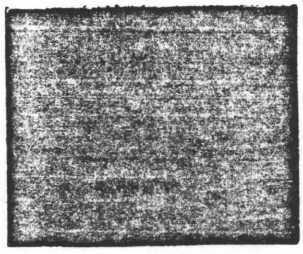
SITE Cape Cod National Seashore
Wellfleet, Massachusetts

LOCATION Old Harbor L.S.S.
DATE 9-18-79

PERIOD OF RESTORATION: 1897
LAYER SELECTION: One
COMMENTS: This paint color was used for cornice band in the locker room, the spare room and the quarters.

PROBABLE PIGMENT:
PROBABLE MEDIUM: linseed oil
COLOR NOTATION: MUNSELL: 2.5 PB 5/8
SPECTROPHOTOMETRIC COEFFICIENTS:
x .214, y .219, Y 20.261

RECOMMENDATIONS:
COLOR: Blue (Benjamin Moore PV 63)
PAINT TYPE: long oil alkyd (interior)
VISUAL CHARACTERISTICS: high gloss, smooth finish



DOCUMENTATION:
SLIDE NOS.:
OTHER:

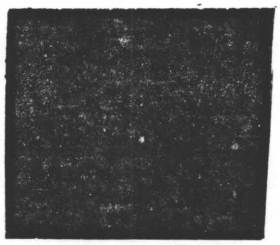
SITE Cape Cod National Seashore
Wellfleet, Massachusetts

LOCATION Old Harbor L.S.S.
DATE 9-18-79

PERIOD OF RESTORATION: 1897
LAYER SELECTION: One
COMMENTS: This paint color was used on all the woodwork throughout the Life Saving Station, with the exception of the ceilings on the first floor. It was also used on the window frames and casings in the boatroom.

PROBABLE PIGMENT:
PROBABLE MEDIUM: linseed oil
COLOR NOTATION: MUNSELL: 5Y 5/4
SPECTROPHOTOMETRIC COEFFICIENTS:
x .384, y .390, Y 18.769

RECOMMENDATIONS:
COLOR: Olive (Benjamin Moore GB-67)
PAINT TYPE: long oil alkyd (interior)
VISUAL CHARACTERISTICS: high gloss, smooth finish



DOCUMENTATION:
SLIDE NOS.:
OTHER:

SITE Cape Cod National Seashore
Wellfleet, Massachusetts

LOCATION Old Harbor L.S.S.
DATE 9-18-79

PERIOD OF RESTORATION: 1897
LAYER SELECTION: One
COMMENTS: This color was used on the plaster walls in the Stair-Hall Foyer, the First-Floor Stair Hall, the Mess Room, Rear Entry, Locker Room, Second-Floor Stair Hall, and Third-Floor Stair Hall.

PROBABLE PIGMENT:
PROBABLE MEDIUM: linseed oil
COLOR NOTATION: MUNSELL: 10YR 8/4
SPECTROPHOTOMETRIC COEFFICIENTS:
x .266, y .290, Y 52.416

RECOMMENDATIONS:
COLOR: Tan (Benjamin Moore CB-66)
PAINT TYPE: long oil alkyd (interior)
VISUAL CHARACTERISTICS: high gloss, smooth finish

DOCUMENTATION:
SLIDE NOS.:
OTHER:

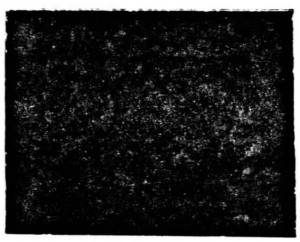
SITE Cape Cod National Seashore
Wellfleet, Massachusetts

LOCATION Old Harbor L.S.S.
DATE 9-18-79

PERIOD OF RESTORATION: 1897
LAYER SELECTION: One
COMMENTS: This paint color was used for the cornice band in the Kitchen.

PROBABLE PIGMENT:
PROBABLE MEDIUM: linseed oil
COLOR NOTATION: MUNSELL: 7GY 5/2
SPECTROPHOTOMETRIC COEFFICIENTS:
x .318, y .349, Y 18.957

RECOMMENDATIONS:
COLOR: Green/Gray (Benjamin Moore OT-67)
PAINT TYPE: long oil alkyd (interior)
VISUAL CHARACTERISTICS: high gloss, smooth finish



DOCUMENTATION:
SLIDE NOS.:
OTHER:

SITE Cape Cod National Seashore
Wellfleet, Massachusetts

LOCATION Old Harbor L.S.S.
DATE 9-18-79

PERIOD OF RESTORATION: 1897
LAYER SELECTION: One
COMMENTS: This paint color was used for the ceilings on the first floor of the Life Saving Station.

