
Cape Hatteras National Seashore
Bodie Island Light Station
Double Keepers Quarters
Historic Structure Report

2009

for

Cultural Resources Division

Southeast Region, National Park Service

by

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LCS#: 007244

Cover image:

The historic structure report presented here exists in two formats. A traditional, printed version is available for study at the park, the Southeastern Regional Office of the NPS (SERO), and at a variety of other repositories. For more widespread access, the historic structure report also exists in a web-based format through ParkNet, the website of the National Park Service. Please visit www.nps.gov for more information.

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Historic Structure Report
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Approved by: Michael B. Murray 7-30-10
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Recommended by: [Signature] 8/18/10
Deputy Regional Director, Southeast Region Date

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Regional Director, Southeast Region Date

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Foreword

We are pleased to make available this historic structure report, part of our ongoing effort to provide comprehensive documentation for the historic structures and landscapes of National Park Service units in the Southeast Region. Many individuals and institutions contributed to the successful completion of this work. We would particularly like to thank the staff at Cape Hatteras National Seashore for their assistance throughout the process. We hope that this study will prove valuable to park management in their continuing preservation of the building and to everyone in understanding and interpreting the Double Keepers' Quarters at the Bodie Island Light Station.

Dan Scheidt, Chief
Cultural Resources Division
Southeast Regional Office
April 2010

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Executive Summary

The Double Keepers' Quarters was built in 1872, contemporaneous with construction of the Bodie Island Lighthouse and its Oil House. The Lighthouse, with a complement of buildings was the third to be built along this section of Cape Hatteras. The Quarters was a double dwelling, or duplex, built to house the Principal Keeper and assistant keepers and their families.

The Quarters retains, to a great extent, its original characteristics. It is rectangular in plan, two stories in height with a gable roof covered in wood shingles. It is constructed of brick laid in a 1:6 common bond with brick jack arch lintels at doors and windows.

Fenestration is organized symmetrically along the two long elevations, the east and west, each with two levels of six bays. The original windows remain in place; six-over-six wood sash windows are at both levels. Two original doorways, with their original doors and transoms, are at the two first-floor center bays of each elevation, serving as front and back entrances to the respective living quarters. Spanning the first level of each long elevation is an open porch. The two gable ends have no fenestration but each has a pair of in-wall brick chimneys.

Inside, each level was originally divided by a stud partition wall through the center of the building, creating two living quarters of equal size with mirror plans. Abutting this center wall were matching staircases, one for each living quarter. In each quarters, the first-floor stair hall ran from the front (east) entrance to the back (west) entrance. Adjoining the hall were two rooms, the larger living room in front and the kitchen behind, each with its own fireplace. At the second floor, the long stair hall was truncated by a small utility room that filled the east end of the hallway. Again, two rooms adjoined the hall; used as bedrooms, each had its own fireplace.

This room configuration and the building's exterior appearance remained largely intact throughout the period of service as living quarters for the light station crew, at least until 1940 and perhaps longer. But when administration of the Quarters transferred to the National Park Service in 1953, the interior room configuration was reorganized for use as a natural history museum, with spaces for exhibits, offices, retail operations, and other functions. Interior walls were removed to create larger rooms. Interior doorways were widened to facilitate circulation between rooms. The south staircase was removed; public restrooms were installed in its place on the first floor. The center wall was opened at both levels to create wide passages from one quarters to the other, essentially creating one functional unit where previously there had been two.

Over the years the building fell into disrepair. During a massive repair campaign of 1990-92, the National Park Service addressed three principal objectives. The first was to correct the considerable maintenance deficiencies of the building. Extensive repairs were made to the wood framing and additional masonry foundation piers were installed. New wood shingle roofs and galvanized steel gutters and downspouts were installed. The open porches were extensively repaired. The electrical and mechanical systems were replaced and upgraded.

The second objective was to use the building fabric itself to tell the story of the building's former use as living quarters for the lighthouse keepers. Where elements were missing, new replacements were installed, such as a section of handrail and balustrade of the missing north staircase, the first-floor fireplace mantels, and numerous interior doors. Where whole walls had been removed, wing walls were constructed to provide a semblance of the original room configurations.

The third objective was to facilitate access by the handicapped. The site was re-graded along the west side of the building and a new wood plank walk was installed on a gradual rise to connect the site's walkway to the building's open porch; the plank walk with gentle slope resembles an historic feature, disguising its true purpose as a wheelchair ramp. On the porch, a beveled wood board serves as a reducer to provide a wheelchair-negotiable change in grade from porch deck to building interior.

A new public restroom building, fully accessible by the handicapped, was built north of the Quarters. Designed in a size, scale and proportion of early

outbuildings, and using similar materials, the resultant effect is a visually unobtrusive and even complementary addition to the site which once had many such buildings.

Today, the Double Keepers' Quarters is in very good condition in general because of the good work performed in 1990-92. A few exceptions are matters of maintenance needs that are now due. Chief concerns are replacement of the wood shingle roofs, re-pointing of the masonry cisterns, replacement of mechanical units, reapplication of varnish to first-level interior wood floors, and repainting of exterior wood elements.

Administrative Data

Locational Data

Building Name: Bodie Island Double Keepers' Quarters

Building Address: 1401 National Park Drive
Manteo, NC 27954

Location: Cape Hatteras National Seashore

County: Dare County

State: North Carolina

Related Studies

Primary

Bodie Island Lighthouse Historic Structure Report. National Park Service, Southeast Regional Office, 2005.

Holland, Francis R. "A History of the Bodie Island Light Station," Washington: National Park Service, U.S. Department of the Interior, 1967.

National Archives (Washington, D.C.), District Engineers Correspondence and District Inspectors Correspondence, two collections of papers relating to Bodie Island Light Station, compiled 1987-2009.

Collections of papers, drawings, and images held at Cape Hatteras National Seashore headquarters, Manteo, North Carolina.

Secondary

Clifford, Candace. National Register nomination, Bodie Island Light Station, 2002.

Oppermann, Joseph K., *Cape Lookout Lighthouse Historic Structure Report.* National Park Service Southeast Regional Office, 2009.

Real Property Information

Acquisition Date: January 12, 1953: Cape Hatteras National Seashore established; U.S. Coast Guard retained control of lighthouse property.

October 15, 1953: property and buildings transferred to National Park Service; U.S. Coast Guard retained possession of lighthouse.

July 13, 2000: lighthouse transferred to National Park Service; U.S. Coast Guard retained possession of Fresnel lens.

May 16, 2003: Fresnel lens transferred to National Park Service.

Numbering Information

Double Keepers' Quarters

LSCS ID: 007244

Structure No: HS-2B

Storehouse

LSCS ID: 007249

Structure No: HS-2C

Cisterns

LSCS ID: 091898

Structure No: HS-2D

Southeast and northeast cistern pumps

LSCS ID: 202972 (southeast)

LSCS ID: 202818 (northeast)

Structure No: HS-2E (southeast)

Structure No: HS-2F (northeast)

Size Information

Total Floor Area: 2,396 square feet

First Floor Area: 1,198 square feet

Second Floor Area: 1,198 square feet

Roof Area: 2,114 square feet

Number of Stories: 2

Number of Rooms: 17

Number of Bathrooms: 1

Cultural Resource Data

National Register Status: Listed July 24, 2003
Reference # 03000607
Name: Bodie Island Light Station

Proposed Treatment

Preservation of the character-defining features of the exterior in their current state, an appearance that spans each of the three major design manifestations. Preservation of the interior as currently adapted.

I.A Historical Background and Context

Forces of Nature

Nowhere along the Atlantic coast of the United States are the forces of nature a more ever-present and defining influence than on the Outer Banks of North Carolina. The winds, water, sand, and storms have continually shaped the landscape and the culture. This isolated land has challenged navigation along its shore since the first recorded shipwreck of John White's flagship *Tyger* at Ocracoke Inlet in 1585. Since then, more than 650 shipwrecks have been identified along this treacherous coastline. In a complex relationship with the sea, the inhabitants of this land have been both threatened and nurtured by this turbulent and often hostile environment.¹

The formation of the Outer Banks began fifteen thousand years ago when the ocean level was 300 feet lower than today and North Carolina's coastline extended fifty to seventy-five miles east of its present location. Winds from the west piled up sediment to create a large dune at the easternmost edge of the continental landmass. Then, as glaciers melted and the sea level rose, the dunes became barrier islands paralleling the coastline. Although the sea continues to rise, the Outer Banks have slowly moved to the west and remained intact because of the unique combination of wind, waves, and weather.²

By protruding so far into the Atlantic, the Outer Banks are particularly vulnerable to hurricanes and storms that continually resculpt the fragile landscape. Consequently, historical records dating from 1585 document more than twenty-four different inlets cutting across the Banks at various

times. Geographic formations indicate that almost half of the Outer Banks has been covered by inlets at one time or another. Today there are six inlets between Morehead City and the Virginia state line.³

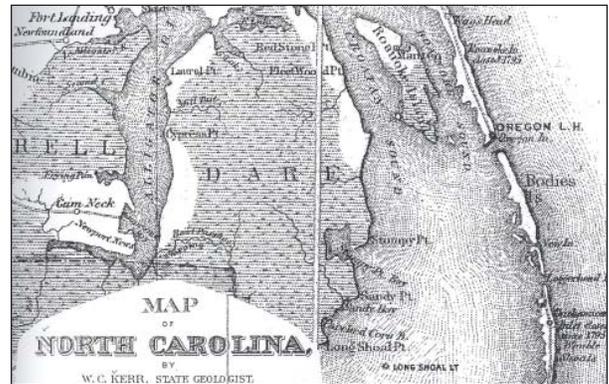


Figure 1, Detail of 1882 "Map of North Carolina." (Collection of the Museum of Early Southern Decorative Arts, Winston-Salem)

By the 18th century, Native Americans no longer had a presence on the Outer Banks. European settlers were sustained by fishing, grazing stock, and farming. Most had migrated from Virginia and were joined by shipwreck survivors as well as a number of outlaws. By the time North Carolina became a state in 1789 about 1,000 permanent residents lived on the Outer Banks. That they were a self-sufficient and independent-minded people was the result of the isolated landscape and its dangers. They would be called upon to man the lighthouses and life-saving stations of the Outer Banks.⁴

1. Stick, *Outer Banks*, p. 173; Hauser, *Graveyard of the Atlantic*, www.coastalguide.com/packet/Shipwrecks01.htm.
2. Pilkey, *North Carolina Shore*, p. 41-45; Bachman, *Insiders' Guide*, www.insiders.com/outerbanks/main-history.htm#tod.

3. Bachman, "Shipping and Settlement into the 1770s," www.insiders.com/outerbanks/main-history.

4. Stick, *Outer Banks*, p. 75-77.

The Graveyard of the Atlantic

Secretary of the Treasury Alexander Hamilton has been credited with declaring the ocean off the Outer Banks “The Graveyard of the Atlantic” for the extraordinary number of ships buried there.⁵ The currents that increased the speed of sailing ships also brought them perilously close to the shifting sand bars of the Outer Banks. Once grounded, ships were soon torn apart by the turbulent waters, their crews without assistance. Historian David Stick vividly describes the sea conditions: “the northbound Gulf Stream and the cold currents coming down from the Arctic run head-on into each other, tossing their spumy spray a hundred feet or better into the air and dropping sand and shells and sea life at the point of impact.”⁶

Today few ships wreck, but storms still uncover the ruins of old wrecks along the beaches of the Outer Banks. The longstanding practice of reusing their remnants continues. In 1926, lighthouse keeper Vernon Gaskill added three rooms to his family’s house in Wanchese, mostly with framing salvaged from the hull of the *Laura A. Barnes*, a four-masted schooner wrecked nearby in 1921.⁷

What’s in a Name?

The origin of the name Bodie Island is unclear but it was apparently in use by 1709. In that year, *A New Voyage to Carolina* was published, a journal of John Lawson’s travels wherein the name is first mentioned in print. Lawson describes several inlets through the barrier islands that have since been closed by storms, and his journal gives a glimpse of the Outer Banks as they were in early 1700s. The name also appears on Moll’s 1730 “Map of the Province of Carolina.”⁸

Known at various times as Body’s Island, Bodies Island, Body Island, Micher Island, and Cow Island, its land mass in the 1770s extended from Roanoke Inlet at the north end, nine and one-half miles south to Gunt Inlet, and contained

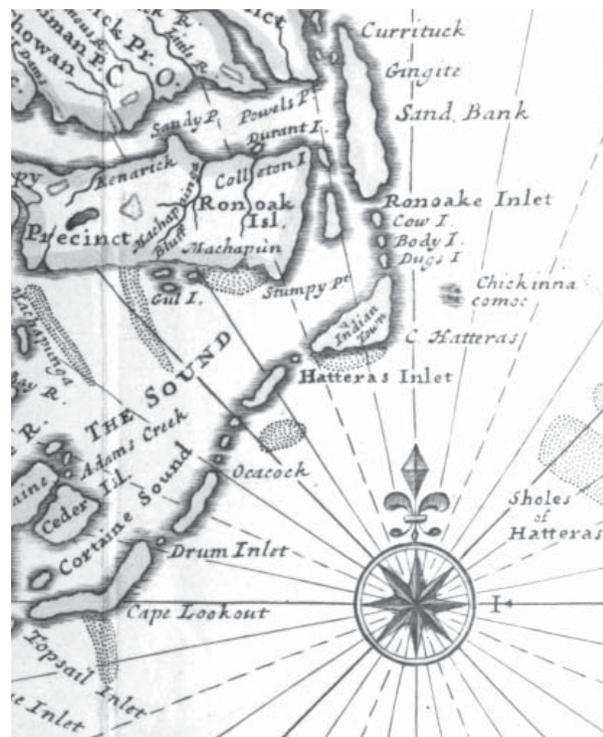


Figure 2, Detail of Moll’s “A Map of the Province of Carolina,” 1730. (Collection of the Museum of Early Southern Decorative Arts, Winston-Salem)

This section of the Outer Banks is especially susceptible to the opening and closing of inlets. Over the years, at least six different inlets have been located between the present day Bodie Island Lighthouse and Rodanthe approximately seventeen miles to the south.⁹ The instability of this landscape has resulted in the reshaping of the size and even the location of Bodie Island over the years.

The land now known as Bodie Island has not been an island since about 1811 when Roanoke Inlet closed. Oregon Inlet was subsequently opened by an 1846 hurricane, further confusing geographic identity. With the cutting of the Oregon Inlet, the lower part of the island was severed. Nonetheless, the name would linger long after the island was gone, a moniker that continues to this day for the land that straddles both sides of the inlet. When the current lighthouse was completed in 1872 on the north side of Oregon Inlet, it retained the name as the Bodie Island Lighthouse.

5. Harrison, p. 10-15. “Under Sea Graveyard along the Outer Banks holds the USS Monitor,” 19 July 2005, www.kittyhawkfreepress.com/atlanticgraveyard.html.

6. Stick, *Graveyard of the Atlantic*.

7. *John Gaskill Remembers*, p. 20.

8. Powell, *North Carolina Gazetteer*, p. 57.

9. The origins of the Bodie Island name remain unknown. Today, local lore explains that the term relates to the bodies that were washed up on its shores. Jan DeBlieu, *Hatteras Journal* (Winston-Salem: John F. Blair Publisher, 1998), p. 31. Zepke, *Coastal North Carolina*, p.36.

10. Stick, *Outer Banks*, p. 274-79.

America's Lighthouse Program

Recorded history traces lighthouses back at least to the ancient construction, possibly as early as 300 BC, of a lighthouse on the island of Pharos at the entrance of the port of Alexandria, Egypt.¹¹ Built to provide safety for mariners, lighthouses have always had a direct correlation to nautical endeavors. With the decline of ship travel after the fall of Rome, the use of lighthouses also declined, but by the fifteenth century renewed sailing skills brought a new age of lighthouse construction.

The first lighthouses in America naturally arose where coastal populations were concentrated and local businesses were growing. During the colonial period, the individual colonies assumed responsibility for the construction and maintenance of the lighthouses on their shores. These towers generally were paid for by the merchants and businessmen at each location and supported by a duty on ships entering the harbor. No standards addressed their priority, placement, construction or operation.¹²

The adoption of the Constitution created a Federal government empowered to address this as a national concern. Aids to navigation were of such high priority that one of the first official acts of Congress was the passage of a lighthouse bill, placing responsibility under Secretary of Treasury Alexander Hamilton. In a short time, most state-owned lighthouses were transferred to the U.S. Treasury. North Carolina at that time had begun construction on the Bald Head lighthouse near the mouth of the Cape Fear River; while still under construction, it was transferred to the United States and completed in 1796.

By the start of the nineteenth century more than a dozen ships a day were navigating the barrier islands, still with little hope of any organized assistance in the event of trouble. The conditions for mariners were only slightly better along the coastline of New England. There, near the major ports of Boston, New York, and Philadelphia, several private organizations had been established early in the nineteenth century to lobby the government for better navigational aids and provision of assistance for wreck victims.

The extreme hazard posed by the Outer Banks was recognized. As efforts were continued to protect mariners and their cargo, lighthouses were built at Ocracoke between 1800 and 1803 and at Cape Hatteras in 1803, followed by a lighthouse at Cape Lookout in 1812. These towers kept the southern portion of the Outer Banks fairly well lit; however, the area to the north between Cape Hatteras and Cape Henry in Virginia was still dark, leaving Bodie Island "literally covered with wrecks."¹³

Initially, Hamilton himself had assumed responsibility for lighthouse matters, but in 1813, the nation's lighthouse program was delegated to the Treasury's Commissioner of Revenue. The vitality of the program changed in 1820 when it was placed under the authority of the Fifth Auditor of the Treasury, Stephen J. Pleasonton, who knew little of maritime matters. For the next 32 years, Pleasonton ran a harmfully frugal lighthouse program. He shunned technological advances and refused to approve use of a revolutionary new lens system, instead retaining an inadequate lamp and reflector system.

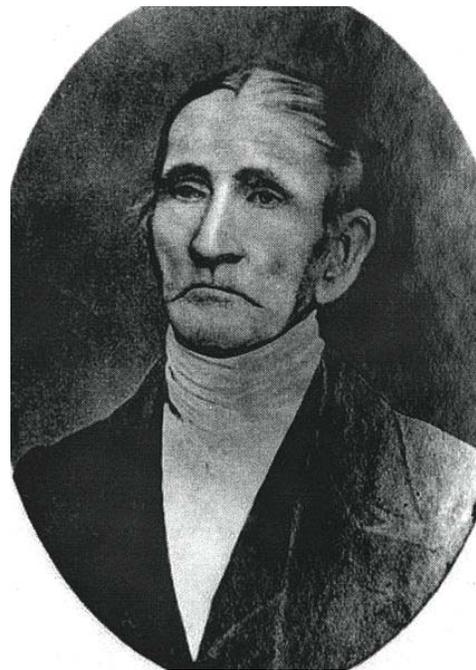


Figure 3, Stephen J. Pleasonton. (U.S. Diplomacy Center poster on U.S. Seal, 2007)

11. Stick, *NC Lighthouses*, p. 2.

12. Cape Lookout Lighthouse HSR.

13. 25th Cong., 2nd Sess, House Doc No. 41 (Serial #322), p. 60; 25th Cong., 2nd Sess, House Ex. Doc No. 24 (Serial #345), p. 113, found in Holland p. 3.

Establishment of the U.S. Light-House Board (1852-1910)

Pleasanton's administration was brought to an end in part by public outcry after a shipwreck in 1849 and the subsequent collapse of a lighthouse in 1851. It was his refusal to consider the Fresnel system that proved his downfall. A commission was appointed to investigate the effectiveness of America's lighthouses. The 750-page report proved so critical of Pleasanton's management that Congress wasted no time in relieving him by creating in 1851 a nine-member Lighthouse Board composed of civilian and military officials. The Board exercised complete authority over the lighthouse system and all of America's navigational aids, and created twelve lighthouse districts, each assigned an officer as lighthouse inspector. Bodie Island was in District Five.¹⁴

A new era in American lighthouse construction began. In the next decades, new brick towers of increasing height were constructed. By 1859, nine tall brick towers had been built, including one at Bodie Island, the second at that location. Six more were constructed in the years following the Civil War. The second Bodie Island Lighthouse was built in 1859, an 80-foot whitewashed brick tower designed by Army Corps of Engineers. The third light, the one now present, was constructed in 1872 and was among several built concurrently on the Outer Banks.

The U.S. Lighthouse Service (1910-1939)

In 1910, Congress dissolved the Light-House Board and created in its place the civilian U.S. Bureau of Lighthouses under the Department of Commerce. The legislation referred to the bureau as the Lighthouse Service, its more commonly known name. George R. Putnam was appointed the first "Commissioner of Lighthouses" and modernized the Service, bringing technical improvements to navigational aids and pioneering the use of radio navigation. At its height, the Lighthouse Service operated about 1,200

14. Cape Lookout Lighthouse HSR; Jones, *Encyclopedia*, p. 108. The Board, whose stationary hyphenated the word to Light-House, was under the Treasury although it had little influence.

lighthouses and 54 lightships with a total of 11,713 navigational aids.¹⁵

Advances in electronics led to the automation of lighthouses, a transformation that reduced the number of Assistant Keepers necessary to operate the stations. In 1916, a device for automatically replacing burned-out electric lamps in lighthouses was developed. The next year an updated bell alarm was developed to warn keepers of fluctuations in oil-vapor lamps. In the same year, an experimental radio beacon was installed in a lighthouse. An automatic time clock for operating electric range lights came into use in 1926, and by 1933, a photo electric-controlled alarm device had been developed to check the operation of the unwatched electric light. Lightships and buoys were similarly improved. These technological improvements brought the United States from sixth in shipping safety in 1920 to second in 1935, with only the Netherlands holding a better safety record.¹⁶



Figure 4, Logo of USLHS.

By the 1920s and 1930s, the majority of light stations had electric service, with the resultant reduction in on-site personnel. The makeup of the light stations began to change. The Bodie Island Lighthouse was electrified in 1932. This led the way to full automation in 1940 and the ensuing departure of the Keeper.

15. Samuel Willard Crompton and Michael J. Rhein, *The Ultimate Book of Lighthouses* (San Diego: Thunder Bay Press, 2003), p. 26, found in Cape Lookout Lighthouse HSR; uscg.mil/history.

16. Maritime Digital Archive, United States Lighthouse Service, www.ibiblio.org/maritime/photolibary/index.php?cat=1554.

From Lighthouse Service to Coast Guard

In 1939 the U.S. Coast Guard was assigned responsibility for the functions of the Bureau of Lighthouses when it was incorporated into the Coast Guard with all personnel, equipment and property. The U.S. Coast Guard became the operational steward of America's lighthouses, overseeing light stations as they evolved from manned to unmanned stations. In more recent years, the Coast Guard has transferred many lighthouses as surplus property, placing them under the management of the National Park Service (NPS) and appropriate non-profit organizations. Despite the transfer of ownership and responsibility, many continue as working navigational aids with the lighting apparatus remaining the property of the Coast Guard. The Bodie Island Lighthouse was transferred to NPS in 2000, then its Fresnel lens in 2005. NPS has agreed to maintain the lens as an aid to navigation. The lighthouse remains under the protection of the National Historic Lighthouse Preservation Act.¹⁷

Sending Out a Light

Lighthouses are simply support structures for a beacon. Early light towers relied on multiple candles and simple oil lamps; hence the quantity of light was measured in candlepower. As maritime commerce increased, so did the quality of lights. By the late eighteenth century, American lighthouses were using spider lamps with numerous wicks; these demanded constant attention.¹⁸ Light production improved around 1810 when the Argand parabolic reflector was introduced to the United States.

One of the greatest improvements in lighthouse technology was developed in 1822 by the French physicist Augustin Fresnel (frā'-nel), who developed a complex lens that concentrated light into a powerful beam. Used first in the British Isles, the lens came to this country in 1840. The lens could rotate and flash, allowing a unique pattern for each lighthouse to help navigators identify their locations.¹⁹ Although expensive,

the Fresnel lens became the universal standard for over a hundred years. A major advantage for lighthouse keepers was the reduced amount of fuel required to produce a stronger light, meaning fewer trips carrying fuel up the steps. When placed at a 150-foot height, the Fresnel lens could achieve a distance of twenty miles; nevertheless, it would take the replacement of Fifth Auditor Pleasonton in 1852 before the United States embraced this new technology.²⁰

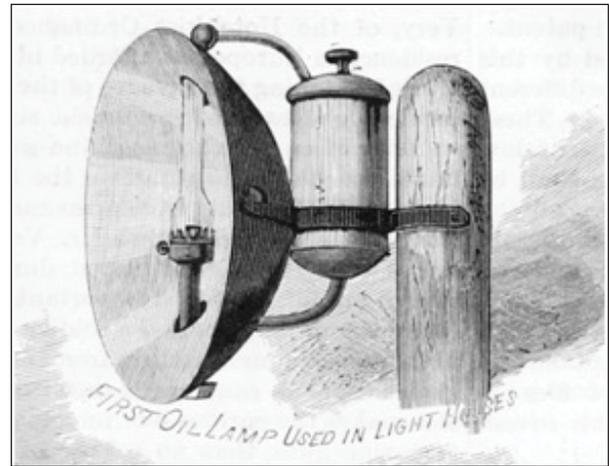


Figure 5, Argand reflector lamp.

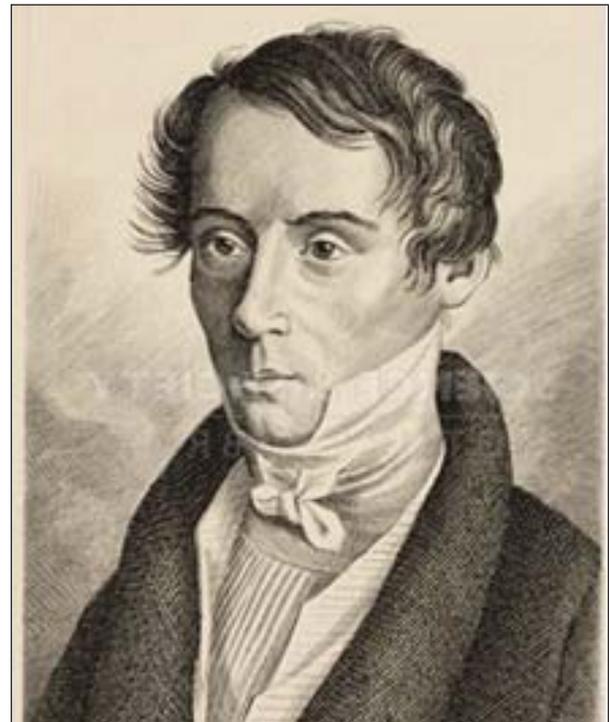


Figure 6, Augustin Fresnel 1788-1827.

17. www.outerbankslighthousesociety.org

18. Holland, *America's Lighthouse*, p. 21-23.

19. Jones, *Encyclopedia*, p. 14.

20. <http://www.michiganlights.com/fresnel.htm>.

The first Bodie Island Lighthouse housed the inferior reflector lighting system. The second Bodie Island lighthouse of 1859 was part of the new generation of tall brick towers constructed in the 1850s along the Atlantic coast, with the tallest, Cape Hatteras, capping out at 193 feet. All of these were furnished with the new “first-order” Fresnel lens and by 1861 nearly all American lighthouses had been upgraded with a Fresnel lens.

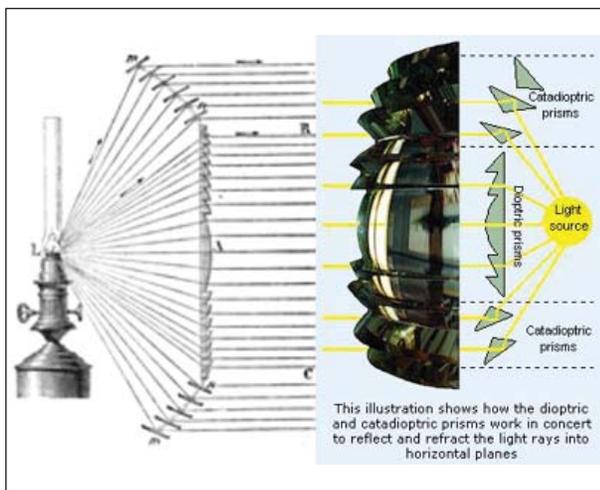


Figure 7, Use of Fresnel lenses to reflect and refract light to a horizontal plane.



Figure 8, 1st Order Fresnel wick.

Fuels for lighthouses were changing as well. In the 1850s, colza oil replaced the expensive whale oil. In the late 1850s, Joseph Henry of the Light-House Board discovered lard to be an excellent fuel if heated to a high temperature. Lard was plentiful

and outperformed earlier fuels; by 1867 it fueled the larger lighthouses with colza oil assigned to the smaller.²¹

By 1878 kerosene, popularly known in that day as mineral oil, began to be used for fuel. Costing a fraction of the cost of lard, it initially was used for smaller lamps but eventually in lamps of all sizes. In 1902, the consumption of oil for a first-order light was calculated to be 2,283 gallons of oil per year, all of which had to be carried by the keeper, typically in five-gallon cans, from the oil house up the hundreds of stairs to the lantern. Bodie Island’s Lighthouse made the conversion to mineral oil (kerosene) in 1884 and later built an oil house to store the fuel.²²



Figure 9, USLHS kerosene glass container protected with metal mesh.

The last technical upgrade before the installation of electricity was the invention of the Incandescent Oil Vapor (I.O.V.) light. Operating similar to a modern Coleman lantern, the device vaporized kerosene against a hot wall, forcing it through small holes to a mantel where it burned in a fireball. An improved I.O.V. lamp was developed in 1911. The following year an I.O.V. was installed in both Bodie

21. Holland, p. 23, Smithsonian Institution Archives, Joseph Henry Papers, www.siarchives.si.edu/history/jhp. Henry was chairman of the Board’s committee on experiments; he helped introduce numerous improvements in illumination and signaling and encouraged research in optics and thermodynamics.

22. *Instructions to Light-Keepers* (Washington: U.S. Government Printing Office, 1902), 14.

Island and Cape Lookout lighthouses. The I.O.V. increased the burn temperature and light intensity, at the same time reducing the effort needed by the keeper to keep the lens clean.

In 1886, the Lighthouse Board tested a new technology in the illumination of the Statue of Liberty--electricity. The electrical lighting of the statue heralded the beginning of the “modern age” in lighthouse illumination. In 1900, the Board began converting lighthouses to electric service; however, the scarcity of nearby power lines hampered a widespread conversion.²³ Therefore, generators were introduced where power lines were not available and in the 1920s and 1930s the Lighthouse Bureau converted most lighthouses to electricity. Remote Bodie Island Lighthouse was electrified using a generator on September 19, 1932, with the light bulbs simply replacing the I.O.V. lamps, leaving the Fresnel lenses in place. The new generator was installed in the oil house.

The change to electricity drastically reduced the manpower needed to operate a lighthouse but, more significantly, it opened the door to new methods of communication that would in time eliminate the need for keepers altogether. As early as 1898, the Navesink Lighthouse that had been the location for the first Fresnel lens was also the first lighthouse to have an electric arc lamp installed and supported by its own generating plant. It was from Navesink that in 1901 the first wireless message was transmitted between a lighthouse and lightship.²⁴

A Light at Bodie Island

The origins of the Bodie Island Lighthouse began almost a century before it was electrified. A congressional examination of the southern coast in 1837 found Bodie Island “of great importance,” saying, “More vessels are lost there than on any part of our coast. It is the eastern-most point of land on the coast of North Carolina, forming in fact, a cape. It is my opinion, that by the erection of a lighthouse on it, much property would be saved and the navigation of the coast facilitated.”²⁵

Congress appropriated funds for a lighthouse

23. www.michiganlights.com/lighthouseservice.htm.

24. Strobridge, n.p., from Cape Lookout Lighthouse HSR.

25. Holland, p. 17.

on Pea Island south of Bodie Island, but Capt. Charles Skinner, who was asked to examine the site, argued that the vast majority of vessels came from the north and passed close to land to avoid the Gulf Stream; “. . . the beach is so low, they run on it before they are aware of danger,” and a light station on Bodie Island would better serve them. He recommended a tower sixty feet high with revolving light, “revolving, because Hatteras, nearest south, is *fixed*, and Cape Henry, the nearest north, is also *fixed*.”²⁶

Collector of Customs Thomas H. Blount disagreed with Skinner, arguing the lighthouse should be located on Pea Island where it would be “secure from the storms. . . and much more comfortable to the keeper.”

Congress avoided a decision by funding, in 1838, a lighthouse to be built on either Pea Island or Bodie Island, leaving the choice to Pleasonton. Pleasonton followed Skinner’s recommendation, instructing Collector of Customs Thomas H. Blount to choose and purchase a site on Bodie Island. After several years of delay, Blount appealed to a member of Congress in 1843,

...I presume the reason why it has not been commenced is that the appropriation was insufficient and will require one of the first class [lights]. There is no part of the Coast of the U.S. which requires a Light House more than Body’s island—‘tis’ in the direct route of all going North or South & of all foreign vessel bound into the Chesapeake, & when there during the last summer, there were fifteen wrecks in sight at one place, & within the last month, a Brig bound into Norfolk was wrecked there worth more than would have built the light house.

You will excuse my calling your attention to this subject, but many of your constituents have suffered and will continue to do so unless a light is placed there, & not only yours but the north are, from their owning more shipping than the south, still more interested.²⁷

After a new inlet had opened at Bodie Island in 1846 and Congress had made an additional appropriation in 1847, the first Bodie Island Lighthouse was completed and its light displayed in early 1848. The finished station included a wood frame single keeper’s house, brick cistern, and two outhouses. Two years later, defects in

26. Holland, pp. 18-19.

27. Correspondence from Thos. H. Blount to Hon. Ed Stanly, U.S. Representative, dated January 20, 1843; in National Archives (Washington, D.C.), Entry 17C, “Letters Received from Superintendent of Lights, 1803-52,” found in National Register nomination, p. 23.

the foundation design caused the tower to settle unevenly in the soft soil, leaning nearly a foot out of plumb by 1851. By 1858 the tower was beyond repair; it was abandoned, replaced, and then razed.

The second Bodie light was built in 1859 with an upgraded third-order Fresnel lens. Construction was completed in less than a year. The new lens required two people for operation; the previous keeper's house was repaired and a new dwelling constructed for the new assistant keeper. The Timing was unfortunate. The new tower and the two keeper's houses would be short-lived.²⁸

The Civil War

The War came early to the Outer Banks and left late. The strategic value of the inlets and sounds was recognized by the Confederacy at the outset, and as the war began the Confederate Lighthouse Service ordered all lighthouse lenses removed and taken inland for safekeeping until war's end.²⁹ The Bodie Island Lighthouse was used as a lookout tower and a storage place for guns. North Carolina seceded from the Union in May of 1861, and soon after sent forces to build forts along the inlets of the Outer Banks, despite the intricacies of getting supplies, hauled by boat from the supply depot in New Bern. The forts were meant "to guard the inlets and thus protect the sounds from Yankee incursions."³⁰ Federal troops watched, then entered the inlets and attacked the forts in August, 1861. Within three days both Fort Hatteras and Fort Clark had fallen. Fort Ocracoke was next, occupied after it was abandoned by the Confederacy.

With the neighboring forts gone, the Confederates abandoned the fort at Oregon Inlet in November 1861, but only after blowing up the Bodie Island tower to prevent the Union force from using it

28. The keeper's house for the first Bodie Island Lighthouse was described in 1858 as a 1½-story frame house with unpainted "natural" wood shingles. Inside were five rooms to serve a keeper's family. With the house were provided a cooking stove, 2 warming stoves, "and pen, clock." A brick cistern supplied water.

29. Torres, Historic Resource Study. HABS documentation of Bodie Island Light Station, 2002. Near the end of the War, Sherman's troops found several crated lens stored in the capitol building in Raleigh. Records of the Light-House board indicate the Bodie lens was saved and eventually shipped to the Lighthouse Inspector in New York

30. Holland, p. 34.

as a lookout. To the south, the Cape Hatteras Lighthouse had been abandoned by Confederate troops, but was occupied and restored by the Union.³¹

The Union commanders recognized that control of the inlets meant control of much of North Carolina and continued their efforts on the Outer Banks. By early 1862, the entire coast had fallen into Union hands. In their attempt to thwart the encroaching enemy, the people of North Carolina had darkened the coast they had worked so hard to illuminate.³²

Crossing the Inlet

In the winter of 1870-71, a number of fatal shipwrecks along the Atlantic coast resulted in a renewed call for protection of vessels and mariners. More lighthouses were required, as well as personnel to help rescue wreck victims. In 1871 Congress appropriated the first funds for life-saving stations and their crews. Construction at the Outer Banks began in 1872.³³ A new lighthouse was needed at Bodie Island, but because Oregon Inlet had moved to within 400 yards of the previous site, a new location was sought. A site across the inlet was chosen, and construction of the third Bodie Island Lighthouse began in 1872.



Figure 10, Bodie Island Life-Saving Station, before 1900. (Collection of Outer Banks History Center, N.C. Division of Archives and History)

31. Bodie Island Lighthouse HSR, p. 10.

32. Torres, Historic Resource Study.

33. Stick, *Outer Banks*, p. 180-193.

The Life of a Keeper

The 1915 definition of a lighthouse by the U.S. Bureau of Lighthouses was “a light station where a resident keeper(s) is employed.”³⁴ The lighthouse dictated the daily lives of the Keepers, who had to work in all weather conditions, especially during hurricanes and gales when passing ships were in the greatest danger. The success of the station as the principal warning to ships at sea was fully dependent on the consistent and dependable tending of the light. Changing technologies had great impact on their work.

In 1852, the newly-formed Light-House Board took quick action to establish uniformity and accountability in the government’s flawed lighthouse program. The Board put into place a system of stringent regulations and inspections, reporting, “Inspectors and light-keepers should be provided with printed instructions, in the form of manuals of instruction to guide them in the policing of the establishments.” The position of District Lighthouse Inspector was created and the regulations were codified in the Instructions to Light-Keepers. According to the 1852 Report of the Light-House Board,

Frequent visitation and minute examinations by competent inspectors would insure vigilance, economy, and order on the part of the keepers. The inspectors should be men thoroughly acquainted with all details of light-house management and superintendency, with the manner of adjusting the lamps and reflectors, and for keeping them in order.³⁵

Each Keeper and all assistants received a copy of the manual and were evaluated by their careful adherence to procedure. This manual prescribed a strict daily regime of maintaining the light, cleaning, maintenance, and record keeping. The manual was revised and updated as technology changed the operation of lighthouses; for each station the Board determined the number of keepers necessary and the duties of each.³⁶

The size of the new 1872 tower at Bodie Island and the complexity of the Fresnel lens required several keepers to operate the light. Initially, a Principle Keeper and three assistants were assigned to the Bodie Island station. After two years, two

assistants worked at the station and this number remained constant until the mid-1920s. Assistants were identified by the status of position, with 1st Assistant Keeper the highest followed by 2nd Assistant Keeper and so on. The keepers worked on a schedule of two weeks on duty and one week off. The work was strenuous, particularly the night duty requiring a constant watch over the light. The keepers split the nights, with one working from dusk to midnight and the other working from midnight to dawn. The work started before dark, when the keeper drew and filtered the oil, carried it up the spiral stairs of the lighthouse, and lit the lamp. At sunset he opened the curtains covering the glass storm panes of the tower’s lantern level to send the light out to sea. He then spent the long hours in the watch room, one level below the lantern, to assure the temperature remained high and the light remained lit.³⁷

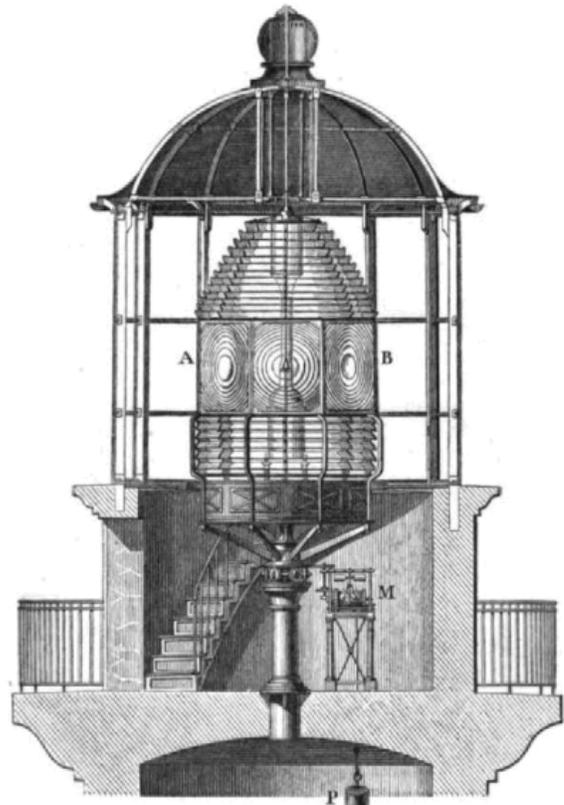


Figure 11, Watch room for keepers with Fresnel lens above.

An 1881 Circular issued by the Light-House Board prescribed the quantity of oil needed for the different lamps in use at that time. The Board instructed that the table “should be posted on one of the blank leaves of the book of Instructions to

34. Jones, *Encyclopedia*, p. 105.

35. Inspector Correspondence (1903-1912).

36. Cape Lookout Lighthouse HSR.

37. John Gaskill interview, and Gaskill, p. 32.

Keepers, at each light-station.”³⁸ The table was accompanied by the admonition,

The foregoing are the largest quantities of oil that the respective lamps can consume when they are clean, properly and constantly attended, and their flames kept during the entire time at the prescribed heights. With lower flames and bad attendance, much less oil will be consumed, and consequently inferior lights produced.

Those keepers who come nearest to the actual consumption of the largest quantity of oil that the lamps can consume, will, as a rule, be found to keep the best lights; while those who report a larger quantity than the lamps are capable of consuming, must either waste or dispose of the excess; and those who do not consume nearly the maximum quantity, must necessarily be bad lights.

CIRCULAR.
CONSUMPTION OF OIL AND LUMINOUS INTENSITIES OF LAMPS IN THE LIGHT-HOUSE SERVICE.

1881.
Department No. 199.
1. S. Hook, S. C. of H.

Treasury Department,
OFFICE OF THE LIGHT-HOUSE BOARD,
Washington, D. C., November 7, 1881.

The following table of consumption of oil has been adopted by the Light-House Board, and will take the place of that published July 1, 1880. It should be pasted on one of the blank leaves of the book of Instructions to Keepers, at each light-station:

ORDER OF LAMP.	NAMES OF LAMPS.	No. of Wicks.	DIAMETER OF WICKS, IN INCHES.				INTENSITY, IN CANDLES.	CONSUMPTION.	
			No. 1.	No. 2.	No. 3.	No. 4.		Per Hour, in Gals.	Per Annum, in Gallons.
LARD OIL.									
1st.	Funck Lamp.....	4	1 1/2	1 3/4	2 1/4	3 1/2	400.00	6.53	938
	Mechanical and Moderator.....	4	1 1/2	1 1/2	2 1/4	3 1/2	358.00	6.60	900
2d.	Funck Lamp.....	3	1 1/2	1 1/4	2 1/4	.....	364.00	4.10	560
	Mechanical and Moderator.....	3	1 1/2	2	2 1/4	.....	390.00	4.10	560
MINERAL OIL.									
2d.	Funck Lamp.....	3	1 1/2	1 1/4	2 1/4	.....	163.00	4.80	607
3d.	Funck Lamp.....	2	1 1/2	1 1/4	.....	.....	78.00	2.00	270
4th.	Hains Lamp.....	1	1 1/2	.....	.....	.....	32.00	1.00	137
	Locomotive Head-light.....	1	1 1/2	.....	.....	.....	54.00	1.33	180
5th.	Do.....	1	1 1/2	.....	.....	.....	50.00	1.23	171
	Hains Lamp.....	1	1 1/2	.....	.....	.....	18.00	.63	86
6th.	Constant-level Lamp.....	1	1 1/2	.....	.....	.....	20.00	.67	90
	Light-vessel Funck Burner.....	1	1 1/2	.....	.....	.....	18.50	.50	68
6th.	Flat-wick Lamp.....	1	1	.....	.....	.....	12.54	.50	68
	Mississippi River Lantern.....	1	1	.....	.....	.....	12.23	.30	40

The foregoing are the largest quantities of oil that the respective lamps can consume when they are clean, properly and constantly attended, and their flames kept during the entire time at the prescribed heights. With lower flames and bad attendance, much less oil will be consumed, and consequently inferior lights produced.

Those keepers who come nearest to the actual consumption of the largest quantity of oil that the lamps can consume, will, as a rule, be found to keep the best lights; while those who report a larger quantity than the lamps are capable of consuming, must either waste or dispose of the excess; and those who do not consume nearly the maximum quantity, must necessarily be bad lights.

BY ORDER OF THE LIGHT-HOUSE BOARD:
JOHN RODGERS,
Esqr. Admiral, U. S. Navy,
Chairman.