PROBABLE PIGMENT:
PROBABLE MEDIUM: linseed oil
COLOR NOTATION: MUNSELL: 10YR 7/1
SPECTROPHOTOMETRIC COEFFICIENTS:
x .373, y .241, Y 42.972

RECOMMENDATIONS:
COLOR: Gray (Benjamin Moore GN-46)
PAINT TYPE: long oil alkyd (interior)
VISUAL CHARACTERISTICS: high gloss, smooth finish

DOCUMENTATION:
SLIDE NOS.:
OTHER:

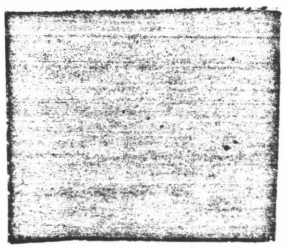
SITE Cape Cod National Seashore
Wellfleet, Massachusetts

LOCATION Old Harbor L.S.S.
DATE 9-18-79

PERIOD OF RESTORATION: 1897
LAYER SELECTION: One
COMMENTS: This paint color was used for the walls in the kitchen.

PROBABLE PIGMENT:
PROBABLE MEDIUM: linseed oil
COLOR NOTATION: MUNSELL: 5 YR 7/2
SPECTROPHOTOMETRIC COEFFICIENTS:
x .349, y .351, Y 36.293

RECOMMENDATIONS:
COLOR: Light Brown (Benjamin Moore ET-63)
PAINT TYPE: long oil alkyd (interior)
VISUAL CHARACTERISTICS: high gloss, smooth finish



DOCUMENTATION:
SLIDE NOS.:
OTHER:

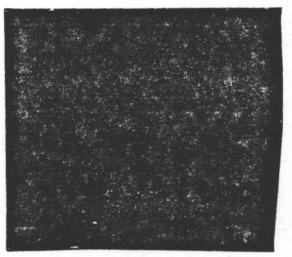
SITE Cape Cod National Seashore
Wellfleet, Massachusetts

LOCATION Old Harbor L.S.S.
DATE 9-18-79

PERIOD OF RESTORATION: 1897
LAYER SELECTION: One
COMMENTS: This paint color was used for the cornice band in the Mess Room, the pantry, and Rear Entry.

PROBABLE PIGMENT:
PROBABLE MEDIUM: linseed oil
COLOR NOTATION: MUNSELL: 2.5YR 5/8
SPECTROPHOTOMETRIC COEFFICIENTS:
x .467, y .370, Y 19.36

RECOMMENDATIONS:
COLOR: Orange (Benjamin Moore ST-19)
PAINT TYPE: long oil alkyd (interior)
VISUAL CHARACTERISTICS: high gloss, smooth finish



DOCUMENTATION:
SLIDE NOS.:
OTHER:

J. Diagrams of Typical Original Paint Schemes

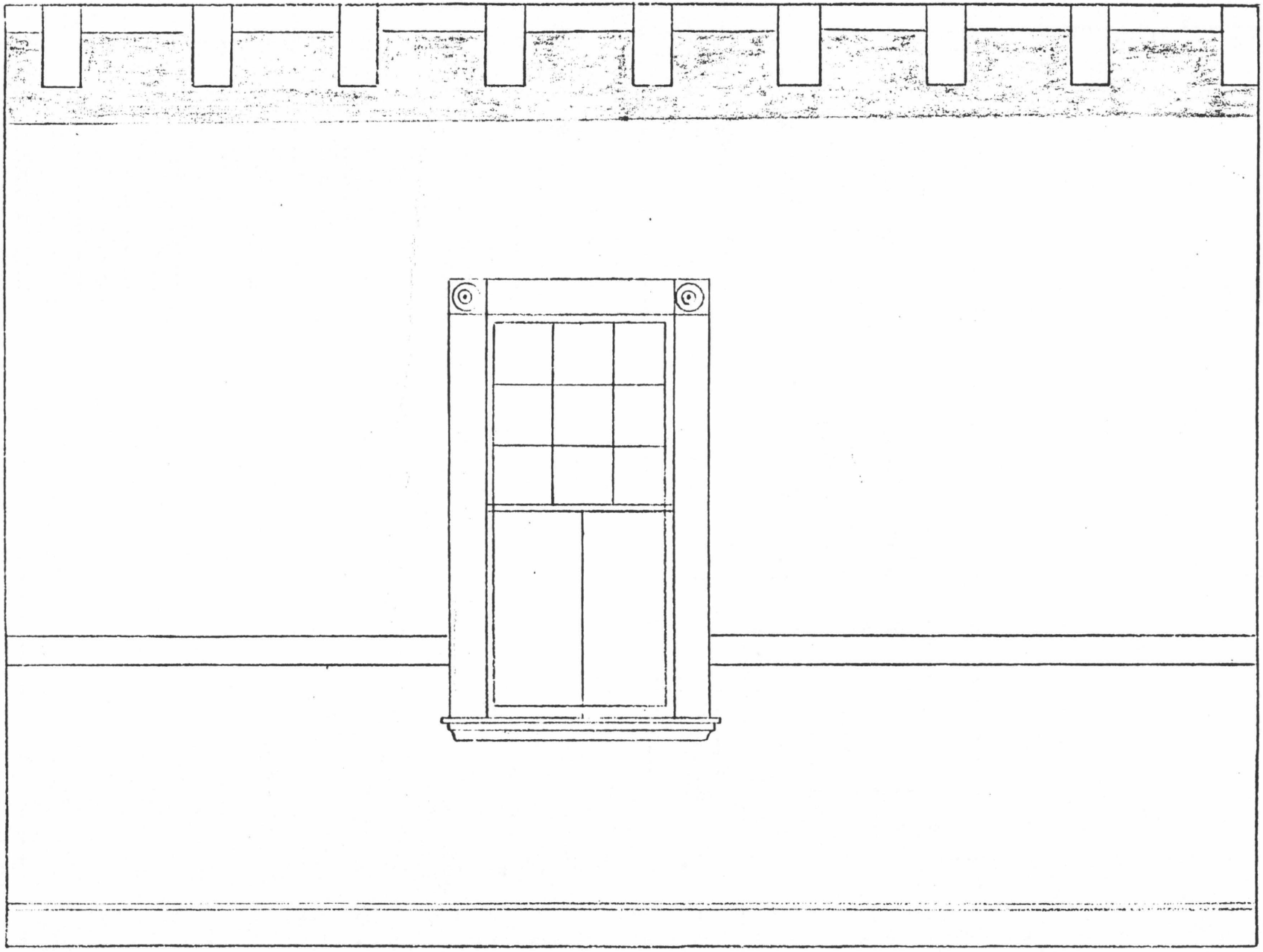
TYPICAL PAINT SCHEME FOR ROOMS WITH DADO
Old Harbor Life Saving Station
Provincetown, Massachusetts