Figure 12, Light-House Board circular regarding oil consumption, 1881.

Ever Cleaning

For the early lighthouse keepers, cleaning the lens and lantern house was a constant and critical chore. Fuels changed and many kinds of burners and wicks were used, but all produced soot or smoke. James Claffin, in *The Lighthouse Digest*, describes the work:

38. "Circular. Consumption of Oil and Luminous Intensities of lamps in the Light-house Service," November 7, 1881.

Cleaning was a constant job at the lighthouse. Keepers were required to keep everything polished and clean at all times, while still maintaining their uniforms clean as well. For this reason, the Service provided cleaning coats or aprons to protect their uniforms.

The "1902 Instructions to Lightkeepers" noted that, "When the light is extinguished in the morning, the keeper must hang the lantern curtains and immediately begin to put the apparatus in order for relighting. While doing this, the linen aprons provided for the keeper's use must be worn, that the lens may not suffer from contact with the wearing apparel." The lens glass was extremely delicate and daily cleaning was required. However, it was important that it be done in just the right manner. Indeed, even wiping the dust improperly could scratch the lens. The regulations continued: "Before beginning to clean the lens, it must be brushed with the feather brush to remove all dust. It must then be wiped with a soft linen cloth, and finally polished with a buff-skin. If there is oil or grease on any part, it must be taken off with a linen cloth, moistened with spirits of wine, and then polished off with a buff-skin. Under no circumstances must a skin which has been wet or damp be used, as this will scratch the lens."³⁹

Cleaning aprons and coats were among the supplies distributed by the Lighthouse Service. The coats were of tight-weave linen, long enough to protect against a buckle or button underneath. The circular logo of the Lighthouse Service was stamped on the coats as were all objects supplied by the service. The "soft linen cloth" mentioned in the Instructions was another item issued by the Light House Establishment, the number determined by the size or order of light: first order lights were issued 24 towels; second order, 20 towels; third order, 18; and so on. Even these were marked with the LHE's circular stamp, "to ensure that they were not removed and used for other purposes."⁴⁰

More than a Lighthouse

The duties of the lighthouse keeper went beyond the lighthouse itself. Days were spent doing the work necessary to keep the complex operating.

It was the keeper's job to keep the whole of the light station in order, to clean, paint, and repair all buildings on the station; clean chimneys of the keepers' dwelling; keep privy clean and apply lime;

39. Lighthouse Digest, April 2006. www.lighthousedepot.com/lite_digest.asp?action=get_article&sk=02440&bhcd2=1248574720.

40. Ibid.



Figure 13, Bodie Island Light Station, 1893. (H. Bamber, photographer)

stack wood properly in woodshed; maintain all mechanical equipment; maintain a log book and record all daily light station activities; take weather readings every day; weed the walkways and maintain the light station grounds; keep inventories of all equipment and fuel; provide visitors with tours of the station; and plant and tend a personal garden as needed.⁴¹

Each aspect of a keeper's task was addressed by the Lighthouse Service. James Claffin describes the rules regarding paint.

During most of the history of the U.S. Lighthouse Establishment and Service, paints and colors were mixed by hand by the keeper as he prepared for his day's work. Colors were not by choice, but rather were strictly dictated by regulation. The 1871 regulations are typical of the detailed instruction provided, with in excess of five pages included on the subject. Whitewash was also a common item used for most towers and dwellings of the time. The recipe for whitewashing had been found by experience and served well on wood, brick and stone and was less expensive than paint as well.

To make whitewash, half a bushel of unslaked lime was slaked with boiling water, keeping it

covered. It was then strained and a peck of salt, dissolved in warm water was added. Three pounds of ground rice was put into boiling water and boiled to a thin paste; half a pound of Spanish whiting, and a pound of clear glue, dissolved in warm water. This mixture was mixed well, and allowed to stand for several days. When used, this whitewash mixture was heated in a kettle and put on as hot as possible, using painters' or whitewash brushes.⁴² By 1902, the same materials and instructions continued to be used by the keepers, with more detailed instructions provided as to color selection.

The keeper was expected to perform other duties as well. He watched for and reported on all wrecks in his vicinity and if he could lend any assistance to the wreck, was instructed to do so. By 1902, the keepers were also acting as conservation wardens charged with the task of preventing trees from being cut on Federal lands and assuring compliance with state game laws. More specifically, regarding birds,

It is most desirable that not only the game animals of the country but that song birds and birds of all kinds should be protected and

41. http://www.ponceinlet.org/PDF/Keepers_Duties.pdf.

42. Lighthouse Digest, October 2006. 72.45.162.158/Digest/StoryPage.cfm?StoryKey=2550.

encouraged to occupy their abodes in their natural habitats and the Light-House Board directs that all persons in the service not only exercise this spirit of protection but encourage others to do likewise.⁴³

Supplies and Demands

Many reports and letters between keepers and the district offices deal with supplies and equipment. The Light-House Board provided all supplies for the light, the station, and the keepers, especially where lighthouses were located in isolated areas with limited access to food, such as at Bodie Island. Provisions were delivered by lighthouse tenders, ships that served a vital role; they “tended” to the needs of others. The crews on the tenders brought fuel, food, news, mail, supplies and maintenance crews to help with major repair work. Specifically designed to support lighthouses and light vessels, the tenders had shallow drafts suitable for coastal waters.⁴⁴

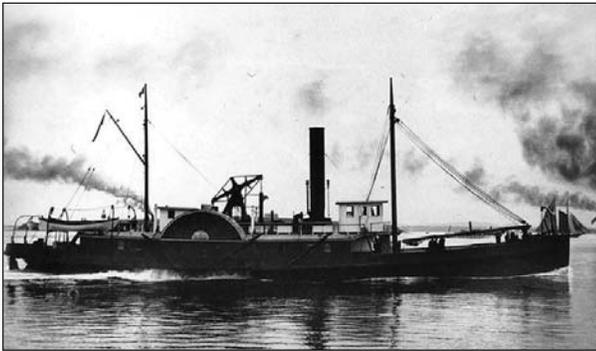


Figure 14. The Lighthouse Tender Geranium. (1865-1910) (www.history.navy.mil.)

Because they were posted at isolated stations, the keepers at Bodie Island, Cape Hatteras, and Hatteras Inlet were entitled to provisions. According to a letter dated April 24, 1907, each keeper was entitled to \$40.88 in provisions per year. In 1907, Messrs Claridge & Woodall of Baltimore received the contract for providing provisions. In May 1908, legislation changed the rate of provisions to 30 cents a day. On June 6, 1908, the Naval Secretary wrote the Inspector, ‘At stations where rations cannot be obtained easily on the local market, inspectors have the authority to

43. *Instruction to Light-Keepers*, 1902 edition. pp. 8, 12.

44. Lighthouse Service Commissioner George R. Putnam noted in his book *Lighthouses and Lightships of the United States*. [Cambridge, MA. 1933 2nd. ed.]

continue rations to prevent hardship, rather than paying the 30-cent daily allowance”. On July 24, 1908, the Inspector wrote the Keepers, “During the four winter months rations will be issued to your station. The allowance is \$36.30 for each keeper. Price list from Claridge & Woodall enclosed.”⁴⁵

In a letter dated May 24, 1909, a 14-page list of supplies was sent to fifth district light stations. An undated letter entitled “Schedule of Deliveries of Fuel from Washington Depot, NC” instructed that coal, hard wood, and pine wood be sent to Bodie Island, Cape Hatteras, Ocracoke, Hatteras Inlet, and other stations in the District.⁴⁶



Figure 15. USLHS Tool box. (Courtesy of Claflin Antiques)

On November 2, 1908, Ephraim Meekins, Jr., Principal Keeper of Bodie Island, wrote the Inspector: “Your letter of Oct 29th last rec’d today, and I hasten to send list of provisions needed in accordance with your instructions. The Keeper of Cape Hatteras told me he received a list to select from, but I did not. Consequently I did not know what to do, but wait instructions from you. The enclosed list calls for (approximately) what has been provided heretofore.

- 1 Barrel Flour
- 1 “ Beef
- 1 “ Potatoes

45. Inspector Correspondence Overview, p. 5.

46. Inspector Correspondence (1903-1912).

- 1 “ Pork
- 1 Bushel Onions
- 1 “ Beans
- 10 lbs Coffee
- 75 “ Sugar
- 15 “ Rice
- 4 Galls Vinegar”⁴⁷

In addition to food, coal, wood, tool chest, and other daily supplies, the Lighthouse Service supplied furniture and basic needs for a residence. The interior of the Keeper’s quarters was simple. The house was neither electrified nor plumbed while it served as a residence. Lighting was by kerosene lamp, heat was by fireplaces, and the privies were outside. A wood stove served the kitchen, and behind the sink a hand pump between the windows supplied water.⁴⁸



Figure 16. USLHS cup, banjo clock, and seal on blanket. (Courtesy of Claflin Antiques)

Tenders brought supplies both large and small. The Quarters were furnished a medicine chest, blankets, china, and a banjo clock and barometer to mount on the hall wall. Also in the hall was a portable library supplied by the Light-House Establishment. Despite their many duties, keepers often had a great deal of time on their hands; reading was a common pastime. In 1876 the Light-House Establishment began to provide portable libraries to light vessels and isolated light stations with a selection of reading materials. These were

47. Ibid.

48. Gaskill interview and Gaskill Remembers, p. 38.

distributed with other supplies by the tender ships. Early “traveling libraries” were contained in a portable wooden case, each with a printed listing of the contents posted inside the door. Later the libraries were rolling bookcases to be placed against the wall of the keeper’s residence. These libraries were exchanged at six-month intervals, sent to another lighthouse and replaced by a different set of books. A typical library consisted of about fifty books, largely fiction with a mix of history, poetry, scientific works, and always a Bible. Each was marked in the front with the official Light-House Establishment bookplate.⁴⁹

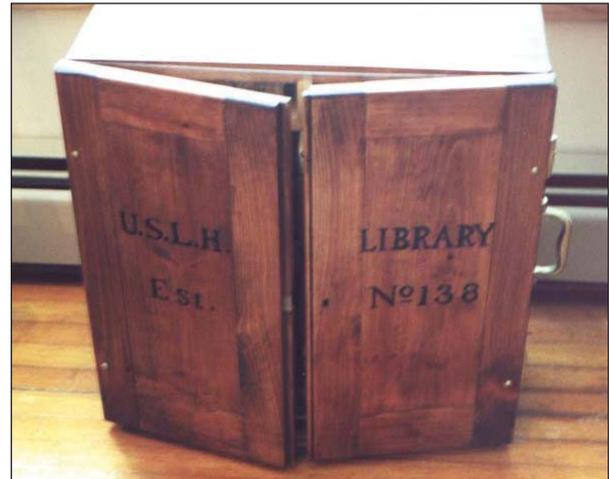


Figure 17. USLHS portable library, closed box (top), open box (bottom). (Courtesy of Claflin Antiques)

49. Gaskill interview; clarke.cmich.edu/lighthouses/lhkeep1.htm; <http://www.michiganlights.com/lhlibrary.htm>.

The Hardships of Proximity & Isolation: Appointments and Transfers

The Double Keepers' Quarters remained the only living accommodations for crew at the Bodie Island Light Station. The daily intimacy of proximity could be one concern for crew working and living so close together. But the isolation from others was hard too. Even though family members were allowed to live at the Cape Hatteras and Bodie Island Light Stations, the isolated locations discouraged the inclusion of families, especially ones with young children. As noted in 1905 by Keeper Gallop, there were no children of school age at that station, the nearest common school was seven miles away, and the only means of reaching it was by boat.⁵⁰

Whether it was the isolation, the demands of the job, the rigor of the inspections, or the salary, Keepers and especially Assistant Keepers transferred to and from light stations frequently. Keepers at isolated stations often sought better positions for themselves or assignments closer to their families. Keepers generally started their careers as 2nd or 3rd Assistant Keepers and were gradually promoted as Principal Keepers at the less attractive stations. Onshore stations near towns were generally considered more desirable and were awarded to keepers with seniority.

Records of the Lighthouse Inspector reveal numerous requests for transfers, leaves, and replacements, sometimes to trade positions with another keeper. Keepers also made many requests for leaves of absence to visit their families who lived onshore or to tend to personal business. On July 21, 1905, Assistant Keeper Simpson requested a transfer to station near Manteo. He writes, "My reasons for wanting thie [*sic*] Position is Because my home is in Manteo, & it would make it quite handy for me. I had to move my family from this station a year ago in order to the my Children to School, & it is about 12 miles from here to Manteo and in winter it is quite a Bad Rout in open Boat."⁵¹ The distance from schools was an ongoing difficulty. On July 22, 1911, Bodie Island 2nd Assistant Keeper B.F. Peel wrote the Inspector:

50. Inspector Correspondence, 1905.

51. Cape Lookout HSR; Inspector Correspondence (1903-1912).

"As I understand that ther is to be some Beacon Light Built in Hatteras Inlet Chanley and if such Be the cse I Respectfully ask to Be transferred to them as my home is in Hatteras an if the are Built whear I have Ben inform thear my House id the nearest pleas for I can see them at any time Seated in my home an I have a power Boat in which I will use free of charge an I will Build a House at my own expence to keep oil in an other supplies. My reason is for wanting them is I am 60 miles from my home an I cant keep family hear on the cont of my children cant git schooling."

Another difficulty was driving in the sand, whether by wagon or automobile. Keepers kept a horse and cart to haul supplies delivered by the tenders and often had trouble in the sandy ground. When the small tires of early cars sank into the sand, air was let out of the tires to gain wider traction. Trips were planned at low tide in order to drive on the hard sand along the water line, but even then the route to and from the light station was risky.⁵²



Figure 18, Vehicle stuck in the beach sand, 1937. (CAHA collection)

Letters indicate that friendships developed among keepers of different stations. For example, on August 6, 1908, Second Assistant J.T. Twiford wrote the Inspector: "I beg leave to state that I most earnestly desire and respectfully ask to exchange positions with Mr. Barnie F. Geel, Asst Long Shoal Lt Sta, NC. My reason for desiring this is that my family is sickly at this Station and I desire to try a change. Long Shoal is near my home and much better for me in all respects. For this reason I respectfully ask that Mr. Geel's and my application receive due consideration as we are anxious to make this change."

52. Inspector Correspondence, Meekins to Inspector, May 3, 1909; Gaskill interview.

Keepers were also given leave to visit or be assigned to national expositions, popular at the time. The expositions often included lighthouse exhibits.⁵³ In December 1906, Keeper Ephraim Meekins at Bodie Island wrote Admiral B.P. Lambertson of the USLHB, requesting “to do a month as keeper of the Light-house Exhibit at the Jamestown Centennial next summer.” In the fall of the following year, he requested “10 days leave (to commence about the 22nd inst.) to visit the Jamestown Exposition with my family. I will faithfully comply with all requirements.” A week later, the inspector offered “Keeper Simpson of Cape Hatteras [to be] at the Jamestown Tricentennial Exposition on Oct 16.” and informed Meekins that this travel and other expenses would be paid by the government representative at the Jamestown Exposition, with per diem at \$2.50 per day. A substitute at Bodie Island was also to be paid by the government. Meekins found a competent substitute in William E. Daniels, left the 1st Assistant Keeper in charge, and was detailed to the exhibition.⁵⁴

Meekins’ tour of duty at the Jamestown Exposition was extended, as was the term of William Daniels as temporary substitute Assistant at the station. Daniels was considered a day laborer “at the rate of the Second Assistant Keeper” \$450 per annum from October 13 to Dec 3 (inclusive).” At the same time and during Keeper Meekins’ absence, John W. Twiford was transferred to Bodie Island from Long Shoal Light Station to become 2nd Assistant Keeper.⁵⁵

We do not know when Meekins returned to duty at Bodie Island although in a letter dated February 18, 1908, the Naval Secretary inquired as to what date Keeper Meekins had returned from the Jamestown Exposition. No response was recorded.⁵⁶

The Last Keeper and the Longest Service

Vernon Gaskill began his long tenure as Principal Keeper in 1919 when his children were young. The family lived at the lighthouse for a year, but because the only transportation was by boat, Gaskill’s wife

and children lived in Wanchese during the winters so the children could attend school, and moved to the lighthouse during holidays and summer vacations. The keeper and his family lived in the south end of the house; the assistant keepers shared the north end.⁵⁷

Gaskill’s duties changed significantly in his first years at Bodie. Night watch duties, requiring a keeper to stay in the tower overnight to monitor temperature of the light, became easier in 1922 when a thermostat was installed over the lamp and wired to a battery-powered bell in the keeper’s quarters. A reduction in temperature triggered the bell to alert the keeper, now sleeping in his quarters rather than in the watch room. The watch room instead was now monitored by a clock that recorded the temperature and the times the light was lit and extinguished each day by the keepers. This record was sent monthly to the lighthouse district office.⁵⁸



Figure 19, Vernon Gaskill (Principal Keeper 1919-1940) on porch of Double Keepers’ Quarters. (CAHA collection)

53. Inspector Correspondence (1903-1912).

54. Ibid.

55. Ibid.

56. Ibid.

57. Before transferring to Bodie Island, Gaskill served at three water light stations and two land stations in South Carolina, North Carolina, and Maryland. After leaving Bodie Island in 1940, he transferred to Coinjock.

58. John Gaskill interview, and Gaskill, p. 32-33.

The clock and bell system eliminated the need for a night watch in the tower. Accordingly, in 1922 the Light-House Board abolished the position of 2nd Assistant Keeper at Bodie. Not only was the third keeper no longer needed, but with night duty in the watch room no longer necessary, only one keeper was needed at the station at any one time. This allowed a work schedule of one week on and one week off, far easier for keepers with families.⁵⁹

Although technological improvements had been made to the lighthouse, the needs of the station had not changed. The Lighthouse Service recognized that the reduced work force could not do the work of three. The Lighthouse Service therefore no longer required the keepers to paint the tower; instead, painters were sent at four-year intervals with work crews brought by the tenders. Responsibility for painting the Keeper's Quarters and other buildings remained with the keepers, with most work done in the summer.⁶⁰

In contrast, Keeper Gaskill described his early responsibilities in a log report:

(1) As keeper in charge of this station, I am responsible for the for the [*sic*] proper execution of the duties whether performed by myself or Asst. I light lamp in tower every othe [*sic*] evening and raise curtains so light will be visible to passing ships. Asst. Keeper performs the same duty the following evening. I watch the light intervals until sunrise when I extinguish light and refill tanks with kerosene so it will be ready for lighting in the evening. Also I clean lens and watch room before coming down to dwelling. I am on duty about twelve hours in this instance. (2) I have one Asst. and I superintend and assist in painting, cleaning paint on outhouses and dwellings, clean iron work by chipping ruse [*sic*] from same when needed. Also keep grass cut on lawn, make minor repairs to sta. such as replacéing [*sic*] lantern glass when broken, repairing doors, replacéing [*sic*] hinges when broken, painting motor boat and skiff, keep engine repaired so it can be used at any time for getting supplies and mail from nearest store and post Office seven miles across the sound. I put in about five hours per day at this work. (3) In addition to the above duties I must make a weekly inspection of Sta. Including assistant's quarters and record made of conditions of Sta. log. Make monthly report of condition of Sta. to district Supt. at Baltimore. Take annual inventory and list all articles worn out have them surveyed and condemed [*sic*] when Supt visits sta. on inspection. Also I superintend and assist in the painting of tower outside, steps inside, and whitewash once every five years. I attend to all correspondence from sta. with supt. relative to

general repairs to station. I average about two hours per day on this work.⁶¹

With elimination of the need for a daily light keeper, so ended a colorful chapter in American maritime history. The lighthouses, the keepers' quarters and the host of ancillary buildings that together were essential to the successful operation of a light station are the tangible evidence that remains from this important epoch.

59. Ibid, p. 32.

60. Ibid.

61. Bodie Island Lighthouse Historic Structure Report, 13. www.nps.gov/history/history/online_books/caha/caha_Bodie_hsr.pdf.

B. Chronology of Development and Use

Historical documentation of light stations is appropriately focused on the lighthouses and their operation, while accounts of their accompanying buildings tend to be scant in comparison. Yet the records of the Bodie Island Light Station tell the story of the complex as a whole. The Double Keepers' Quarters there and its complement of outbuildings were recognized as necessary to the success of the lighthouse in protecting mariners from the shoals of the Outer Banks. Available records and previous research provide a comprehensive description of the building's development and use from its 1870s construction as a residence, through its conversion in the 1950s as a nature museum, and to its current use as a comprehensive Visitor Center.

Post-war Recovery

National and international shipping returned to the war-torn parts of the south after the Civil War and with it an increase in shipwrecks. In 1867, the District Engineer of the Lighthouse Board sought funding for the reconstruction of the Bodie Island Light Station. Initial plans to place the Light Station on the same ground occupied by the earlier two were stymied by the encroaching Oregon Inlet as it advanced to within 400 yards of the earlier site. The District Engineer proposed instead a site on the north side of the inlet on a plot of land owned by John B. Etheridge, who had been Keeper of the first Bodie Island Lighthouse. The 15 acres of land that Etheridge and his wife agreed to sell to the Board were conveyed on June 13, 1871, for \$150.

The Double Keepers' Quarters was not among the first buildings at the site. Even before the tower was begun, structures were built to house workers and materials. Work started on the support buildings in the middle of June, 1871, when the

Lighthouse Engineer for the Fifth District, Captain Peter C. Hains, dispatched a working party to the new Bodie site under the supervision of Dexter Stetson.¹ As superintendent of construction, Stetson engaged his own work crew with the Engineer's approval.

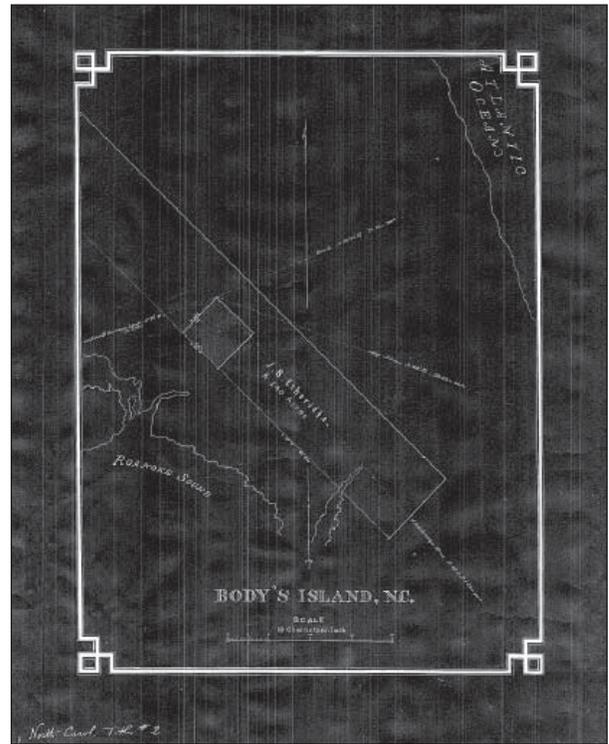


Figure 1, Plot of Etheridge land purchased in 1871. (CAHA collection)

Workers began immediately erecting temporary storage buildings, workmen's quarters, and

1. Dexter Stetson also supervised construction of the lighthouses at Cape Hatteras (1870) and Currituck Beach (1875). He trained as a carpenter, first building summer cottages in Massachusetts, then moving to New Orleans where he built large government storehouses. He later transferred to the Atlantic coast where he built lighthouses from Florida to North Carolina. Cutter, William Richard, *Genealogical and Personal Memoirs relating to the Families of Boston and Massachusetts*, New York: Lewis Historical Publishing Co., 1908, p. 1701.

a wharf. Construction of the Cape Hatteras lighthouse was wrapping up, and materials from temporary structures used during construction there were sent to Bodie Island; even Hatteras' tramway was moved to Bodie to carry the brick and stone from the wharf to the building site.² In early August, Captain Hains reported to the U.S. Lighthouse Board (USLHB) the temporary buildings that had been constructed, including

a blacksmiths' shop, a store house for cement, engine room, stable and carpenters shop. A temporary building for an office and quarters is nearly completed. Two scows for landing supplies have been commenced and nearly finished. An embankment on which to lay the railroad track where it crosses the marsh has been thrown up. The most of the material used in these temporary structures is that taken from Cape Hatteras...³

When the support buildings were finished, Stetson stayed on to supervise lighthouse construction. The Lighthouse Service decided against contracting the construction of the permanent buildings to a private firm, although contracts were awarded for materials, including brick, granite, and iron. By September a pier was built to hold a derrick for off-loading ships, and brick shipments began after November. Some of that brick, supplied by Nicholas M. Smith of Baltimore, may have been used for the Keepers' Quarters.⁴

Progress on the tower and dwelling was reported regularly to the Lighthouse Board by the District Engineer. Initial decisions on the Keepers' Quarters were made only shortly before construction began. An early reference to the house was one of practicality. On March 11, 1872, Hains wrote Major George H. Elliott, Engineering Secretary of the USLHB:

Have you any particular plans for keepers dwelling at Body's Island, NC? I would suggest that as it is extremely expensive to make repairs in this locality, it would be advisable to build the dwelling of permanent material—as brick. This would afford additional safety against fire. I am having a tracing made of keepers dwelling for First Order Light-houses from Plate 85-V, VI and VII-Volume ?? of Drawings published by Light-House Board.⁵

2. Engineering letters Feb –Sept 1871; Engineer's annual report 1871.

3. Engineering letters, Hains to Shubrick, August 1, 1871, monthly progress report.

4. Stick, *NC Lighthouses*, pp. 64, 67; Holland p. 39-41; 5th District Engineer's Letter Press, April-September 1871, and Engineer's 1871 Annual Report.

5. Engineering letters, Hains to Elliott, March 11, 1872.

The keepers at Bodie Island might have lived in more stylish accommodations had it not been for Captain Hains's letter of April 4:

I have to return herewith, tracings of Light-keepers Dwelling, from L. H. Board, as suitable for Body's Island Light-Station, which seem to me to be more elaborate and costly than would be necessary at that Station. I submit also tracings prepared in this Office from old drawings furnished by the L.H. Board and would propose that the latter, which will answer every purpose, at a much less cost, be used instead of the former.

Hains compared costs for the LHB plans and his plans, the former costing \$9,868.69, the latter \$6,037.20.⁶

Two weeks later, Hains pressed the board for a decision in order to begin the work. It apparently was approved before “[the] foundation of the dwelling was commenced on the 2nd inst. [May].” Walter Frazier joined the work crew in March as a well-paid bricklayer, and it is likely that he worked on the Keepers' Quarters when construction began. If so, his first stint there was brief, as work on the house was suspended in late June to allow the crew to concentrate on completing the lighthouse tower.⁷ Even so, by July 1, over 26,000 bricks had been laid on the dwelling with 68 casks of cement used. “The twelve upper window frames have been made and set in dwelling and the upper and lower flooring joists and lower partition studding have been put in. The dwelling has been built up 10 feet, and the walls are now leveled up ready to receive the wall plates.”⁸

By mid August, Hains reported “the tower and keepers' dwelling are now well advanced toward completion.”

Apparently feeling a need to justify the cost, Hains emphasized that the lighthouse would “supply a want long felt by the commerce of the country, as may be readily seen from the number of wrecks that have been strewn along the beach from time to time for twenty miles to the south and the same

6. Hains lists 18 windows for the proposed house. The DKQ has 6 bays totaling 20 windows, while the 1872 keeper's house at Cape Lookout had 5 bays, totaling 18 windows. Perhaps at that time Hains was considering the same plan as the CALO plan.

7. Holland p. 41. Letters & Letter Press Nov 1871 to June, 1872. Frazier was paid 40 cents an hour when first-rate laborers received 22½ cents an hour.

8. Engineering letters, Hains to Professor Henry, July 1, 1872.

distance north of the lighthouse.” Hains went so far as to list vessels that had gone ashore since construction had begun, pointing out that in vessels and cargo alone, the loss was “more than enough to build the lighthouse.”⁹

By late September, Hains reported “the entire work is now about finished.”¹⁰ A more detailed report was submitted for the November monthly report:

[Carpenters] have been engaged in getting out material for and completing back piazza of the keeper's dwelling; making and putting down main steps and three pairs of end steps to piazza; laying two wooden walks, leading from the dwelling to wood-house and privies; building a double privy; reboarding and fitting up the carpenter shop for use as a wood house; making a . . . [illeg.] and hanging two gates; [illeg.] putting various fastenings on dwelling house, sheds, etc.

The blacksmith has been employed in putting flashing on piazzas; setting holes in dwelling walls for piazza ceiling strips; building two wooden platforms as cisterns; . . . putting ladder rods under piazza, and assisting in whitewashing fence, taking down cement shed . . .

Materials were once again recycled as Hains recommended the considerable excess of brick be loaded onto the barge and transferred to Cape Lookout for use in construction of the keeper's quarters there.¹¹ The third Bodie Island Lighthouse was completed. Its success depends on the keepers.

Plans of 1872

Plans for “Double Dwelling for Keepers of Bodys Island L.H.” are dated Jan. 31, 1872, drawn in Baltimore and “Transmitted with Letter of this date to L.H.B., [signed] P.C. Hains, Major Engineers I/S/A/, Engineer 5th L.H. District.” The sheet of drawings includes front elevation, section, framing plans for first & second floor, and “Section through Veranda.” The front and back of the house had been determined in early May when work on the house began and District Engineer Hains instructed the Superintendent of Construction Dexter Stetson to have the building face the lighthouse. His one-sentence letter was to the point: “Sir: You are hereby directed to have the Keepers dwelling for Body's Island Light Station

face towards the light-house. Very respectfully, Peter C. Hains, Capt Eng.”¹²

At that time there was no road near the house; access was solely by boat until the 1920s when a bridge to the island was built. Later residents considered the west, or “back” to be the front, which was the sensible arrangement after the road appeared. It is presented as such today.

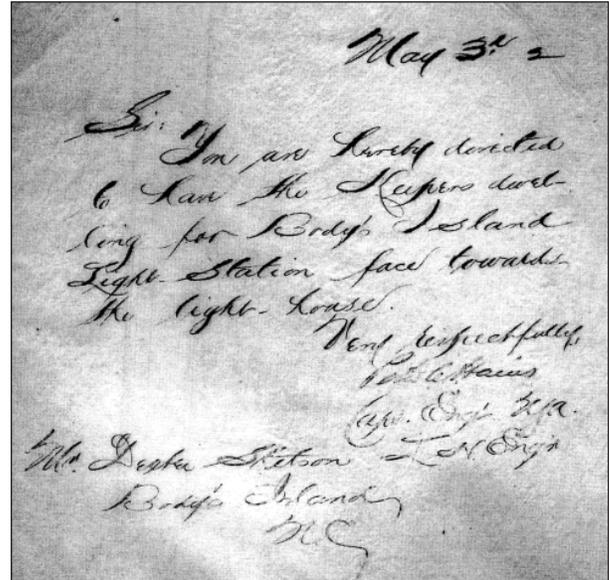


Figure 2, Peter Hains's 1872 instruction for dwelling to face lighthouse. (CAHA collection)

The plans show the body of the house as it is today, a two-story, side-gabled brick house with six bays of six-over-six windows on the upper story, and a corresponding six bays on the lower level with the two center bays used as entrances. A full-front porch rests on piers, and four interior end chimneys pierce the roof. Front stairs are the width of the two interior hallways. Front and back elevations appear identical with the exception of porch steps. At the back, two narrower sets of steps are centered not on the entrance doors, but roughly on the inner kitchen window of each apartment. Lattice screening was to span the spaces between the porch's foundation piers. Inside, the two living quarters are shown of equal size with a through-hall and two side rooms on both levels, each heated by a fireplace. The halls are unheated, as are the small rooms found at the end of each second-floor hall. A small room was located at the front of the hall on the second floor of each apartment. Keeper Vernon Gaskill kept his

9. Engineering letters, Aug. 21, 1872.

10. Engineering letters, Hains to Elliot, Dec. 1, 1872.

11. Engineering letters, found in Holland, p. 42.

12. Hains to Dexter Stetson, May 3 & June 25, 1872.

keeper's logs and medicine chest on a shelf in the room; it served no other use while he was Keeper.¹³

Exterior Design vs. Construction

A closer examination reveals notable differences between these 1872 plans and later documents. In the summer of 1893, Herbert Bamber, Lighthouse District Superintendent of Construction, surveyed the Light Station and produced a detailed site plan and a series of photographs.¹⁴ His site plan notes "Double dwelling, brick, shingle roof. Height of floor 8.9'." Measurements of the house are recorded as 48.8' x 28.8'.

the building was built with the current spacing. The 1872 drawings themselves might indicate that the changes were considered before actual construction; the elevation shows the even spacing, but the floor plans show the arrangement as built.¹⁵

A closer look reveals that the spacing of the doorways is different on the two elevations. The doorways of the east elevation, towards the lighthouse, are closer together than those on the west façade. The reason for this is not known. A letter of May 5, 1872, might address one or both of these issues. District Engineer Hains wrote to Mr. Dexter Stetson, "Sir: your suggestion relative to



Elevation.

Figure 3, Plans for "Double Dwelling for Keepers of Bodys Island L.H." are dated Jan 31, 1872, drawn in Baltimore and "Transmitted with Letter of this date to L.H.B." (CAHA collection)

Of particular interest are Bamber's photographs of the Keepers' Quarters, the earliest known images of the site. They suggest that elements of the 1872 plans may have been changed in the first two decades, or more likely were omitted before construction. Whereas the 1872 drawings show the six fenestration bays evenly spaced, the 1893 photographs show the arrangement as found today, with the two central bays closer together. Certainly

changing the positions of the doors and windows in the keepers dwelling is approved, and you are authorized to make them."

Other elements of the 1872 plans may never have been built. The plans show a paneled frieze across the front of the building with sixteen rectangular panels, although photographs taken in 1893, 1933, and the early 1950s show no shadow or other indication of such a frieze. The next available elevation, drawn in 1954, shows a plain fascia board similar to the existing.

Similarly, a scroll-sawn corner bracket on the main roof of the drawing was not built. Again, there

13. John Gaskill Interview.

14. Photographs by Herbert Bamber, June 9, 1893. Bamber was the Lighthouse District Superintendent of Construction. During construction of the 1887 Ponce de Leon Inlet Lighthouse in Florida, he developed an adjustable construction platform for masonry lighthouses. Eshelman, Ralph. National Historic Landmark Study, Ponce de Leon Inlet Light Station, 1998.

15. Center bays are spaced differently on the two elevations.

is a discrepancy even during the design phase, as the brackets are not shown in the front elevation on the same 1872 sheet. They are clearly absent in the 1893 and later photographs and in the 1954 drawings.

The 1872 design of the porch also differs from the 1893 photographs. The original design depicts the house with the nine bays of porch delineated by square 4" x 4" posts with simple square 6" x 6" bases and capitals. The nine bays are evenly spaced, but show no correlation with the six bays of the house. The porch is topped by a shed roof. A side view of the back porch suggests a similar design.

The photographs show major differences. Both porches are covered by hipped roofs rather than the shed roof shown in the 1872 plans; the porches are divided into six bays rather than nine; and both porches have an X-braced railing while the 1872 plans show none. Also of interest are the paired posts on the 1893 photograph of the back porch rather than the single posts shown in 1872 plans. Detail of the front posts is unclear in the photographs.

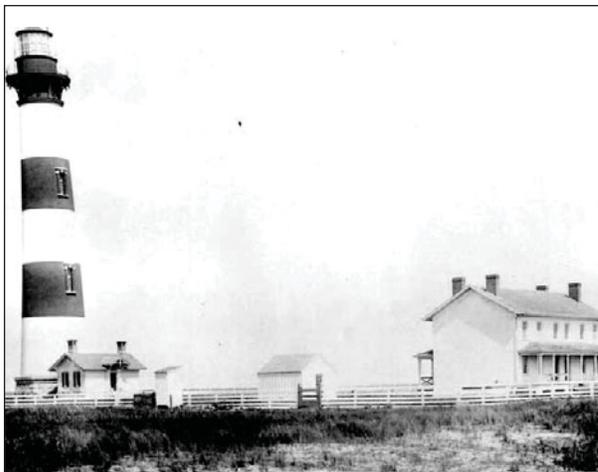


Figure 4, Herbert Bamber's photograph of Bodie Island Light Station, 1893. (CAHA collection)

Even the porch steps appear to have been changed. According to the 1872 plans, front steps were to be wide and centered at the entrance bays, but two narrower sets of steps were planned at the back. Again the 1893 photographs show differences. The front stair appears the same as the 1872 plan. The back steps, however, show the same wide center stair as the front rather than the two smaller sets of steps, though this detail is somewhat obscured by a

fence in the photograph. A 1933 photograph also shows a single set of back steps, wide and centered.

Despite both drawn and photographic evidence of the back stairs, a floor plan drawn by the Coast Guard in 1945 shows the same two sets of back steps as shown in the 1872 drawing, perhaps suggesting that the draftsman in Norfolk based portions of his plan on earlier drawings rather than on-site evidence.



Figure 5, Colored photograph; possibly a 1920s reproduction of one of Bamber's 1893 photographs. (CAHA collection)

The porch's side steps also may have changed during construction. In the 1872 plans, no side steps were present, yet District Engineer Hains' letter of August, 1872 reports "putting down main steps and three pairs of end steps to the piazza." The fourth set apparently was added before 1909 when a site plan for the proposed new keepers' house shows side steps on both porches extending to narrower walkways to existing outbuildings. The plan shows the desired layout of the new house and several new outbuildings, as well as identifying "new brick walks" and specifying the locations of two buildings to be moved. These may have replaced the wooden walkways represented in 1872, or supplemented them.

Interior Design vs. Construction

Changes are also evident in interior plans. The 1872 drawings show, for each apartment, a door from hall to kitchen and another from hall to living room, positioned close together near the center of the hall wall. Doors to the second-floor bedrooms are similarly positioned. The 1945 plans, on the other hand, show the first-floor doors farther apart, closer to the outside walls of the house. On the second floor, the 1945 plans show the bedroom doors still close together and near the center.

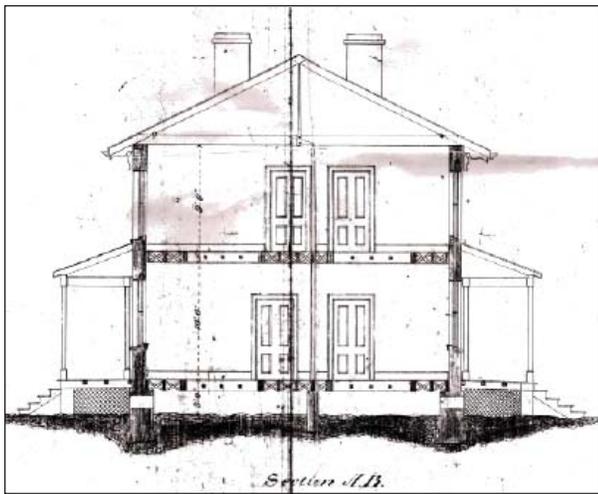


Figure 6, Section from 1872 sheet of drawings showing placement of interior doors. (CAHA collection)

Another interior change, again in doorways, is the lack of any opening between living room and kitchen in the 1872 plan. This seems an uncomfortable arrangement, leaving access only through the unheated hall. By 1945, plans show a more practical doorway between the two rooms. John Gaskill, who grew up in the house when his father was keeper, remembers all doors in the later configurations shown on the 1945 plan prior to his departure in the early 1930s.

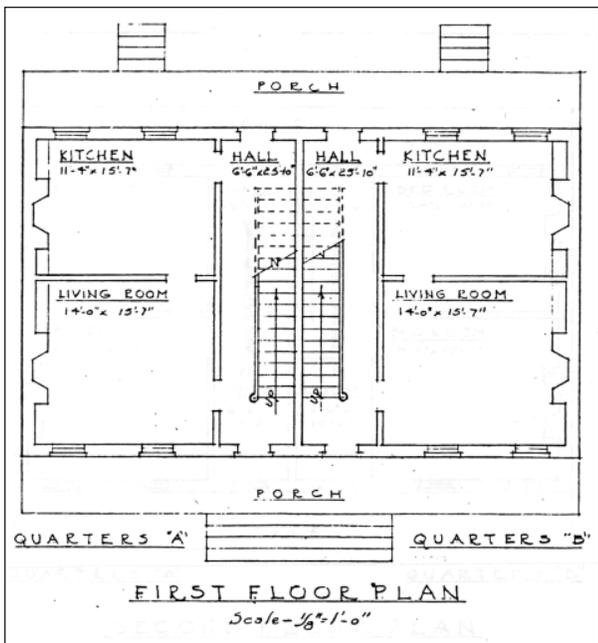


Figure 7, First floor plan, 1945. (CAHA collection)

A minor change from 1872 is also shown in the 1945 plans. In both plans, the downstairs rooms appear to have cabinets in the spaces adjacent to

fireplaces. In 1872, they are shown only on the interior side of both fireplaces; by 1945, they are on both sides of the fireplace in the kitchen, and on the west side of each living room fireplace.

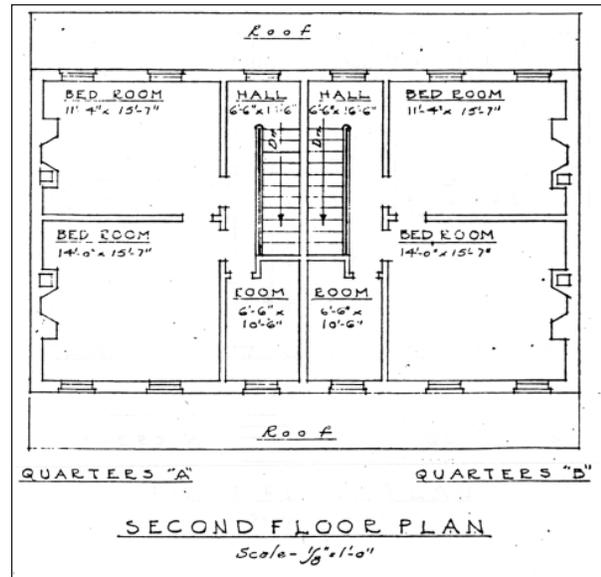


Figure 8, Second Floor Plan, 1945. (CAHA Collection)

1900: A Busy Year

Extensive repairs were made to the Keepers' Quarters and other buildings at the Light Station in 1900. Supplies may have been readied as early as November, 1886, when a purchase order was made to buy Georgia pine for repairs to walks, cistern, and piazza of dwelling. The next year, chestnut posts and fence boards were purchased, and in 1888, repairs to the inside of the dwelling were authorized.¹⁶ The Engineer's monthly report for May reported, "Some of the plaster on the inside of the dwelling has been repaired."¹⁷

In April, 1899, the District Engineer submitted an estimate to the Lighthouse Board: "For new fences, new roofs on keepers' dwelling, office and old oil house; new cistern, and repairs to window frames and plastering in dwelling \$1,800.00," and two months later reported that "there are leaks around [sic] the chimneys in the principal and assistant keepers' dwellings. The porch is rotten." He repeated an earlier request for wood and coal sheds to "be supplied."

16. District Engineer's correspondence, November, 1886.

17. J.C. Mallery to Chairman, USLHB, monthly report June 6, 1888.

Much more work was actually undertaken. The shingle roofs of the Quarters, including the porch roofs, were “renewed,” screening replaced at doors and windows, and plaster cracks pointed in six rooms and the halls. “The brickwork and the woodwork, generally, of the various buildings were put in order.”

The work is explained in summary detail in monthly reports made to the Lighthouse Board by W.A. Jones, Lieutenant Colonel of Engineers and Light-house Engineer. The first Report of Operations was sent April, 2, 1900, and reported,

The old shingles have been taken off from the roof of keeper’s dwelling, 37' by 53', and new shingles and saddle boards put on. The old shingles have been taken off from the roofs of the front and rear porches, 8' by 29' each, and replaced by new shingles. New flashings have been put on the roofs of the two porches and around four chimneys of dwelling, and the jambs of the porches and the joints of the chimneys pointed with cement mortar. An excavation has been made for a new cistern, a wooden foundation laid, and the brick walls built 8' by 9'-6" in plan, 5'-8" high and 14" thick. Twenty pair Venetian [*sic*] blinds have been fitted, painted, hung and fastenings put on. The old netting has been taken off from two door and six window screens of keeper’s dwelling and new netting put on. The plastering in two rooms and one hall, which had fallen, has been repaired, and the cracks in plastering of four rooms and halls of assistant keeper’s dwelling have been pointed. . . .¹⁸ [A June 30 report updated this to six rooms and halls.]

The Report of Operations described much additional work completed in April.¹⁹

The two chimneys of the dwelling have been repaired and the joints pointed with cement mortar. The front and inside doors and blinds have been eased where necessary, new hooks put on the blinds, one new lock put on door and the old locks repaired. A new window sill and beading have been put in, new sash cords supplied, and one door jamb and trimmings pieced out where rotten. The brick hearths in principal keeper’s side [south] of the dwelling have been taken up and relaid in cement mortar.