Not to Scale.

Drawn by: Andrea M. Gilmore
September 25, 1979

Typical Paint Scheme for Room Without a Dado
Old Harbor Life Saving Station
Provincetown, Massachusetts



Not to Scale.

Drawn by: Andrea M. Gilmore
September 25, 1979

APPENDIX P.

Reconstruction of the Old Harbor Life-Saving Station Sign

United States Department of the Interior

NATIONAL PARK SERVICE

North Atlantic Region
15 State Street
Boston, Massachusetts 02109

IN REPLY REFER TO:

December 9, 1980

MEMORANDUM

To: Glen Kaye, Chief of Interpretation, CACO

From: E. Blaine Cliver, Chief of Historic Preservation, NARO

Subject: Transmission of Revised Drawings and Specifications for the Reconstruction of the Old Harbor Life Saving Station Sign

Enclosed are two sets of revised specifications and drawings for the reconstruction of the sign for the Old Harbor Life Saving Station. The elevation of the sign has been redrawn to show the type of the letters and their spacing based on the c. 1900 photograph. The edgeband of the sign also has been changed to a simple unmolded band.

The choice of type has been left to the sign maker. Submittals will include: a sample letter, a drawing showing the type of the letters and their spacing, and samples of the finish paint colors.

The specifications should include a copy of the early photograph. Since I have no extra copies of the photograph, I would appreciate it if you could make a copy to submit with these specifications and drawings to the contractor.

With Best Wishes for the Holidays.

Andrea M. Gilmore
for E.B. Cliver

REVISED DRAWINGS AND SPECIFICATIONS
SIGN RECONSTRUCTION
OLD HARBOR LIFE - SAVING STATION
CAPE COD NATIONAL SEASHORE
PROVINCETOWN, MASSACHUSETTS

Prepared by,
Andrea M. Gilmore
Historic Preservation Conservator
North Atlantic Historic Preservation Center
December 1980

SPECIFICATIONS
SIGN RECONSTRUCTION
OLD HARBOR LIFE SAVING STATION
PROVINCETOWN, MASSACHUSETTS

MATERIALS:

WOOD: Sign: Pine, without knots or defects, pressure treated; full 2-inch thickness.

Letters: Pine, without knots or defects, pressure treated; full 1-inch thick.

GLUE: Allied Resin E-152 epoxy adhesive.

NAILS: Finish nails as required.

SCREWS: 2-inch, flat-headed, wood screws.

PAINT: Primer: alkyd exterior, such a Benjamin Moore's "Moorwhite".

Finish: high gloss oil enamel, such a Mobil Oil's "Bulletin Colors"

Paint Colors:

Background:	Yellow - Munsell 10YR 7/8
Edgeband:	Grey - Munsell 5PB 7/1
Letters:	Black - Munsell N 0.5/

Color Sample Submittal: Please submit through CACO to NAHPC samples of paint colors for approval.

EXECUTION:

Mill lumber to actual and full size. Pressure-treat all lumber.

Laminate 2-inch wide diagonal, reversed, pine boards.

Cut edgeband - 1 1/2-inches thick, 5-inches wide

Secure edgeband with glue and screws, using coped joints throughout.

Paint with primer and finish coats.

Letters: Letters shall be cut from 1-inch thick lumber. Letters shall be 8-inches high and 6-inches wide. The width of the type shall be 1 1/2-inches. (See elevation.) Choice of type shall be made by the sign-maker, based on the attached photograph. A sample of a letter and the layout for the sign, illustrating the type to be used, shall be submitted through CACO to NAHPC for approval.

Letters shall be placed 2-inches apart, with the following exceptions. The "U" and the "S" are separated by four inches; the "S" and the "L" are separated by eight inches. The words LIFE, SAVING and STATION are separated by six inches. One other exception is the spacing between the

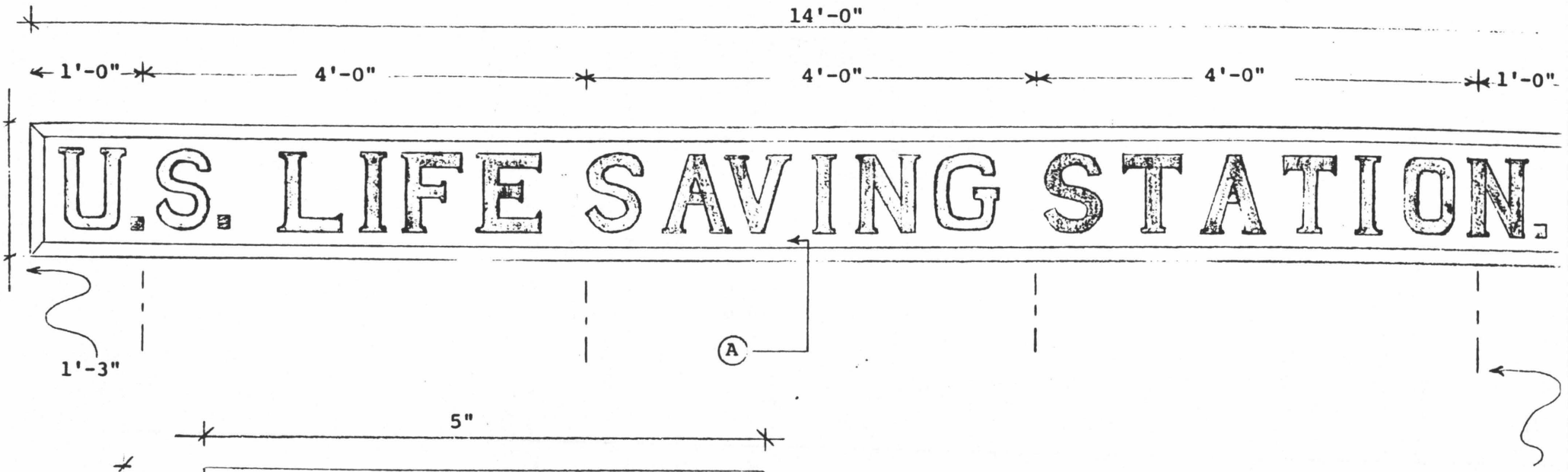
"A" and "V" in SAVING. These letters overlap, i.e. there is no space between them. The baseline of the letters is 3-inches up from the bottom of the sign. Lettering begins 4-inches from the left side of the sign.

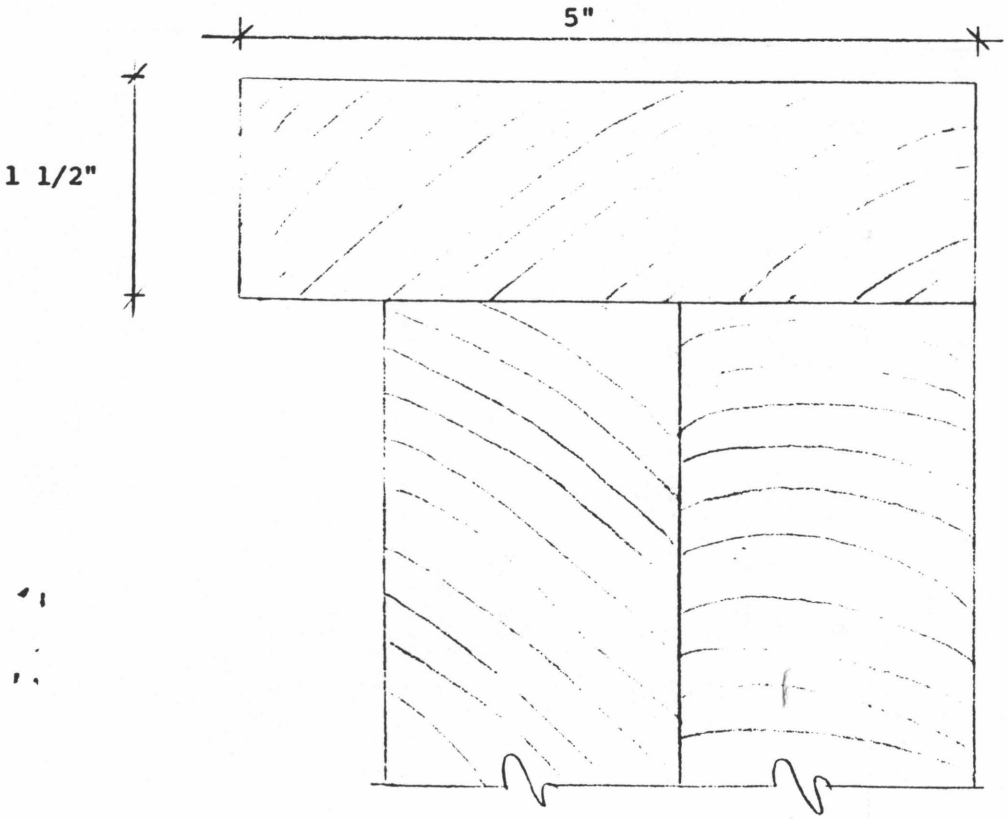
Letters shall be painted black.