A new rail and post have been put in for front porch, and new front sills and fascias put in front and rear porches. The rotten window sills have been taken out, new main and sub-sills put in and the sides of the window frames pieced. A portion of the ceilings of two rooms and two halls has been relathed and plastered, and the cracks in the walls and joints around the doors and windows pointed, and new sash cords supplied.

18. Engineering letters, Report of Operations, April 2, 1900.
19. The work on outbuildings described by Jones is found in the outbuildings subsection of this report.

The brick hearths in assistant keeper’s side [north] of the dwelling have been taken up and relaid in cement mortar. A new floor has been laid in the kitchen, strips put around the base boards and a new closet constructed. The door and window screens have been recovered with wire cloth, the jambs of one door repaired and new hinges and lock put on, doors and sashes cased where necessary, new locks put on closet and storeroom doors and new sash cords supplied. New fascias and 4" x 10" sills have been put in for front and rear porches. The rotten window sills have been taken out and new main and sub-sills put in. . . . All new work has been painted.²⁰

Photographs and physical evidence suggest that the “Venetian” blinds and new hooks on the blinds refer to exterior shutters.

(Unfulfilled) Hopes for a Principal Keeper’s House

Keepers at this isolated station not only worked side by side but lived close together in the Double Quarters; appeals for additional housing became frequent. As the century ended, the Lighthouse Board agreed a new house was needed, and in 1899 requested an appropriation for a second keeper’s quarters at Bodie Island, explaining,

The present dwelling at the station is too small for the accommodation of the keeper and two assistants, and it is impossible for the keepers to have their families reside at the station for the lack of proper and sufficient accommodations; this does not tend to make the keepers contented, and to take the interest in the Station necessary to maintain it in the best condition.²¹

Engineer Jones continued to lobby for the house.²² In his annual report of June 1900 summarizing the extensive and costly repairs that had only recently been completed on the existing Quarters, Jones once again addressed the need for the additional house. He expanded his argument to include a cost estimate, reporting “[a]n additional dwelling with cisterns and the necessary outhouses can be built for \$7,500, and it is recommended that an appropriation of this amount be asked of Congress for the purpose specified.”

The request failed, was renewed in succeeding years, and in about 1907 Bodie Island received the appropriation. By that time, the Lighthouse Board had in hand a standardized design for keepers’

20. Engineering letters, Report of Operations, May 1, 1900.
21. Engineering letters.
22. Engineering Letters Research Guide, p. 40.

dwelling. By 1904, plans had been prepared for identical buildings at Bodie Island and at Cape Lookout.²³ In late 1906 plans were labeled for Bodie Island’s “proposed” dwelling, but two sheets of elevations and plans dated 1907 suggest there may have been questions about funding. One is labeled for the keeper’s dwelling at Bodie Island Light Station. The other is labeled for Cape Lookout, but the name was scratched out and “Bodie Island” written in its place.



Figure 9, Plans for proposed Principal Keeper’s dwelling at Bodie Island Light Station, December 30, 1906. (CAHA collection)

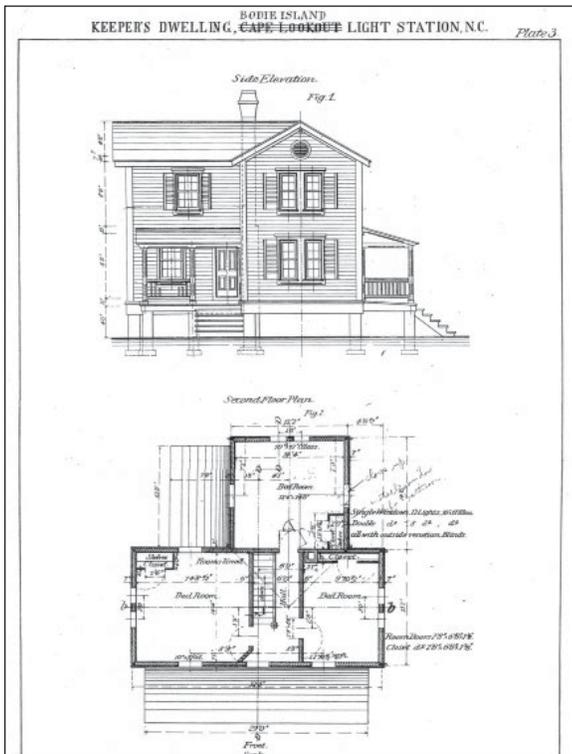


Figure 10, 1907 drawings for proposed keeper’s dwelling with label revised for Bodie Island. (CALO HSR)

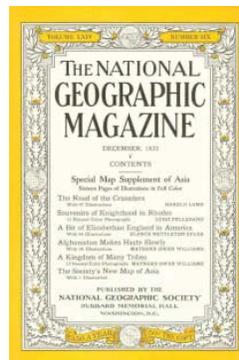
23. Jones, Cape Lookout 1907 Keeper’s Dwelling HSR, p. 25-31.

By this time Gallop had left and Ephraim Meekins had been appointed Principal Keeper. Despite the appropriation for the additional dwelling, rising construction costs apparently exceeded the earlier estimate, and the project at Bodie Island was dropped. At Cape Lookout, however, the house was built in 1907.

For reasons that are not clear, work on the Bodie Island proposal continued, and as late as 1909 a site plan was developed showing the group of proposed buildings. In the end, the Board was unable to meet the budget and the project disappeared from later records.²⁴

A Visit from the National Geographic

Two photographs taken in 1933 show changes



made to the Light Station after 1893. The December 1933 issue of The National Geographic Magazine included a photograph of the back (west) of the Keepers’ Quarters showing its setting among the lighthouse and four outbuildings. Most elements of the back elevation are

consistent with the 1893 photographs. The porch is hipped with six bays delineated by paired posts, and the X-braced railings are on the two outer bays on each side. The back steps are centered, and side steps lead to the porches. There is no lattice between the porch’s foundation piers. The fence has been changed to post and wire.²⁵

The photograph shows the addition of shutters on both first and second floor. These are probably the “Venetion [sic] blinds” and “new hooks put on the blinds” reported in April 1900. The “twenty pair” indicates shutters were hung on all windows of both elevations. A photograph of a similar double

24. Holland, p. 47. W.A. Jones to Lighthouse Board Sept. 27, Oct. 24, 1899, 5th District Engineer’s Letter Press April 1899 to Jan 1900, Lighthouse Board Annual Reports 1900-1908. Drawings, 1909.

25. “A Bit of Elizabethan England in America,” *National Geographic Magazine*, December 1933, p. 730.



Figure 11, National Geographic Magazine photograph of Bodie Island Light Station, 1933.

keepers' quarters, built in 1873 at Cape Lookout Lighthouse, shows that by 1907 that house had shutters as well. At the Bodie Island quarters, screens were added in 1934 to the west porch, possibly to both porches.²⁶

1939: The Coast Guard

In 1939, the Lighthouse Board was incorporated into the Coast Guard, which assumed responsibility for the operation of the Lighthouse. The next year, the Bodie Island Light Station became an unmanned light, lit by an electric generator operated by timer. With on-site operation no longer needed, the Coast Guard transferred the Principal and Assistant keepers from Bodie Island, and the Nags Head Lifeboat Station was given oversight of the light. Bodie Island's Principal Keeper Vernon Gaskill, Sr. and Assistant Keeper Julian Austin, Sr., were two of the last keepers of the U. S. Lighthouse Service. Gaskill transferred to

the lighthouse depot in Coinjock, and the Keepers' Quarters, once so crowded with people, was left unused. A 1944 siteplan included the note: "No Resident Keeper. Attended by personnel from Nags Head Lifeboat Station."

A "Plot Plan" drawn June 1, 1940, by the Coast Guard's Civil Engineering Office shows the location of the newly-subdivided land, labeled "Lot B."



Figure 12, U.S. Coast Guard Plot Plan, June 1, 1940. (CAHA collection)

²⁶ A pre-construction survey of the house in 1989 noted the evidence of shutters. Cape Lookout photograph from CALO Keepers' Dwelling HSR, p. 31. 1934 porch screening plan.

Of importance to the Coast Guard was the property remaining under its jurisdiction, situated within Lot B and labeled “Lot A,” a 10,000 square-foot parcel containing the lighthouse and its connected oil house. A sheet metal oil house built in 1896 (by then converted to the generator building) and all other buildings were outside the lot. Of equal importance to the Coast Guard was the ten-foot right-of-way leading from the western edge of Lot B northeasterly towards the lighthouse, passing immediately adjacent to the two north cisterns before turning at a precise right angle to continue in front of the house to its center line. The right-of-way then turns, again at a right angle, and follows the existing brick walkway to the southwest border of Lot A.

During World War II, the Lighthouse became a lookout tower for the Navy. German submarines sank so many tankers and cargo ships that these waters earned a second epithet, Torpedo Junction.

In 1945, the Bodie Island Light Station site increased from 15 acres to a little over 56 acres.²⁷ The Coast Guard is believed to have used the Quarters for exhibits during this period; however, a 1945 floor plan of the Keepers’ Quarters drawn by the Coast Guard is labeled “Public Quarters,” probably referring to a Coast Guard program to house employees on duty, but no record has been found to indicate whether the house was used during the war or in the decade that followed.

A clear view of the house is seen in a photograph taken in the early 1950s before the renovations of 1954. The appearance of the house, with plywood covering the windows, suggests it may not have been in use at the time. The view shows the west elevation, which by that time had been used as the front of the house for several decades. Shutters are gone from the windows. The porch retains the paired posts seen in all earlier photographs, as well as an X-braced railing. The screening supports installed in 1934 are also visible. At the front are concrete gate posts and a metal gate. Of particular interest are the front doors, which appear to be painted with contrasting colors in the panels.²⁸

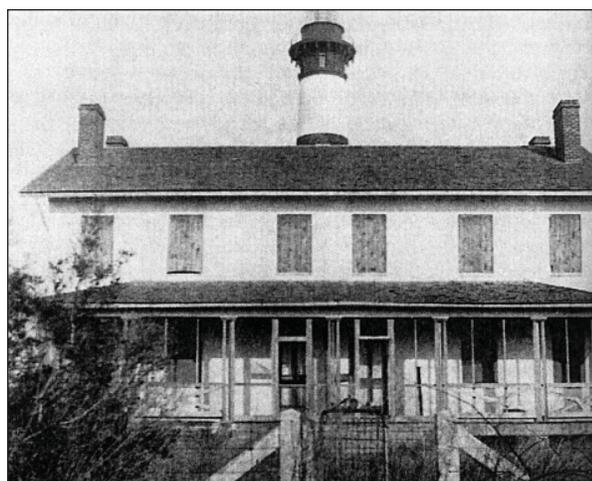


Figure 13, Double Keepers’ Quarters, early 1950s. (*Gaskill Remembers*, p. 36).

1953: The Park Service Takes Over

Congress had authorized Cape Hatteras as the first National Seashore in 1937, but it was another sixteen years before the park was officially established in January of 1953. That was a busy year for the Light Station. The tower was cleaned and painted, and on October 9, the lighthouse’s electrical source was converted from generator to commercial power, leaving the existing generator for emergency power only. Six days later on October 15, the 56-acre Bodie Island Light Station property was declared surplus by the Coast Guard and transferred to the National Park Service as part of the Cape Hatteras National Seashore Recreation Area. Excluded was a small square plot of land, 100' on a side, on which the Lighthouse stands.²⁹

The Park Service acquired the Keepers’ Quarters and its outbuildings with the rest of the land, and alterations to the house started soon after. Both the house and its function were to change as the residence was converted to exhibit space for the large number of visitors expected to come to the lighthouse. Exhibits were to focus on the natural environment.

In January 1955, park naturalist Verde Watson arrived from Yellowstone and assumed responsibility for completing the Natural History Museum at the Bodie Island Lighthouse and

27. Lighthouse HSR.

28. 1950s photograph from *Gaskill Remembers*, p. 36. A color slide in the NPS etic collection also shows paired posts.

29. Bodie Island Lighthouse HSR.

developing a natural history interpretive program at Cape Hatteras. Watson was an avid amateur photographer whose work contributed to the exhibits.³⁰

Architectural plans for the project, titled “Museum of Natural History,” are dated December 21, 1954, and were updated with freehand additions, then hand-labeled as the “As-Built” plans. According to the masthead, the plans were prepared for the Operations Division by the Region 1 office. The architect was Lawrence B. Coryell, called “Bur,” who had been with the National Park Service in regional offices in Richmond, Philadelphia, Washington, and Denver. He also was architect for the 1954 reconstruction of buildings at the nearby Wright Brothers Memorial.³¹

in the plans. The 1954 elevation calls for 6" x 6" posts, but the section drawing on the same page shows 4" x 6" posts; the plan also shows 4" x 6" posts. Whether the single posts proposed in 1954 were an attempt to imitate the 4" x 4" posts on the 1872 plans is not known. Capitals and bases on the 1954 plans do not match the 1872 design. The 1954 plans also proposed new 3" x 4" pilasters near the outer ends of both porches.

It remains unknown whether the 4" by 4" posts were built in 1872, and it is clear from the Bamber photographs that paired posts were in place by 1893. New single posts were installed during the 1954-1955 project. A photograph taken in the late 1950s shows the Quarters, labeled “temporary visitor center,” with single posts. In a 1974 color slide, the posts appear to be 6" x 6".



Figure 14, Elevation and section, “Museum of Natural History, Keepers Dwelling - Bodie Island,” December 21, 1954. (CAHA collection)

Plans of 1954

The 1954-1955 Double Keepers’ Quarters project was comprehensive. Although significant alterations were made to the interior, the only significant exterior changes were to the porches. The drawings called for single posts to replace the existing paired posts, yet there is contradiction

The 1954 plans show that the four exterior doors were to be rehung and a screen door installed at each. Screens and screen supports on the west porch, added in 1934 and evident in the early 1950s photograph, were to be removed. A freehand addition to the plans shows an elevation of one bay of the porch railing, repeating a simple X-braced railing not unlike the 1893 design; however, no railing was in place in 1967 when NPS historian Russell Holland photographed the station nor in a photograph of 1974. The drawing also shows new lattice between the foundation piers of the porch, although these also are not evident in the photographs. New gutters were to be added “as required,” certain downspouts replaced, and new

30. Cape Hatteras National Seashore Administrative History, p. 145. “Park Service plans Outlay of \$214,280,” *Coastland Times*, January 28, 1955, newspaper clipping collection, CAHA archives.

31. Coryell retired in 1978 from the Mid-Atlantic Office. “The Arrowhead,” NPS employee newsletter, summer 2008, p. 9. Peterson, “Restoring Wright Brothers’ Camp of 1903,” in *Journal of the Society of Architectural Historians*, Vol. 13, No. 3 (Oct., 1954), p. 28-29.

splash blocks set below downspouts. The front, back, and four sets of side steps were to remain.

First Floor Exhibit Spaces

The bulk of the proposed work was to the interior. Major alterations were made to the floor plan, woodwork, fireplaces and surface finishes. The first floor of each residence was converted to an exhibit room occupying the entire space previously used as kitchen and living room, with the dividing partition removed and resulting damage repaired. New 6" x 10" beams were added beneath the second floor to provide the support necessitated by removal of the interior bearing walls.

In both residences, new 3'-6" wide cased openings were to be built at locations of either narrow existing doorways or where there had been no passageway. Interior doors on existing first-floor doorways were removed. Plans note that

new construction should "match existing," and doorways constructed in 1954 are close matches in appearance to the original. Floors were patched in three places.

The halls of the two residences were treated differently. At each end, near the east and west entrances, the dividing partition was removed to form a double-width entrance hall. The central portion of the north hall was blocked by information counters added adjacent to the stairs. The counter enclosure ended well back of the stair newel post, leaving the hall spaces open at east and west entrance areas. A proposed railing and gate near the counter was eliminated from the plans before construction.

The south residence saw much greater change. In addition to removal of the partition between the former kitchen and living room, the hall was eliminated. The stairs were removed, leaving

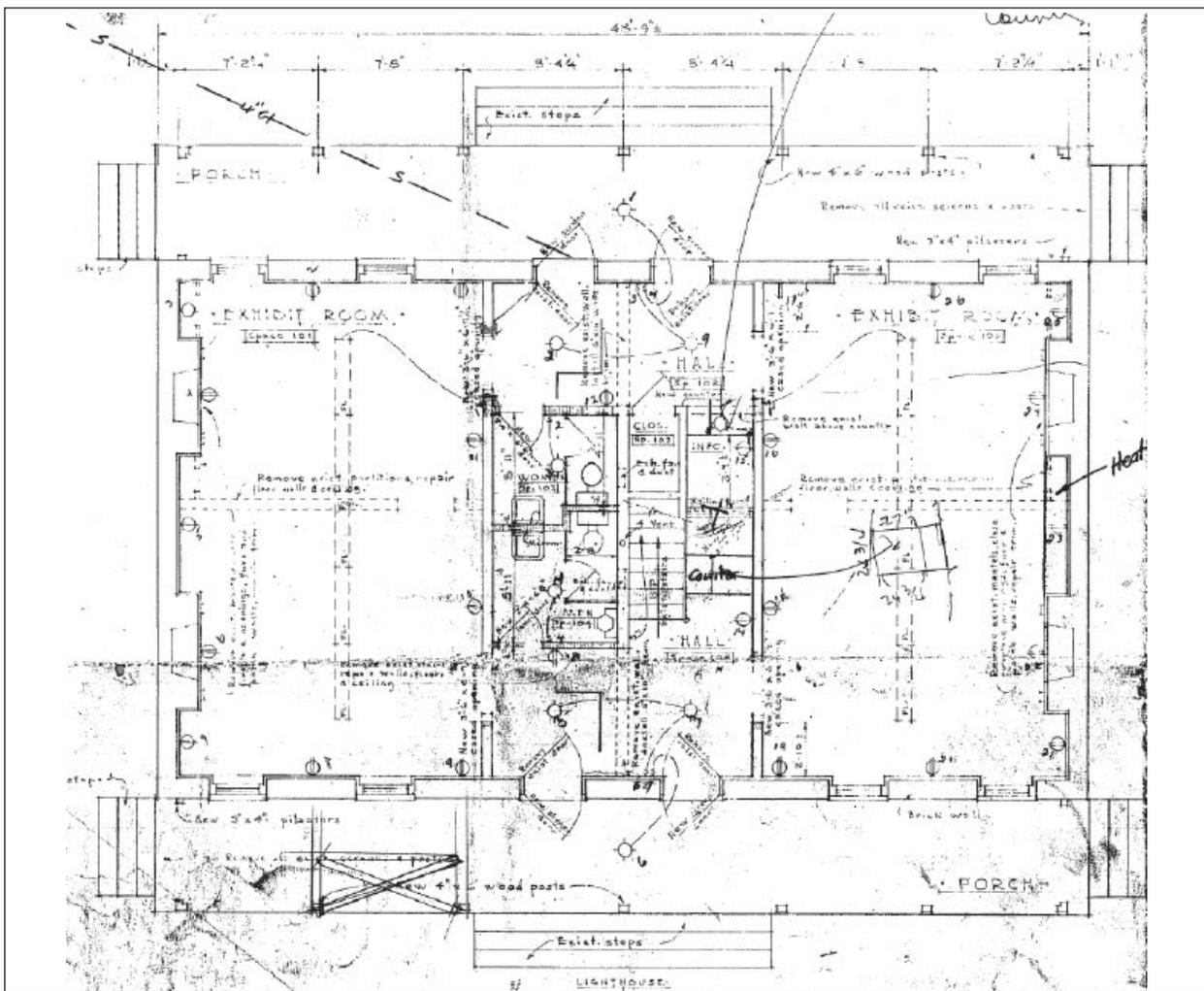


Figure 15, First floor plan, "Museum of Natural History, Keepers Dwelling - Bodie Island," December 21, 1954. (CAHA collection)

only one stair in the former duplex, and the space formerly used as hall and stairway became tile-floored men's and women's bathrooms. Here too, the hall spaces near the entrance doors were left open and undivided. The walnut newel post, balusters, and handrail of the south stair were salvaged and reused in the 1879 Bodie Island Life-Saving Station in 1955.³²

In a concern for safety, all fireplaces were closed. The mantelpieces in the living rooms were removed; their fate is unknown. Those in the kitchens were treated differently, with the mantel shelves chopped off flush but the rest of the mantelpiece retained. All fireplace openings, as well as the remaining kitchen mantelpieces, were covered with new wall surface and the trim repaired. Baseboards were removed with instructions to "check for termites, repair framing and treat as required."

The plans show existing cabinets on each side of the kitchen fireplaces but none in the living rooms. This was a change from the 1945 plans that show those cabinets as well as cabinets on the west side of the living room fireplaces. The 1954 plans called for the cabinets to be removed from both sides. The area between the two chimneys on the north side of the house, where the Assistant Keepers lived, was enclosed to create a chase for heating ducts.

HVAC and electrical systems were finally added to the building, which had not been electrified when Vernon Gaskill left in 1940.³³ All mechanical systems were new to the building and required penetration of interior and exterior surfaces. The new oil hot-air heater was placed in the attic with vent fans leading from the ceilings of the first-floor hall, and 2" x 6" diagonal braces were suspended from each rafter to help support the second-floor ceiling. A plumbing vent was run through an unused chimney flue.

Second Floor Spaces

Considerable change was made to the second floor for use as lecture, work, and storage rooms. The north residence retained its stairs and east-west hall as well as the partition between the hall and the two former bedrooms. It also retained the two doorways off the hall to the two former bedrooms.

The partition that formed the small room at the east end of the hall was removed. At each end of the center wall that divided the two residences was cut a 3'-6" x 6'-½" cased doorway to provide two passages between the sides of the house and access to the sole remaining stair.

The partition wall dividing the bedrooms is shown to be retained on the plan as printed. Later hand-drawn X marks indicate that it was to be removed. Two closets on the north wall are also marked through to be demolished. Both closets were added after 1945 when Coast Guard plans showed no closets. A 1968 floor plan shows the closets and dividing wall between former bedrooms as having been removed.

The northwest room was designated for storage, the only change being removal of the closet and its west wall. In the northeast room, designated as a Work Room, a partition was added in the southeast corner of the room to create a rectangular "Dark Room" along the hall wall. Although a sink was to be installed on the north perimeter wall of the work room, there is no indication of a water supply in the darkroom. The small closet was to be removed from this room as well.

Again on this level, the south half of the house received the greatest change as it became one uninterrupted space. Both mantelpieces were removed and their fireplace openings covered with new "blue board," a wallboard with plaster veneer. The partition between the two bedrooms was removed, the stairs and the stair hall's south partition wall were removed and new infill sections of joists and floors "to match" were installed to cover the stair opening. The partitions creating the small east room where Keeper Gaskill kept his log book and medicine cabinet was removed. This newly created large space became the Lecture Room with a new tile floor.

In 1968 a storage room was built at the east end of the surviving stair hall, spanning the full width of the former north residence hall and extending west to encroach on the stair opening. It was at this time that a large section of the original handrail and balusters were lost. The 1968 walls creating this hallway storage room were removed and the missing staircase elements reproduced during the 1990-92 work.

General Notes on the plans called for sanding all floors, treating for powder post beetles, and finishing with 2 coats of "penetrating floor seal." References in the plans to existing wallboard on

32. George Perrot interview.

33. The Coast Guard's 1945 "Public Quarters" plans do not indicate proposed work.

ceilings and walls implies that plaster surfaces had been covered, and perhaps some removed, before 1954. All new trim wood was to be treated with a 5% solution of pentachlorophenol, a synthetic insecticide and fungicide first produced in the 1930s and used as a wood preservative. Known as PCP, it has been off the market since the 1980s.

The chimneys may have been painted white during the 1954 work. The early 1950s photograph and all others taken before the changes of 1954 show an absence of paint, but by 1961, a postcard photograph shows that the chimneys had been painted white.

As part of the work on the grounds, the Park Service in 1954 planted pine trees lining the entrance road and west side of the parking lot. These have grown to be tall pines.

After the 1950s



Figure 16, Double Keepers' Quarters, 1967. (Russell Holland photograph, CAHA collection)

It seems that few changes were made to the Quarters after the 1954-1955 project. In 1967, Russell Holland wrote a history of the Bodie Island Light Station for the Park Service. He reported at that time that the Quarters was in use as a visitor center and small natural history museum. His photographs show no noticeable change to the exterior of the building. Photographs taken by the State Historic Preservation Office in 1974 and 1981 also show no significant changes. Both photographs show white chimneys and white cisterns.

According to a Feature Inventory prepared by NPS in 1989, the roof was replaced in 1975, though no details are given. The roof of the storehouse was replaced with wood shingles the same year.



Figure 17, Double Keepers' Quarters, 1974. (NC State Historic Preservation Office)

1990-1992 Work

A second major project began in 1989 with the work carried out from February of 1990 to May of 1992. The project addressed the station as a whole including not only the house, but the cisterns, grounds, walks and the extant storehouse. The poor condition of the porch had been recognized for some time. In November, 1984, during a Park Service inspection of the Keepers' Quarters, the porches were labeled "Extreme Caution Areas." The porch sills had failed, foundation piers were broken and listing, steps were rotten, and termites and spiders had taken over. Recommendations were made to install immediate temporary supports for the porches and remove the steps from the ends of both porches.

Termites had caused damage under the house as well, and it was discovered that all inner brick foundation walls, including the main center bearing wall, had been cut and weakened during installation of an earlier air/heat ducting system. Overloading was also a concern and a safe was removed from the second-floor Ranger Office (northeast room). The safe as well as the furnace in the attic were placing stress on the building and contributing to deterioration of structural members.

Documents produced in the years before construction work began give information on the

configuration of the Quarters. Floor plans of 1989, identified as existing condition, show the dwelling before the 1990 project began. The first floor is much as proposed in 1954, with each side of the first floor taken up by an exhibit room. The northern staircase remains in place with a janitor's closet beneath. The adjoining hallway is uninterrupted; the information counter proposed for the north hall is not evident in this plan. The center section of the former south hall is taken up by the two bathrooms installed in 1954 after the south stair had been removed.

On the second floor, the north hall had been partitioned into two storage rooms the width of the hall and stair, one opening into the south room, the other to the north. Only the area around the stair landing at the west end of the hall remained open. The north room, originally two rooms, had become one large office with no center partition. The rectangular Dark Room added in 1954 remained, now used for storage. Because the darkroom when built was wider than shown on the 1954 plans, the partition was offset to avoid overlapping the window. The south side of the house showed the changes made in 1954 when it was converted into a large uninterrupted room used as projection and lecture room; the only variation was the north doorway near the room's east wall which now opened into one of the new storage rooms.

Phased Work

Work on the Double Keepers' Quarters was completed in three phases. Phase I addressed the poor structural integrity of the building and its systems. Phase II consisted of designing and installing new structural, utility, and mechanical systems, and altering spaces to accommodate the new uses. Phase III addressed the exterior of the Quarters and the surrounding buildings and grounds. Efforts to retain historic fabric and the overall historic integrity of the house are evident throughout, and an archaeologist was on-site for work in the crawl space and elsewhere. The extensive NPS documentation of the work is in the collection of the Cape Hatteras National Seashore.

The location of parking, access from the parking area to the Quarters, and access for the handicapped were considered within the landscape of the Light Station. The yard around the Quarters was graded to better simulate the original open appearance. The west walkway was removed. In its stead, access was provided by creation of a

gradual rise in the land with a new wide wheelchair accessible boardwalk ascending to the porch. Beneath the new board walkway, a newly created scale addressed a long-persistent problem of site drainage.

Exterior

The porches were of primary concern. Temporary supports had already been built to stabilize the failing framing and structural elements. During the project, cinder block infill was added to the west porch foundation and major repairs were made to all elements of the porches. Portions of the roof and ceiling framing had deteriorated and were replaced and new roof shingles were installed. Most of the porch rafters were replaced, as well as associated trim. The deck framing at both porches was removed and replaced, and the west deck was replaced. The four sets of side steps were extensively rebuilt.

The porch posts are 1990 replacements as well. The porches were supported by paired posts from as early as 1893 when Henry Bamber took his photographs, and possibly as early as initial construction. Documentation also confirms that paired posts were on the building just before 1954 when the house was modified for use as a natural history museum. The 1954 plans called for single posts. A series of photographs taken in the late 1950s, 1967, 1974, and 1981 confirm that single posts were in place. New paired posts were installed in 1990-91 to match those shown in earlier photographs. The X-braced railing was also reproduced and installed.

Elements of the main roof were also replaced. After repair of underlying damage, the existing wood shingles were removed; new western red cedar shingles were installed over an open wood-lath system, itself over an existing solid wood deck attached to the rafters. A new gutter and downspout system was designed with gutters leading into the cisterns, but emptying through outlet pipes in side walls to an exterior rock drainage bed.

The chimneys were repaired and new copper flashing installed. The chimneys had been painted white for the first time either during or shortly after the 1954 modifications, and were painted again during the 1990-92 project. According to George Perrot, because the windborn weathering removes the paint so rapidly, the National Park Service

no longer paints them and will allow the paint to weather naturally.

The brick walls needed only minor work. Paint was removed and small areas of the brick were repointed. The brick was painted as well as all exterior wood trim, including porches, soffits, fascia boards, and eaves. The wood decks of the porches were oiled.

The four exterior doors are original to the house and were retained; modern mortise locks were installed. “Coach light” sconces were installed on either side of the paired doors at both east and west facades. All of the building’s windows were retained and repaired, then covered with wood storm windows designed for the house.

All mechanical, electrical, and plumbing systems were replaced and underground networks installed. New electrical service was brought underground to the Storage Shed from where it services the Quarters and the Public Restroom Building. At the Quarters, two heat pumps were installed to provide heating and cooling on both floors with one unit serving each. The heat pumps are located in a new structure built at the southwest corner of the building and designed with similar footprint as the existing cisterns, set on a low brick wall with high louvered walls and an open top. All three cisterns and this structure are painted white.

General Interior Treatments

With the exception of one wall, all walls were covered with blue board plaster board with a veneer coat of finish plaster. When built in 1872, walls were plaster-on-lath, but most had been covered with drywall and other board coverings before, during, and after the 1954 work. Because of this, the current depth of wall coverings varies. The exception is the two levels of the south stair wall, the only wall in the Quarters that has not been covered with plaster board. Instead, the plaster was repaired and left exposed after graffiti from an early workman was discovered. (His grandson was on the 1990-92 crew working on the Quarters.)

All ceilings were covered with the same blue board and plaster veneer. In many areas of the house, original baseboards were salvaged and reused. A reproduction Victorian-style picture molding was installed in all rooms except the remaining

hall, Staff Restroom, and Mechanical Rooms. Reproduction “school house” ceiling fixtures were installed throughout the interior.

First Floor Exhibit Spaces

Only minor modifications were made to the first-floor plan, which had been drastically altered in 1954. The south side of the Quarters, originally a stair, hall, living room, and kitchen, had been converted to a large exhibit room and two restrooms after removal of interior partitions. The north side retained its staircase and hall, but the partition between Living Room and Kitchen had been removed. In 1990-92, wing wall partitions were installed in both sides of the house at the locations of the original partitions to give a visual impression of the walls of the original living room and kitchen. The south side, which was the Principal Keeper’s residence, is used as a Bookstore. The north side where the Assistant Keepers lived is an Exhibit Room.

When the south staircase and hall were removed in 1954, two restrooms were put in their place. In 1990-92, the west restroom was removed and replaced by a Mechanical Room. The east restroom was replaced by a new Staff Restroom. Both the Mechanical Room and Staff Restroom are therefore in the original location of the south stair and hall. The closet under the north staircase remains; its door is one of the two original interior doors remaining in the Quarters.

During the 1954 modifications, the Living Room mantelpieces were removed and the Kitchen mantels altered and covered. In 1992, new mantelpieces were installed in the Living Rooms with their design based on drawings of the more decorative mantelpieces in the St. Augustine Lighthouse in Florida, built the same year as the Bodie Island Quarters. The replacements designed for Bodie Island were “without as much detail, since the St. Augustine house has more detail throughout,” according to NPS correspondence from Todd Hart in February, 1992. The Kitchen mantelpieces were uncovered, their Dutchman repairs added to the shelves and to the trim.

New cabinets were added in the Kitchens, flanking the fireplaces. Their design was based in part on the ghost marks of the earlier kitchen cabinets, evident in the series of early plans of the house. The keeper’s quarters in St. Augustine again

provided the model.

It was revealed during the 1990-92 work that Southern yellow pine tongue-and-groove flooring had been placed over the original 1872 heart pine flooring before the 1954 project. In 1954, the floors were damaged by the removal of partition walls, patched, and carpeted. Many additional layers of carpeting were installed in the years following. In 1990-92, all carpeting was removed and the three 1954 infill patches were replaced by new flooring to match the pre-1954 yellow pine boards.

The absence of the south staircase was addressed by the National Park Service in determining how to demonstrate the original configuration of the double quarters. Exhibits were designed for fabrication by the National Park Service's Harpers Ferry Center. An effective interpretation for the missing staircase was devised by erecting a life-size photograph of the south stair at its original location, and in front of it a careful reproduction of the walnut newel post and the lower portion of the balustrade.



Figure 18, Photo-exhibit of north stair, 2009.

Second Floor Spaces

More modifications were made to the second-floor plan than to the first, although the second floor had also been drastically altered in 1954 when the south staircase and hall had been removed. The bedroom partition on that side of the Quarters was removed

to create an uninterrupted space for use as a lecture room. In 1990-92, partitions were added to create three spaces. One wing wall partition was placed at the north end of the location of the 1872 bedroom partition, a wider section at the south which with a third new partition created the Book Store Office. The Staff Office was created in the new east room, which encompassed the space of the former east bedroom and a portion of the former stair and hall. The Bookstore Storage Room was created in the northwest portion of the south quarters, and a small Bookstore Office was created in the southwest corner.

The north side of the second floor retained its staircase and hall during the 1954 work, but the partition between the two bedrooms had been removed. (A series of working plans from 1990 show various proposals for placing partitions in the upstairs rooms. Although some show interior partitions as though existing, most evidence, including penciled changes to the 1954 plans and the as-found 1989 plans, show that the partition was removed in 1954.) In 1990-92, a new partition was built in the location of the original partition and a doorway was cut between the rooms. The door at that location is one of the two original interior doors that remain in the house. The fireplaces in both rooms were framed and enclosed, and the darkroom that had been created in the east room in 1954 was removed. The east room is the Lead Ranger's office and the smaller west room is a Conference Room.

In the north hall, the two storage rooms that had been added after 1954 were removed. This exposed a large section of the stair balustrade that had been removed when the two rooms were created. The missing handrail and balusters were reproduced and the full length of the balustrade was restored. The Mechanical Room was built in the east part of the hall behind the stair opening. Doors from the room open to both the north and south adjoining rooms and a door on the west wall leads to the hall.

On the second floor as on the first, Southern yellow pine tongue-and-groove flooring had been placed over the original 1872 heart pine flooring. In 1990-92, multiple layers of carpeting were removed from the second floor and all rooms were re-carpeted. The edges of the 1872 floor, as well as a second pine floor on top, are visible at the stair opening.

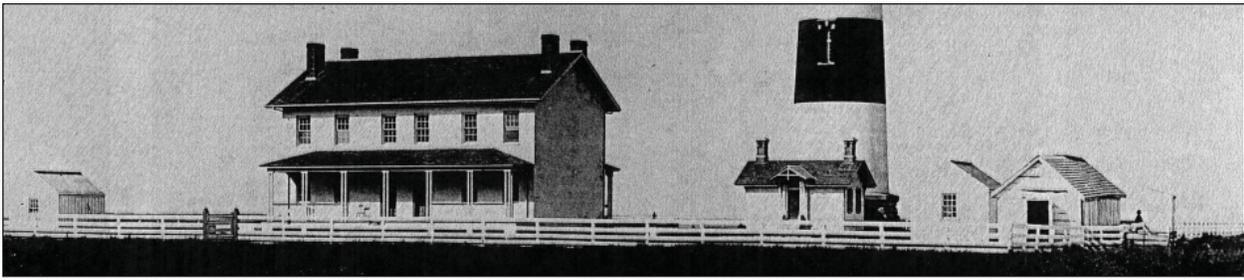


Figure 19, Bodie Island Light Station showing fence, porch posts, and outbuildings in 1893. (Herbert Bamber photograph, CAHA collection)

Outbuildings

In 1893 when Herbert Bamber visited Bodie Island Light Station, he surveyed the site and took a series of photographs. Bamber was Lighthouse District Superintendent of Construction. His 1893 survey of buildings on the station includes two storehouses, one woodshed, two privies, and two cisterns, “all frame with shingle roofs and wood foundations.”

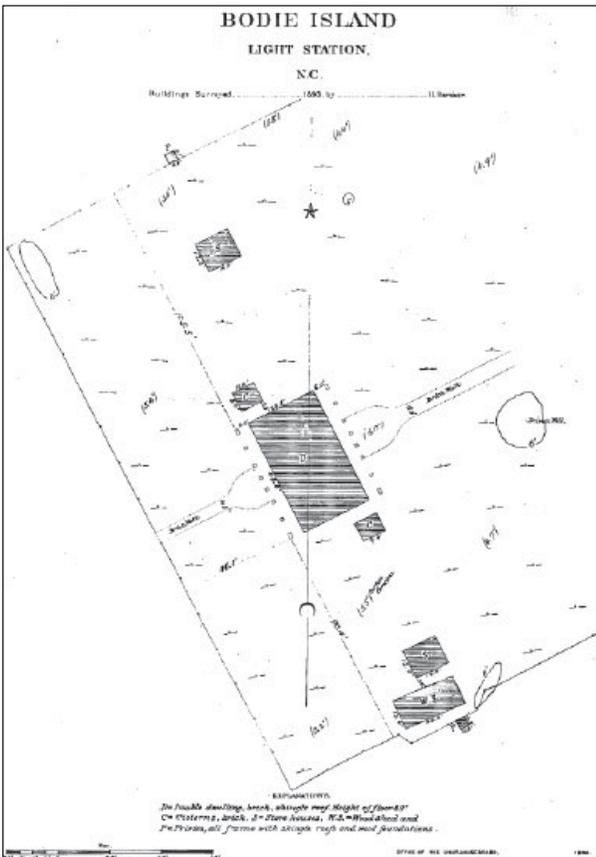


Figure 20, 1893 site survey by Herbert Bamber, printed in 1906. (CAHA collection)

Brick walkways lead from the front and back doors. A fence surrounds the station but gates are

not depicted. East of the house is a “driven well.” (This was a small iron pipe with a strainer on the end and a hand pump attached to the top. The pipe, perhaps only two or three inches wide, was driven into the ground twenty feet or less until it reached fresh water.) Photographs from the same year show the wood fence around the lighthouse and other structures; the two privies are shown, one each on north and south sides just outside the edge of the fence with the front wall and doorway at the fence line.³⁴

Outbuildings were necessary to the operation of the lighthouse. A number of site plans, photographs and letters give an idea of the outbuildings at the Bodie Island Station. Upgraded technology and a new fuel in the lighthouse brought about the construction in 1896 of a sheet metal oil house to contain mineral oil (kerosene). The next outbuilding we know of was needed to haul supplies. Keepers often kept a horse and cart for bringing supplies from the tenders, so it was not unusual for a light station to have one or more stables. Four years after Bamber drew his site survey, Keeper Gallop requested permission to build a stable and a fence around the lighthouse and submitted a sketch of the station to show the proposed location for the stable. His sketch shows the Dwelling with walks from front and back door. On each side of the dwelling is a wood walk extending from the side of the front porch, a storehouse, and a water closet. No woodshed is shown, although on Bamber’s plan just a few years earlier the woodshed was close to Gallop’s stable site. A fence surrounds the full lighthouse station with gates indicated at the end of the west walk, on the north side of the yard behind (west of) the house, and three at the east end opening into three large rectangular gardens. The area east of the garden plots is labeled “Bogs.”

34. “Buildings Surveyed 1893 by H. Bamber,” Office of the Light-House Board, 1906; and Gaskill, p. 15.

Gallop proposed to build the stable outside the fence line behind the south privy.³⁵

On August 30, 1897, the Engineer wrote Light House Board with Gallop's request, adding, "He promises to build a neat structure and keep it whitewashed. He also asks permission to use a few feet of lumber for this purpose which were left over from the recent repairs at the station." The engineer recommended the stable be approved, adding that the keeper would "remove the building at his own expense" if it proved objectionable.

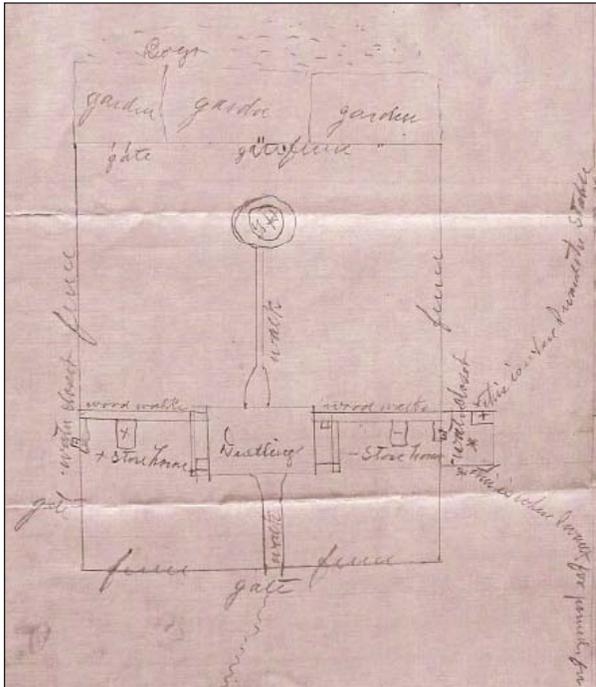


Figure 21, 1897 sketch by Keeper Peter Gallop. (CAHA collection)

The same year Gallop requested his stable, walkways to all outbuildings were built or improved. The Lighthouse Board authorized 360 square feet of old walkways to be relaid and 2,200 square feet of new wood walkways.³⁶ A year later on an inspection trip, the District Engineer found one of the two cisterns in poor condition and recommended building a new one as soon as possible.³⁷

Records indicate permission was given for Gallop's stable in 1897; however, again in 1902 a stable was requested (as well as a henhouse) and by 1909 a stable had been built.³⁸ The 1902 request was made by 2nd Assistant Keeper F.E. Simpson. Because the

Principal Keeper's request had been approved, perhaps an earlier stable had been built and assigned to the Principal Keeper, or if not, Simpson may have renewed Gallop's request.³⁹

In 1898 a telephone was installed in the Keepers' Quarters, with national defense used as justification. For many years the various Life Saving Stations on the Outer Banks had been connected by telephone lines fed to a central telegraph station. The War Department broadened their coverage by tying five lighthouses on the coasts of Virginia and North Carolina to the central telephone station, instructing keepers to report irregular activity off the coast. At Bodie Island, the telephone was in the Principal keeper's end of the house, hung on the hall wall with the barometer above it.⁴⁰

A decade later, the value of the telephones may have been in question when the Inspector asked whether the telephone connection was of any use to the Life-Saving Service. Meekins replied that it was a "decided benefit to the Life Saving Service because we are sometimes called on by telephone to notice the movements of vessels during bad weather, and by using glasses from the balcony of the Tower, we can get a much better view and report back by telephone to the Life Savers." In July 1910, the phone lines were either improved or removed; the Inspector instructed Meekins "to act as auctioneer in selling at public auction the poles and wire of the old telephone line connecting Your Station with the Life-Saving Station."⁴¹

On May 1, 1900, the lighthouse engineer reported that "About 1200 lineal feet of new fence has been built: containing 152 posts, 7200 feet of rails and caps and 160 battens on the posts. Three new gates have been made and two old gates fitted, hung and fastenings put on, and the fence whitewashed."

Also reported in 1900 were monthly descriptions of work associated with a new cistern, pump, and gutter system. The work was begun in March, according to an April 2 report made by the Lighthouse Engineer. An excavation was dug for a new cistern, a wooden foundation laid, and its brick walls were built 8'-0" x 9'-6" in plan, 5'-8" high and 14" thick. In April, he reported that the inside of the cistern has been plastered, sills and

35. Gallop's 1897 sketch.

36. Lighthouse Board Annual Report 1897, p. 99, found in Holland, p. 46.

37. 5th District Engineer Letter, Feb. 7, 1898.

38. 1909 "Description of Buildings, Premises, Equipment, at Bodie Island Light-Station, Seacoast of North Carolina."

39 Simpson was appointed 2nd Assistant Keeper on Dec. 12, 1899.

40. Holland p. 47. Lighthouse Board Annual Report, 1898, p. 108. *Gaskill Remembers*.

41. Inspector Correspondence, Meekins to Inspector, April 30, 1910, and Inspector to Meekins July 24, 1910.

joists laid and a covering of tongued and grooved lumber put on. A new pump had been set with a wooden base and a trough for carrying off the waste water, an overflow pipe had been put in and holes cut for ventilating the cistern.