Letters shall be secured to the sign with glue and screws.

Hanging the sign: (To be done by CACO Staff.) The sign shall be secured to the north roof of the boathouse. The sign shall be placed 5-feet over from the tower and 6-feet, 4-inches over from the east side of the boathouse roof. The sign shall be placed 5-inches up from the north edge of the boathouse roof. The sign shall be secured with "four stout wrought-iron standards, and two 3/4-inch wrought-iron stay braces". The design of these two types of hardware shall be determined later. The wrought-iron standards are to be placed 1-foot in from the ends of the sign and the spaced 4-feet apart. (See elevation for the placement of the standards.)

SIGN
OLD HARBOR LIFE SAVING STATION
CAPE COD NATIONAL SEASHORE
PROVINCETOWN, MASSACHUSETTS





Center of wrought-iron standards

338

SECTION A: EDGEBAND

SCALE: ELEVATION, 3/4" = 1'-0"
SECTION A, 3/4" = 1"

AMG/12-80

United States Department of the Interior

NATIONAL PARK SERVICE

North Atlantic Region
15 State Street
Boston, Massachusetts 02109

IN REPLY REFER TO:

November 7, 1984

Plymouth Sign Company
P.O. Box 134
South Yarmouth, MA 02664

Dear Sir:

I have reviewed the lettering and sign layout enclosed. As presently drawn, both the lettering and the placement of the letters is incorrect. I have enclosed the black and white photo from which the specification drawing for the sign was made. You will note on this photo, as well as on the specification drawing of the sign that the ends of the letters are much more pointed than you have drawn them. I can appreciate your concern about the vulnerability of these pointed letters in the Cape Cod climate, however, the National Park Service has to be concerned with historical accuracy. Therefore, the ends of the letters must taper down to no more than 3/4". On some of the letters I have dotted in with pencil how the shapes need to be changed. You should make the changes to the other letters based on these guidelines, as well as the written information contained in the specifications.

The size of the letters on your drawing varies considerably. As stated in the specifications, they are to be approximately 8-inches high and 6-inches wide. As presently drawn, the A and V are 8-inches wide. The spacing between the letters also needs correcting. They should be placed approximately 2-inches apart.

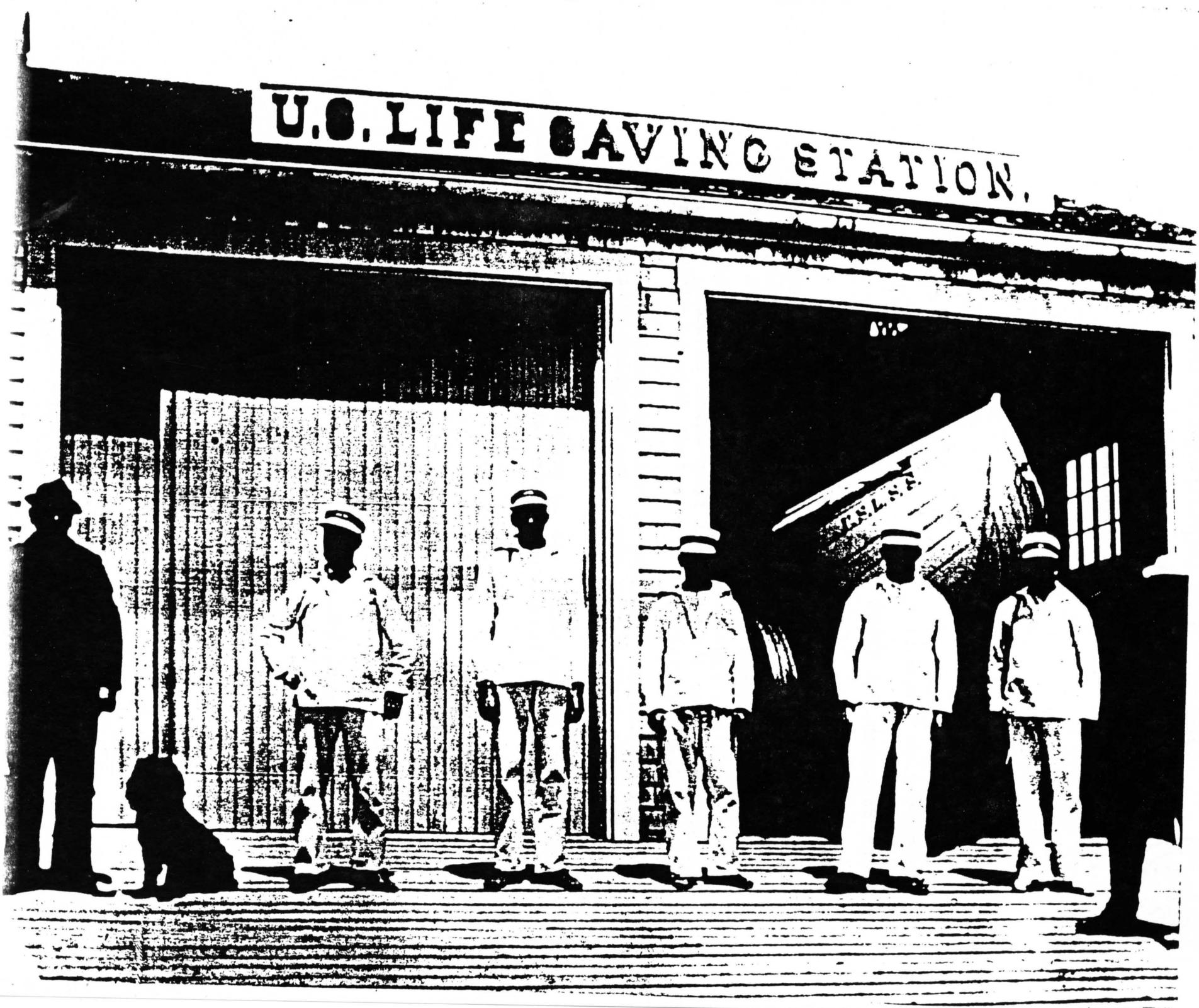
In light of the number of corrections that must be made, the sign should be redrawn and submitted again for approval.