The gutter system that supplied water to the cistern had also been improved: “New galvanized gutters [were] put on the porches, new spouting put up for conducting the water from the dwelling to the cistern, and brick gutters laid for carrying the water from the spouting on porches.”⁴²

The privies were also improved in 1900. Engineer Jones wrote, “The fronts of the water closets have been repaired, new base boards put on, and flaps made, fitted and hinged on the outsides of the buildings.” (Hinged flap-doors were put on the back of privies for cleaning out the deep pits with long-handled shovels.)

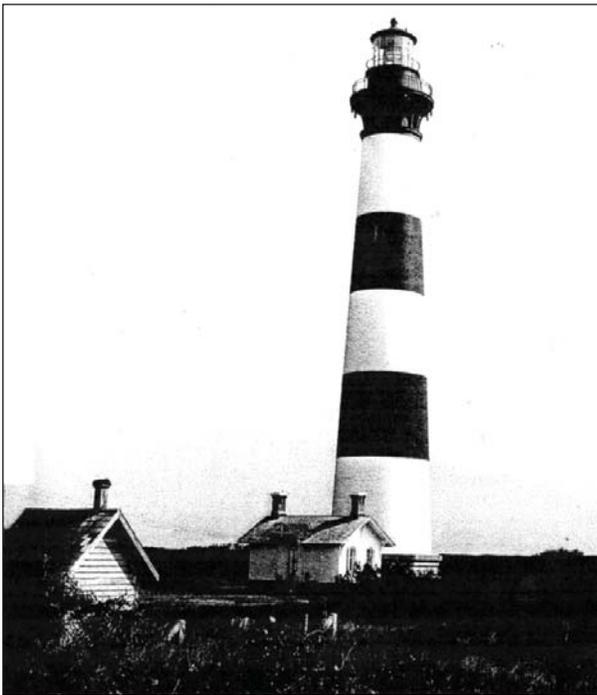


Figure 22. South privy (left) shown in 1954 photograph. (Holland’s History, CAHA collection)

The new cistern mentioned in the 1900 report was included in a written “Description of Buildings, Premises, Equipment, at Bodie Island Light-Station, Seacoast of North Carolina,” prepared in 1909. No site plan is known to have accompanied the Description. It listed “two storerooms, constructed by keeper, one used by the keeper, sixty feet west [south] of the dwelling; the other by assistants, sixty feet east [north] of the dwelling,

42. April 2, 1900, and May 1, 1900 reports from Lighthouse Engineer to Lighthouse Board.

two water closets [privies], three cisterns, one stable, one chicken house, a one-acre garden noted as “unprofitable” because of poor soil, and the wood fence. The ground is described as “marsh and sand.”⁴³

Despite the addition of the third cistern, Meekins wrote to the Inspector in July, 1911, that, [because] of the continued dry weather the water supply at this station is getting very low and poor quality, and I respectfully ask permission to purchase a pump to drive on the premises.”⁴⁴

The next month, the Inspector reported that rotten boards had been cut out of the walks in front of the Keeper’s and Assistant Keeper’s cisterns and replaced with Georgia pine. Downspouts and the cutoffs leading to the Assistant Keeper’s cistern (north] were taken down, and new downspouts installed, described as “put up new 32 ft. of 3” downspout, with two 3” cutoffs, two 3” elbows, four 3” spout heads, and two 3” shoes; put in 5 bulb wire strainers.”⁴⁵

The former Storage Shed that remains at the Station is said to have been built in 1920. According to John Gaskill, son of the last keeper, tools and maintenance equipment were stored there, as well the tackle, paints and equipment to paint the tower.⁴⁶ The 1920 date is reported in the National Register nomination and other secondary sources, but the evidence for that date is not clear.

The last two privies were built in 1921 and, because the house did not have plumbing, remained in use throughout the Gaskill family’s occupancy.⁴⁷

In 1925, a more practical wire and concrete post fence was erected to enclose the station, presumably replacing the board fence. The fence and a metal gate are visible in the early 1950s photograph of the house. A woodshed was built in 1930 with its east side left open for easy access. Knowing the power of ocean winds, Keeper Gaskill advised against the open side. His advice not heeded, a major hurricane destroyed the building in 1933, leaving only the concrete foundation still present today.⁴⁸

43. Lighthouse Engineer to Keeper Gallop, Sept. 7, 1897, in files at CAHA archives; “Description of Buildings..,” March 1909; both found in National Register nomination, p. 14.

44. Inspector Correspondence, July 7, 1911.

45. Inspector’s Monthly Report of Operations, August 24, 1911.

46. Gaskill interview; National Register nomination, p. 12.

47. National Register nomination.

48. Gaskill interview, and *Gaskill Remembers*, p. 31.

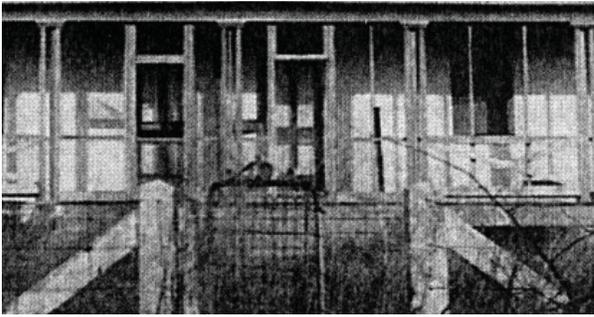


Figure 23. Concrete posts, wire fence and metal gate in front of Quarters, early 1950s. (Gaskill Remembers, p. 36)

As lighthouse technology changed, in 1932 Bodie's lighting apparatus was converted to electricity, and the 1896 sheet metal oil house was converted to become the generator building.

A "Plot Plan" drawn in 1940 by the Coast Guard shows several outbuildings. North of the house are a privy (placed just outside the fence with its front wall on the fence line), garage, shed, and 2 cisterns. South of the house are a cistern, woodshed (though this may have been only its concrete foundation), garage, and privy. This southern privy is now inside the fence with its back wall at the fence line. The plan also shows the ten-foot right-of-way bordering the north cisterns, then turning south to the front brick walkway and to the new lighthouse lot. South of this lot are two outbuildings, one still labeled "oil house" despite its use as a generator house. The lighthouse, Keepers' Quarters, and outbuildings are surrounded by a fence that extends a few feet beyond the lighthouse lot line.

A report of 1949 gives an updated list of outbuildings at the station. Present were a 1930 woodshed on 16' x 28' concrete floor (yet see description below) and two 1-story frame garages 12' x 20', perhaps the older buildings. The report makes reference to buildings used as World War II barracks, and stated that due to a lack of maintenance, all buildings were obsolete & deteriorated, citing in particular the woodshed "all torn down" except the concrete floor. The report included a recommendation that the Keepers' House be retained, but that all frame buildings be demolished.

In the 1950s after the National Park Service had converted the Keepers' Quarters to a visitor center, the generator building was no longer needed. The two storehouses listed on the 1909 Description were later turned into garages and after the war were sold, moved, and made into cottages.⁴⁹

Today, three brick cisterns with concrete slab covers flank the house, two on the north side of the house opposite the corners, and one on the south side, opposite the southeast corner. Two of these remain visually connected to the gutter system, although water is actually carried through to the outside. Records indicate that two of the cisterns date from initial construction of the house; the third was built in 1900. The National Register nomination lists 1912 as the date of a new cistern, but the source of that date is not given.

A fourth structure, housing heat pumps, was built during the 1990s work, designed and located near the southwest corner of the house to appear similar to the cisterns, but with higher louvered sides and open top. Hand pumps raised on pedestals remain but are inoperable, no longer connected to the cisterns.

The brick walk connecting the Keepers' Quarters to the Oil House is said to be laid with brick left over from the original tower construction. Although the good condition of the brick suggests a later date, a brick walkway of this configuration is shown in this location on plats of 1890, 1893, and 1909, and there are several references to walkway improvements in early documents, but no mention of replacements to this walkway.

In 1990-92, the Storage Shed was repaired and the interior modified to serve as the electrical hub for the Light Station complex. The small building was raised about a foot and set on eight brick piers on concrete pads. The floor joists were sistered, a section of sill was replaced, and minor floor repair was completed. Window sash was replaced with four-light fixed sashes, the double doors and board-and-batten siding repaired.

The building is believed to be the ca. 1920 storehouse, later labeled as a garage. Because its former uses are not clear, it has been identified by a variety of names, including pump house, garage, and pony barn.

In 1992 a new outbuilding was constructed to serve as a public restroom facility and to avoid installing restrooms in the Keepers' Quarters. A gable-roofed board-and-batten structure, the building's design is compatible with the existing and former architecture of the Light Station. The addition of this compatible second outbuilding is appropriate in a landscape once home to many outbuildings.

49. National Register nomination, p. 14.



Figure 24, 1969 Aerial photograph showing brick walkway and pine trees planted in 1954. (National Register nomination)

In July 2003, the Coast Guard announced its intentions to remove the Fresnel lens from the tower. This news was not well received by the public, nor by Jeffrey Crow, head of the North Carolina Historic Preservation Office, who declared that removing the lens would have an adverse effect upon the historic property.” The Coast Guard was flexible, and a plan was worked out whereby the park service would assume responsibility for the aid to navigation after it was converted from a federal aid to navigation to a private aid to navigation. The lens was officially transferred at a ceremony held at the lighthouse on April 25, 2005.



Figure 25, 2008 aerial photograph from the east, Doug Stover, photographer, 2008. (CAHA collection)

Timeline

1837	Congressional study of southern coasts and light placements recommended Bodie Island area.
1838	Congress appropriated funds for lighthouse on either Pea Island or Bodie Island, leaving choice to the Lighthouse Auditor.
1848	Completion of the first Bodie Island Lighthouse.
March 3, 1851	Congressional study of lighthouses.
1852	Lighthouse system placed under newly-established U.S. Light-House Board (USLHB); District Inspectors appointed.
1859	Completion of the second Bodie Island Lighthouse. First lighthouse subsequently razed.
April, 1861	Start of the Civil War; Confederate Lighthouse Service seized lighthouses.
May 20, 1861	North Carolina joined Confederacy, extinguished lighthouse lamps.
November, 1861	Confederates removed lens from Lighthouse, blowing it up before abandoning it to prevent Union use as a lookout
June 13, 1871	Government purchased land from John B. Etheridge and his wife for the location of a new Bodie Island Lighthouse on new location across Oregon Inlet from site of two former lighthouses.
Mid-June, 1871	Work started on support buildings, including storage buildings, workmen's quarters, wharf, and tramway to building site. Materials from temporary structures used during construction of Cape Hatteras lighthouse. Contracts awarded for brick, granite, and iron for lighthouse construction; brick presumably for Keepers' Quarters as well.
September, 1871	Pier built to hold a derrick for off-loading ships.
after Nov., 1871	Brick shipments began.
Jan. 31, 1872	Plans for "Double Dwelling for Keepers of Bodys Island L.H."
March, 1872	Walter Frazier joined the work crew as a bricklayer.
Early May, 1872	Work began on the Keepers' Quarters; District Engineer instructed that the building face the lighthouse.

Late June, 1872	Work on Keepers' Quarters suspended so crew could concentrate on completing lighthouse tower. Resumed soon after.
Late Sept., 1872	District Engineer reported the Keepers' Quarters almost finished, recommended the excess brick be used to build the Keepers' Quarters at Cape Lookout.
October 1, 1872	Light of third Bodie Island Lighthouse first lit. Original fuel was lard oil.
October 29, 1872	William F. Hatsel employed as first Principal Keeper.
October, 1872	Flock of geese damaged the new light.
Spring 1873	"Body's Island lighthouse is now painted black and white horizontal bands."
April 28, 1873	Keeper William Hatsel given permission to build a garden fence.
1874	Light-House Board abolished the position of 3 rd Assistant Keeper.
July 1878	Hatsel transferred; Peter G. Gallop becomes Keeper.
1884	Lighthouse beacon modernized: original lard oil lantern was removed and replaced by mineral oil (kerosene) lamps; reduced Keeper workload. New lightning protection installed.
June 9, 1893	Herbert Bamber, Lighthouse District Superintendent of Construction, produced a detailed site plan and series of photographs showing Keepers' Quarters, outbuildings, walks, fence, and well.
1896	Sheet iron oil house erected southeast of the tower.
1897	Board authorized 2,200 square feet of new wooden walks.
1897	Keeper requested permission to build stable just outside south fenceline, enclosing sketch of Station showing outbuildings, fence, and gates.
1898	District Engineer reported one of the two cisterns in poor condition and recommended building a new one.
1898	Telephone service installed at lighthouse station connecting it to central telegraph station.
September 21, 1899	Additional house for Principal Keeper requested by District Engineer.
December 12, 1899	F. E. Simpson appointed 2 nd Assistant Keeper.
1900	Extensive repairs made to Keepers' Quarters and outbuildings. New cistern, pump, & gutter system. New wood fence with gates. Privies improved.
1905	Keeper reported there were no children of school age at that station
1906	Ephraim Meekins, Jr., replaced Peter G. Gallop as Keeper.

1904-9	Proposals continued for construction of a Principal Keeper's house; plans & elevations from several years. Funding provided in 1907. Proposals continue, but funds proved inadequate. House never built.
1909	Written "Description of Buildings, Premises, and Equipment" listed outbuildings, garden, and fence; no sketch or plan.
1909	Bodie Island Hunt Club started.
August 1909	Keeper Meekins & two assistants painted tower.
1909	Series of Inspector Correspondence regarding painting tower and buildings.
1910	Keeper directed to sell at public auction the poles and wires of earlier telephone lines from lighthouse to life-saving station.
1910	U.S. Bureau of Lighthouses replaced Light-House Board; commonly known as the Lighthouse Service.
July 1911	Water pump requested due to low water supply.
December 1911	Wood walks in front of Keeper's and Assistant Keeper's cisterns replaced with Georgia pine. New downspouts installed.
1912	Lighthouse upgraded; incandescent vapor oil lamp installed.
1919	Lloyd Vernon Gaskill replaced Ephraim Meekins, Jr., as Keeper. He was to be the last keeper of the Bodie Island Light Station.
1920	Traditional date for construction of extant storehouse.
1921	Last set of privies built.
1922	Bell line was run from tower lantern to Keepers' Quarters, reducing watch duty. Light-House Board abolished position of 2 nd Assistant Keeper.
1925	Wire fence with concrete posts built to enclose Station.
1930	Woodshed constructed with open front.
September 19, 1932	Lighthouse beacon converted to electricity. 1896 sheet metal oil house converted to generator building. Keeper workload reduced.
1933	1930 woodshed destroyed by hurricane leaving concrete slab foundation.
December 1933	National Geographic Magazine included a photograph showing the Keepers' Quarters, the lighthouse, and four outbuildings.
1934	Tower scraped and painted.
September 1934	Screening plan for doors, windows, and porch(es).

1936	Several aerial photographs show the complex.
August 17, 1937	Cape Hatteras National Seashore authorized by Congress (but not established until 1953).
July 1, 1939	Lighthouse Board incorporated into the Coast Guard, which assumed responsibility for operation of the Lighthouse.
1940	Coast Guard assumed control of lighthouse.
May 1940	Bodie Island Light Station became an unmanned light, operated by timer. Vernon Gaskill, last Lightkeeper at Bodie Island Light Station, transferred to Coinjock Buoy Tending Depot. Keepers' Quarters no longer used as keepers' residence. Nags Head Lifeboat Station was given oversight of the light.
June 1, 1940	Coast Guard "Plot Plan" shows subdivision of lighthouse lot.
During WWII	Lighthouse used as lookout tower for the Navy
1945	Light Station increased from 15 acres to a little over 56 acres.
1945	Floor plans labeled "Public Quarters" drawn by US Coast Guard.
1949	Report listed outbuildings, referenced WWII barracks. Recommended Keepers' Quarters be retained but all others demolished.
Post-WWII	Two storehouses listed in the 1909 Description, & later used as garages, were sold, moved off-site, and converted to cottages.
Early 1950s	Photograph shows Keepers' Quarters before 1954 work began. Windows boarded.
1950s (?)	NPS color slide shows Quarters & outbuildings.
January 12, 1953	Cape Hatteras National Seashore Recreation Area, authorized in 1937, established.
October 9, 1953	Electrical source for lighthouse converted from generator to commercial power. Existing generator for emergency power only.
October 15, 1953	Bodie Island Light Station property declared surplus by Coast Guard and transferred to the National Park Service. Excluded was small square plot of land, 100' on a side, containing the lighthouse.
December 21, 1954	Plans for "Museum of Natural History" in Keepers' Quarters.
Jan., 1955	Park naturalist Verde Watson came from Yellowstone to develop natural history interpretive program.
1954-1955	Extensive remodeling project. Significant alterations to porches and interior.
August 5, 1958	Photograph shows two frame outbuildings.

1960s	Postcard shows chimneys painted white.
1967	Series of photographs by NPS historian Russ Holland for his history of the Bodie Island Light Station. Keepers' Quarters was operating as visitor center and small natural history museum. Tower was locked.
1974	Photographs taken by State Historic Preservation Office (NC Division of Archives & History).
1975	Roof replaced.
1981	Photographs taken by State Historic Preservation Office (NC Division of Archives & History).
May 1983	NPS began historical programs in oil house & lowest level of tower.
May 1984	Coast Guard installed chain-link security fence around base of the tower staircase.
1987-89	Structural investigation of Keepers' Quarters and NPS Inventory and Condition Assessment (ICAP).
1990-92	Extensive work to create Visitor Center, bookstore, offices.
1990	Architectural artifacts from house tagged & stored.
1994	Outer Banks Lighthouse Society founded.
July 13, 2000	Bodie Island Lighthouse transferred from the Coast Guard to NPS. Coast Guard retained ownership of the Fresnel lens.
2000	National Register documentation.
2002	HABS documentation.
2002	Historic Structure Report of lighthouse and oil house.
April 25, 2005	Ownership of the Fresnel lens transferred from the Coast Guard to NPS at a ceremony at the lighthouse.
2009	Historic Structure Report of Double Keepers' Quarters.

I.C Physical Description

General Description

Site

The 1872 Light Station is located on Bodie Island of the North Carolina Outer Banks. The station is set back about eight-tenths of a mile from the Atlantic Ocean to the east and one hundred yards or so from the marshy Roanoke Sound to the west. The soil is sandy and the water table is high, typically just a few feet below grade. Site elevation is low, just three feet above sea level.

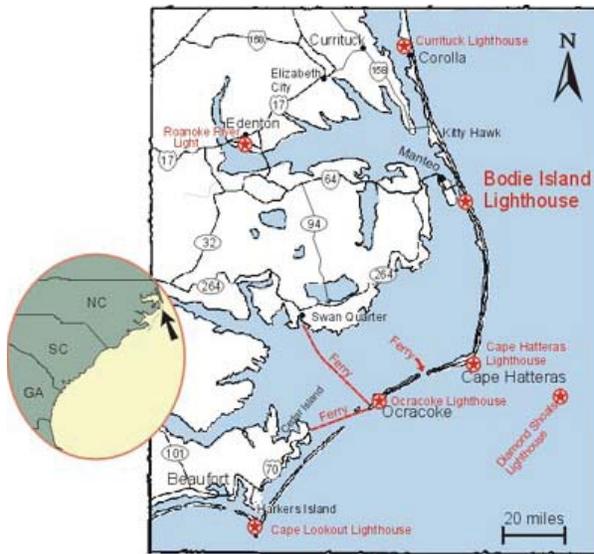


Figure 1, Map of lighthouses along the North Carolina Outer Banks, c. 1990.

Between the shoreline and the lighthouse is State Highway 12, connecting the communities of Nags Head about 11 miles to the north and Hatteras about 50 miles to the south. Virtually all people arrive at the Light Station via this highway and then the Park Service road that branches off just to the north of the station and circles west and then southward to paved parking areas on the west side of the station.

The fifteen-acre station, then as now, is dominated by the 164-foot brick lighthouse with its bands of black and white and its attached brick oil house. Facing it is the Keepers' Quarters. The complex

was once surrounded by a wide vista of flat sand bordered by ocean and sound. Today the station is separated from the ocean by barrier dunes built in the 1930s. Tall pines planted in 1954 line the road and rise behind a parking lot. The immediate grounds of the Light Station are mowed grass, surrounded on three sides by the pines and to the east by a pond, called a bog in early records, extending from the station to the main beach road. The isolated setting retains an undeveloped, naturalistic appearance with few modifications.

Origin and Date of Design

A standardized design for lighthouse crew quarters, the architectural plans are titled "Double Dwelling for Keepers of Bodys Island L.H." The available drawings contained one sheet issued on January 31, 1872, and are identified as having been transmitted to Bodie Lighthouse by P.C. Hains, Major Engineers I/S/A Engineers 5th Lighthouse District. These Quarters for the operating crew were built concurrent with the construction of the lighthouse, coal house and ancillary structures.

Interior Organization

The design was for a duplex, two separate living quarters in one building. Two stories in height, the organizational arrangement was, for each unit, a side hall with two adjoining rooms at each level. The stairs connecting first and second levels were contained within the hall. At the first floor, the forward, or east side room was the Living Room and the following, or west side room the Kitchen. At the second floor, the two rooms served as Bedrooms. A third ancillary room was at the end of the hall opposite the stair landing. At each level, room circulation was off the hallway. There was no designed interconnection between the rooms.

The floor plans for the two living quarters were arranged symmetrically so that the hallways were side-by-side at the center of the building and extended east-west. Thereby, the Living Room and Kitchen at first floor and Bedrooms immediately

above were placed at the north and south ends of the building. Two wood-burning chimneys serving both floor levels, were located at the north and south end walls. Combined, the two quarters make for a building rectangular in footprint measuring approximately 28'-2" by 48'-10".

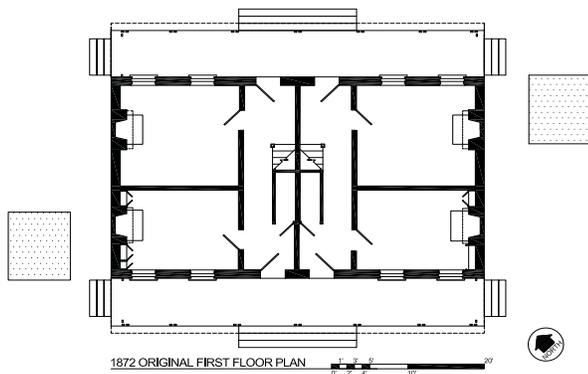


Figure 2, Original Design - First-floor Plan, 1872.

While the perimeter walls of the building are masonry, the interior walls, even the dividing wall between the two quarters, are wood stud walls covered with plaster or plaster board. Floor systems are likewise sawn-wood framing with tongue-and-groove, pine, board flooring. Ceilings, at both levels, were originally plaster on wood lath, and now replaced with plaster board.

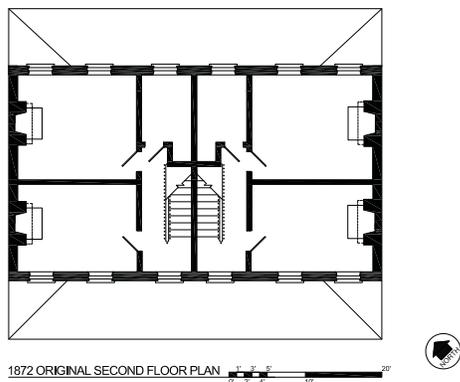


Figure 3, Original Design - Second-floor Plan, 1872.

Exterior

The two-story Quarters is constructed of brick laid in a 1:6 common bond pattern. The smaller, north and south building elevations match one another. Both are gable-end walls devoid of any fenestration or distinctive features.



Figure 4, Southwest oblique, 2005.

The longer east and west elevations are close matches of one another. On each elevation, the fenestration is arranged symmetrically from a vertical center line. At first-floor level, there are two central doorways, one for each quarter, flanked by two matching, six-over-six light, double-hung sash windows. At second-floor level, there are six identical window units, each directly over a window or door at first floor. Each at second level is a six-over-six light, double-hung sash window of equal width, but slightly shorter than the windows of the lower level.

Curiously, the pattern of fenestration is not evenly spaced as indicated on the original 1872 architectural plans. Instead, the two central openings of both elevations are closer together than the spacing between the flanking windows. And even more curious, the doorway openings of the west elevation are closer together than those of the east elevation.

Along both the east and west elevations of the Quarters is an open, first-floor porch spanning the full distance of the building elevation. Wood shingles cover the hip roof of each porch.

The house has a gable roof covered with wood shingles. At each gable end, there is a pair of in-wall, brick chimneys, all four of which are identical.

Location Within the Light Station

The Quarters is located to the west of the lighthouse and coal house, connected by a walkway that park folklore says was built from brick left over from construction of the lighthouse and other buildings. The east elevation of the Quarters was

considered the “front,” the lighthouse being the focus of the daily crew activities.

As the Quarters’ interior was organized symmetrically to contain the two households, so too was the surrounding site and the outbuildings associated with the Quarters. A storage barn and privy for each quarter were placed symmetrically opposite each other, at a distance, to the north and south respectively. Of these early outbuildings, none survive.

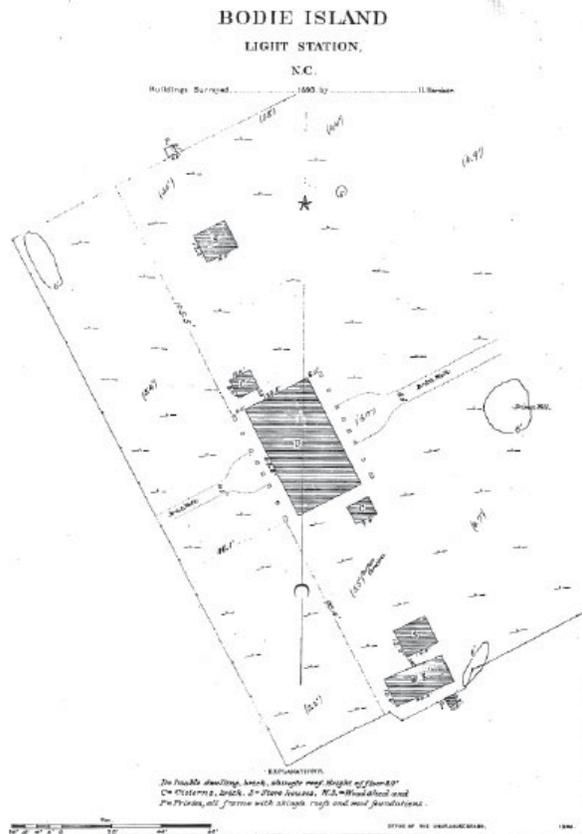


Figure 5, Bodie Island Light Station Site Survey, 1893.

Early on, according to original construction records and an 1893 site plan, there were two cisterns. One on the north side, close to the west elevation, for the north quarters and the other on the south side, close to the east building elevation, for the south quarters. Two cisterns of approximately the indicated sizes and configurations are in those locations now, though apparently with some physical modifications. There now is a third cistern off the north side of the building, near the east elevation, added in 1900. Off the south side, at the previously open west corner, a brick and wood louvered enclosure was built in 1990-92 to conceal the two heat pumps.

About 25 feet back from the south wall of the Quarters is a poured concrete slab. This was the floor for the Wood Shed constructed in 1930 and destroyed by a hurricane in 1933. Imprints created while the cement was still wet indicate interior spaces were formed by stud wall enclosures.

About one hundred feet north of the Quarters is a one-story, wood-frame building with board-and-batten siding and a wood-shingled gable roof. In recent years it has been known primarily as the Storage Shed. Since 1992 it has also served as the central distribution facility for electrical power to the station. According to the National Register Form, it was built in 1920 as a storehouse located between the original North Quarters’ Storage Shed and its Privy. It first appears in a 1933 photograph. It is identified in the 1940 site survey as garage.

To the north, at a distance of about 100 feet past the Storage Shed, a frame board-and-batten-sided public restroom facility was constructed in 1990-92. The design of the building and the choice of building materials were modelled on the Storage Shed.



Figure 6, Northwest oblique view of Light Station.

Interconnection of Building and Site

The first-floor level is slightly less than 3 feet above grade. Today, the building is typically approached from the west via a modern board ramp that terminates at porch’s edge in front of the double doorway. Though originally and through much of its history this side was thought of as “the back of the building,” it is now considered “the front.” Parking areas and service drive are now located to the west and this west elevation is the principal approach for visitors. On the east side, the original “front” but now the rear, there is a central set of board steps as

originally designed. At the north and south ends of each porch, connecting porch to grade, is a set of wood steps, probably original features, though not shown on the 1872 plans.

On each porch, a wood door threshold two boards deep is set about two inches above porch level and at a height even with the interior flooring.

Construction Characteristics

All photographs were taken in 2009 by author unless otherwise noted.

Structural Systems

Foundations

For the building proper, the original architectural plans indicate a continuous brick perimeter foundation wall and a central east-west cross wall. Below the framing of the first-level floor, this perimeter masonry is 2'-0" thick and extends about 2'-6" below ground level, the last 12 inches being a spread footing 2'-6" wide.

Above the first level floor framing, the brick perimeter wall decreases 10" in thickness. The internal cross wall provides support for a system of wood framing within the building that begins at the first floor. This cross wall is 1'-0" wide and according to the 1872 plans extends about 1'-6" below grade and does not have a spread footing. The actual constructed characteristics below grade of the perimeter walls and cross wall have not been established.

Brick piers measuring 1'-0" by 1'-0" were added in 1990-92 to provide additional support for the wood floor framing.

Exterior Walls

The perimeter walls at all four elevations are constructed of brick, laid in a six-to-one common bond. Three wythe deep, these walls measure 1'-2" at both first and second floors.

At the exterior face of the east and west walls, the brickwork corbels outward another 3 inches to accept the ends of the joists for the open porches. On the interior face of all four perimeter walls, the masonry corbels inward 9 inches to support the first-floor framing.

Fenestration, both window openings and doorways, have brick jack arch lintels. The sills of both types of openings are made of wood.

With multiple layers of finishes on the exterior faces of the masonry, the current mortar joint profile appears to be slightly concave. An unmodified-original mortar joint has not been identified.

Interior Walls

The interior walls that originally subdivided the building into its two living quarters and those quarters into rooms are made of frame construction. Originally, these frame walls were covered with plaster on wood lath. During the repair campaign of 1990-92, some plaster surfaces could be patched and left exposed. Other damaged plaster walls were retained, re-secured and covered with a plaster board (blue board). Thus, the wall depth of these interior walls varies from about 7¼ inches to 8 inches.

Flooring Systems

The original 1872 plans call for first-level floor joists to span from north and south end-walls to the masonry cross wall support at the center of the house, a distance of approximately 24'-0". Though the dimensions are not labeled on these plans, it is assumed that the first-floor joists are 10 inches deep as are the second level floor joists. And also, presumably, the joists of both first and second level floor are 3 inches wide, consistent with the attic floor joists. Joists abutting each side wall of the chimneys are paired. At mid-span in the Kitchens and Living Rooms, a pair of sistered joists of presumably the same size are under the joists to provide support.

Roofing Systems

The original wall plates atop the east and west walls measure 4" by 10", according to the 1872 plans. Located at the outside face of the perimeter masonry wall, these plates could not be accessed to confirm their actual size.

Original pine rafters, each cut on all four sides with a circular saw and measuring 3" by 6", are set in pairs 22" on center to form the gable roof. At the roof ridge, rafters (the originals) are teo-nailed together. There is no ridge board. At the base of each rafter pair, a second-floor ceiling joist spans the full distance from east to west walls.



Figure 7, Roof overhang.

The rafters continue beyond the exterior masonry walls of the east and west elevations to support overhanging roof deck, fascia and gutter. The pine joists are original, measure 2" by 9¾" and are cut by circular saw on all four sides.



Figure 8, Diagonal bracing added in 1954 in attic to help support new oil heater.

In 1954, pine planks measuring 1½" by 3⅛" were nailed in place as a diagonal connection between rafters and joist. This was done to provide additional support for the joists as heating units were placed in the attic. The deck boards, which appear to date from different installation periods, measure 5½" in width.

Also at some point, perhaps in 1954, a modern, 1⅝" by 5½" pine board was added as a vertical brace at the connection of each rafter pair and joist. Though not on the 1954 as-built plans these vertical boards were already installed by commencement of the 1990 repairs.

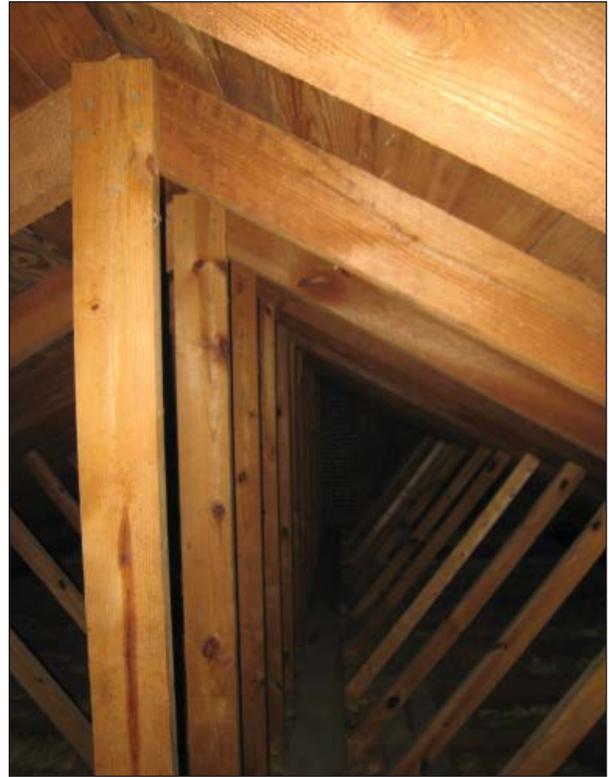


Figure 9, Vertical brace added at unknown date to apparently help support the 1954 oil heater.

Porch Piers & Framing

There are two rows of apparently original, low brick piers, aligned north-south, one parallel to the east exterior wall of the dwelling and the other row parallel to the west wall. Each row supports a system of wood framing for an open porch. The two end-piers of each group measure 1'-1" by 2'-1" in plan. The brick piers between the two end-piers are square in plan measuring 1'-1" by 1'-1".



Figure 10, East Porch.

Utility Systems

Mechanical System

Two heat pumps installed in the 1990-92 phase of repair provide central heating and cooling to this building. One unit serves the first floor and the other the second floor. These heat pumps are just outside the building to the southwest in an enclosure, built at the time of installation, designed to hide the mechanical units from view. The enclosure sits on a low, brick perimeter wall and has four sides of wooden horizontal louvers and an open top.

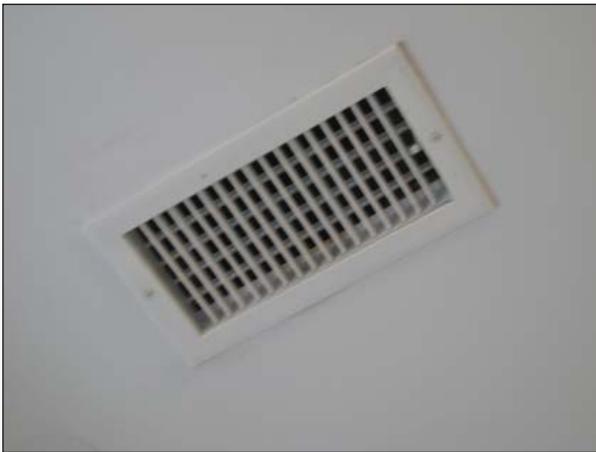


Figure 11, Typical, 1990s era, 10-inch, metal ceiling register.

Inside the house, there is a mechanical room for an air handler at each floor level. The first-floor air handler has a trunk line contained in a chase that runs along the ceilings of what originally was the Stair Hall for the South Keepers' Quarters. Off this trunk line ducts run north-south between ceiling joists to factory-painted, adjustable, 10 inch metal, ceiling-supply registers. A factory-painted, fixed-louvered, return-air register measuring 1'-10" by 1'-10" is in the wall between Room 104, the Mechanical Room, and Room 105, the Bookstore - West Room.

The second-floor air handler uses the attic for its ducting. A galvanized metal trunk line runs east-west above the original Stair Hall for the North Keepers' Quarters. Off this trunk line, flex ducts runs north-south above the ceiling joists to ceiling registers matching those of the first floor. There are two return-air registers matching the one on the first floor. One extends through the north wall and the second through the south wall of Room 206, the Mechanical Room.



Figure 12, Typical, 1990s, 1'-10" by 1'-10" metal return grill.

Electrical System

Electrical service is provided by Dominion Energy and comes to the site underground off State Highway 12. A transformer feeds directly to the Storage Shed. A second feed bypasses the Storage Shed and goes directly to the lighthouse.



Figure 13, Typical, 1990s, plastic plate cover.

Distribution panels in the Storage Shed feed 110/220 service underground to the Public Re-

strooms Building to the north and to the Double Keepers' Quarters to the south. In the Quarters, there are two electrical panels in the first-floor Mechanical Room.



Figure 14, Typical, Interior 12-inch diameter, reproduction "schoolhouse" ceiling light.

The Keepers' Quarters were completely rewired in the 1990-92 phase of repair. Ivory-colored plastic plates were the typical covers for switches and outlets. Reproduction "school house" ceiling fixtures were installed throughout the interior. On the exterior, a "coach light" sconce was installed on each side of the paired doors at both the east and west porches.



Figure 15, Typical, 12-inch tall, exterior, reproduction-"coach light" sconce.

Plumbing System

The Staff Restroom, Room 107, with a single toilet and a lavatory, was installed in 1990-92. The water source is the City of Nags Head.

Exterior Features

Roofs & Rainwater Collection/Dispersal

The current, sawn-shingle roofing was installed in 1990-92. According to the specifications contained in the corresponding ICAP report, the shingles are #1 Blue Label Western Red Shingles. They are set on nailers which are atop a pine board deck attached directly to the roof rafters. The shingles are random widths with a 5-inch exposure.



Figure 16, East-side, roof, rainwater collection.

The main section of the Quarters has a gable roof. The two porches have hip roofs.

Painted, half-round, galvanized-steel gutters collect water from the upper roof and both porches. A round, 3-inch downspout carries the water from the east half of the upper roof and connects with same from the east-side porch roof into one 3-inch downspout that enters the southeast cistern; the downspout does not deposit the rainwater in

the cistern but carries it through to the far south side where the water is dumped onto the ground. Downspouts on the west side are configured in the same fashion and pass through the northwest cistern.

There are three brick cisterns. Two are on the north side of the Keepers' Quarters, opposite the northeast and northwest corners, and one is on the south side, opposite the southeast corner. Each cistern has a concrete-slab cover.



Figure 17, Paired chimneys at north gable.

Chimneys

There are four matching chimneys, a pair at each gable-end wall. All four chimneys are made of brick and measure about 3'-2" by 1'-9" in horizontal section above roof line. Beginning at the top of each chimney, the third and fourth rows of brick corbel out about 2 inches to create a two-brick deep banding, decoration for the culmination of the chimney stack. These chimneys are believed to be unmodified original features. There is visual evidence of well-weathered finish coatings on the exterior surfaces of the brickwork. Each chimney is subdivided into two flues, connecting to a first- and a second-floor fireplace immediately below. For fear of uncontained fire, use of the fireplace is not permitted. At first floor, the fireboxes are exposed. At second floor, all four fireplaces are covered with a stud and blue board enclosure. Also, to minimize rain water intrusion at the top of the chimneys and to maximize ventilation in the chimney stacks, a vented cover was installed atop each chimney.

Open Porches

At first floor, a one-story open porch spans the entire east elevation and a matching porch spans the west elevation. They measure approximately 6'-8" deep by 48'-10" long. Both porches are original features. However, both porches have had extensive repairs over time, especially in 1990-92 when there was extensive replacement of the porch-deck framing, columns, roof framing and associated trim.



Figure 18, Replacement floor joists at West Porch.

The porch-deck framing at both porches is treated 1½" by 7½" joists installed in 1990-92. A painted, 1" by 10½" skirt board conceals the porch deck framing.

Both porch decks consist of unpainted but regularly oiled (linseed oil), tongue-and-groove, pine boards measuring 5/4" by 2¼", 2½" or 3". Those boards in better condition from both porches were salvaged in 1990-92 and reinstalled on the East Porch. The deck boards on the West Porch match those on the East Porch in appearance but they are replacements dating to the 1990-92 repairs. The top of the porch deck of both porches are approximately 2'-8" above grade.



Figure 19, Looking north from East Porch.

The seven pairs of coupled posts and four sets of X-braced railings per porch are an unusual feature first documented in 1893 photographs. These configurations are probably original features given the early documentation of their existence, even though the 1872 plans call for ten solitary posts.



Figure 20, Side steps.

According to photographs, the paired posts and X-braced porch railings continued until 1954 when they were replaced by single posts without porch railings similar to the 1872 plans. The single posts were replaced with paired posts and X-braced rails which were in place in 1990. However, because insect damage was so severe, George Perrot, who

supervised the NPS repair effort in 1990-92, reports that all posts and rails had to be replaced. The posts measure 2" by 4". The top rail measures 1" by 5", the bottom rail 1" by 6", and the cross rail 1" by 4".

The porch posts support 2" by 6" joists and 3" by 6" rafters as in the 1990 plans.



Figure 21, Plank-board ramp leading to West Porch.

Stairs & Ramps

Centered on the east elevation of the dwelling is a wide set of three steps. These painted steps measure 15'-5" in width. The risers are 8" high. Each tread board is 1" thick by 1'-0" deep with bull nose detail along the three exposed edges. The stringers measure 3'-0" by 8" with a 1/2" edge bead on the exposed bottom corner. Though an original design feature, the steps were extensively rebuilt in 1990-92.



Figure 22, West Porch entrances.

A wooden ramp installed in 1990-92 is centered on the west elevation, the façade to which the arriving public approaches upon arrival by vehicle.

At the porch, the ramp is 16'-0" wide. From this point, the west edge of the porch, the ramp slowly descends and tapers in width for nearly twenty feet of run until it reaches a width of 5'-11", a width it retains until it ends at the vehicular drive. The treated plank boards of the ramp deck are unpainted but oiled (linseed oil) periodically. The plank boards of the walkway measure 1" by 5¾". Railings matching those of the open porches flank the sides of the ramp at the east end.



Figure 23, North elevation of West Porch ramp.

At the north and south ends of the two open porches, there are matching steps, an early if not original design feature. Each group consists of three steps and measures 5'-1" in width. The full-length treads measure 11¼" deep by 5/4" thick with a bull nose profile on the three exposed sides. The riser measures 8" in height. There are three stringers. Each measures 3" by 8", has been squared up with circular saw and cut to accommodate treads and risers. This framing is without decorative embellishment. All four of these sets of steps were extensively rebuilt in 1990-92.



Figure 24, Early brick walkway and rebuilt steps leading to East Porch entrances.

Windows

The windows appear along the east and west walls, the long elevations of the Quarters. At both the first and second levels, the window units are the original, wood, double-hung sash, in a six-over-six light design. At first floor, the window units measure 2'-8" wide by 5'-2" tall. At second floor, the window units are 2'-8" wide by 4'-10" tall.

Each window opening has an exterior sash window consisting of a wood sash of full-opening dimensions with thermal glass. Two metal receivers at the top rail of each sash attach to matching hooks on the window header. The thermal windows were added during the 1990-92 repair campaign.



Figure 25, Typical first-floor window.

Also at each window are scars at the jambs from butt hinges for shutters. Shutters are shown on the building in a 1933 photograph. No evidence was observed of other shutter hardware such as plate or driven pintles, other jamb hinges, hooks, holdbacks or latches.

Doors

There are four exterior doorways, all at first floor. Two are centrally placed on the east elevation and two on the west, one on each elevation for each of

the two living quarters. All four doors are identical and appear to be original. The four-panel doors measure 1 $\frac{5}{8}$ " by 3'-0" by 7'-0".



Figure 26, Typical door lock, exterior face of exterior door.

Each door has a modern mortise lock with brass pull handle and thumb latch on the exterior face. A turn is on the interior side. All four doors have a door closer. The two west doors each have three, stainless-steel, 4 inch hinges. The two doors on the east elevation each have three early brass 4-inch ball-pin hinges which are possibly the original.



Figure 27, Early brass door hinge, East Porch.

Each doorway has a three-light transom sash, also original. The transom bar has been modified at the exterior face of each doorway; a replacement piece of trim has been added at some unknown point.

Each doorway has a well-worn, perhaps original, threshold comprised of two boards side-by-side that spans the width of the masonry opening and measures 14" in total depth. Each doorway also has a modern 3 $\frac{1}{2}$ " wide oak threshold added on top of the early threshold.



Figure 28, West Porch reducer.

All four doorways have remnants of an added exterior door stop measuring $\frac{1}{2}$ " by 1 $\frac{3}{8}$ ". Associated with that stop are scars for small hinges and a latch for a light-weight outer door, presumably the screen doors that were installed in 1954 and removed in 1990-92.