Sincerely,

Andrea M. Gilmore

Andrea M. Gilmore
Architectural Conservator

cc Frank Ackerman


U.S. LIFE SAVING STATION.

United States Department of the Interior
NATIONAL PARK SERVICE
North Atlantic Region
15 State Street
Boston, Massachusetts 02109

IN REPLY REFER TO:

March 26, 1985

Mr. George Caggeno
Plymouth Sign Company
Old Main St.
South Yarmouth, MA 02664

Dear Mr. Caggeno:

I have reviewed the lettering style and layout submitted by Plymouth Sign Company for the Old Harbor Life Saving Station sign. The lettering and layout, as submitted, are approved.

I have filed the layout drawing at the Preservation Center, assuming you have the original from which to work. If you need the drawing returned, please feel free to contact me.

As noted in the specifications, the lettering begins 4-inches from the left side of the sign. The baseline of the letters is 3-inches up from the bottom of the sign.

Paint color samples must also be submitted for approval as part of this project. Please submit them at your earliest convenience.

Sincerely,

Andrea M. Gilmore

Andrea M. Gilmore
Architectural Conservator

cc Frank Ackerman, CACO

United States Department of the Interior
NATIONAL PARK SERVICE
North Atlantic Region
15 State Street
Boston, Massachusetts 02109

IN REPLY REFER TO

April 11, 1985

Mr. George Caggeno
Plymouth Sign Co.
Old Main St.
South Yarmouth, MA 02664

Dear George:

I have matched the Munsell colors for the Old Harbor Life Saving Station sign to Benjamin Moore paint colors. The colors are as follows:

Yellow - Munsell 10YR 7/8 - Benjamin Moore GB-8

Gray - Munsell 5PB 7/1 - Benjamin Moore GN-4

Black - Munsell N0.5/ - Benjamin Moore Decorative Trim Paint - Black

The Benjamin Moore black paint does not have a color notation.

A high gloss paint should be used for the sign - either Moore's House paint or Decorative Trim Colors.

For your reference, I have enclosed color chips for the yellow and gray paints. The black paint is a standard mix and no color chip is enclosed.

Please feel free to contact me if you have any additional questions about the paint colors.

Sincerely,

Andrea M. Gilmore

Andrea M. Gilmore

cc Frank Ackerman

United States Department of the Interior

NATIONAL PARK SERVICE

North Atlantic Region

15 State Street

Boston, Massachusetts 02109-3572

IN REPLY REFER TO:

H30(NAR-PHP)

September 3, 1986

MEMORANDUM

To: Claude Phipps, Maintenance, CACO

From: Andrea Gilmore, NAHPC

Subject: Hardware for mounting the sign at the Old Harbor Life Saving Station

As we discussed on the phone yesterday, the hardware for the mounting of the sign at Old Harbor should remain as specified - four angle braces and two stay braces. The angle and stay braces are to be screwed to the rafters with three-inch screws that have a 3/8-inch diameter head. The angle and stay braces are to be screwed to the sign with two-inch screws that have a 3/8-inch diameter head. All screws shall be screwed in through pre-drilled holes.

The angle and stay braces should be located so that they are screwed into a rafter. The rafters to which the braces are to be secured are identified on the attached drawing. The sign should be placed approximately 1'-6" back from the edge of the roof. It should be placed so that the edge of the screw plate is at the edge of a shingle course. The angle braces should be secured to the sign so the sign is one-inch off the roof.

Prior to mounting the hardware, it should be painted. The paint to be used is as follows:

Primer: Metal Primer - cold galvanizing compound containing 95% pure zinc metal, equal to Z.R.C. as manufactured by Z.R.C. Chemical Products Co., Quincy, MA.