Interior Features

Common 1872 Design Elements

The two living quarters were constructed to be mirror images of one another. In the original 1872 design, architectural features were frequently repeated. And there was an hierarchy of sophistication in the features; the more sophisticated designs were placed in the more-public, first-floor areas.

An example of the heirarchical difference in treatment is found with the windows. Though the beveled window casings are the same at both floor levels, the window aprons at first floor differ from those at second floor. At first floor the aprons are beveled to align with the bevels of the casing above. At second floor, the apron is a simple plank board without bevels.

Some of the repeated original design elements found on both levels of the Quarters interior include:

Baseboards

The 8-inch tall, beveled baseboard is found in virtually every room.

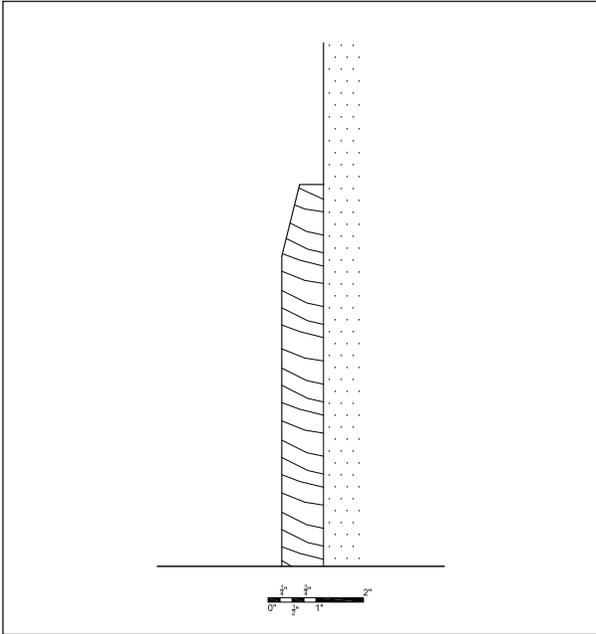


Figure 29, Section through baseboard.



Figure 30, Typical baseboard.

Window Casing

Throughout the Quarters, all window casing is 5 inches wide, beveled along two edges.

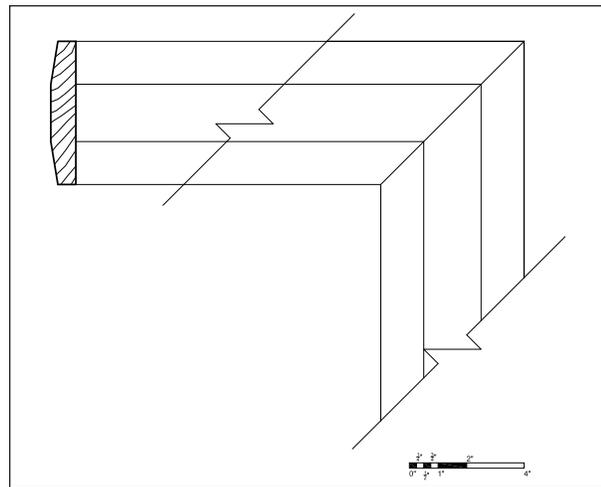


Figure 31, Typical window casing.

Window and Transom Sash

The sash and muntin are trimmed identically for all units. All sash and transoms appear to be original.

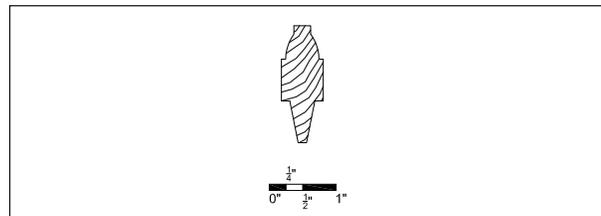


Figure 32, Typical window muntin.

Door Casing

Similar to the window casings, the door casings have the double-bevel. In addition, the casing has a bead at the interior edge creating a full width of 5 5/8 inches.

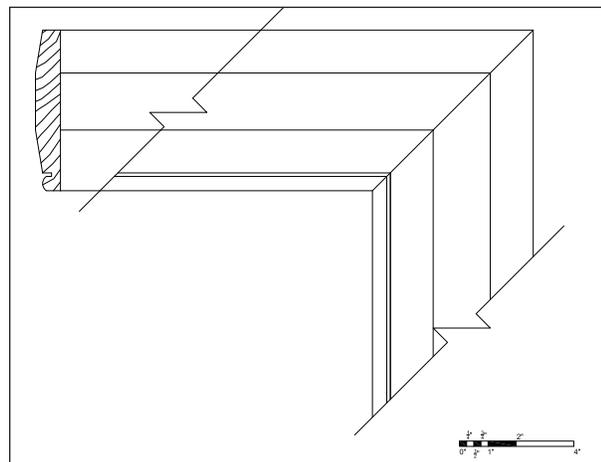


Figure 33, Typical door casing

Exterior Doors

Found only at first floor, the 4 doors are identical.

Interior Doors

Only two of the early interior doors have survived but this four-panel design was probably the typical door type. The two early doors are at the doorway to the closet off Room 102 North Front Entry Hall and between Room 201 Conference Room and 207 Lead Ranger's Office.

Later Design Elements

Later repair and remodeling campaigns in 1954 and especially in 1990-92 retained and reused the original 1872 elements in the same places of origin. Sections or whole units of damaged or missing elements were replicated.

When new room configurations were created, the component architectural elements were chosen to match in appearance the designs of the original 1872 elements. Examples include baseboards, door casings, and doors. Close inspection reveals small differences between the 1872 design and the replacement copy. As example, the 1990-92 replacement doors look very similar to the 1872 doors. However, the methods of construction vary and the differences facilitate identification of the respective construction periods. (See Drawing B-3: Interior Door - Original and Drawing B-4: Interior Door - 1992.)

If the evidence were inconclusive, other plausible late-nineteenth-century designs were selected. Examples include door and window hardware, doorstops, and picture molding.



Figure 34, Reproduction ball-pin door hinge.



Figure 36, Typical sash latch.



Figure 35, Reproduction rimlock.



Figure 37, Typical sash lift.

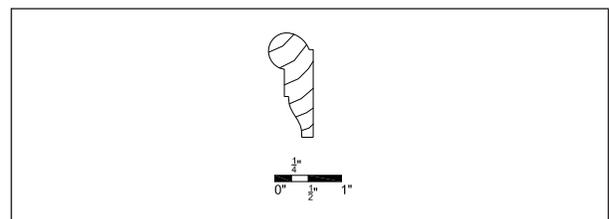


Figure 38, Typical picture molding.



Figure 39, Reproduction door stop.

Description by Room

Room 101 - Exhibit Room-West

This room was originally the Kitchen for the North Keepers' Quarters. However, with the majority of its east wall removed, this room is now functionally part of one large exhibit space along with Room 110, the original Living Room. Rectilinear in plan, this room measures about 11'-0 ½" by 15'-6".



Figure 40, Northwest oblique of Room 101.

Flooring

The pine, tongue-and-groove flooring measures 2½" in width. Installed before 1954, it is laid north-

south. The varnish finish is well worn from visitor foot traffic.

Baseboards

The 8-inch tall baseboard of typical beveled design was salvaged and reused in the same location during the 1990-92 work. The west and south walls are original and their baseboards likely date to that 1872 period. The wing-wall sections of the east wall were reconstructed in 1990-92 and their baseboards likely date to that period.

Walls

The blue board veneer plaster system was reportedly applied in 1990-92 over the deteriorated plaster on lath at the west and south walls. The sections of the east wall now present were reconstructed in 1990-92 using wood studs and plaster board.

Picture Molding

The reproduction Victorian wood picture molding was installed in 1990-92.

Ceiling

In 1990-92 a blue board plaster veneer system was installed. No plaster or wood lath remains.



Figure 41, Southwest oblique of Room 101.

Doorways

A single doorway is on the south wall and leads to Room 102 Front Entry Hall – North. The missing door which measured 2'-10" by 6'-8" was probably a four-panel door as found elsewhere in the Quarters' interior rooms. No elements of the missing door hardware remains. The door casing appears to be original.

A large passageway is present at the east wall. This entire wall was removed in 1954 to create one large exhibit space. The current sections were then reconstructed in 1990-92.

Windows

There are two window units on the west wall. Both are original and intact. The window sash are six-over-six light, double-hung.

The window casing and apron are the typical type found throughout the first floor and probably date to 1872.

Finishes

The floors, baseboards and built-in cabinets are coated with a polyurethane varnish applied in 1990-92, as per Perrot. The door and window casings, window sash, picture molding, plaster or plaster board walls and ceilings are painted.

Mechanical System

Two 1990-92-era ceiling supply registers of typical design (described in section Utility Systems – Mechanical System above) are located close to the west wall. In addition, a typical return register (described in same referenced section) is located in the south wall.

Electrical System

In addition to the typical, 1990-vintage, ivory-colored plastic plate covers, there are two reproduction "school house" ceiling fixtures of typical design installed in 1990-92.

Fireplace

On the north wall is the exposed-brick fireplace for the original Kitchen. The early if not original firebox is intact. The opening measures 3'-3" across at the front face and 1'-1" deep, the beveled cheek walls forming a 2'-4" wide back wall. Many of the brick along the back of the firebox have heat fractures and spalled exposed surfaces. A metal strap supports the flat arch of the hearth. In 1990-92 a

new brick hearth measuring 4'-3" wide and 2'-1" deep was laid. Also during those repairs, a Dutchman repair was made to the front of the mantel shelf. In 1954, the front of the shelf was hacked off to enclose the fireplace with a stud wall.



Figure 42, Fireplace of Room 101.



Figure 43, Dutchman repair (1990s) to mantel shelf, Room 101.



Figure 44, Fireplace hearth, Room 101.

Built-in Cabinets

On each side of the fireplace, new built-in oak cabinets were constructed in and installed in 1990-92. The designs are based in part on ghost marks found only in the two Kitchens, according to Perrot, and in part on the cabinets still surviving in the Lighthouse Keepers' Quarters in St. Augustine, Florida.

Room 102 - Front Entry Hall-North

This west sector of the Stair Hall for the North Quarters was originally the living unit's back passageway. Even before the building's function changed in 1954 to receive large numbers of visitors, this area had come to be thought of as a front entrance. It measures 6'-8" wide with a depth arbitrarily set for the purposes of this report at about 11'-0", the location of the dividing wall that divides the adjoining spaces, first floor and immediately above at second floor, into east and rooms.

Flooring

The pine, tongue-and-groove flooring measures 2½ inches in width. Installed before 1954, it is laid north-south. A 10 inch wide patch of flooring was installed in 1954 where the south wall was removed for a wide passageway. The current patch of matching flooring was installed in 1990-92 to demarcate where the original wall was located. The varnish finish throughout is well worn from visitor foot traffic.

Baseboards

The 8-inch tall baseboard of typical beveled design was salvaged and reused in the same location during the 1990-92 work. The north, east and west walls are original and intact. Part of the south wall retains its original configuration as well. All four walls may retain their 1872 baseboards.

Walls

The blue board veneer plaster system was reportedly applied in 1990-92 over the deteriorated plaster on lath at the north and west walls. The sections of the south wall now present were reconstructed of wood studs and plaster board in 1990-92 to demarcate the location of the original wall.

Picture Molding

The reproduction Victorian wood picture molding was installed in 1990-92.



Figure 45, West entrances at Room 103 and 102.

Ceiling

In 1990-92 the blue board veneer plaster system was installed. No plaster or wood lath remains.

Doorways

There are three doorways in this room. One doorway is on the north wall and leads into Room 101 Exhibit Room – West. This doorway is described in the Room 101 section above.

A second doorway on the east wall opens into a small closet beneath the stairs. At this second doorway, an original 1872 feature, the original four-panel door remains and measures 2'-4" wide by 6'-4" tall. However, the early hardware is not present. The doorway now has a metal-plate reproduction rim lock and two reproduction ball-pin hinges, all installed in 1990-92.

On the west elevation is a third doorway. This doorway, which connects with the exterior, was originally the back doorway of the North Quarters. The original, four-panel exterior door remains. This doorway is described in the section Exterior Features above.

The door casing on all three doorways is original, the typical design found throughout the building.

There is also a passageway at the south wall that connects with Room 103 Front Entry Hall - South. Originally a frame and plaster wall that separated the two living quarters, this wall was removed in 1954 when the building use changed. The current sections of wall were reconstructed in 1990-92 to better demarcate the location of the original 1872 wall.

Windows

There are no windows in this room. There is a three-light transom above the doorway, however. The transom sash has the same construction features as the window sash throughout the building.

Finishes

The floors, baseboards and closet door are coated with a polyurethane varnish applied in 1990-92, as per Perrot. The exterior door, the door casings, transom sash, picture molding, plaster or plaster board walls and ceilings are painted.

Mechanical System

No elements of the mechanical system are exposed in this room.



Figure 46, Understair Closet in Room 102.

Electrical System

In addition to the typical 1990s-vintage, ivory-colored plastic plate covers, there is a reproduction “school house” ceiling fixture of typical design installed in 1990-92.

Security System

A motion detector is located in the northwest corner of the room.

Closet

Beneath the Stairs is an original service room or Closet. Entered through a low door, this Closet measures just 2'-6" wide by 6'-10" deep.

Room 103 - Front Entry Hall-South

This space was originally the west sector of the Stair Hall for the South Quarters and contained this living unit's back entrance. Even before the building's function had changed in 1954 to receive large numbers of visitors, this area came to be thought of as a front entrance. It measures 6'-8" wide and 6'-5" deep.



Figure 47, Southeast oblique view of Room 103.

Flooring

The pine, tongue-and-groove flooring measures 2½ inches in width. Installed before 1954, it is laid north-south. A 10-inch wide patch of flooring was installed in 1954 where the original north wall was removed. The current patch of matching floor-

ing was installed in 1990-92 to demarcate where the original wall was located. The varnish finish throughout this space is well worn from visitor foot traffic.

Baseboards

The 8-inch tall baseboard of typical beveled design was salvaged and reused in the same location during the 1990-92 work. The south and west walls and part of the north are in their original locations and may retain their 1872 baseboards. The east wall was rebuilt in 1991-1992 and its baseboards likely date to that period.

Walls

The blue board veneer plaster system was applied in 1990-92 over the deteriorated plaster on lath at the west and south walls. The sections of the north wall now present and the east wall were reconstructed in 1990-92 using wood studs and plaster board.

Picture Molding

The reproduction Victorian wood picture molding was installed in 1991-1992.

Ceiling

In 1990-92 blue board plaster board was installed. No plaster or wood lath remains. A chase for HVAC ductwork was installed running east-west along the south wall at ceiling height. The chase measures 1'-2" wide by 1'-1" deep and is made of ¼" finish-grade plywood.

Doorways

A doorway on the east wall opens from Room 104 Mechanical Room. This doorway and door were reconstructed in 1990-92 and are close matches in appearance to original interior doorways and doors elsewhere in the building.

A second doorway on the south wall leads into room 105 Bookstore – West Room. It is an original doorway, though its door and hardware are now missing. This door measured 2'-10" by 6'-8" and probably was the typical four-panel interior door found elsewhere in this building.

On the west elevation is a third doorway. This doorway, which connects with the exterior, was originally the back doorway of the South Quarters. The original, four-panel exterior door remains. This doorway and door are described in the section Exterior Features above.

The door casing on this and the south doorway are original, a typical design found throughout the building.

There is also a passageway at the north wall that connects with Room 102 Front Entry Hall - North. Originally a frame and plaster wall that separated the two living quarters, this wall was removed in 1954 when the building use changed. The current sections of wall were reconstructed in 1990-92.

Windows

There are no windows in this room. There is a three-light transom above the west doorway to the exterior, however. The transom sash has the same construction features as the window sash throughout the building.

Finishes

The floors, baseboards and built-in cabinets are coated with a polyurethane varnish, applied in 1990-92, according to Perrot. The door and window casings, window sash, picture molding, plaster or plaster board walls and ceilings are painted.

Mechanical System

A chase for HVAC ductwork was installed in 1990-92 running east-west along the south wall at ceiling height. The chase measures 1'-2" wide by 1'-1" deep and is made of ¼" finish-grade plywood.

Electrical System

In addition to the typical 1990s-vintage, ivory-colored plastic plate covers, there is a reproduction "school house" ceiling fixture of typical design installed in 1990-92.

Room 104 - Mechanical Room

This room was originally a closet beneath the Stair Hall for the South Quarters. As the building's function changed to receive large numbers of visitors in 1954, the stairs for this section was removed and this space became part of the newly installed women's restroom. In 1990-92, when the central heating/cooling system was installed, the space was converted to the Mechanical Room for the first-floor rooms. It measures 6'-8" wide and 3'-11" deep.

Flooring

The sheet vinyl floor covering was installed in 1990-92.

Baseboards

The 8-inch tall baseboard of typical beveled design was salvaged and reused in the same location during the 1990-92 work. The north and west walls are original dating to 1872. The baseboards may date to 1872 vintage or to the 1954 remodel. The east and west walls were constructed in 1990-92 and the baseboards likely date to that period.

Walls

The blue board veneer plaster system was reportedly applied in 1990-92 over the deteriorated plaster on lath of the original north and south walls. The east and west walls were constructed in 1990-92 using wood studs and plaster board.

Picture Molding

There is no picture molding in this room.

Ceiling

In 1990-92 a blue board veneer plaster system was installed. No plaster or wood lath remains.

Doorways

The one doorway, located on the west wall, is described above in the section on Room 103- Front Entrance South.

Windows

There are no windows in this small interior room.

Mechanical System

This room contains the HVAC air handler for the first-floor rooms of the building. The HVAC system was installed in 1990-92.

Electrical System

Two circuit panels, installed when the building was rewired in 1990-92, are located on the north wall.

Room 105 - Bookstore-West Room

This space was originally the Kitchen for the South Keepers' Quarters. With the majority of the dividing wall removed, this room is now part of one large Bookstore along with Room 106. Rectilinear in plan, the room measures about 11'-2½" by 15'-5½".

Flooring

The pine, tongue-and-groove flooring measures 2½ inches in width. Installed before 1954, it is laid

north-south. The varnish finish is well worn from visitor foot traffic.

Baseboards

The 8-inch tall baseboards of typical beveled design were salvaged and reused in the same location during the 1990-92 work. The north and west walls are in their original locations and may retain their original 1872 baseboards. The wing-wall sections of the east wall sections were reconstructed in 1990-92 and their baseboards likely date to that period.



Figure 48, South elevation of Room 105.

Walls

The blue board veneer plaster system was reportedly applied in 1990-92 over the deteriorated plaster on lath at the north and west walls. The wing wall sections of the east wall were constructed in 1990-92 using wood studs and plaster board.



Figure 49, North elevation of Room 105.

Picture Molding

The reproduction Victorian wood picture molding was installed in 1990.

Ceiling

In 1990-92 the blue board veneer plaster system was installed. No plaster or wood lath remains.

Doorways

A single doorway is on the north wall and leads to Room 103 Front Entry Hall – South. This doorway is discussed in the section on Room 103.

A large passageway is located in the east wall. The original 1872 wall was removed in 1954 to create one large exhibit space from the previous Kitchen and Living Room. The current wing walls were constructed in 1990-92 to better demarcate the location of the original wall.

Windows

There are two window units on the west wall. Both are original and intact. The window sash are six-over-six light, double-hung.



Figure 50, West elevation of Room 105.

The window casing and apron are the typical type found throughout the first floor and probably dates to 1872.

Finishes

The floors, baseboards and built-in cabinets were coated with a polyurethane-based varnish in 1990-92. The door and window casings, window sash, picture molding, plaster or plaster board walls and ceilings are painted.

Mechanical System

Two 1990s-era ceiling supply registers of typical design (described in section Utility Systems – Mechanical System above) are located close to the west wall. In addition, a typical return register (described in same referenced section) is located in the north wall.

Electrical System

In addition to the typical 1990s-vintage, ivory-colored plastic plate covers, there are two, reproduction “school house” ceiling fixtures of typical design installed in 1990-92.

Fireplace

On the south wall is the exposed-brick fireplace for the original Kitchen. The early if not original firebox is intact. The opening measures 3'-3" across at the front face and 1'-10" deep, the beveled cheek walls forming a 2'-4" wide back wall. Many of the bricks along the back of the firebox have heat fractures and spalled exposed surfaces. A metal lintel, imbedded in the mortar joint of the cheek walls, provides additional support to the flat arch at the top of the firebox. In 1990-92 a new brick hearth measuring 4'-2 ½" wide and 2'-4" deep was laid. Also during those repairs, a Dutchman repair was made to the front of the mantel shelf. In 1954, the front of the shelf was hacked off to enclose the fireplace with a stud wall.

Built-in Cabinets

On each side of the fireplace, new built-in oak cabinets were constructed and installed in 1990-92. The designs are based in part on ghost marks found only in the two Kitchens, according to Perrot, and the cabinets still surviving in the Keepers' Quarters in St. Augustine, Florida.

Room 106 - Bookstore-East Room

This space was originally the Living Room for the South Keepers' Quarters. With the majority of the dividing wall removed, this room is now part of one large Bookstore along with Room 105. Rectilinear in plan, the room measures about 13'-10½" by 15'-5½".

Flooring

The pine, tongue-and-groove flooring measures 2½ inches in width. Installed before 1954, it is laid north-south. The varnish finish is well worn from visitor foot traffic.

Baseboards

The 8-inch tall baseboard of typical beveled design was salvaged and reused in the same location during the 1990-92 work. The north, east and south walls appear to be intact and may retain their 1872 baseboards. The wing-wall sections of the west wall were constructed in 1990-92 and their baseboards likely date to that period.



Figure 51, Southwest oblique of Room 106 and 105.

Walls

The blue board veneer plaster system was reportedly applied in 1990-92 over the deteriorated plaster on lath at the north, east and south walls. The wing-wall sections of the west wall now in place were reconstructed in 1990-92 using wood studs and plaster board.

Picture Molding

The reproduction Victorian wood picture molding was installed in 1990-92.

Ceiling

In 1990-92 the blue board veneer plaster system was installed. No plaster or wood lath remains.

Doorways

A passageway is on the north wall connecting with Room 108 Back Entry Hall – South. This passageway was constructed in 1954 and is in the approximate location of an original doorway. In 1954 the doorway was widened and the current casement opening was created. The casing matches in appearance the original door casing found elsewhere in the building, but it dates to 1954.

The large passageway of the west wall is discussed in the section on Room 105.



Figure 52, Northeast oblique of Room 106.

Windows

There are two window units on the east wall. Both are original and intact. The window sashes are six-over-six light, double-hung.

The window casing and apron are the typical type found throughout the first floor and probably dates to 1872.



Figure 53, South elevation with fireplace, Room 106.

Finishes

The floors and baseboards are coated with a polyurethane-based varnish applied in 1990-92. The door and window casings, window sash, picture molding, plaster or plaster board walls and ceilings are painted.

Mechanical System

Two 1990-92-era ceiling supply registers of typical design (described in section Utility Systems – Mechanical System above) are located close to the east wall.

Electrical System

In addition to the typical 1990s-vintage, ivory-colored plastic plate covers, there are two reproduction “school house” ceiling fixtures of typical design installed in 1990-92.

Fireplace

On the north wall is the parged-brick fireplace for the original Living Room. The early if not original firebox is largely intact. The opening measures 2'-10" across at the front face and 1'-6" deep. The cheek walls are angled and the back wall measures 2'-1" in width. Some of the bricks along the back of the firebox have heat fractures and spalled exposed surfaces. In 1990-92 it was reconstructed using the fireplace mantelpieces at the St. Augustine, FL, Lighthouse Keepers' Quarters as a model, in combination with features and details found in this building and the nearby Oil House. Also in 1990-92, a new brick hearth measuring 4'-1" wide and 2'-1" deep was laid.

Room 107 - Staff Restroom

This room occupies space that was originally part of the stairs and Stair Hall for the South Quarters. As the building's function changed to receive large numbers of visitors in 1954, the stairs for this section were removed and this space became part of a new Men's Restroom. In 1990-92, when the first central heating/cooling system was installed, the space was converted to its present use as the Staff Restroom. It measures 6'-8" wide and 4'-10" deep.

Flooring

The sheet vinyl floor covering was installed in 1990-92.

Baseboards

The 8-inch tall baseboard of typical beveled design was salvaged and reused in the same location during the 1990-92 work. The north and south walls appear to be intact and may retain their original 1872 baseboards. The east and west walls were constructed in 1990-92 and their baseboards likely date to that period.

Walls

The blue board veneer plaster system was reportedly applied in 1990-92 over the deteriorated plaster on lath at the north and south walls. The east and west walls were constructed in 1990-92 using wood studs and plaster board.



Figure 54, Northwest oblique of Room 107.

Picture Molding

There is no picture molding in this room.

Ceiling

In 1990-92 a blue board veneer plaster system was installed. No plaster or wood lath remains.

Doorways

The one doorway, located on the east wall, leads to Room 108 – Back Entry Hall South. This doorway and door were constructed in 1990-92 and are close matches in appearance to original interior doorways and doors elsewhere in the building.

Windows

There are no windows in this small interior room.

Mechanical System

A chase for HVAC ductwork was installed in 1990-92 running east-west along the south wall at ceiling height. The chase measures 1'-2" wide by 1'-1" deep and is made of ¼" finish-grade plywood. A small metal register is located at the west side of this chase.

Electrical System

In addition to the typical 1990s-vintage, ivory-colored plastic plate covers, there is a modern ceiling

light installed in 1990-92.

Plumbing

A new plumbing system was installed in 1990-92 along with the current bathroom fixtures of toilet and lavatory.

Room 108 - Back Entry Hall-South

This space was originally the east sector of the Stair Hall for the South Quarters and contained this living unit's front entrance. Even before the building's function changed to receive large numbers of visitors in 1954, this area became thought of as the foyer for a rear entrance. The space was further modified in 1990-92. It now measures 6'-8 ½" wide and 9'-6" deep.



Figure 55, Northwest oblique, Room 108.

Flooring

The pine, tongue-and-groove flooring measures 2½ inches in width. Installed before 1954, it is laid north-south. A 1'-5" wide patch of flooring was installed in 1954 when the original north wall was removed. The current patch of matching floor boards was installed in 1990-92 to demarcate where the original wall was located. The varnish finish throughout this space is well worn from visitor foot traffic.



Figure 56, Floor patch at original dividing wall between Room 109 (foreground) and Room 108.

Baseboards

The 8-inch tall baseboards of typical beveled design were salvaged and reused in the same location during the 1990-92 work. The east and remaining parts of the north and south walls appear to be intact and may retain their 1872 baseboards. The west wall was constructed in 1990-92.

Walls

The blue board veneer plaster system was reportedly applied in 1990-92 over the deteriorated plaster on lath at the east and south walls. The west wall was constructed anew and the current wing walls of the north wall were constructed during the campaign of 1990-92. These walls are constructed of wood studs and plaster board.

Picture Molding

The reproduction Victorian wood picture molding was installed in 1990-92. (See Image)

Ceiling

In 1990-92 a blue board plaster veneer plaster was installed. No early plaster or wood lath remains.

A chase for HVAC ductwork was installed running east-west along the south wall at ceiling height. The chase measures 1'-2" wide by 1'-1" deep and is made of ¼" finish-grade plywood.

Doorways

On the east elevation is an original doorway, initially designated as the front doorway of the South Quarters. The original, four-panel exterior door remains. This doorway and door are described in

the section on Exterior Features above. The interior door casing appears to be original.

A second doorway, on the west wall, leads to Room 107 Staff Restroom. This doorway and door were constructed in 1990-92 when the Restroom was installed and are close matches in appearance to original interior doorways and doors located elsewhere in the building. This door measures 2'-8" by 6'-8" by 1 $\frac{3}{8}$ ".

There is a passageway at the north wall that connects to Room 109 Back Entry Hall - North. The frame and plaster wall that originally separated the two living quarters was removed in 1954 when the building use changed. In 1990-92 wing walls were constructed to better demarcate the location of the original wall.

A second passageway is at the south wall and is discussed in the section on Room 106 Bookstore - East Room.

Windows

There are no windows in this room. There is a three-light transom above the east wall doorway to the exterior, however. The transom sash has the same construction features as the window sash throughout the building.

Finishes

The floors, baseboards and doors are coated with a polyurethane-based varnish applied in 1990-92. The door casings, transom sash, picture molding, plaster or plaster board walls and ceilings are painted.

Mechanical System

A chase for HVAC ductwork was installed in 1990 running east-west along the south wall at ceiling height. The chase measures 1'-2" wide by 1'-1" deep and is made of $\frac{1}{4}$ " finish-grade plywood.

Electrical System

In addition to the typical 1990s-vintage, ivory-colored plastic plate covers, there is a reproduction "school house" ceiling fixture installed in 1990-92.

Staircase

The staircase for the South Quarters was removed in 1954. When this area was remodeled in 1990-92 to accommodate a staff restroom, the first-floor

newel post was reproduced using as the model the surviving newel post for the North Quarters. It was installed in front of a large photo-image perspective of the missing staircase that was attached to the west wall where the staircase once stood.



Figure 57, Original 1872 staircase, Room 109, looking west.

Room 109 - Back Entry Hall-North

This space was originally the east sector of the Stair Hall for the North Quarters and contained this living unit's front entrance. Even before the building's function changed to receive large numbers of visitors in 1954, this area became thought of as the foyer for a rear entrance. It measures 6'-8" wide with a depth arbitrarily set for the purposes of this report at about 14'-0", the location of the dividing wall that divides the adjoining spaces, first floor and immediately above at second floor, into east and west rooms.

Picture Molding

The reproduction Victorian wood picture molding was installed in 1990-92.

Ceiling

In 1990-92 a blue board veneer plaster system was installed. No early plaster or wood lath remains.



Figure 58, Doorways to East Porch.

Flooring

The pine, tongue-and-groove flooring measures 2½" in width. Installed before 1954, it is laid north-south. A 1'-5" wide patch of flooring was installed in 1954 when the original wall was removed. The current patch of matching floor boards was installed in 1990-92 to demarcate where the original wall was located. The varnish finish throughout this space is well worn from visitor foot traffic.

Baseboards

The 8-inch tall baseboards of typical beveled design were salvaged and reused in the same location during the 1990-92 work. The north, east and part of the south walls appear to be intact and may retain their original 1872 baseboards.

Walls

The blue board veneer plaster system was reportedly applied in 1990-92 over the deteriorated plaster on lath at the north and east walls. The sections of the south wall that frame the passageway to Room 108 Back Entry Hall - South were reconstructed in 1990-92 using wood studs and plaster board. The plaster of the south wall adjoining the staircase was repaired in place, in part because of the discovery of a workman's graffiti.

Doorways

On the east elevation is an original doorway, initially thought of as the front doorway of the North Quarters. The original, four-panel exterior door remains. This doorway and door are described in the section on Exterior Features above. The interior door casing appears to be original.



Figure 59, Looking east, Room 109.

A second doorway, on the north wall, leads into Room 110 Exhibit Room East. This is an original doorway. The missing door which measured 2'-10" by 6'-8" was probably a four-panel door as found elsewhere in the Quarters' interior rooms. No elements of the missing door hardware remains. The door casing is original.

There is a passageway at the south wall that connects with Room 108 Back Entry Hall - South and is discussed in that section of the report.

Windows

There are no windows in this room. There is a three-light transom above the east wall doorway to the exterior, however. The transom sash has the same construction features as the window sash throughout the building.

Finishes

The floors, baseboards and staircase are coated with a polyurethane-based varnish. The door casings, transom sash, picture molding, plaster or plaster board walls and ceilings are painted.

Mechanical System

No portion of the HVAC system is visible in this room.

Electrical System

In addition to the typical 1990s-vintage, ivory-

colored plastic plate covers, there is a reproduction “school house” ceiling fixture installed in 1990-92.



Figure 60, Newel post.

Staircase

The original staircase remains intact at this level. The turned newel post is cut from a single piece of wood. It measures 5¾" by 5¾" by 3'-6 5/8". The handrail is an oval in section measuring 2¾" across. The turned balusters, two per stair tread, are slender with delicate features.



Figure 61, Northeast oblique of Room 110.

Room 110 - Exhibit Room-East

This room was originally the Living Room for the North Keepers' Quarters. However, with the majority of its west wall removed, this room is now part of one large exhibit area along with Room 101 Exhibit Room - West. Rectilinear in plan, the room measures about 14'-0½" by 15'-6".

Flooring

The pine, tongue-and-groove flooring measures 2½ inches in width. Installed before 1954, it is laid north-south. The varnish finish is well worn from visitor foot traffic.

Baseboards

The 8-inch tall baseboard of typical beveled design was salvaged and reused in the same location during the 1990-92 work. The north, east and south walls appear to be intact and may retain their 1872 baseboards. The wing-wall sections of the west wall were reconstructed in 1990-92 and their baseboards likely date to that period.

Walls

The blue board veneer plaster system was reportedly applied in 1990-92 over the deteriorated plaster on lath at the north, east and south walls. The sections of the west wall present were reconstructed in 1990-92 using wood framing and plaster board.

Picture Molding

The reproduction Victorian wood picture molding was installed in 1990-92.

Ceiling

In 1990-92 a blue board veneer plaster system was installed. No early plaster or wood lath remains.

Doorways

A single doorway on the south wall opens from Room 109 Back Entry Hall – North and is discussed in that section of this report.

A passageway is at the west wall connecting with Room 101 Exhibit Room - West and is discussed in that section.

Windows

There are two window units on the east wall. Both are original and intact. The window sash are six-over-six light, double-hung.

The window casing and apron are the typical type found throughout the first floor and probably dates to 1872.

Finishes

The floors and baseboards are coated with a polyurethane-based varnish applied in 1990-92. The door and window casings, window sash, picture molding, plaster or plaster board walls and ceilings are painted.

Mechanical System

Two 1990s-era ceiling supply registers of typical design (described in section Utility Systems – Mechanical System above) are located close to the east wall.

Electrical System

In addition to the typical 1990s-vintage, ivory-colored plastic plate covers, there are two reproduction “school house” ceiling fixtures of typical design also installed in 1990-92.



Figure 62, Fireplace and 1992 replacement mantel of Room 110.

Fireplace

On the north wall is the parged-brick fireplace for the original Living Room. The early if not original firebox is largely intact. The opening measures 2'-10" across at the front face and 1'-6" deep, the

beveled cheek walls forming a 2'-1" wide back wall. Some of the brick along the back of the firebox have heat fractures and spalled exposed surfaces. In 1990-92 it was reconstructed using the fireplace mantelpieces at the St. Augustine, FL, Lighthouse Keepers' Quarters as a model in combination with features and details found in this building and the nearby Oil House. Also in 1990-92, a new brick hearth measuring 4'-1" wide and 2'-1" deep was laid.

Room 201 - Conference Room

This room was originally a Bedroom for the North Keepers' Quarters. Since 1954 when NPS began occupation of the building, it has served as a conference area. It measures 11'-4" by 8'-11".

Flooring

The floor covering is a commercial grade of wall-to-wall carpeting installed in 1990-92.



Figure 63, North elevation, Room 201.

Baseboards

The 8-inch tall baseboard of typical beveled design was salvaged and reused in the same location during the 1990-92 work. The west and south walls appear to be intact and may retain their original 1872 baseboards. Part of the north wall was modi-

fied in 1954 and again in 1990-92; part of the baseboard may be original or date to 1954 or the 1990s. The east wall was reconstructed 1990-92 and its baseboards likely date to that period.

A reproduction Victorian-style door stop for the door connecting with Room 207 is mounted on the baseboard of the south wall.

Walls

The blue board veneer plaster system reportedly was applied in 1990-92 over the deteriorated plaster on lath at the north, west and south walls. The north wall also had 1954 stud and dry wall construction that may have been incorporated into the 1990-92 construction. The east wall was reconstructed in 1990-92 using wood studs and plaster board.

Picture Molding

The reproduction Victorian wood picture molding was installed in 1990-92.

Ceiling

In 1990-92 a blue board veneer plaster system was installed. No early plaster or wood lath remains.



Figure 64. Southeast oblique of Room 201.

Doorways

This room has two doorways, one on the south wall and one on the east wall. The south wall doorway and door are discussed in the section on Room 202 Stair Hall.

The second doorway, on the east wall, opens from Room 207 Lead Ranger's Office. The wall originally in this location was removed in 1954. The 1872 plans show this wall without a doorway. However, a 1945 set of plans show a doorway near the south

terminus. And the 1954 as-built plans, which recorded the demolition of this wall, show a doorway near the center of the wall. A 1989 plan confirms the demolition. The wall was reconstructed in 1990-92 with the doorway placed conveniently near the room's south wall. The door casing is the typical design found throughout the building and dates to 1990-92. The door, measuring 2'-8" by 6'-8", appears to be original. Its specific location of origin is not known, however. It retains none of its original or early hardware. It now has reproduction hardware installed in 1990-92, including two ball-pin hinges and a metal-plate rim lock.

Windows

There are two window units on the west wall. Both are original and intact. Each window has six-over-six light sash, double-hung.

The window casing is 5 inches wide and beveled on the two exposed edges as is typical of original window as well as door casings throughout the building. Typical of the second-floor windows, but not the first-floor windows, the window apron is flush not beveled.

Finishes

The doors are varnished. The door and window casings, window sash, picture molding, baseboards, plaster or plaster board walls and ceilings are painted.

Mechanical System

Two 1990s-era ceiling supply registers of typical design (described in section Utility Systems – Mechanical System above) are located close to the west wall.

Electrical System

In addition to the typical 1990s-vintage, ivory-colored plastic plate covers, there is a reproduction "school house" ceiling fixture of typical design installed in 1990-92.

Room 202 - Stair Hall

This room was originally the second-floor stair hall for the North Quarters. As the building's function in 1954 changed to receive large numbers of visitors and house staff offices, the stairs for the south unit were removed and the north stairs became the sole connection between first and second-floor rooms. The stairs measure 6'-8" wide and 15'-4" deep.

Flooring

The floor covering is a commercial grade of wall-to-wall carpeting installed in 1990-92. As seen at the staircase, the original flooring of 1-inch pine remains in place. On top is another pine board flooring of 5/4 inch thickness. The carpet appears to be applied directly to this second layer of flooring.

Baseboards

The 8-inch tall baseboard of typical beveled design was salvaged and reused in the same location during the 1990-92 work. The north, west and south walls appear to be intact and may retain their original 1872 baseboards. The east wall was reconstructed in 1990-92 and its baseboards likely date to that period.



Figure 65, Southwest oblique of Room 202.

Walls

The blue board veneer plaster system reportedly was applied in 1990-92 over the deteriorated plaster on lath at the 1872-era north and west walls. The east wall was reconstructed in 1990-92 using wood studs and plaster board. The plaster of the south wall was repaired in place, in part because of the discovery of a workman's graffiti at the first-floor level of this wall.

Picture Molding

The reproduction Victorian wood picture molding was installed in 1990-92.

Ceiling

In 1990-92 a blue board veneer plaster system was installed. No early plaster or wood lath remains.

Doorways

This room has four doorways. Two are on the north wall, one on the east wall, and one on the west. The two doorways on the north wall appear to be original. Although the 1872 initial construction plans show these doorways to be closer together, the 1945 and 1953 plans show the current configuration, suggesting these are the locations where initially installed. In addition, both appear to retain original door casings. However, both doors are reproductions, very similar to the original four-panel interior doors found elsewhere in the building. These two doors date to 1990-92 and measure 2'-8" by 6'-8".

The entire east wall, including doorway, were reconstructed in 1990-92. The door is a reproduction and measures 2'-6" by 6'-8". The door casing is the typical design found throughout the building.



Figure 66, Northeast oblique of Room 202.

None of these doorways retain early hardware. All three have reproduction hardware installed in 1990-92 which includes two ball-pin hinges and a plate-metal rim lock.

The fourth doorway is on the south wall and opens into Room 203 Bookstore Storage. Originally a frame and plaster wall that separated the two living quarters, a 3'-6" wide cased opening was created to accommodate new functions according to the 1954 construction plans. The cased opening was rebuilt in 1990-92 as a reproduction doorway with door to match the original designs found elsewhere in the building. This doorway has the 1990s-vintage reproduction ball-pin hinges found on the other three doors of this room, but it also has a modern mortise lock with copper finish that replaced the reproduction rimlock at some point after 1992.

Windows

There is one window unit on the west wall. It is original and intact. The window has six-over-six light sash, double-hung.

The window casing is 5 inches wide. The face of the casing is beveled in two directions from the flush center section as is typical of original window as well as door casings throughout the building. Typical of the second-floor windows, but not the first-floor windows, the window apron is square cut, not beveled.

Finishes

The doors, stair baluster and handrail are varnished. The door and window casings, window sash, picture molding, baseboards, plaster or plaster board walls and ceilings are painted.

Mechanical System

One 1990s-era ceiling supply register of typical design (described in section Utility Systems – Mechanical System above) is located close to the west wall.

Electrical System

In addition to the typical 1990s-vintage, ivory-colored plastic plate covers, there is a reproduction "school house" ceiling fixture installed in 1990-92.

Staircase

The original 1872 staircase is partially intact at this level. A large section of the original handrail and

balusters were apparently lost when part of the hall was made a storage area post-1954 and pre-1989. The storage room was removed and the missing staircase elements reproduced for reconstruction of the hall during the 1990-92 campaign.



Figure 67, Staircase at second level.

Room 203 - Bookstore Storage

This room includes what originally was the west part of the Stair Hall and north part of the West Bedroom for the South Keepers' Quarters. The current configuration was created in 1990-92 and measures 11'-2" by 8'-7".



Figure 68, Southwest oblique of Room 203.

Flooring

The floor covering is a commercial grade of wall-to-wall carpeting installed in 1990-92.

Baseboards

The 8-inch tall baseboard of typical beveled design was salvaged and reused in the same location during the 1991-1992 work. The north and west walls appear to be intact and may retain their 1872

baseboards. The east and south walls were reconstructed in 1990-92 and the baseboards likely date to that period.

Walls

A blue board veneer plaster system reportedly was applied in 1990-92 over the deteriorated plaster on lath at the original 1872 north and west walls. The sections of the east wall now present were reconstructed with wood framing and plaster board in 1990-92. The south wall is a new design element constructed of wood framing and plaster board in 1990-92 to create an office for the new book store operation.

Picture Molding

The reproduction Victorian wood picture molding was installed in 1990-92.

Ceiling

In 1990-92 a blue board veneer plaster system was installed. No early plaster or wood lath remains.

Doorways

This room has two doorways, one on the north wall and one on the south. There is also a large passageway at the east wall.

The doorway on the north wall is discussed in the section on Room 202 Stair Hall. The doorway on the south wall was constructed in 1990-92 when the Bookstore Office was built.



Figure 69, Northwest oblique of Room 203.

Both doorways have 1990-92 casing that is the typical design found throughout the building. (See Drawing) Both have reproduction doors measuring 2'-8" by 6'-8" that are very similar to the original four-panel interior doors found elsewhere

in the building. Both have reproduction ball-pin hinges. The doorway opening from Room 204 Bookstore Office has its 1990s-era reproduction ball-pin hinges and a metal-plate rim lock.



Figure 70, South elevation of Room 203.

The east-wall passageway is a large opening 10'-2" wide. The frame and plaster blue board wall that forms this opening was constructed in 1990-92 at the location of the original frame and plaster wall that divided the east and west Bedrooms. The original wall was removed in 1954. This reconstructed version of the original wall provides visual definition of the original floor plan in this location yet allows the desired openness between the two large rooms as currently configured.

Windows

There are two window units on the west wall. Both are original and intact. Each window has six-over-six light sash, double-hung.

The window casing is 5 inches wide. The face of the casing is beveled in two directions from the flush center section as is typical of original window as well as door casings throughout the building. Typical of the second-floor windows, but not the first-floor windows, the window apron is square cute, not beveled.

Finishes

The doors are varnished. The door and window casings, window sash, picture molding, baseboards, plaster or plaster board walls and ceilings are painted.

Mechanical System

A 1990s-era ceiling supply register of typical design (described in section Utility Systems – Mechanical

System above) is located close to the west wall.

Electrical System

In addition to the typical 1990s-vintage, ivory-colored plastic plate covers, there are two reproduction “school house” ceiling fixture of typical design also installed in 1990-92.

Room 204 - Bookstore Office

This room includes what originally was the south part of the West Bedroom for the South Keepers’ Quarters. This room was created in 1990-92 and measures 11'-2" by 8'-0".

Flooring

The floor covering is a commercial grade of wall-to-wall carpeting installed in 1990-92.

Baseboards

The 8-inch tall baseboard of typical beveled design was salvaged and reused in the same location during the 1990-92 work. The south and west walls appear to be intact and may retain their 1872 baseboards. The east walls was reconstructed in 1990-92 as the north wall was being constructed anew; the baseboards of both these walls likely date to that period.

Walls

A blue board veneer plaster system was reportedly applied in 1990-92 over the deteriorated plaster on lath at the south and west walls. The north and east walls are constructed of wood frame with plaster board and were erected in 1990-92.

Picture Molding

The reproduction Victorian wood picture molding was installed in 1990-92.

Ceiling

In 1990-92 a blue board veneer plaster system was installed. No early plaster or wood lath remains.

Doorways

This room has one doorway which is on the north wall. The doorway is discussed in the section on Room 203 Bookstore Storage.

Windows

There is one window unit on the west wall. It is original and intact. The window has six-over-six light sash, double-hung.

The window casing is 5 inches wide. The face of the casing is beveled in two directions from the flush center section as is typical of original window as well as door casings throughout the building. Typical of the second-floor windows, but not the first-floor windows, the window apron is square cut, not beveled.

Finishes

The door is varnished. The door and window casings, window sash, picture molding, baseboards, plaster or plaster board walls and ceilings are painted.

Mechanical System

A 1990s-era ceiling supply register of typical design (described in section Utility Systems – Mechanical System above) is located close to the west wall.

Electrical System

In addition to the typical 1990s-vintage, ivory-colored plastic plate covers, there is a reproduction “school house” ceiling fixture of typical design installed in 1990-92.

Room 205 - Staff Office

This room includes what originally was the east part of the Stair Hall and the East Bedroom of the South Keepers’ Quarters. The current configuration was created in 1990-92 when sections of the west wall were reconstructed. The room measures 13'-10" by 22'-9".



Figure 71, South elevation of Room 205.

Flooring

The floor covering is a commercial grade of wall-to-wall carpeting installed in 1990-92.

Baseboards

The 8-inch tall baseboard of typical beveled design was salvaged and reused in the same location during the 1990-92 work. The east, south and north walls appear to be intact and may retain their 1872 baseboards. The sections of the west wall that now are in place were reconstructed in 1990-92. The baseboards likely date to the same period.

Walls

A blue board veneer plaster system reportedly was applied in 1990-92 over the deteriorated plaster on lath at the north, east and south walls. The west was reconstructed in 1990-92 using wood framing and plaster board.

Picture Molding

The reproduction Victorian wood picture molding was installed in 1990-92.

Ceiling

In 1990-92 a blue board veneer plaster system was installed. No early plaster or wood lath remains.

Doorways

This room has one doorway, located on the north wall, and a passageway at the west wall.

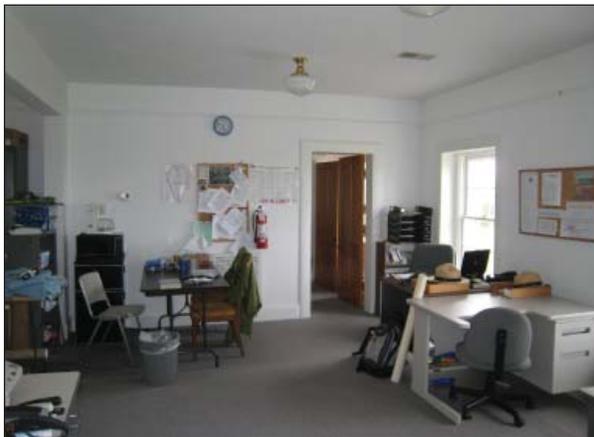


Figure 72, North elevation of Room 205.

The doorway opens into Room 206 Mechanical Room. Originally a frame and plaster wall that separated the two living quarters, a 3'-6" wide cased opening was created to accommodate new functions according to the 1954 "as-built" construction plans. The cased opening was rebuilt in 1990-92 to create an 1872 reproduction doorway with door (2'-8" by 6'-8") to match the original designs found elsewhere in the building. This doorway has the

1990s-vintage reproduction ball-pin hinges but a modern replacement mortise lock with brass finish, a post-1992 replacement of the 1990s reproduction rim lock.

The west-wall passageway is discussed in the section on Room 203 Bookstore Storage.

Windows

There are three window units on the east wall. All are original and intact. Each window has six-over-six light sash, double-hung. (See Drawing.)

The window casing is 5 inches wide. The face of the casing is beveled in two directions from the flush center section as is typical of original window as well as door casings throughout the building. Typical of the second-floor windows, but not the first-floor windows, the window apron is square cut, not beveled.

Finishes

The door is varnished. The door and window casings, window sash, picture molding, baseboards, plaster or plaster board walls and ceilings are painted.

Mechanical System

Two 1990s-era ceiling supply registers of typical design (described in section Utility Systems – Mechanical System above) are located close to the east wall. In addition, a typical return register (described in same referenced section) is located in the north wall.

Electrical System

In addition to the typical 1990s-vintage, ivory-colored plastic plate covers, there are two reproduction "school house" ceiling fixture of typical design installed in 1990-92.

Room 206 - Mechanical Room

This room originally was an ancillary room east of the Stair Hall of the North Keepers' Quarters. Its original L-shaped floor plan was removed in 1954 and reconstructed in 1990-92. It measures 6'-8" wide and 8'-9½" along the north wall where least deep, and 11'-4" along the south wall where deepest.

Flooring

The floor covering is a commercial grade of wall-to-wall carpeting installed in 1990-92.



Figure 73, Northwest oblique of Room 206.

Baseboards

The 8-inch tall baseboard of typical beveled design was salvaged and reused in the same location during the 1990-92 work. The north, east and south walls appear to be intact and may retain their original 1872 baseboards. The original west wall was removed in 1954 and rebuilt in a different configuration sometime prior to 1989. That wall was demolished and reconstructed of wood framing and plaster board in 1990-92. Its baseboards likely date to 1990-92.

Walls

A blue board veneer plaster system reportedly was applied in 1990-92 over the deteriorated plaster on lath at the north, east and south walls. The west wall was reconstructed of wood framing and plaster board in 1990-92.

Picture Molding

The reproduction Victorian wood picture molding was installed in 1991-1992.

Ceiling

In 1990-92 a blue board veneer plaster was installed. No early plaster or wood lath remains.

Doorways

This room has three doorways. One is on the north wall opposite another on the south wall. The third doorway is on the west wall.

The doorway on the west wall, opening into Room 202 Stair Hall, is in an original location but it was reconstructed in 1990-92 to reestablish this portion of the original floor plan that was demolished in 1954. This doorway is described in the section on Room 202 Stair Hall.

The south doorway, as discussed in the section on Room 205 Staff Office, was created as a cased opening in 1954 and rebuilt in 1990-92 in the style of the original 1872 doorways.

The north doorway, which leads to Room 207-Lead Ranger's Office, was constructed anew in 1990-92 where there had been none. This door and doorway both match the style of the original 1872 doorways, the typical design found throughout the building. The reproduction door is very similar in appearance to the original four-panel interior doors found elsewhere in the building. It has two reproduction ball-pin hinges and a reproduction rim lock.

Windows

There is one window unit on the east wall. It is original and intact. It has six-over-six light sash, double-hung.

The window casing is 5 inches wide. The face of the casing is beveled in two directions from the flush center section as is typical of original window as well as door casings throughout the building. Typical of the second-floor windows, but not the first-floor windows, the window apron is square cut, not beveled.

Finishes

The doors are varnished. The door and window casings, window sash, picture molding, baseboards, plaster or plaster board walls and ceilings are painted.

Mechanical System

This room contains the HVAC air handler for the second-floor rooms of the building. The HVAC system was installed in 1990-92.

Electrical System

In addition to the typical 1990s-vintage, ivory-colored plastic plate covers, there is one reproduction “school house” ceiling fixture installed in 1990-92.

Room 207 - Lead Ranger's Office

This room was originally the east Bedroom for the North Keepers' Quarters. It now serves as an office. Rectangular in plan this room measures 13'-9" by 15'-6".



Figure 74, North elevation of Room 207.

Flooring

The floor covering is a commercial grade of wall-to-wall carpeting installed in 1990-92.

Baseboards

The 8-inch tall baseboard of typical beveled design was salvaged and reused in the same location during the 1990-92 work. The north, east and south walls appear to be intact and may retain their 1872 baseboards. The west wall was reconstructed in 1990-92 and its baseboards likely date to that period.

A reproduction-Victorian door stop was added at the south wall in 1990-92.

Walls

A blue board veneer plaster was reportedly applied in 1990-92 over the deteriorated plaster on lath at the north, east and south walls. The west wall was reconstructed in 1990-92 in the location of the original 1872 wall using wood framing and plaster board.

Picture Molding

The reproduction Victorian wood picture molding was installed in 1990-92.

Ceiling

In 1990-92 a blue board veneer plaster system was installed. No early plaster or wood lath remains.

Doorways

This room has three doorways, two on the south wall and the other on the west wall. The west wall doorway and door are discussed in the section on Room 201 Conference Room.



Figure 75, Southwest oblique of Room 207.

The west-most south doorway is described in the section on Room 202 Stair Hall.

The east-most south doorway is described in the section on Room 206 Mechanical Room.

Windows

There are two window units on the east wall. Both are original and intact. Each window has six-over-six light sash, double-hung.

The window casing is 5 inches wide. The face of the casing is beveled in two directions from the flush center section as is typical of original window as well as door casings throughout the building. Typical of the second-floor windows, but not the first-floor windows, the window apron is square cut, not beveled.

Finishes

The doors and door stop are varnished. The door and window casings, window sash, picture molding, baseboards, plaster or plaster board walls and ceilings are painted.

Mechanical System

Two 1990s-era ceiling supply registers of typical design (described in Utility Systems – Mechanical

System above) are located close to the east wall. A typical return register (described in same referenced section) is located in the south wall.

Electrical System

In addition to the typical 1990s-vintage, ivory-colored plastic plate covers, there are two reproduction “school house” ceiling fixture installed in 1990-92.

Outbuildings & Other Ancillary Structures

Cisterns

There are three cisterns, two on the north side of the house and one on the south. The design characteristics of all three are similar. Above grade, the brickwork for each cistern stands about 2'-3" tall with a 4 inch concrete slab as cap. Below grade, according to Perrot, the brickwork extends down an equal distance before reaching accumulated silt. Though visually obscured, it is assumed that the base is also of the same masonry construction.



Figure 76, North side cisterns.

The above-grade portion is rectilinear in plan for each cistern. The easternmost of the north cisterns measures 8'-2½" by 11'-3½"; the westernmost measures 8'-1½" by 9'-6". The cistern on the southeast corner of the Quarters measures 8'-2" by 9'-7". Cisterns of same approximate size at the northwest and southeast corners appear on the 1893 survey, suggesting these two are early if not original. The northeast cistern is documented as being constructed in 1900.



Figure 77, Enclosure for heat pumps.

Mechanical System Enclosure

On the south side of the house near the west corner, this enclosure for mechanical equipment was constructed during the 1990-92 campaign. It measures in plan 8'-0" by 9'-4". The base of the perimeter wall is constructed of brick, similar in appearance to the three cisterns. Atop is a louvered-wall enclosure without a cover.

Concrete Slab Foundation - Wood Shed

Just 25 feet south of the south-side cistern is the north edge of a poured concrete slab of a wood shed constructed in 1930. This slab measures 28'-3" north-south and 14'-9½" east-west with a 1'-0" wide step along the east edge. Height above grade is about 1'-0". Imprints in the top of the slab indicate interior subdivision of rooms.



Figure 78, Southwest oblique of the Wood Shed's concrete Slab Foundation.

The Storage Shed

Sometimes called “the pony barn” because of its small size, and the “garage” because of a former use, this building measures in plan 12'-3½" by 24'-3½" and initially consisted of a single room. According to the National Register Nomination Form it was constructed as a storehouse in 1920 as a storehouse. It first appears in a 1933 photograph.



Figure 79, East elevation, 1920 Storage Shed.

The building is wood framed, covered on the exterior by what appears to be the original board-and-batten siding. The plank boards measure 1'-0" by ⅞". The square-edge battens measure 1" by 2".

In the 1990-92 repair campaign, the building was raised to a height of about 2'-0" above grade and placed on eight new brick piers each measuring 1'-0" by 1'-0".

A single, four-light, fixed window sash is centered on each of the east, north and west walls. The windows are identical and were installed as replacements in 1990-92. There is no evidence of window hardware.



Figure 80, Northwest oblique of the 1920 Storage Shed.

Centered on the south wall is a doorway with double doors. The doors measure 6'-0" tall by 1¾" thick by 5'-11½" wide and are constructed of vertical boards measuring ⅞" thick by 5½" wide including a ¼" edge bead. Two cross-bracing, chamfered boards measure ⅞" thick by 4" wide. Each door has three strap hinges of 11 inches in length when fully open. There are ghost marks indicating the same style and size of hinges having been used previously.



Figure 81, Exposed rafters, the 1920 Storage Shed.

The gable roof has a cedar-shingle roofing material matching that of the Quarters. This roof was installed in 1990-92.

The wall framing consists of wood studs measuring 1⅝" by 3¾" set 26 inches on center. Two boards, each 1⅝" by 3¾" serve as wall plate. Boards measuring 1⅝" by 3¾" intersect wall studs at mid-height. The floor framing consists of 6" by 6" sills with floor joists running east-west and measuring 1¾" by 3¾" set at 28" on center. Each is sistered with two joists of 1¾" by 6¼".

The gable roof is framed with original rafters measuring 1⅝" by 3¾" set at 26 inches on center. Every other pair of rafters has an original ¾" by 5½" collar beam. Deck boards measure ¾" by 5½".

Entry inside the building is by way of three wooden steps at the center of the south elevation. The two-board treads measure 10½". The two-board risers measure 8". The steps are 6'-4½" wide. There is no landing at the top of the steps.



Figure 82, South elevation doorway, the 1920 Storage Shed.

Inside, the original perimeter stud walls are exposed except for added plywood at the east end. A partition stud wall running north-south was installed near the west end wall in 1990-92. The east side of this partition is sheathed with $\frac{3}{4}$ -inch plywood to hold the electrical distribution panels.



Figure 83, Double doors.

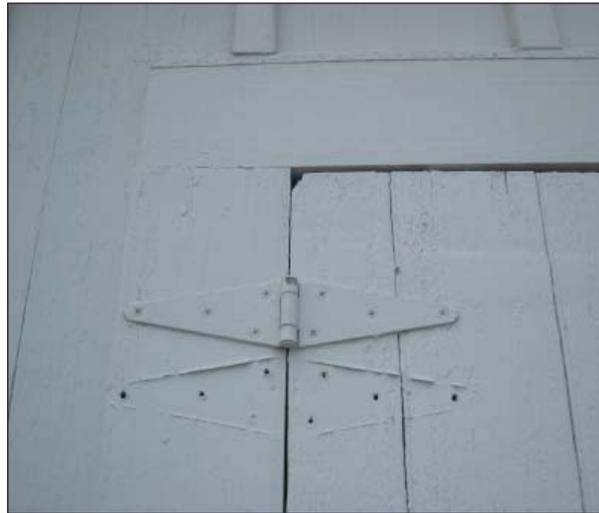


Figure 84, Doorway and hardware, the 1920 Storage Shed.

Without a ceiling above, and there is no indication that there ever was one, the roof framing and underside of the roof deck are clearly visible. The original tongue-and-groove flooring remains. It consists of boards of random widths of $4\frac{1}{2}$ ", $5\frac{1}{4}$ ", and $5\frac{1}{2}$ ".



Figure 85, Northwest oblique of the interior, the 1920 Storage Shed.

The Public Restroom Building

Beyond the Storage Shed another 100 feet to the north is a 1992 frame building on exposed brick piers. The exterior wall siding is board-and-batten. The roofing material is the same wood shingle found on the Storage Shed and the Quarters.



Figure 86, The 1920 Storage Shed in foreground and the 1992 Public Restroom Building behind.

Character-Defining Features

- The isolation of a lone light station in an undeveloped setting of a coastal barrier island.
- The open expanse of the Light Station site. The vegetation and land features consisting of broad flat sandy grass-covered stretches across most of the site and small sand dunes covered with dense bushes along the perimeter. The scattered buildings and associated structures and other man-made features, such as walks and pathways.
- The 360 degree view shed from the Quarters that includes, to the east, the Bodie Island Lighthouse and Oil House with marshlands and pond beyond; to the west, Roanoke Sound stretching to Roanoke Island; and to part of the north, south and west, the distant pine groves framing the site and serving as backdrop.
- The early brick walkway leading from the Quarters to the Oil House and Lighthouse.
- The three brick cisterns, two on the north side of the Quarters and one on the south side, and the accompanying hand pumps.
- The 1920 Storage Shed to the north of the Quarters.
- The concrete foundation of the 1930 Wood Shed just south of the Quarters.
- The 1992 Public Restroom Building. Although it is a modern structure, its form, composition and use of materials are consistent with the historic buildings of the Light Station. Its remote location near the north perimeter of the site further deflects attention, allowing the major buildings at the center of the site to be the focus. Yet its mere presence helps to maintain the historic character of a site with numerous small outbuildings of similar characteristics. This new building blends with and contributes to the historic setting rather than contrast or stand apart.
- The two one-story open porches, one spanning the entire east elevation of the Double Keepers House, the other the entire west elevation.
- The center steps at the east porch and the four sets of steps at the sides of the two porches.
- The one-to-six common bond, brick, exterior walls.
- The paired brick chimneys at the north and south gable ends.
- The wood-shingle roofs of the Quarters and its two porches.
- The original double-hung, multi-light sash windows of first and second floor levels of both the east and west elevations.
- The paired entrance doorways, including original doors and transoms, of both the east and west elevations.
- The paired floor plan configurations of side hall with two rooms opposite, repeated on both floor levels, in each Quarters.
- The original staircase of the North Quarters.
- The plaster of the south wall adjacent to the North Quarters staircase, the only surface currently known to retain original plaster.

- The workman's graffiti on the south wall above the North Quarters' staircase.
- The two original four-panel interior doors, one at first floor (closet for the North Front Entry Hall) and the other at second floor (between the Conference Room and the Lead Ranger's Office.) Though the other interior doors are modern, they are reproductions of the missing originals and contribute to the building's historic character.
- The four first-floor fire boxes and the two original west-side fireplace mantle pieces. Though the two east-side mantle pieces are modern and are based on the design found at another lighthouse of the same historic period, they are reasonable approximations of the original designs and should be considered as contributing to the historic character of the building's interior.
- The first-floor oak flooring. Introduced in the twentieth century, it was a prominent feature of the first effort at the adaptive reuse of the building by NPS in 1954 and its presence helps tell the story of this chapter in the building's history.
- The architectural trim of baseboards and door and window casings throughout the first and second floor levels. Many are original elements. Others are accurate reproductions mixed with the originals and contribute to the historic character of the interior spaces.

Summary of Physical Conditions & Code Compliance Issues

The work of the extensive 1990-92 repair campaign appears to be holding up very well. No major deterioration or developing condition that might become a serious threat was noted.

There are some typical maintenance concerns that are being monitored and will soon become an issue simply because of the normal life cycles of building materials. The roofing shingles on the main section of the Quarters, the two porches, and the Storage Shed are one such concern. They were all installed during that 1990s repair effort and are approaching their projected effective life span.

Another category of life-span concern is the

mechanical equipment, installed in the same timeframe as the roofs. These components too are approaching their projected effective life span.

A third matter of life-span concern is the finish of the first-level wood floors. Refinished in the early 1990s, the floors have been worn bare by heavy foot traffic. Paint and other finishes, in general, require frequent maintenance due to the harsh conditions that can occur on the Outer Banks.

A fourth concern is the condition of the masonry cisterns. Even with the redesigned downspouts passing through the cisterns, the exposed masonry is exhibiting water saturation and the resultant damages to mortar joints and brick.

Accessibility by the handicapped also was addressed in the 1990s work and continues to be a very successful solution. Reserved parking for the handicapped is immediately west of the Quarters. The principal access approach is a direct line from the parking to the central doors on the west porch. Along this route, the land was graded to provide a slightly raised approach to the center two bays of the porch while providing a swale for natural drainage around the house. The walkway of wood plank transitions to a gently sloping, wood-plank ramp that terminates at the Quarter's west porch. While the plank surface is less than a perfectly flat, hard surface, the plank board is quite rigid and its use is in keeping with the character of this historic site.

The two west door thresholds sit about two inches above the historic height of the porch, which is higher than the recommended threshold height for accessibility by the handicapped. However, wood reducers have been added to create a smooth transition between the height of the porch deck and that of the first floor of the Quarters. The reducer, too, is a reasonable solution that addresses both the needs of the handicapped and the historic character of the building.

The operation of the two doors themselves could be improved to facilitate access by the handicapped. Currently they operate with thumb latches and turn handles, devices which can prove challenging. Minor modifications could prove beneficial.

Public restroom facilities, accessible by the handicapped, are provided in a separate facility constructed in 1990-92. By several important measures, the building has been a great success. Modeled on the massing and form of the earlier ancillary buildings of the site, especially the 1920 Storage Shed, the Public Restroom Building blends into the design context of the site without calling undue attention to itself. In addition, as a new design, the interior spaces can be arranged for optimum accessibility by the handicapped. And, when plumbing equipment malfunctions, as it invariably will, the damage will be to non-historic building fabric.

Inside the Quarters, the tight spaces make even a small unisex staff restroom a challenging design problem. The chosen approach, also constructed in 1990-92, is a pragmatic solution. The room is tucked away in the area that was part of the stair hall for South Quarter. There is enough room for a single toilet with grab bars. Though the turning radius is less than the optimum, it is close. The doorway, though more narrow than recommended, does allow a wheelchair to pass.

All in all, the solutions are a practical balance, sensitive to the cultural resources while addressing the needs of the public at large.

II.A Ultimate Treatment & Use

The Bodie Island Double Keepers' Quarters has had three major manifestations of physical form.

The first manifestation is the original form of 1872 when construction was completed. In large part, the initial construction was true to the design prepared by the Lighthouse Board. Photographic documentation from two decades later together with surviving physical evidence indicate that some features apparently were constructed differently than originally envisioned, including the paired porch posts and the small steps at the side ends of the two porches. Another important designed feature, the absence of passage between rooms at each floor level permitting circulation only through the side halls, cannot be confirmed from the current historical documentation or surface physical evidence. However, selective removal of building fabric should reveal the initially constructed feature.

The building's second major manifestation of physical form occurred in 1954-55, in the years immediately after NPS assumed control of the light station from the United States Coast Guard. To better accommodate public visitation to the historic site and to conduct educational programs, NPS made major modifications, primarily to the interior of the building. Some of these changes included the removal of the staircase of the South Quarters and installation of public restrooms in its place in the first-floor stair hall, removal of the dividing walls between the two major rooms of each floor level in each quarter, and removal of part of the dividing wall between the two quarters at first floor and creation of doorways between the two quarters at second floor.

The third major manifestation of physical form occurred in 1990-92. This NPS effort attempted to ameliorate the severity of the agency's 1953-54 remodeling in order to better interpret the building's nineteenth century character while still providing for the education of the public. Some

of the major changes included reconstruction of the end sections of the dividing walls removed in 1954-55, the relocation of the first floor public restrooms to a separate building and replacement with a staff restroom plus a mechanical room for ducting central heating and cooling, the subdivision of a second-floor space to create an office for the gift shop, and the ramping of the west walkway to create a handicapped-accessible route for entry into the house. This manifestation of physical form is the one that is present today.

The Cape Hatteras National Seashore General Management Plan of 1984 succinctly states that the purposes of the Bodie Island Light Station include "visitor center/ interpretation." (A purpose of the lighthouse is also to be a "navigational aid.") The proposed actions toward these purposes are to "preserve all exterior features; renovate interiors for adaptive reuse."

The actions of the 1990-92 NPS work very successfully address these prescribed purposes and actions.

In addition, the building retains physical characteristics from each of the three major eras of manifestations: the basic form and building fabric from the initial 1872 construction; the openness of floor plans from the 1954-55 NPS conversion to interpretive center; and the 1990-92 NPS partial reconstruction of selected original features. With these considerations in mind, the following recommendation is made.

The Recommended Ultimate Treatment is to preserve the character-defining features of the exterior in their current state, an appearance that spans each of the three major design manifestations. On the interior preserve as currently adapted.

This approach would have the following advantages:

- Preserves the building consistent with the purposes of the park's General Management Plan, which are to serve as a visitor center and promote the interpretation of the history of the Bodie Island Light Station;
- Preserves existing character-defining interior and exterior elements of the building's three principal manifestations of physical form;
- Provides ease of circulation between gift shop and interpretive displays at first floor;
- Provides separate NPS staff offices and conference room at the second floor, away from the valuable first floor display and commercial areas and without interruption by the public;
- Provides an administrative office and storage space for gift shop supplies at the second floor, away from the valuable first floor display and commercial areas and without interruption by the public;
- Provides a uniformly climatized space for the public at first floor with discrete placement of mechanical equipment.

There would be disadvantages to this approach as well:

- Limits interpretation of the building's period of primary significance, its use as a lighthouse keepers' quarters, by excluding access to the keepers' private quarters on the second floor;
- Limits interpretation of the building's period of primary significance by emphasizing displays, exhibits and efficiency of visitor circulation instead of the experience of the restored spaces;
- Limits the efficiency of the mechanical system at first floor by having an open room plan with multiple doors providing a direct connection to the exterior.

II.B Requirements for Treatment

The Double Keepers' Quarters of the Bodie Island Light Station operates under a General Management Plan completed in late 1984. The GMP calls for the buildings of the light station to be used for a "visitor center/interpretation." For these buildings the proposed actions are to "preserve all exterior features" and "renovate interiors for adaptive reuse."¹

The National Park Service Cultural Resources Management Guideline (DO – 28) requires planning for the protection of cultural resources on park property.

In addition, Section 106 of the National Historic Preservation Act (NHPA) mandates that federal agencies, including the National Park Service, take into account the effects of their actions on properties listed or eligible for listing in the National Register of Historic Places and give the Advisory Council on Historic Preservation a reasonable opportunity to comment.

Treatment of the building and site are to be guided by *The Secretary of Interior's Standards for Historic Preservation Projects*, the Americans with Disability Act, and the International Building Code. Threats to public life, safety, and welfare are to be addressed; however, because this is an historic building, alternatives to full legislative and code compliance are recommended where compliance would needlessly compromise the integrity of the historic building.

1. *General Management Plan – Cape Hatteras National Seashore*, p. 55.

II.C Alternatives for Treatment

In addition to the Recommended Ultimate Treatment discussed in Section II.A above, three alternatives are discussed below.

Alternative #1: Preserve the character-defining features of the exterior in their current state, an appearance that spans each of the three major design manifestations. On the interior, restore the character-defining design to its appearance in 1955 after the National Park Service took possession of the light station and completed its initial phase of modifications as a museum and a visitor center.

This approach would have the following advantages:

- Preserves the building exterior consistent with the proposed actions of the park's General Management Plan;
- Expands current interpretation of the building by restoring the character-defining design features of the interior to the era of National Park Service acquisition and initial adaptation as a museum and visitor center for an historic site;
- Recreates the 1954-55 open plan between the two major rooms of each floor level of each quarters, providing maximum flexibility for subdivision with temporary partitions as needed.

There would be disadvantages to this approach as well:

- Diminishes the use of interior building fabric and characteristics to interpret the building as it appeared and was used in the era beginning in 1872, the building' period of primary significance;

- In reconstructing the interior features and spaces of 1954-55, gives overwhelming emphasis to the era of secondary significance, at the expense of building fabric and spaces that represent the era of primary significance.

- Requires the relocation of at least part of the mechanical system, the air-handlers of the second floor mechanical room, in order to achieve the openness of the 1954-55 design;

- Cannot accommodate public restrooms at the first floor in the areas designated in the 1954-55 design because of space limitations and modern code requirements;

- Eliminates a private office for the gift shop administrator at the second floor;

- Eliminates a private office for the park ranger at the second floor.

- Requires a re-evaluation of the stairs of the North Quarters as a means of egress. Limitation of the number of second-floor occupants or other action may be required.

Alternative #2: Preserve the character-defining features of the exterior in their current state, an appearance that spans each of the three major design manifestations. On the interior, preserve both the first and second floor design characteristics of the South Quarters; restore the first and second floor design characteristics of the North Quarters to their appearance in 1872, the period of greatest significance.

This approach would have the following advantages:

- Preserves the building exterior consistent with the proposed actions of the park's General Management Plan;
- Expands current interpretation of the building's primary period of significance, its use as a light-house keepers' quarters, by restoring significant features and spaces of the first-floor kitchen and living room of the North Quarters;
- Expands current interpretation of the building's primary period of significance, its use as a light-house keepers' quarters, by restoring significant features and spaces of the second floor private living quarters of the North Quarters;
- Expands current interpretation of the building's primary period of significance, its use as a light house keepers' quarters, by introducing public access to a restored second-floor private living quarters of the North Quarters;
- Utilizes restored building fabric and spaces, supplemented by displays and exhibits, for interpretation, thus enhancing the experience of the visitor.
- By emphasizing a comprehensively restored building interior for interpretation, it reduces the reliance on staff to supplement the visitor experience.
- Keeps visually and physically separate but conveniently close by the areas for both retail sales and administrative functions.
- Maintains administrative functions apart from the public areas of interpretation and sales.
- Avoids disrupting the current placement of HVAC equipment at both first and second floor;
- Potentially improves the operation of the HVAC system by creating airlocks at the first floor when doors are reintroduced between hallway and both the living room and the kitchen;
- Requires the removal in the North Quarters of some non-original historic fabric, such as the first-level wood flooring and second-level carpet;
- Requires both additional research and investigation of building fabric beyond the scope of this report to reconstruct the missing second-floor fireplace mantelpieces;
- Makes inconvenient the routes of travel from interpretive rooms to the gift shop, by requiring the use of the porches rather than the hallways;
- Eliminates a designated staff conference room;
- Eliminates the current private office for the park ranger.
- Requires a re-evaluation of the stairs of the North Quarters as a means of egress. Limitation of the number of second-floor occupants or other action may be required.

There would be disadvantages to this approach as well:

- Requires additional investigation of building fabric beyond the scope of this report to verify internal doorways, if any, between major rooms;

II.D Recommendations

The Recommended Ultimate Treatment for the Bodie Island Light Station Double Keepers' Quarters includes the preservation of the exterior of the building. And it includes the preservation of the interiors as presently adapted.

For the first floor of the South Quarters, the adapted interior spaces include a gift shop in the place of the original living room and kitchen. A mechanical room and a staff restroom are in the center part of the original stair hall, with the two outer ends serving both as a foyer to a doorway connecting to the exterior and as a hallway connecting to the North Quarters.

For the second floor of the South Quarters, the adapted interior spaces include the gift shop storage room and separate enclosed office over the original kitchen and west end of the stair hall. NPS staff offices are over the original living room and east end of the original stairway.

For the first floor of the North Quarters, the adapted interior spaces include an exhibit room in the place of the original living room and kitchen. The original stairway and closet beneath remain in the center part of the original stair hall, with the two outer ends each continuing to serve as a foyer to a doorway connecting to the exterior and also in a non-original use as a hallway connecting to the South Quarters.

For the second floor of the North Quarters, the adapted interior spaces include the conference room over the original kitchen and the office for a park ranger over the original living room. The original staircase and stair hall remain with the small room at the east end of the stair hall now serving as mechanical room.

This adaptation of the interiors and the preservation of the exterior conform to the recommendations of the park's General Management Plan. The current arrangement of spaces allows for public

circulation between the two quarters at first-floor level, between exhibits and gift shop. The second floor has restricted access, providing administrative space. The openness and interconnection of spaces at both floor levels largely reflect the design modifications of the NPS adaptation of the building in 1954-55 upon acquisition. The exterior perimeter walls, including doors and windows, date to the initial construction of 1872. The modifications of 1990-92, most of which are subtle, reinforce the interior pattern of room layout as initially constructed. These modifications include the reconstruction of short end-sections of the dividing walls removed in 1954-55, changes in wood flooring patterns to represent the removed walls, and reinstallation of reconstructed fireplace mantelpieces, doors and casings and other missing 1872 design features. The resultant design that is present today works well both in terms of accommodating a visitor center and providing for interpretation, the prescribed purposes of the General Management Plan.

The building is in good condition in general. However, some of the work of the 1990-92 campaign, subsequent maintenance efforts, as well as earlier construction efforts, are reaching their expected life expectancy. The time is approaching for certain repairs.

Specific Recommendations

To maintain the Recommended Ultimate Treatment the following actions should be taken:

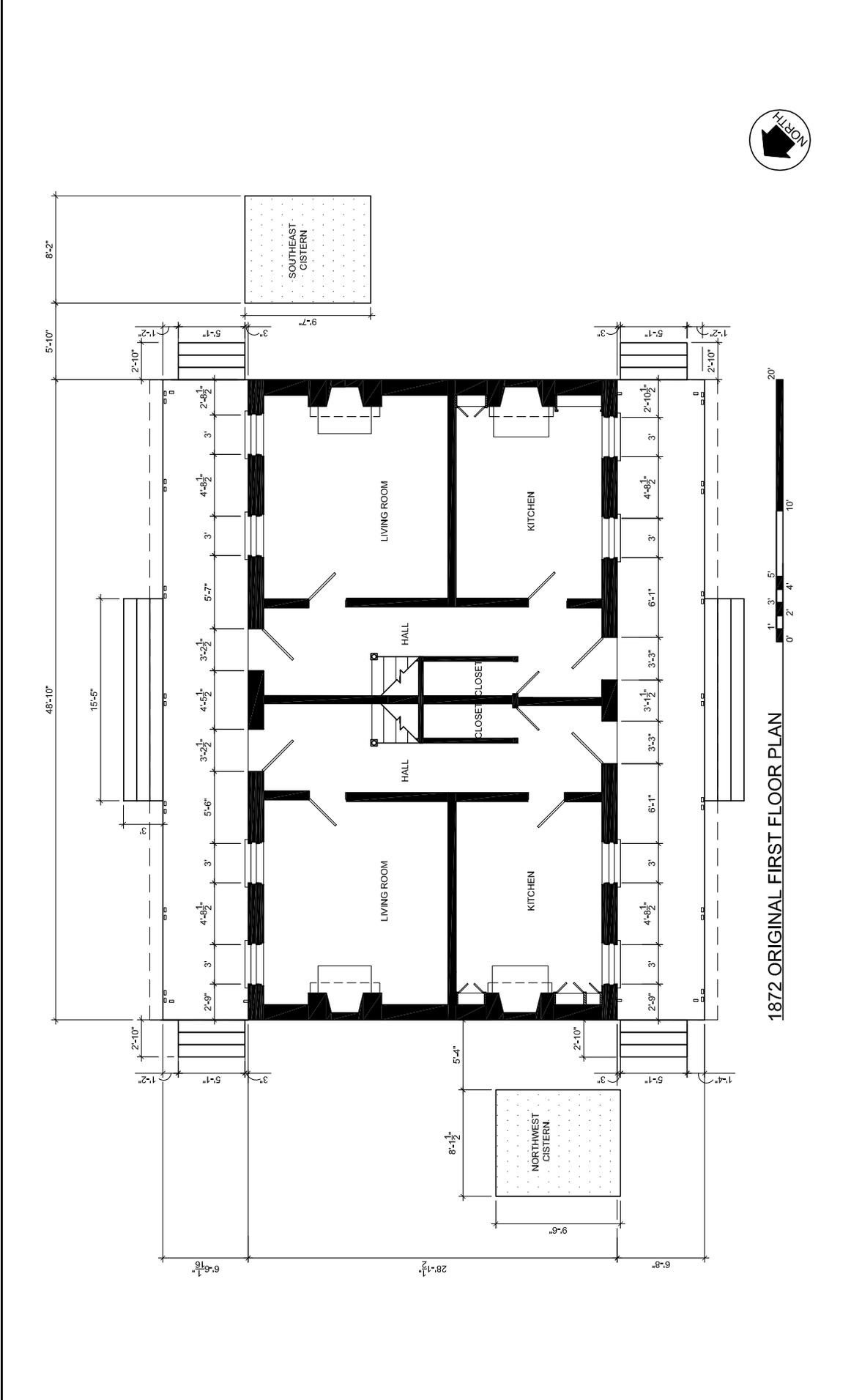
- Replace the wood shingle roofing of the Quarters and the Storage Shed;
- Repaint the painted exterior wood elements;
- Re-oil exterior wood porch flooring;
- Re-varnish interior first-floor wood flooring;

- Replace the heat pumps;
- Re-point the masonry of the three exterior cisterns;
- Consider developing a brochure, an exhibit and/or other interpretive material with original and current floor plans to help illustrate the building's evolution of form and use.

Appendix A:

Documentation Drawings: The Quarters by Historic Period

- 1872 First Floor Plan
- 1872 Second Floor Plan
- 1945 First Floor Plan
- 1945 Second Floor Plan
- 1954 First Floor Plan
- 1954 Second Floor Plan
- 1989 First Floor Plan
- 1989 Second Floor Plan

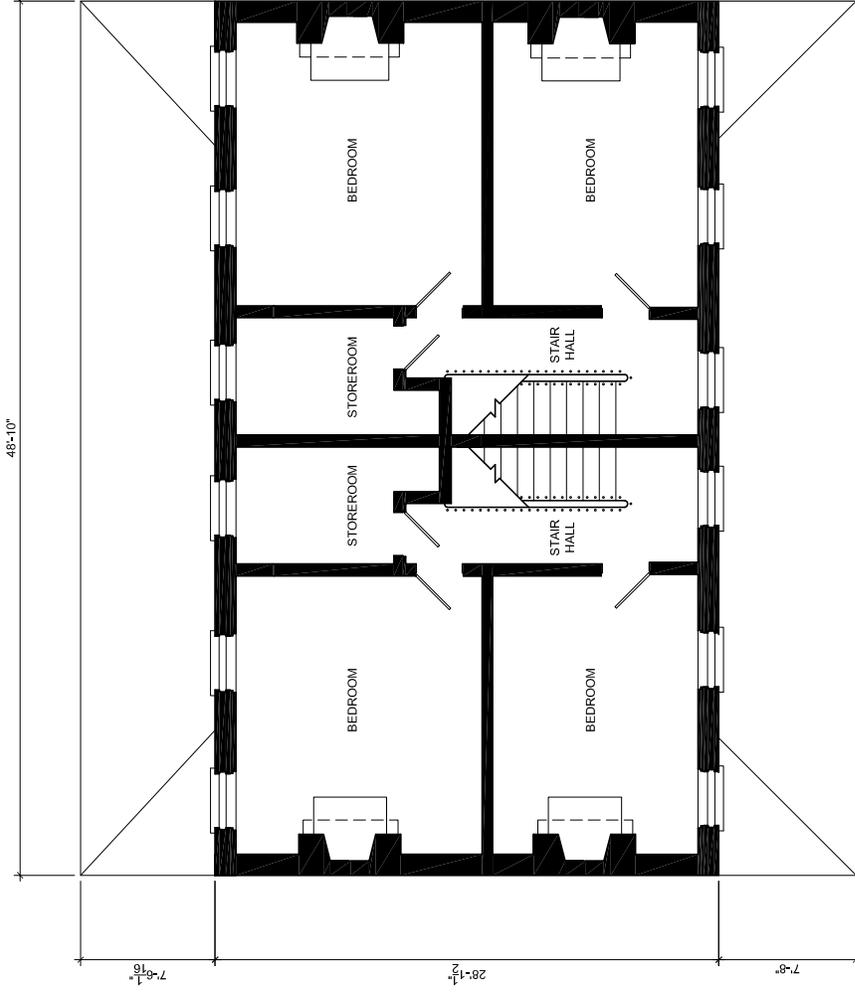


1872 ORIGINAL FIRST FLOOR PLAN

APPENDIX A
DRAWINGS BY HISTORIC PERIOD
SHEET 1 OF 8 SHEETS

BODIE ISLAND DOUBLE KEEPERS' QUARTERS
- CAPE HATTERAS NATIONAL SEASHORE -

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JOSEPH K. OPPERMANN - ARCHITECT P.A.
JOSEPH K. OPPERMAN, FAIA
ABBY GENTRY

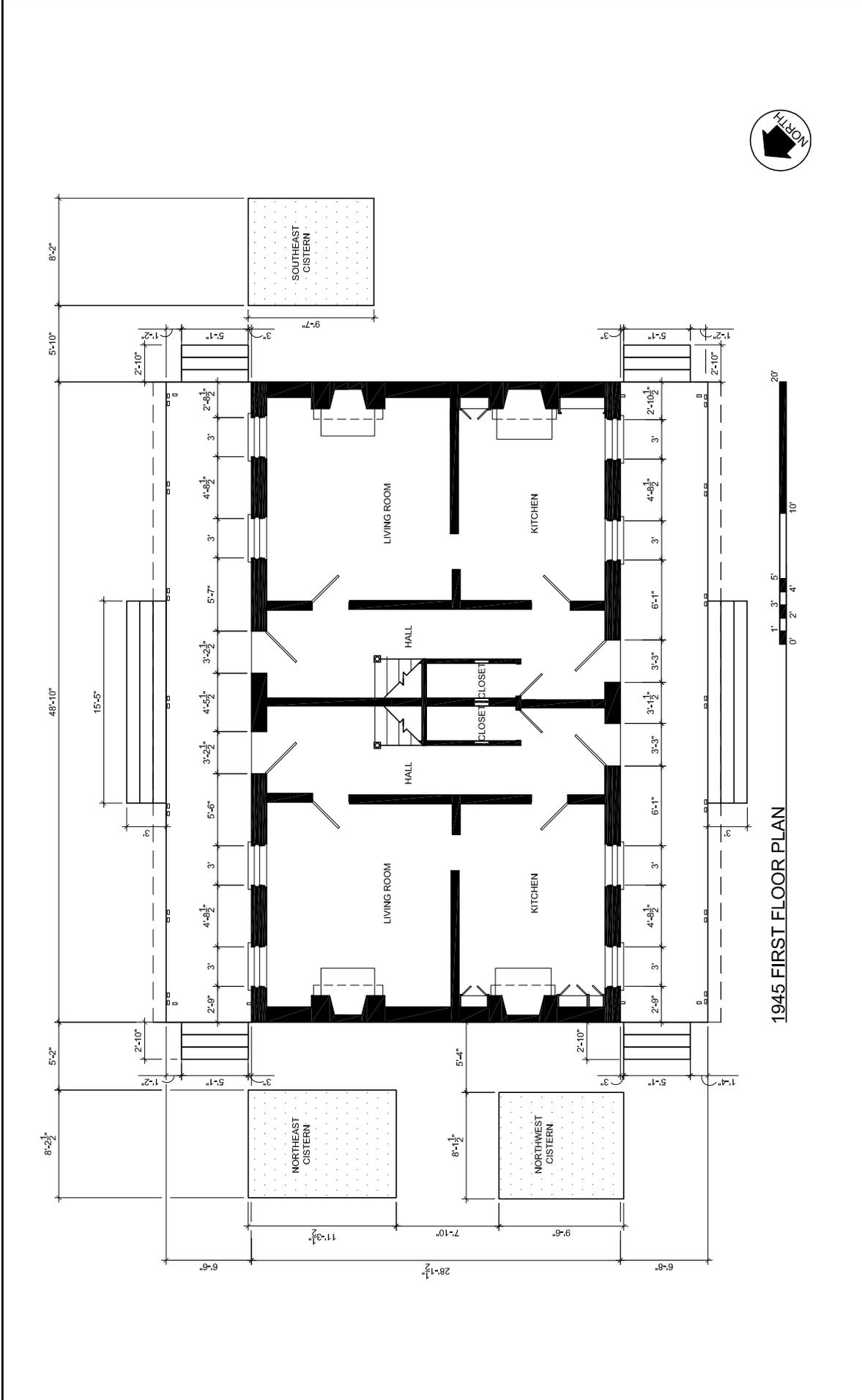


1872 ORIGINAL SECOND FLOOR PLAN

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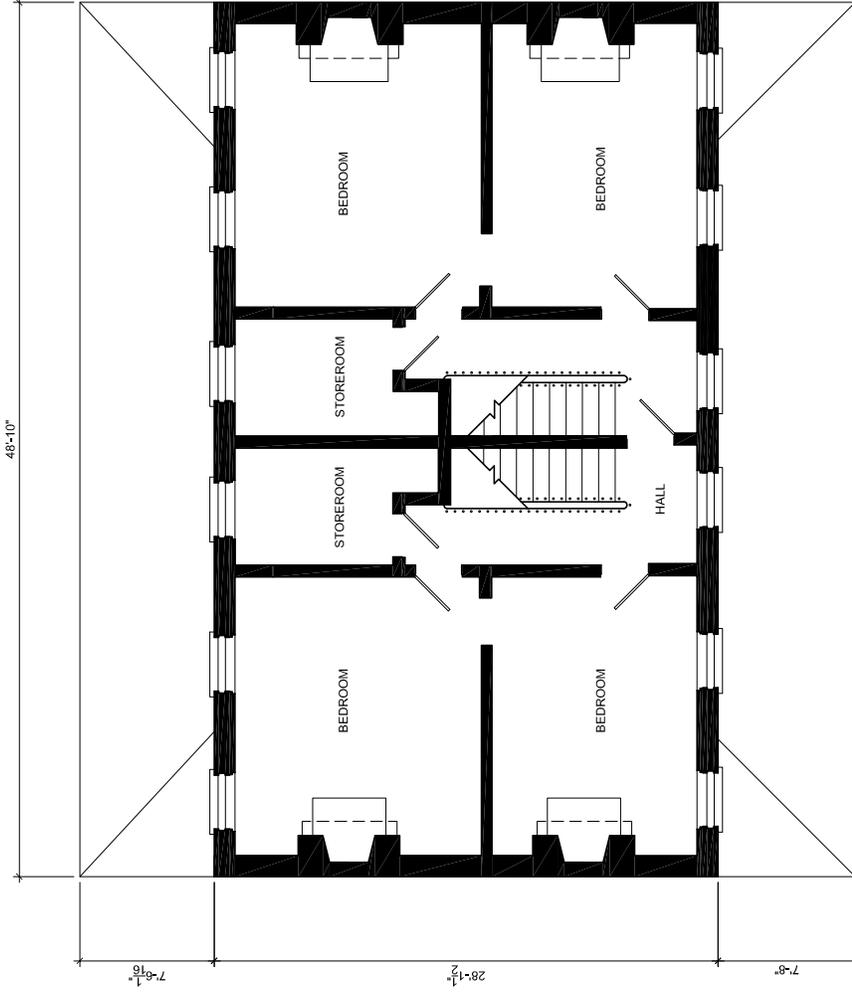
APPENDIX A
 DRAWINGS BY HISTORIC PERIOD
 SHEET 2 OF 8 SHEETS