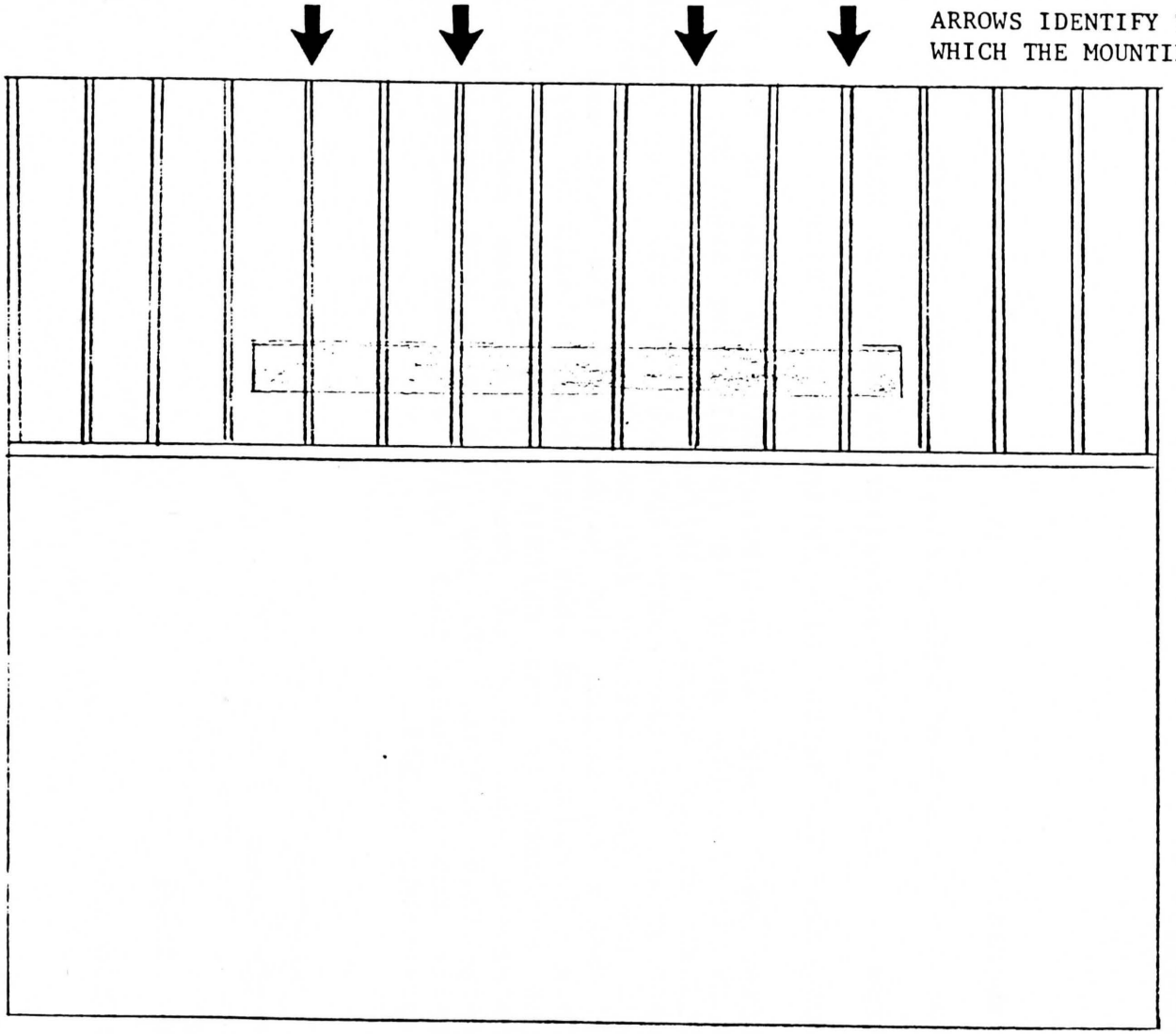
Intermediate Coat: Color - gray - High build epoxy equal to Mobil - Series 89.

Finish Coat: Color - black - Aliphatic enamel equal to Mobil - Series 40-J-5.

I hope the fabrication of the hardware progresses on schedule. Please contact me if you have any questions about how the sign should be mounted.

Andrea M. Gilmore
Architectural Conservator

OLD HARBOR LIFE SAVING STATION
CAPE COD NATIONAL SEASHORE
PROVINCETOWN, MASSACHUSETTS
SIGN MOUNTING HARDWARE



ARROWS IDENTIFY THE RAFTERS TO WHICH THE MOUNTING BRACES ARE TO BE SCREWED.

SIGN IS TO BE LOCATED 1'-6" UP FROM THE EDGE OF THE ROOF

344

A.M.G. 9-3-86

United States Department of the Interior
NATIONAL PARK SERVICE
North Atlantic Region
15 State Street
Boston, Massachusetts 02109-3572

IN REPLY REFER TO

February 4, 1988

Memorandum

To: Chief of Interpretation, North District, CACO

From: Historic Preservation Conservator, NAHPC

Subject: Old Harbor Life Saving Station Sign

After many years of deliberation, I'm glad to see that the Park is finally going to install the sign at Old Harbor. Please follow Andrea Gilmore's instructions in her 9/3/86 memorandum for the exact location of the sign installation and the specifications for painting the sign hardware. Use 3" bolts to attach the hardware to the sign and ask your Chief of Maintenance what size bolts should be used to attach the hardware to the rafters. The size of both bolts will determine the size of pre-drilled holes necessary in the respective braces. If you have any more questions, please call; but I think this last enclosed revision should be acceptable to all.

Peggy Albee

cc:
B. Cliver

Enclosure

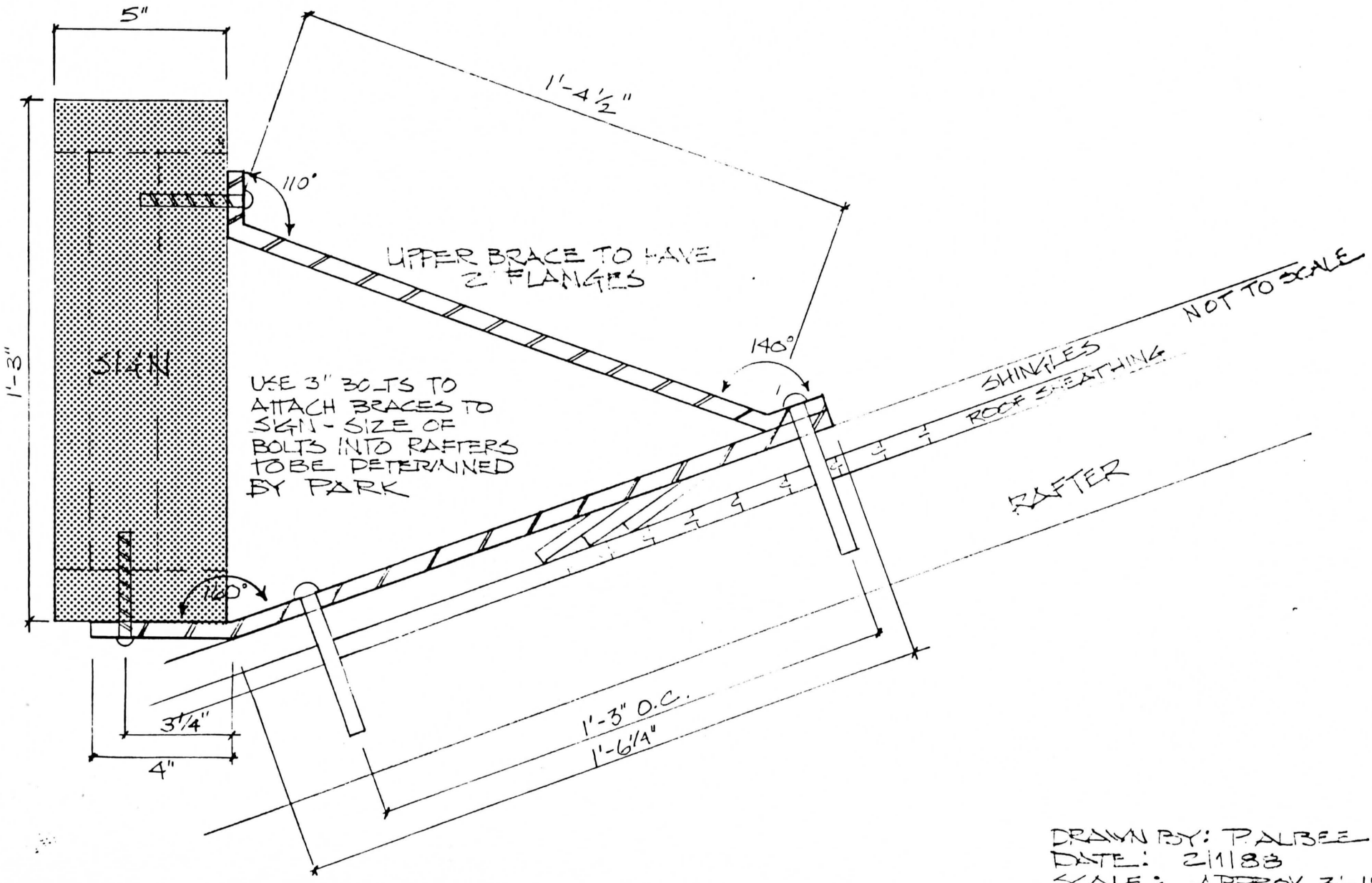
OLD HARBOR LIFE-SAVING STATION - CACO

SIGN HARDWARE NOTES: FOLLOW INSTALLATION INSTRUCTIONS AS PER 9/33/15/510.

ALL DIMENSIONS TO BE SHOP VERIFIED - BASED ON 20° PITCH ROOF

USE STOCK 1½" WIDE X ½" THICK.

NEED 4 BRACES EACH TYPE - 8 TOTAL - MUST BE PAINTED BLACK



DRAWN BY: PALBEE
DATE: 2/1/83
SCALE: APPROX 3"=1'-0"

V. BIBLIOGRAPHY

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