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APPENDIX A
 DRAWINGS BY HISTORIC PERIOD
 SHEET 3 OF 8 SHEETS



1945 SECOND FLOOR PLAN

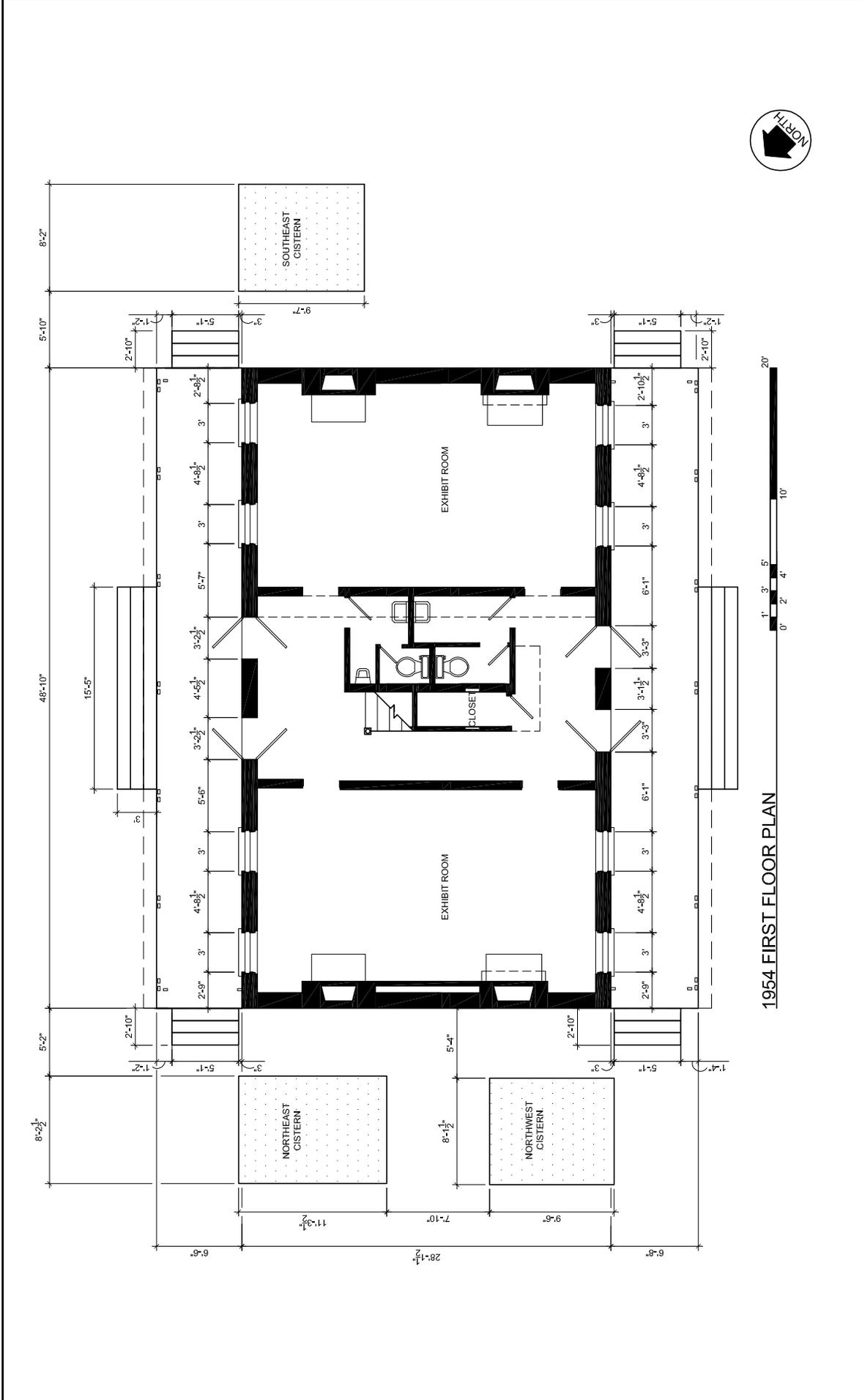


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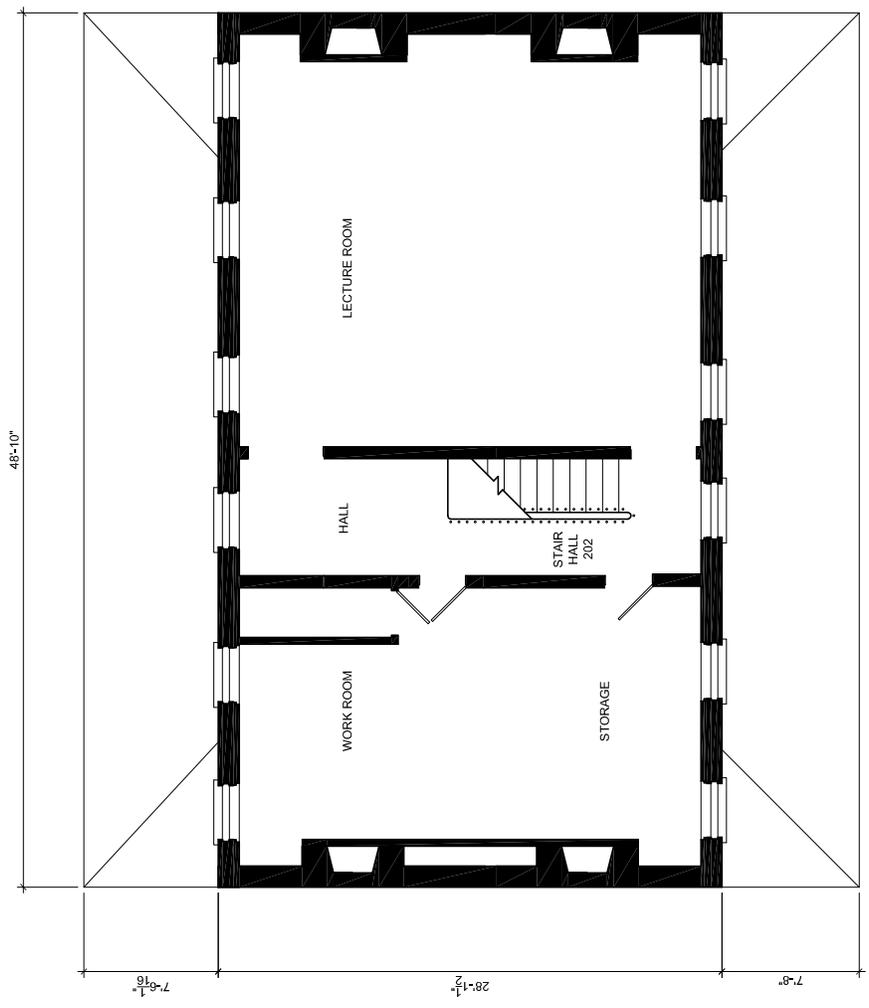


1954 FIRST FLOOR PLAN

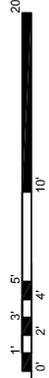
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SHEET 5 OF 8 SHEETS

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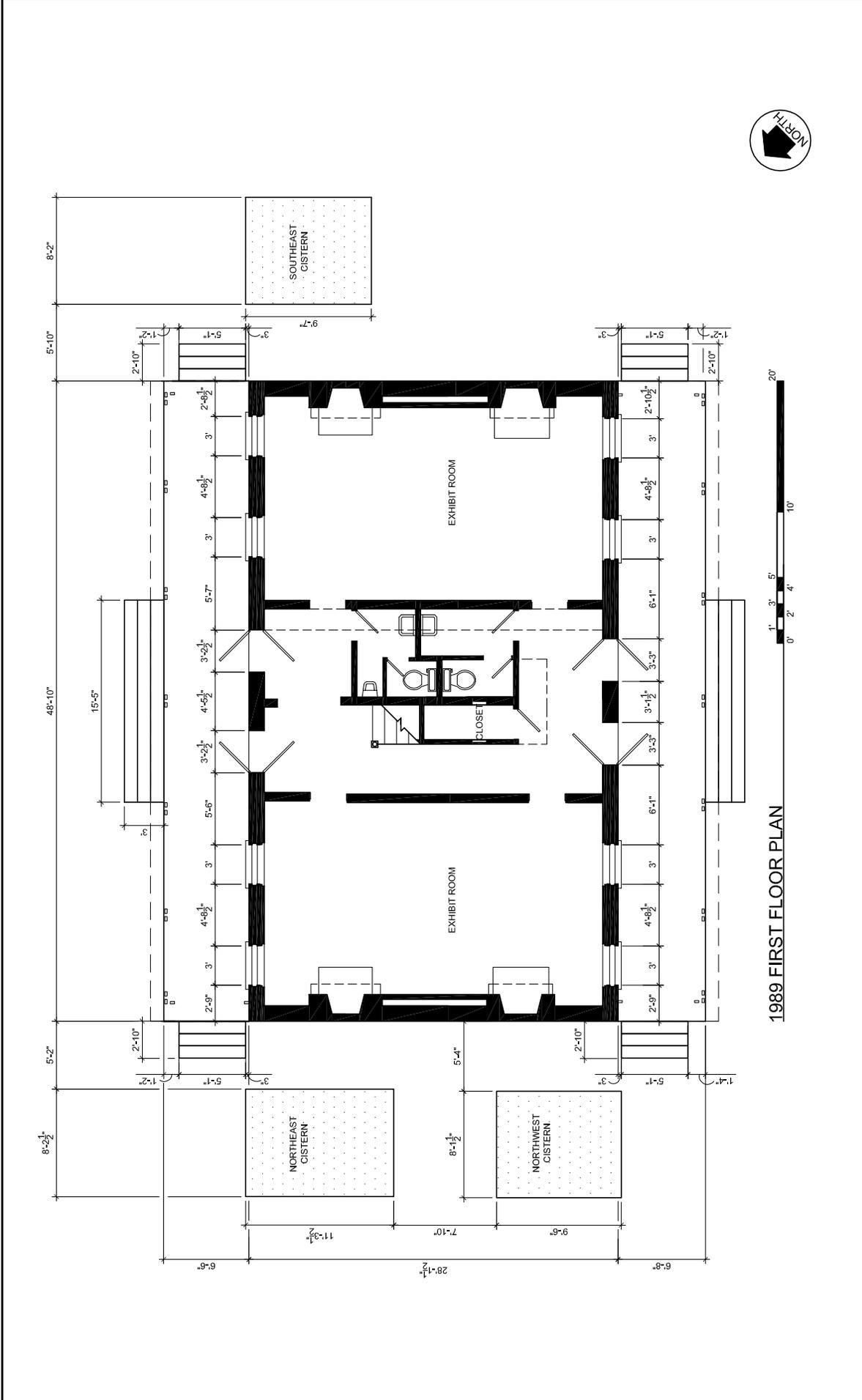
1954 SECOND FLOOR PLAN



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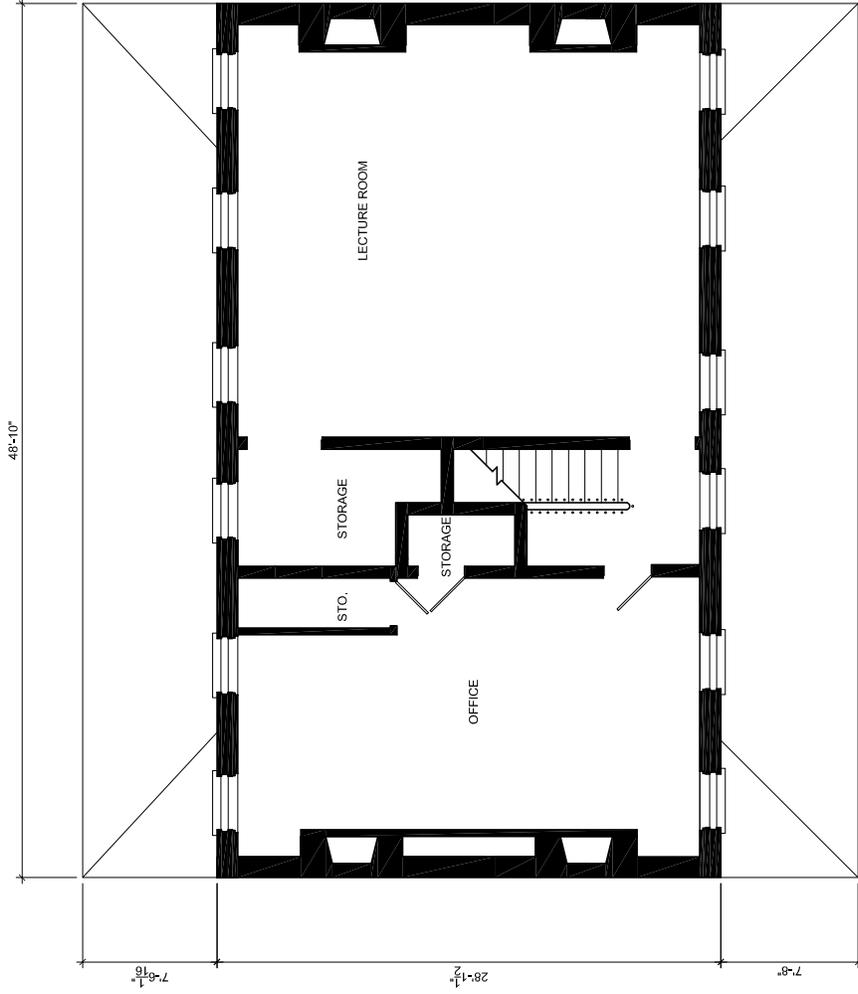
BODIE ISLAND DOUBLE KEEPERS' QUARTERS
 - CAPE HATTERAS NATIONAL SEASHORE -

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1989 FIRST FLOOR PLAN

BODIE ISLAND DOUBLE KEEPERS' QUARTERS
- CAPE HATTERAS NATIONAL SEASHORE -



1989 SECOND FLOOR PLAN



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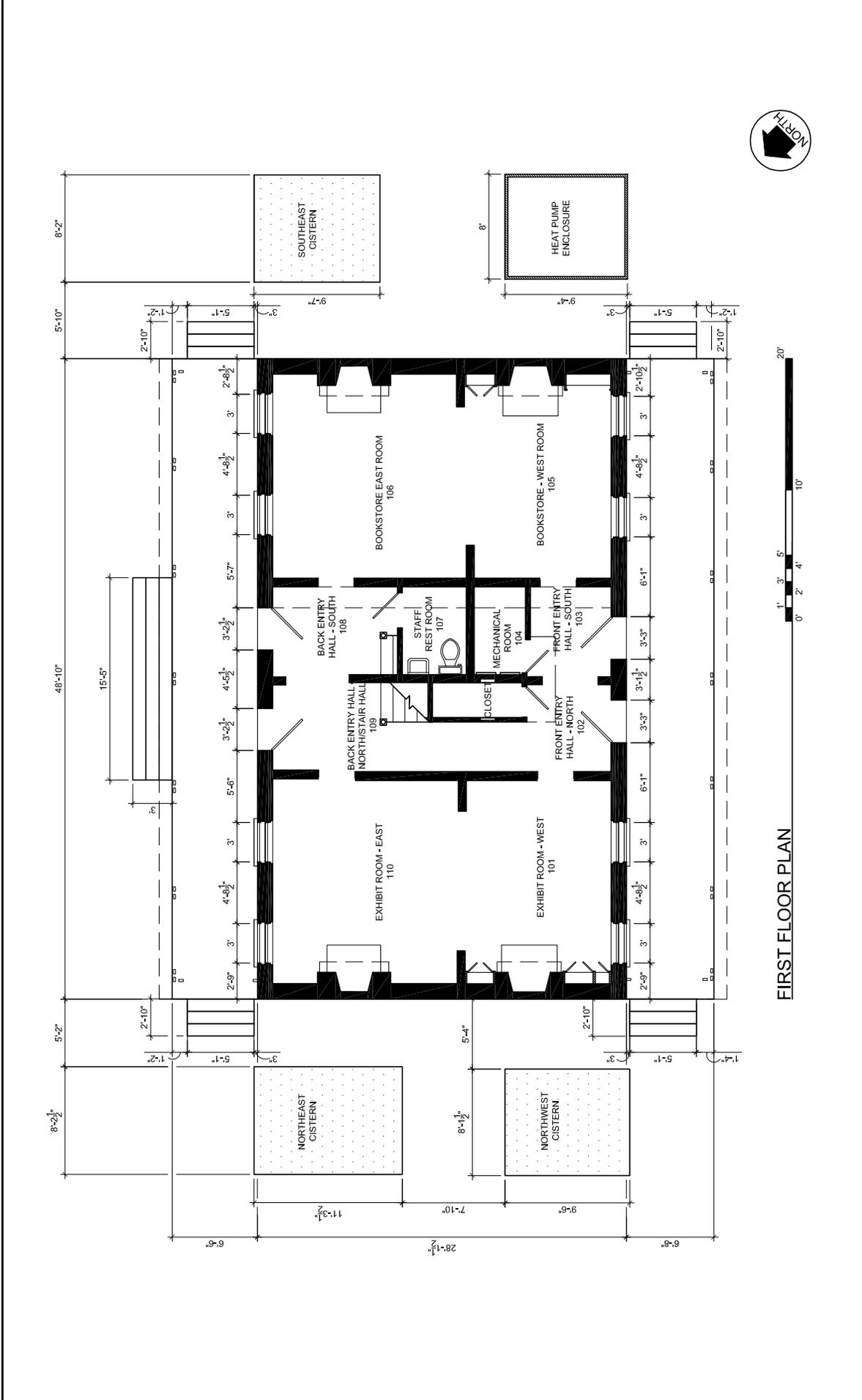
BODIE ISLAND DOUBLE KEEPERS' QUARTERS
 - CAPE HATTERAS NATIONAL SEASHORE -

APPENDIX A
 DRAWINGS BY HISTORIC PERIOD
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Appendix B:

Documentation Drawings: The Quarters as Found

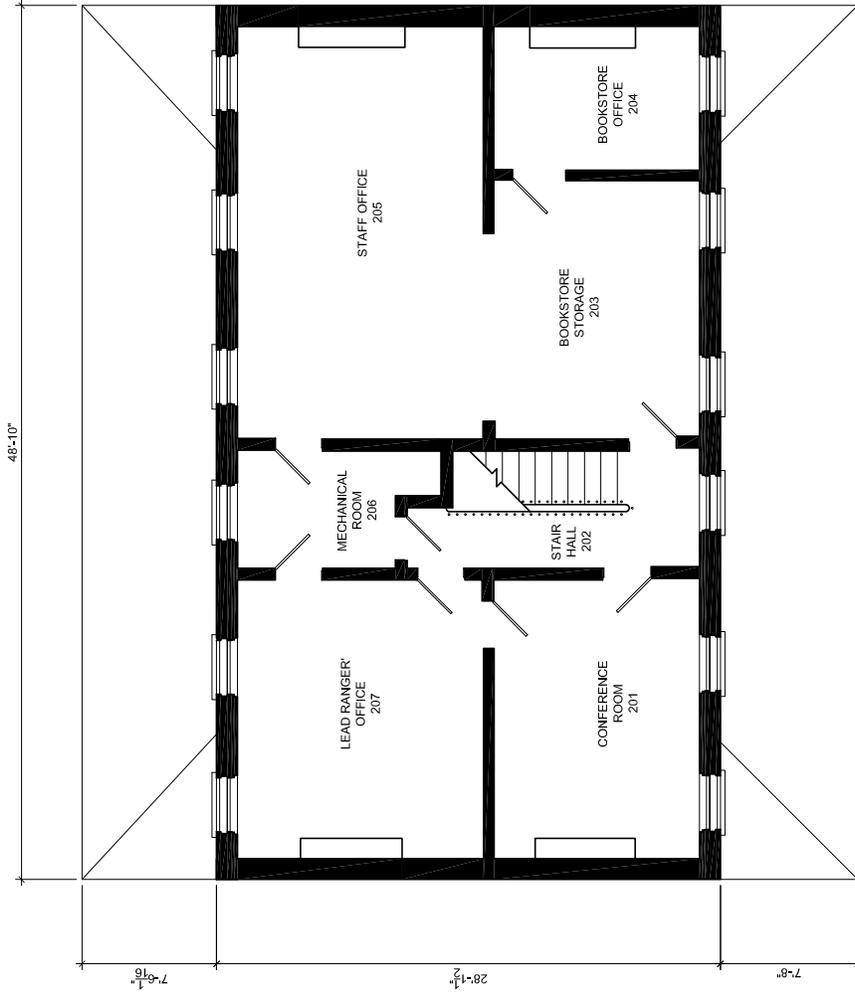
- First Floor Plan
- Second Floor Plan
- Elevations and Sections: Interior Door - Original
- Elevations and Sections: Interior Door - 1992
- Elevations and Sections: Exterior Door - Original
- Elevations and Sections: Wall Base Board
- Elevations and Sections: Interior Door Casing
- Elevations and Sections: Window Apron - First Floor
- Elevations and Sections: Window Apron - Second Floor
- Elevations and Sections: Window Casing - Typical
- Elevations and Sections: Staircase Balustrade and Handrail
- Details: Trim at Wall Below Stair and Stair Undercarriage



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BODIE ISLAND DOUBLE KEEPERS' QUARTERS
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APPENDIX B
 AS-FOUND DRAWINGS
 SHEET 1 OF 12 SHEETS



SECOND FLOOR PLAN



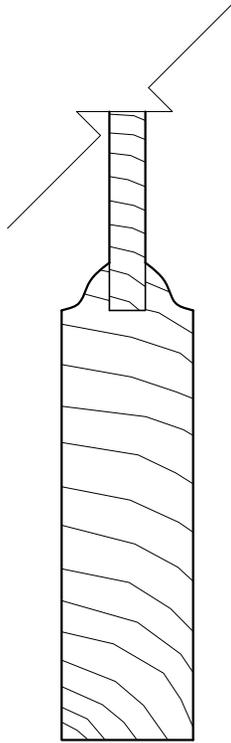
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BODIE ISLAND DOUBLE KEEPERS' QUARTERS

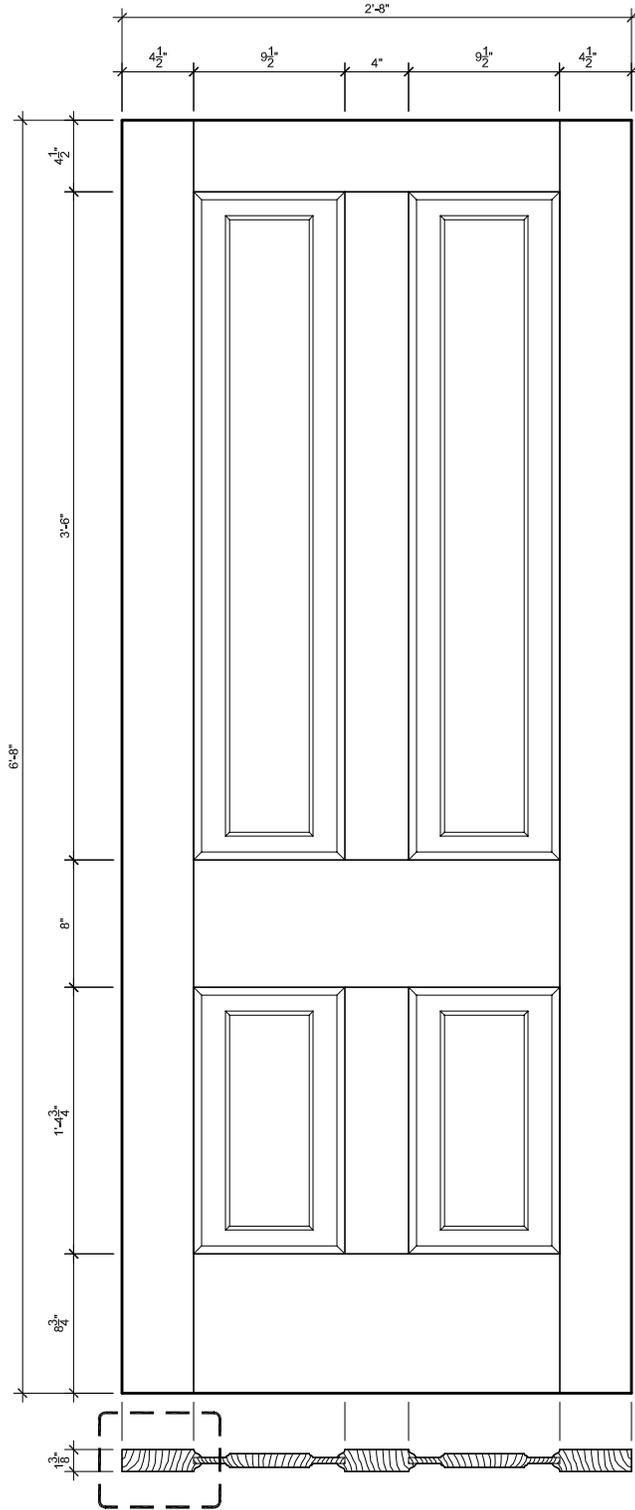
- CAPE HATTERAS NATIONAL SEASHORE -

APPENDIX B
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DETAIL



ELEV. (BOTH FACES) - ORIGINAL 1872 INT. DOOR - TYP.



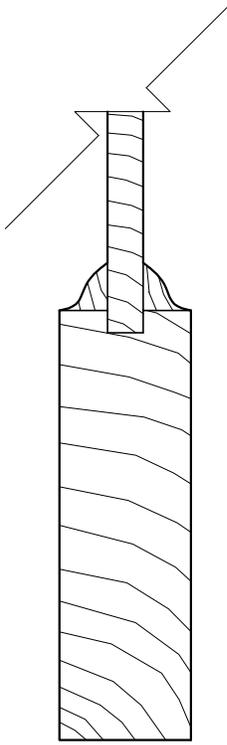
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BODIE ISLAND DOUBLE KEEPERS' QUARTERS

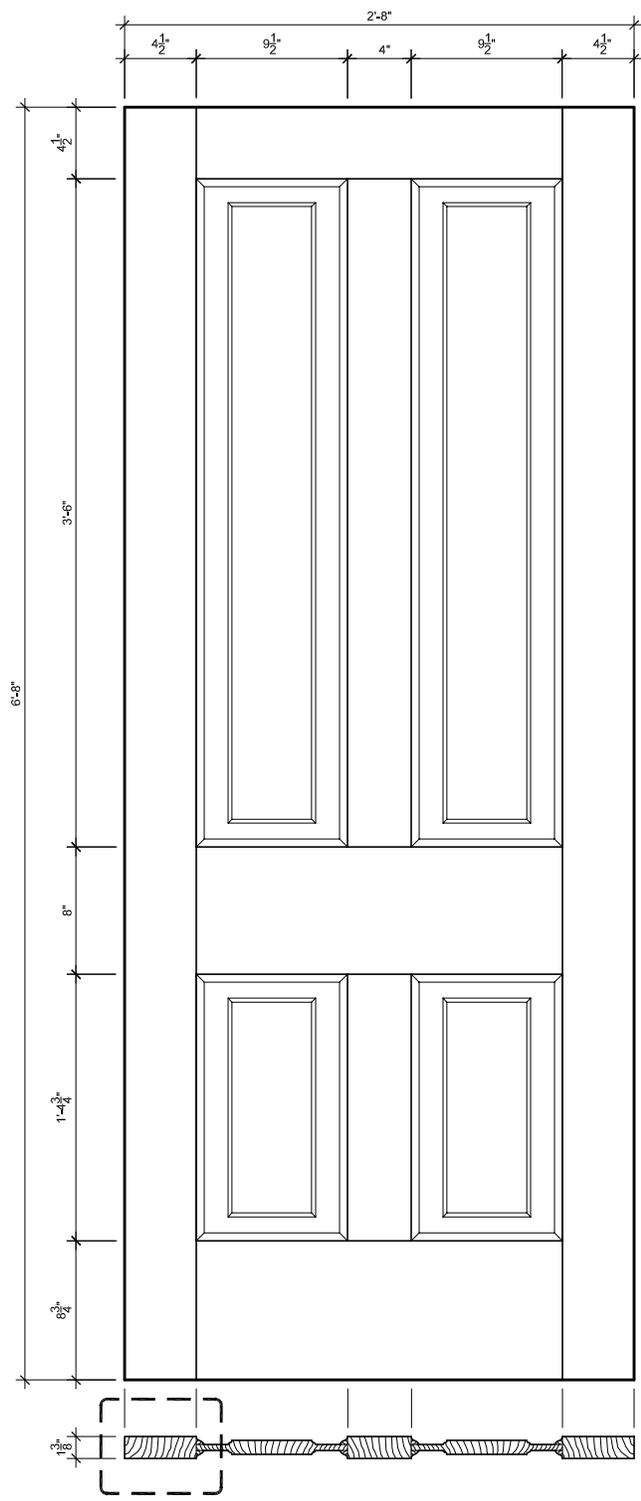
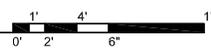
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DETAIL



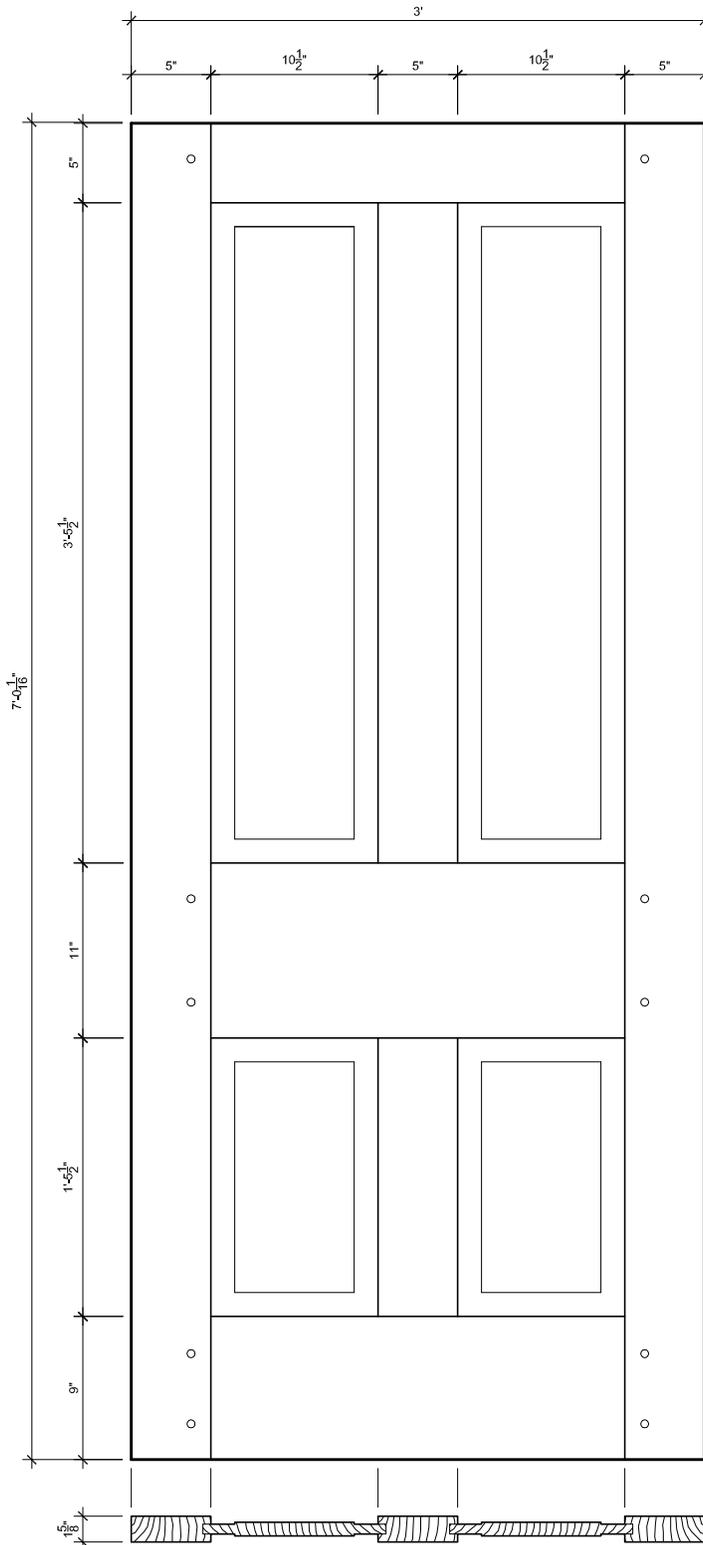
ELEV. - 1992 REPRODUCTION INT. DOOR



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- CAPE HATTERAS NATIONAL SEASHORE -

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ELEV. (BOTH FACES) - ORIGINAL 1872 EXT. DOOR

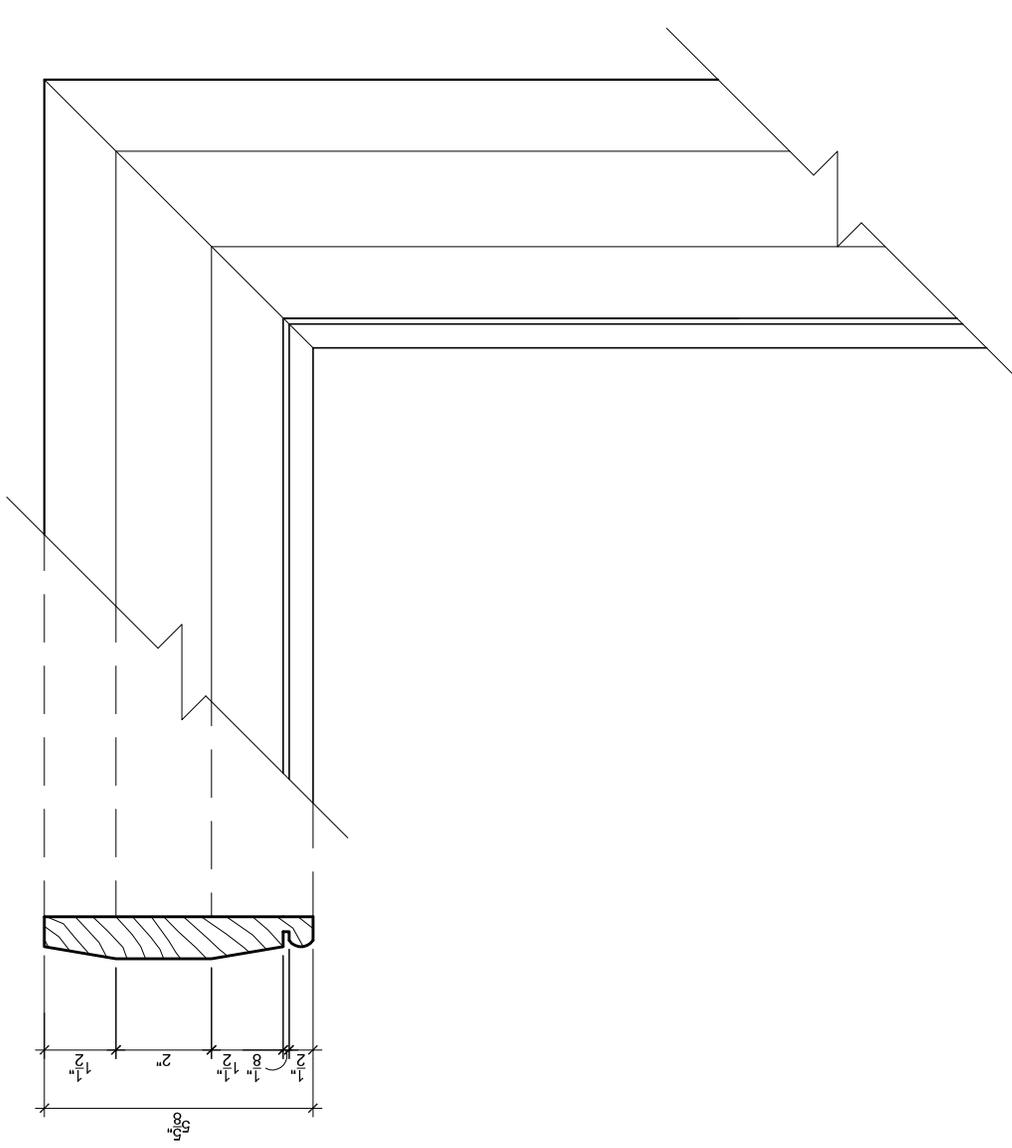


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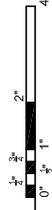
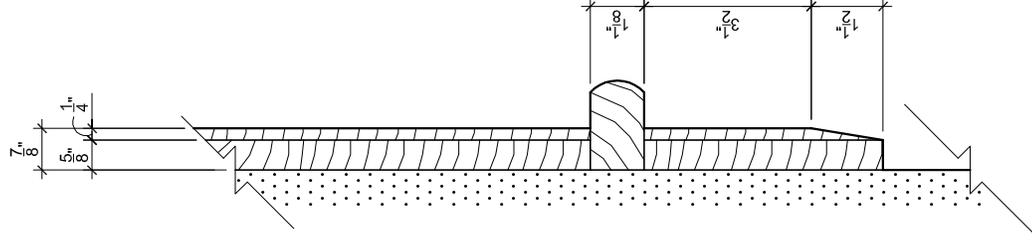
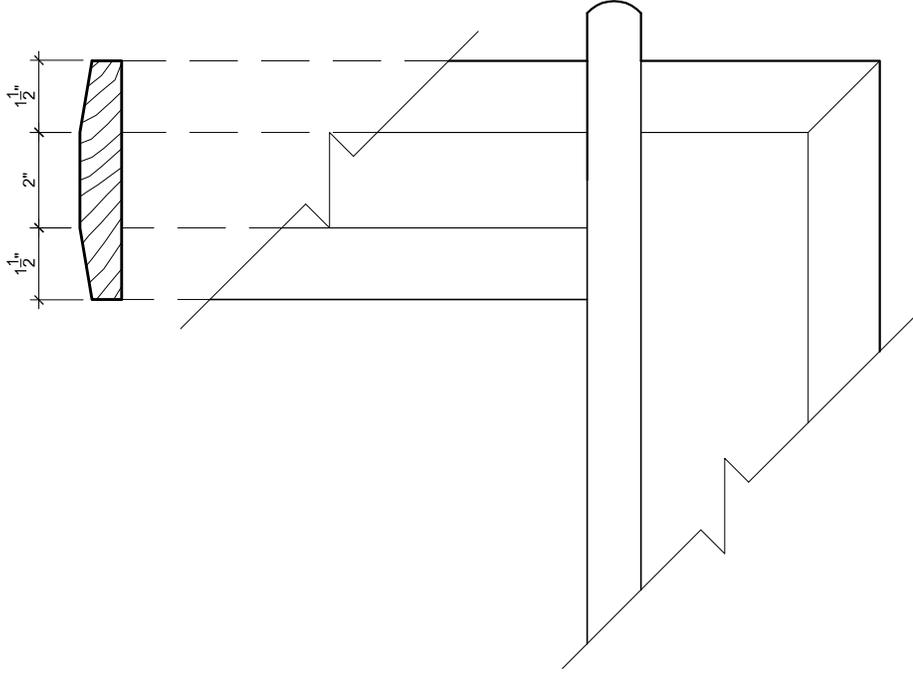
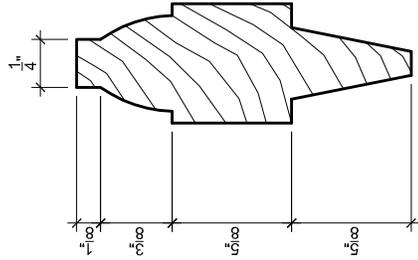


ORIGINAL 1872 & REPRODUCTION (1954, 1992) INT. DOOR CASING - TYP.

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 - CAPE HATTERAS NATIONAL SEASHORE -

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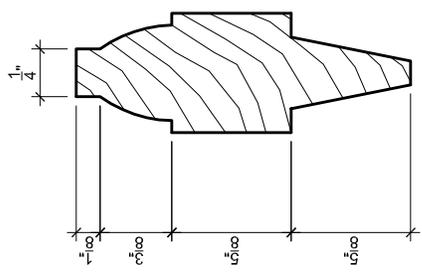
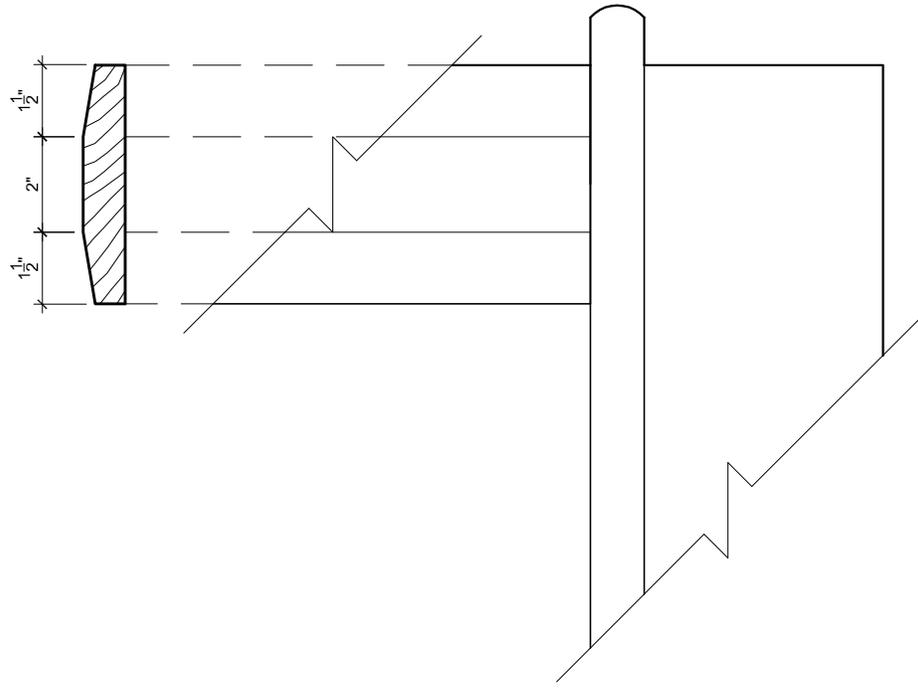
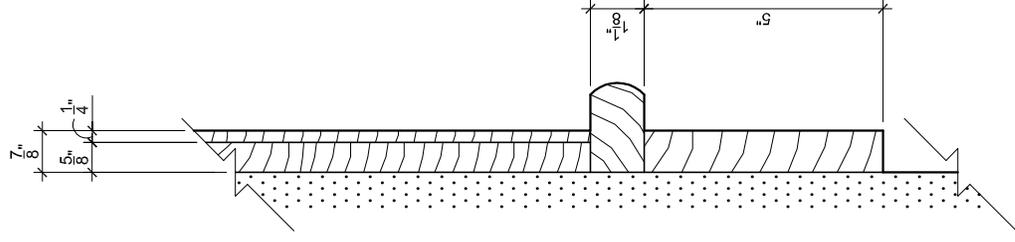
ORIGINAL 1872 WINDOW APRON - FIRST FLOOR

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BODIE ISLAND DOUBLE KEEPERS' QUARTERS

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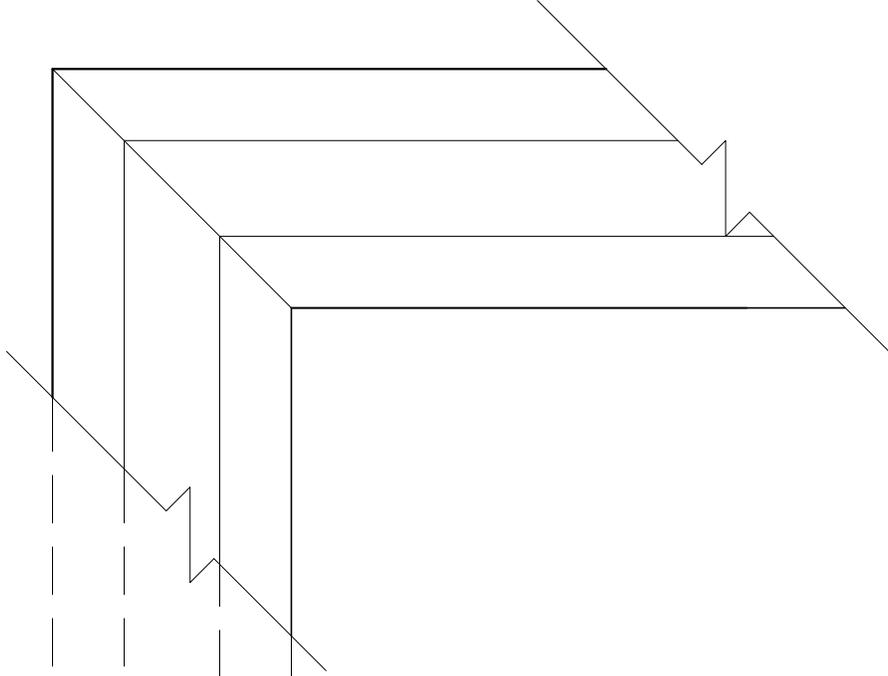
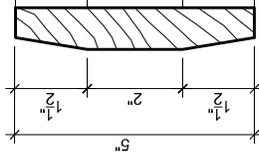
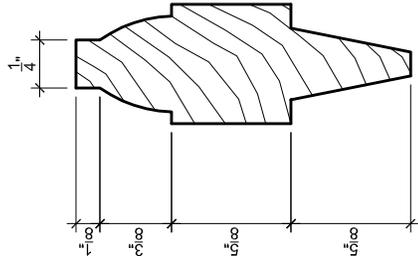


MUNTIN SECTION FULL SCALE ORIGINAL 1872 WINDOW APRON - SECOND FLOOR

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ORIGINAL 1872 INT. WINDOW CASING - TYP.

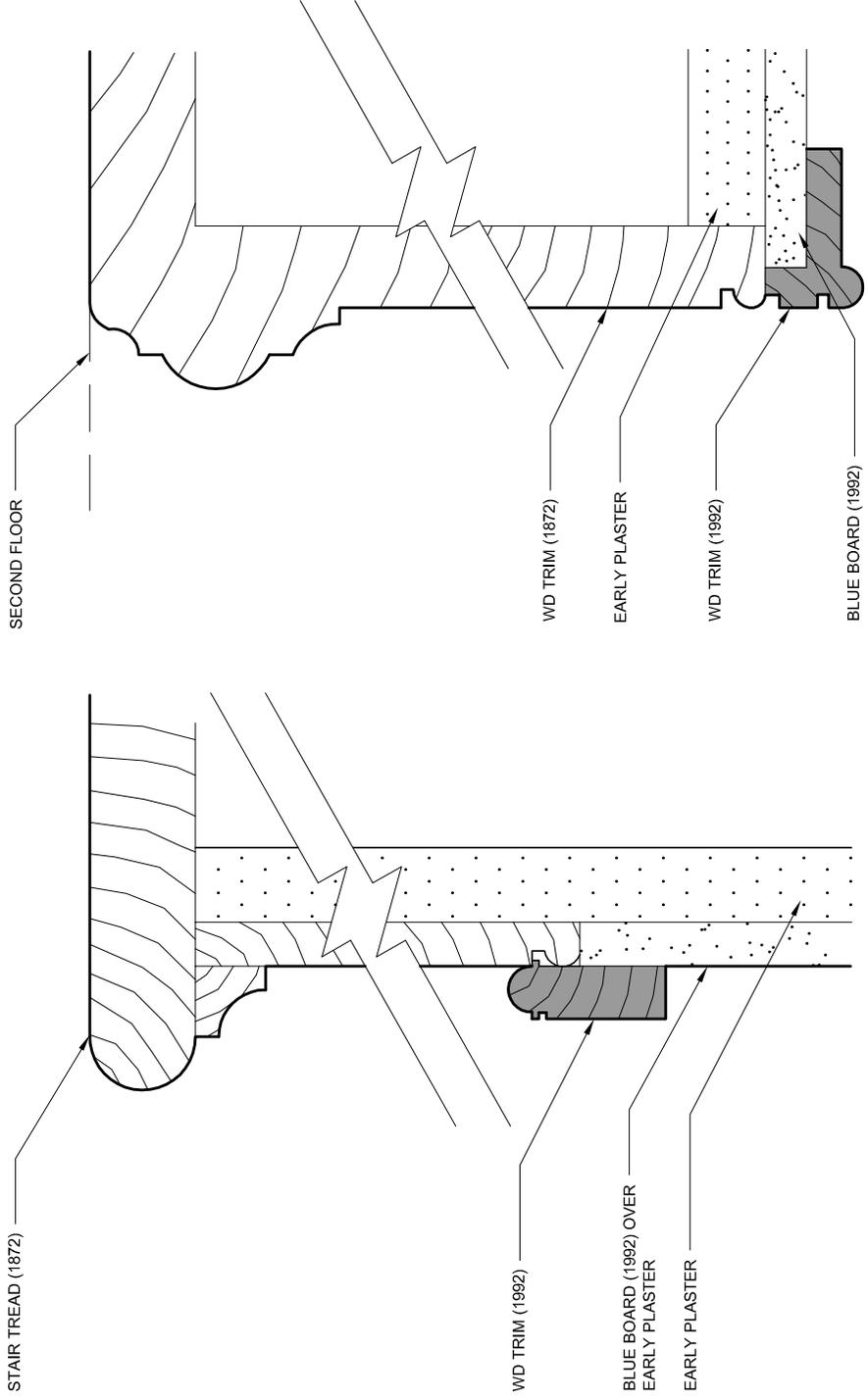
MUNTIN SECTION FULL SCALE

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BODIE ISLAND DOUBLE KEEPERS' QUARTERS

- CAPE HATTERAS NATIONAL SEASHORE -

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 AS-FOUND DRAWINGS
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DETAILS - TRIM (1992) AT WALL BELOW STAIR & STAIR UNDERCARRIAGE

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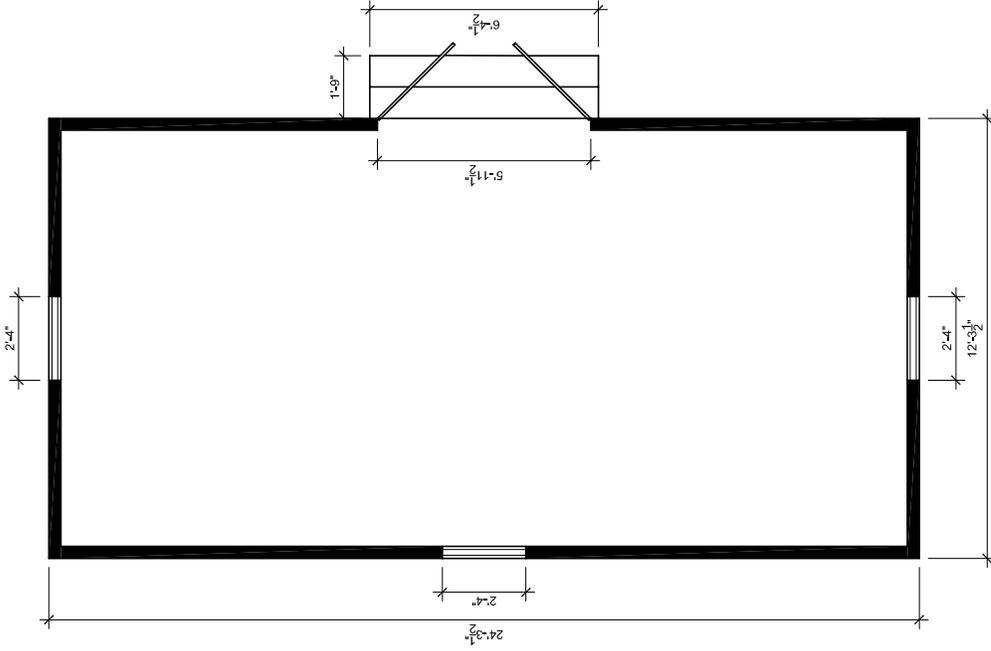
BODIE ISLAND DOUBLE KEEPERS' QUARTERS
 - CAPE HATTERAS NATIONAL SEASHORE -

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 AS-FOUND DRAWINGS
 SHEET 12 OF 12 SHEETS

Appendix C:

Documentation Drawings: Outbuildings as Found

- Floor Plan: The Garage
- Floor Plan: The Wood Shed



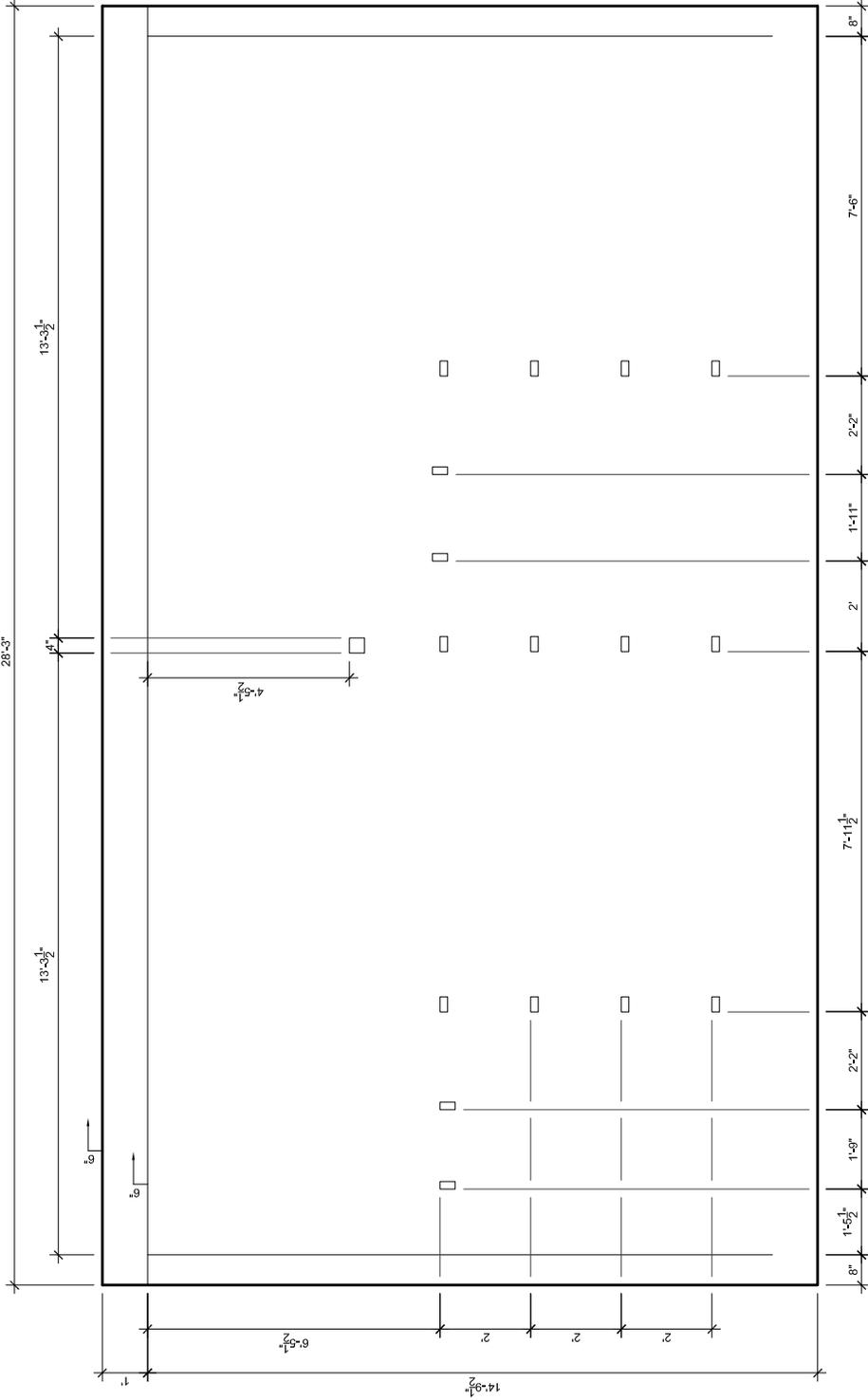
FIRST FLOOR PLAN - THE STORAGE SHED (GARAGE) 10'



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 JOSEPH K. OPPERMAN, FAIA
 ABBY GENTRY

BODIE ISLAND DOUBLE KEEPERS' QUARTERS
 - CAPE HATTERAS NATIONAL SEASHORE -

APPENDIX C
 AS-FOUND DRAWINGS
 SHEET 1 OF 2 SHEETS



FLOOR PLAN - WOOD SHED

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 - CAPE HATTERAS NATIONAL SEASHORE -

APPENDIX C
 AS-FOUND DRAWINGS
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Appendix D: HABS Documentation (2002)

- Index to Photographs
- Key to Photographs
- Selected Photographs Showing Double Keepers' Quarters and Outbuildings
- Selected Drawings Showing Double Keepers' Quarters and Outbuildings

HISTORIC AMERICAN BUILDINGS SURVEY

INDEX TO PHOTOGRAPHS

BODIE ISLAND LIGHT STATION
 Off Highway 12 CAHA
 Nags Head Vicinity
 Dare County
 North Carolina

HABS No. NC-395

Jon A. Buono & James M. Womack, Photographers, November 2000
 Jon A. Buono, Photographer, March 2001

- NC-395-1 GENERAL VIEW LOOKING NORTHEAST SHOWING (FROM LEFT TO RIGHT) STORAGE SHED, KEEPERS' DWELLING, AND TOWER WITH ATTACHED OIL HOUSE.
- NC-395-2 GENERAL VIEW LOOKING EAST SHOWING (FROM LEFT TO RIGHT) STORAGE SHED, TOWER, AND KEEPERS' DWELLING.
- NC-395-3 VIEW TO EAST-NORTHEAST, FROM SECOND FLOOR OF KEEPERS' DWELLING, OF TOWER ELEVATION.
- NC-395-4 VIEW LOOKING EAST OF TOWER.
- NC-395-5 VIEW TO SOUTHWEST OF LIGHTHOUSE WITH KEEPERS' DWELLING TO RIGHT.
- NC-395-6 OIL HOUSE, ELEVATION OF ENTRY TO TOWER, FACING NORTHEAST.
- NC-395-7 OIL HOUSE, VIEW TO EAST-NORTHEAST.
- NC-395-8 OIL HOUSE, SIDE ELEVATION, VIEW TO NORTH-NORTHWEST.
- NC-395-9 OIL HOUSE, VIEW NORTHWEST OF CONNECTION BETWEEN TOWER AND OIL HOUSE.
- NC-395-10 OIL HOUSE, VIEW SOUTHWEST OF CONNECTION BETWEEN TOWER AND OIL HOUSE.
- NC-395-11 OIL HOUSE, SIDE ELEVATION, VIEW TO SOUTH-SOUTHEAST.
- NC-395-12 OIL HOUSE, VIEW TO EAST.

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HABS No. NC-395
(Page 2)

- NC-395-13 OIL HOUSE, INTERIOR VIEW OF HALLWAY, FACING SOUTHWEST TO ENTRANCE DOOR.
- NC-395-14 OIL HOUSE, INTERIOR VIEW OF SOUTHEAST ROOM.
- NC-395-15 OIL HOUSE, INTERIOR VIEW OF NORTHWEST ROOM.
- NC-395-16 OIL HOUSE, INTERIOR DETAIL OF CABINETS ABOVE OIL SHELVES IN SOUTHEAST ROOM.
- NC-395-17 OIL HOUSE, INTERIOR VIEW OF HALLWAY WITH STAIR CONNECTION TO BASE OF TOWER.
- NC-395-18 TOWER, INTERIOR VIEW WITH WEIGHT WELL. (CLOCKWORK MECHANISM NOT INSTALLED AT BODIE LIGHT.)
- NC-395-19 TOWER, INTERIOR VIEW, DETAIL OF DEDICATION PLAQUE.
- NC-395-20 TOWER, INTERIOR VIEW, LOOKING UP SPIRAL STAIRS.
- NC-395-21 TOWER, INTERIOR VIEW OF FLIGHT OF STAIRS.
- NC-395-22 TOWER, INTERIOR VIEW BELOW LANTERN, PLAQUE.
- NC-395-23 TOWER, INTERIOR VIEW, INSIDE OF LIGHT ARMATURE WITHIN LENSE.
- NC-395-24 TOWER, INTERIOR VIEW, DETAIL OF LIGHT INSIDE LENSE.
- NC-395-25 KEEPERS' DWELLING, ALONG AXIS TO LIGHTHOUSE.
- NC-395-26 KEEPERS' DWELLING, WEST FRONT ELEVATION VIEW.
- NC-395-27 KEEPERS' DWELLING, VIEW OF SOUTHWEST CORNER.
- NC-395-28 KEEPERS' DWELLING, VIEW OF SOUTHSIDE ELEVATION.
- NC-395-29 KEEPERS' DWELLING, REAR EAST ELEVATION.
- NC-395-30 KEEPERS' DWELLING, VIEW OF NORTHEAST CORNER.
- NC-395-31 KEEPERS' DWELLING, VIEW OF NORTH SIDE ELEVATION.

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(Page 3)

- NC-395-32 KEEPERS' DWELLING, VIEW OF NORTHWEST CORNER.
- NC-395-33 KEEPERS' DWELLING, INTERIOR VIEW OF REMAINING STAIR ON NORTHERN WING.
- NC-395-34 KEEPERS' DWELLING, INTERIOR VIEW OF WEST FIREPLACE IN NORTHERN WING.
- NC-395-35 KEEPERS' DWELLING, INTERIOR VIEW OF EAST FIREPLACE IN NORTHERN WING.
- NC-395-36 STORAGE SHED, VIEW TO NORTHEAST.
- NC-395-37 STORAGE SHED, SIDE ELEVATION, LOOKING EAST-NORTHEAST.
- NC-395-38 STORAGE SHED, VIEW TO EAST.
- NC-395-39 STORAGE SHED, VIEW TO WEST-SOUTHWEST.

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Historic photos from Cape Hatteras National Seashore archives

- NC-395-40 VIEW OF STATION FROM NORTHWEST SIDE. U.S. LIGHTHOUSE BOARD (USLHB) PHOTO BY HERBERT BAMBER, JUNE 9, 1893.
- NC-395-41 VIEW OF STATION FROM SOUTH SIDE. USLHB PHOTO BY HERBERT BAMBER, JUNE 9, 1893.
- NC-395-42 VIEW OF STATION FROM NORTHEAST SIDE. USLHB PHOTO BY HERBERT BAMBER, JUNE 9, 1893.
- NC-395-43 VIEW OF STATION FROM SOUTHWEST SIDE WITH DUPLEX KEEPERS' DWELLING TO THE LEFT. USLHB PHOTO BY HERBERT BAMBER, JUNE 9, 1893.
- NC-395-44 VIEW OF TOWER AND ATTACHED OIL HOUSE FROM WEST SIDE OF THE STATION. USLHB PHOTO BY HERBERT BAMBER, JUNE 9, 1893.
- NC-395-45 AERIAL VIEW OF STATION IN 1944, FOUR YEARS AFTER AUTOMATION AND BEFORE CONSTRUCTION OF THE PARKING LOT.

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HABS No. NC-395
(Page 4)

U.S. COAST GUARD (USCG) PHOTO.

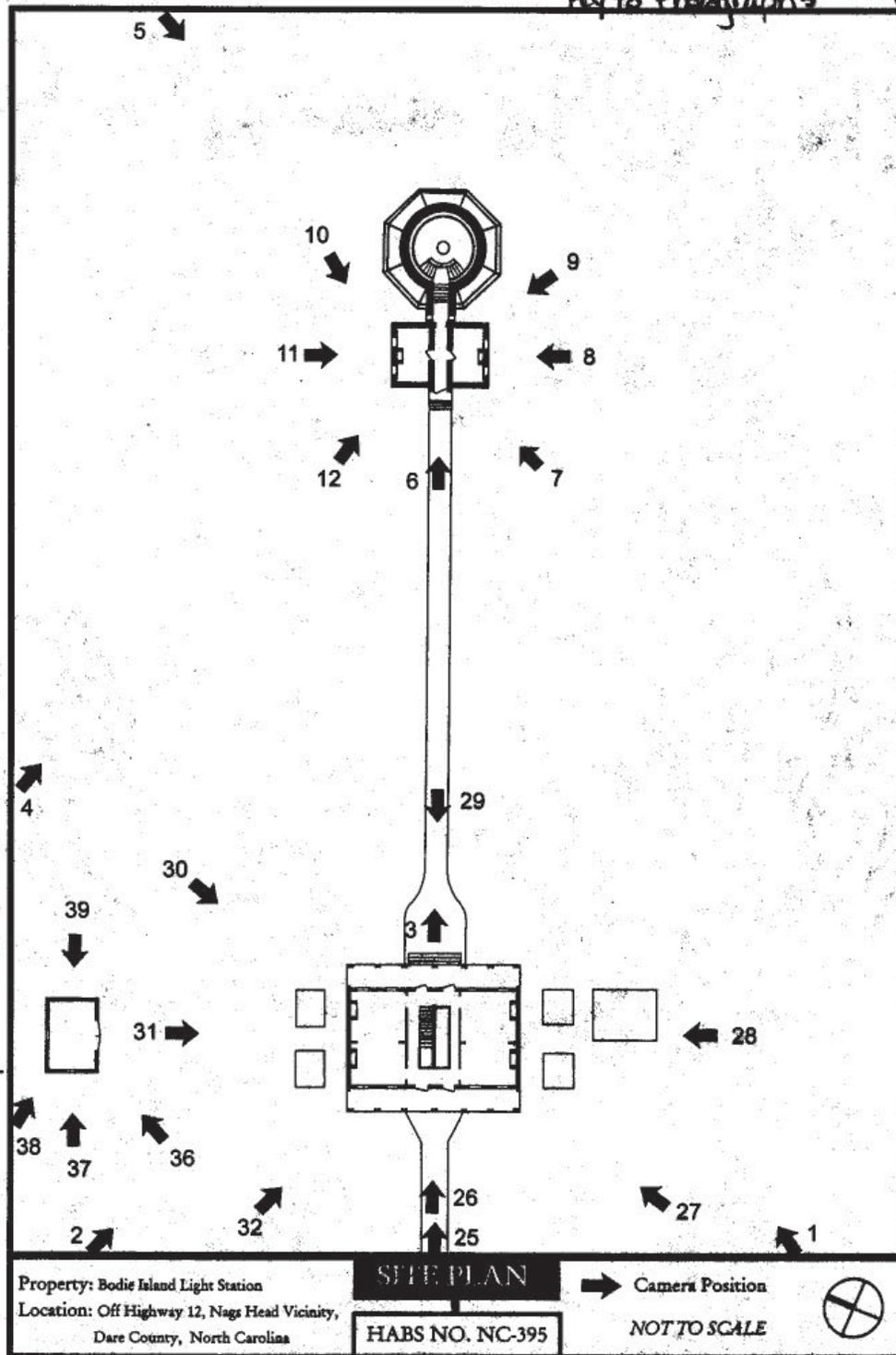
- NC-395-46 AERIAL VIEW OF STATION IN 1944. USCG PHOTO BY STEVENS.
- NC-395-47 AERIAL VIEW OF STATION IN 1956, THREE YEARS AFTER THE NATIONAL PARK SERVICE (NPS) ACQUIRED THE GROUNDS. PHOTOGRAPHER UNKNOWN.
- NC-395-48 AERIAL VIEW OF STATION IN 1969. NPS PHOTO BY CECIL W. STOUGHTON.

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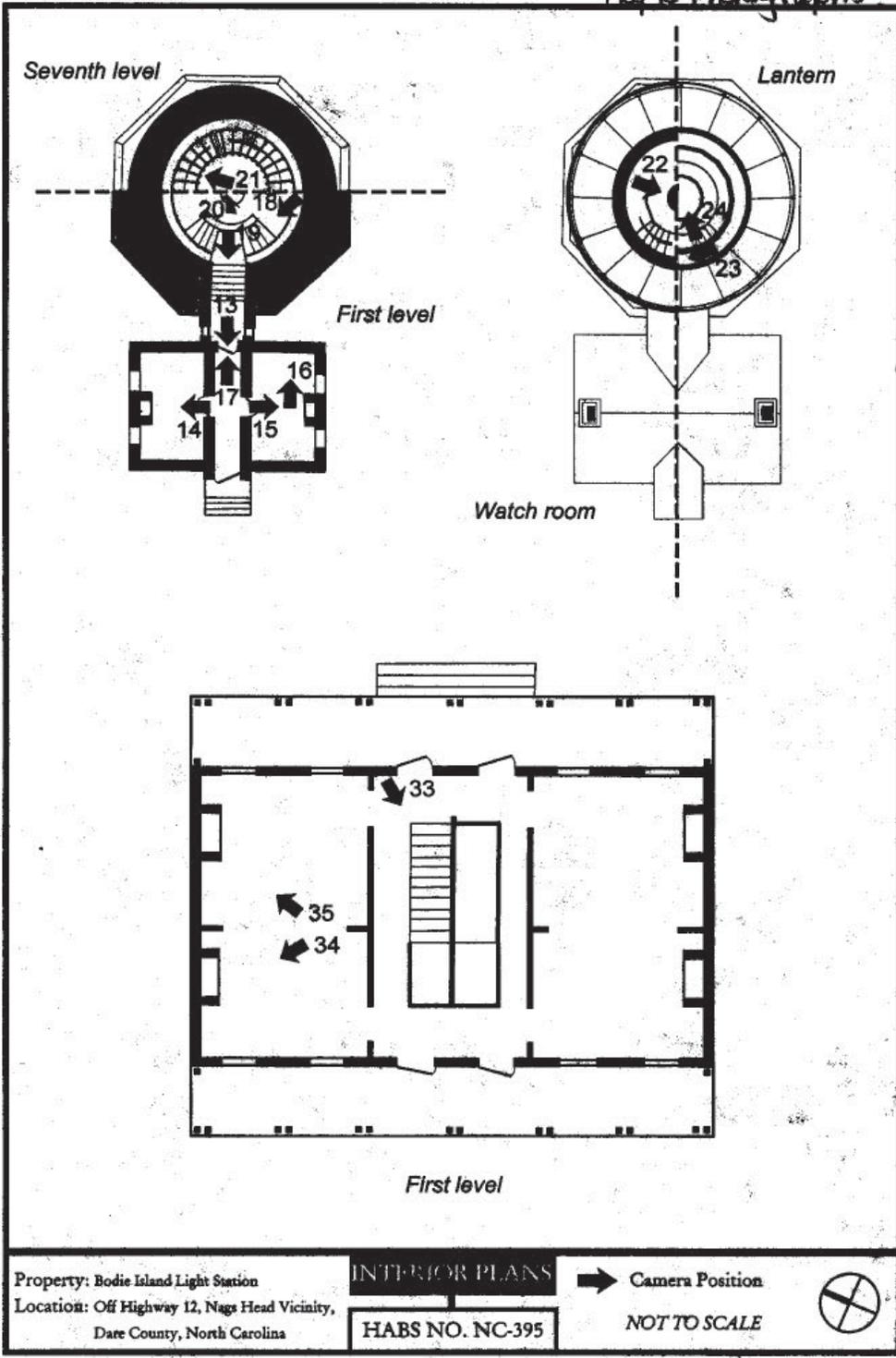
Jet Lowe, Photographer, 2003

- NC-395-49 GROUND VIEW FROM NE.
- NC-395-50 DETAIL OF LANTERN HOUSE.
- NC-395-51 WINDOW DETAIL, EAST FACE.
- NC-395-52 DETAIL, BRACKETS UNDER LANTERN.
- NC-395-53 INTERIOR, OIL STORAGE ROOM.

BODIE ISLAND LIGHT STATION, HABS NC-395
Key to Photographs (Page 5)



Key to Photographs



Property: Bodie Island Light Station
Location: Off Highway 12, Nags Head Vicinity,
Dare County, North Carolina

INTERIOR PLANS
HABS NO. NC-395

→ Camera Position
NOT TO SCALE







Bodie Island Double Keepers' Quarters HSR





Bodie Island Double Keepers' Quarters HSR





Bodie Island Double Keepers' Quarters HSR





Bodie Island Double Keepers' Quarters HSR





Bodie Island Double Keepers' Quarters HSR



HABS NO NC-395-34



Bodie Island Double Keepers' Quarters HSR





Bodie Island Double Keepers' Quarters HSR

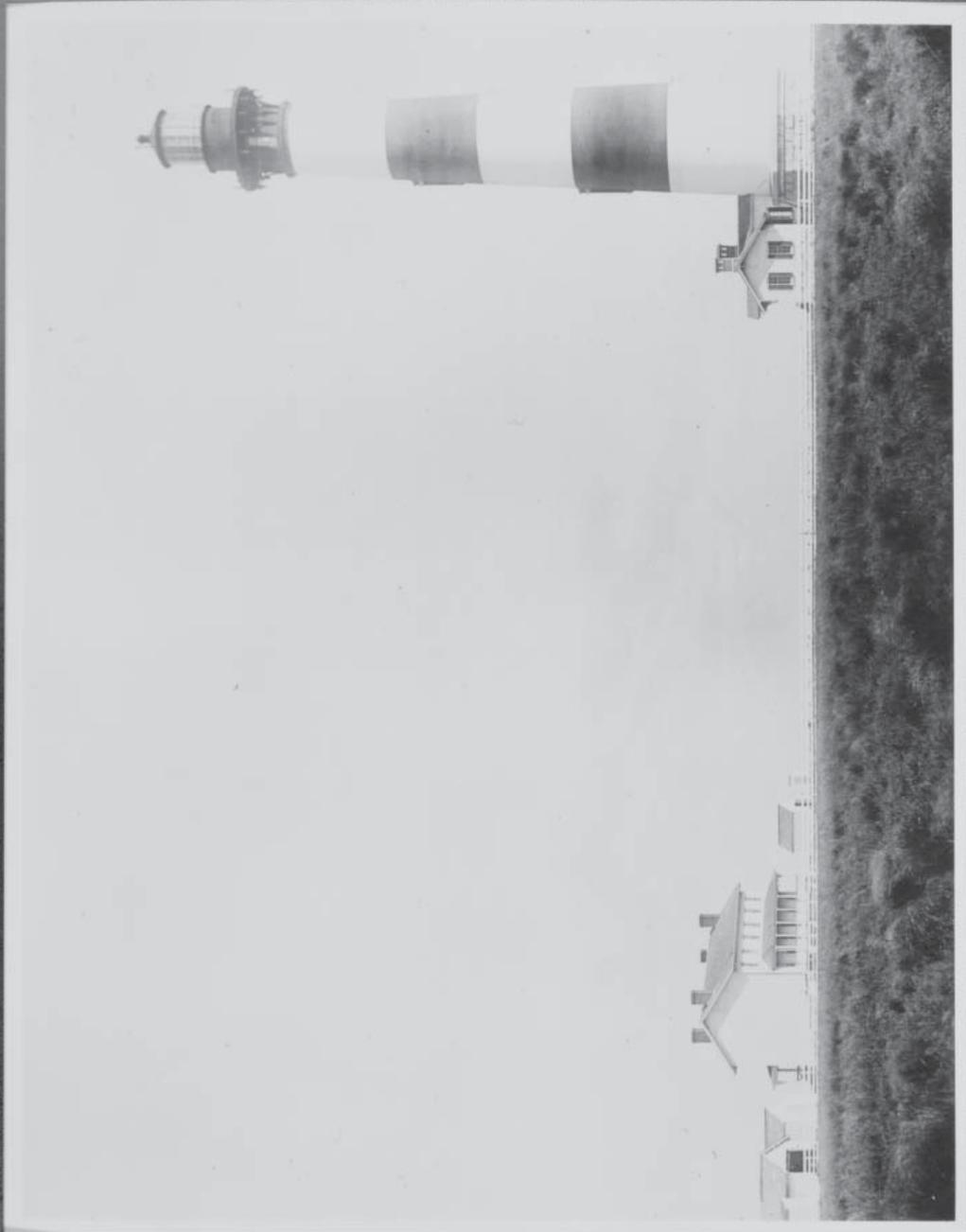




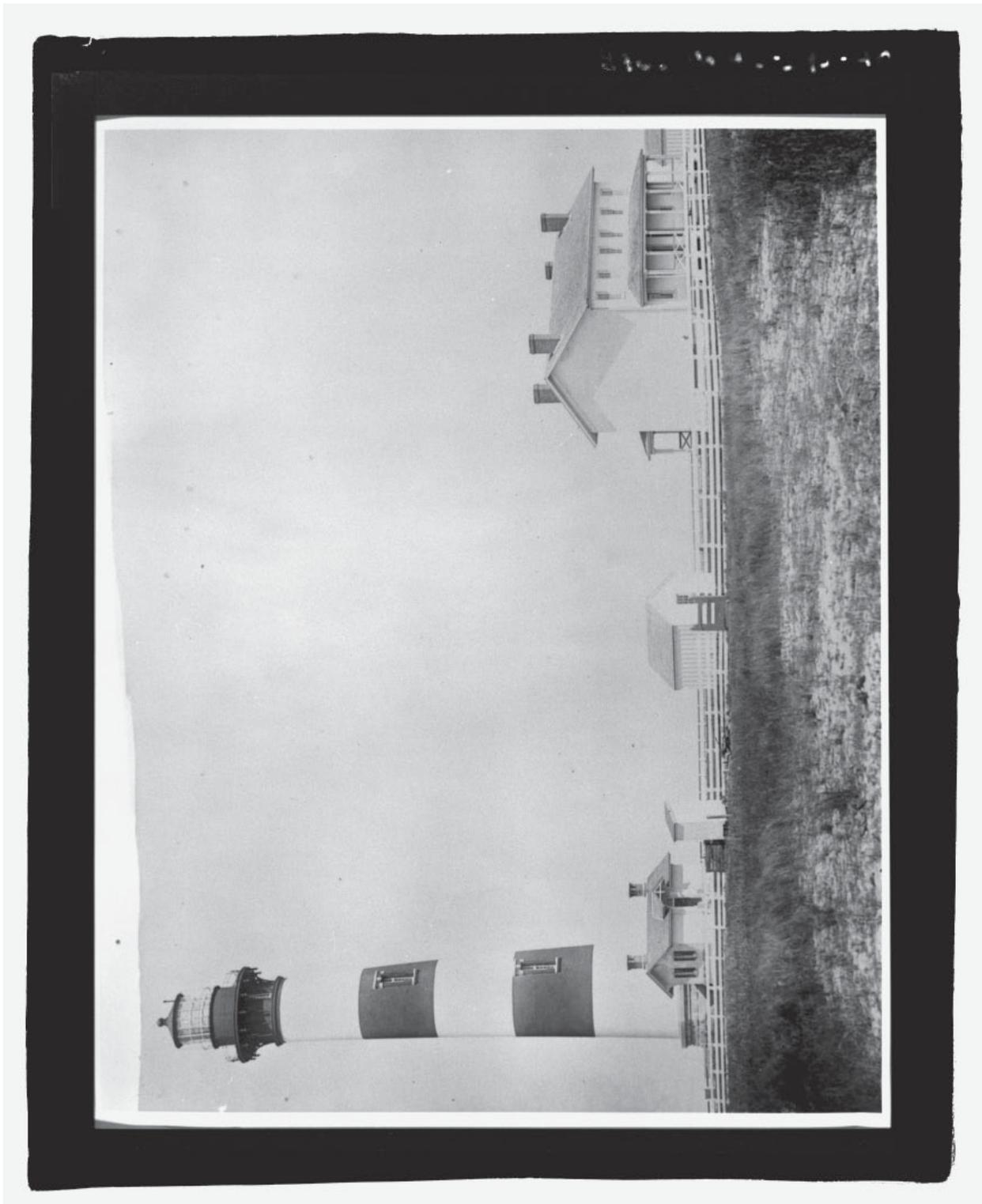
Bodie Island Double Keepers' Quarters HSR



HABS No NC-395-41



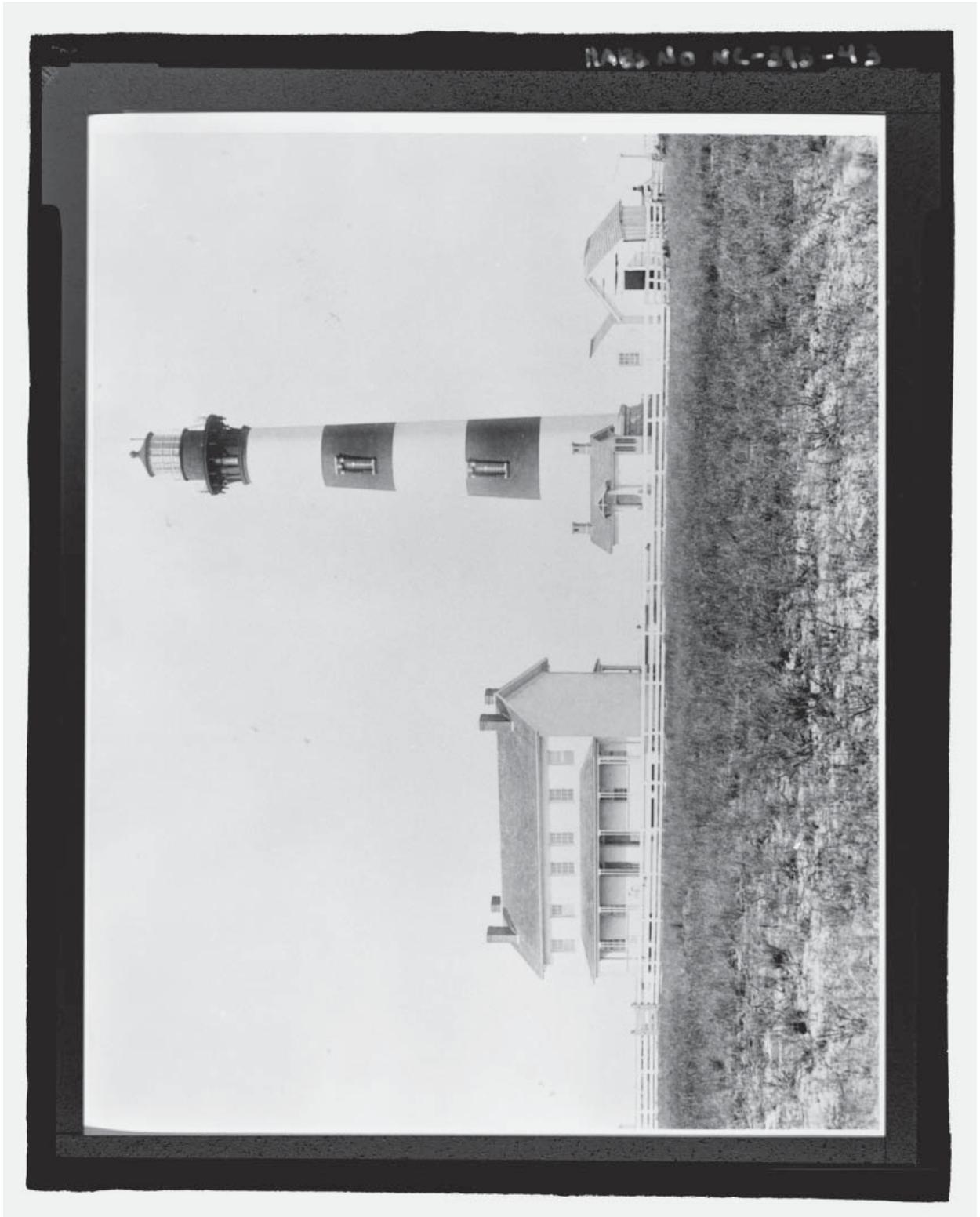
Bodie Island Double Keepers' Quarters HSR



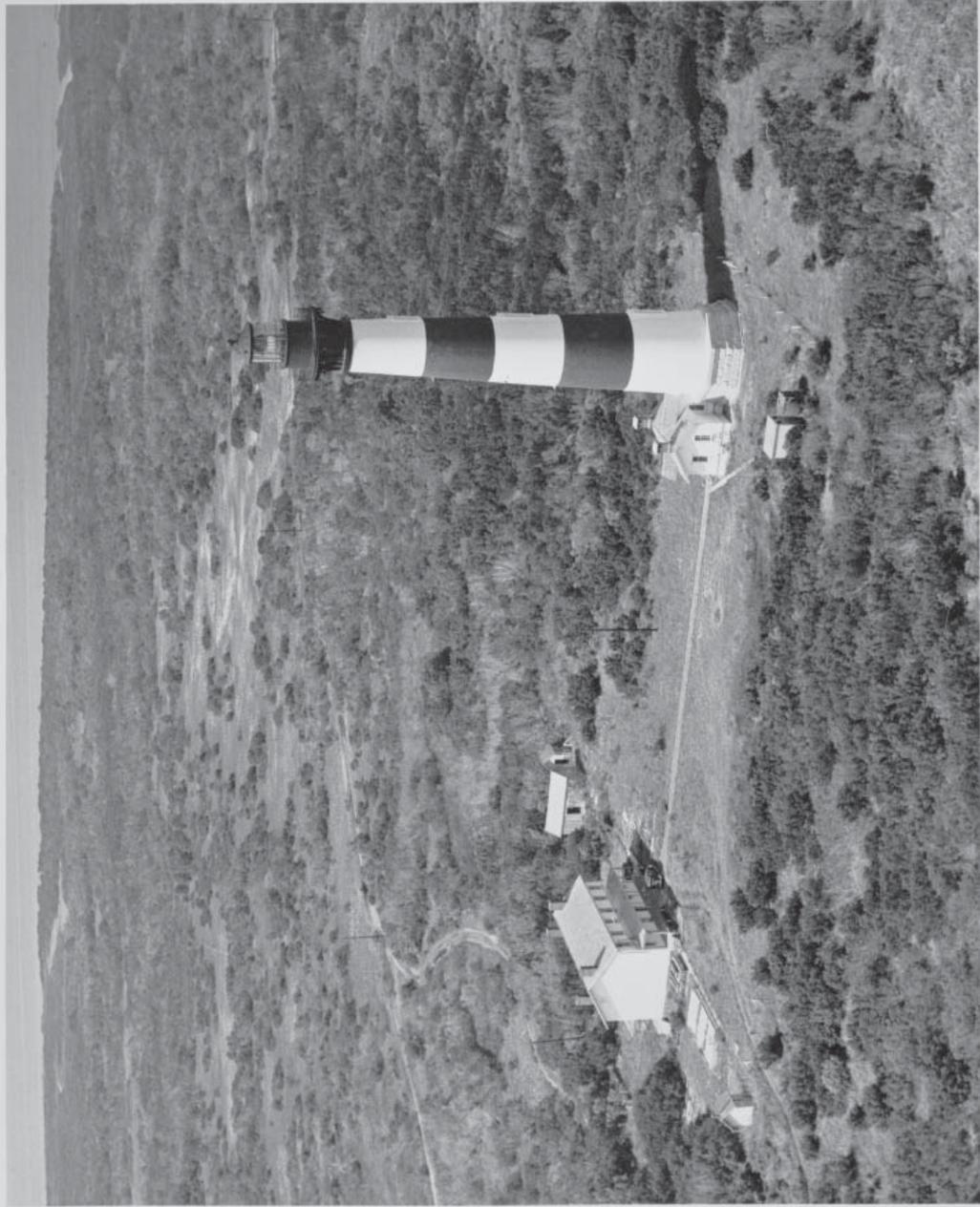
1905 No. 11. 26. 12



200. U. S. I. BODIE ISLAND LIGHT STATION, N. C. JUNE 8, 1899.



HR05 MO NC-395-46



Bodie Island Double Keepers' Quarters HSR



HABS NO NC-595-41



Bodie Island Double Keepers' Quarters HSR





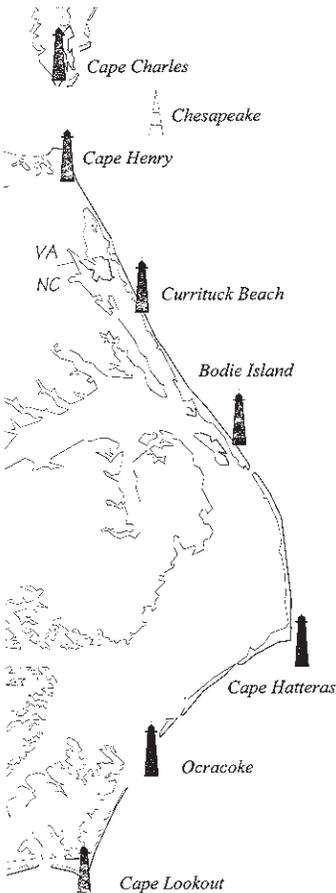
Bodie Island Double Keepers' Quarters HSR

Site Maps

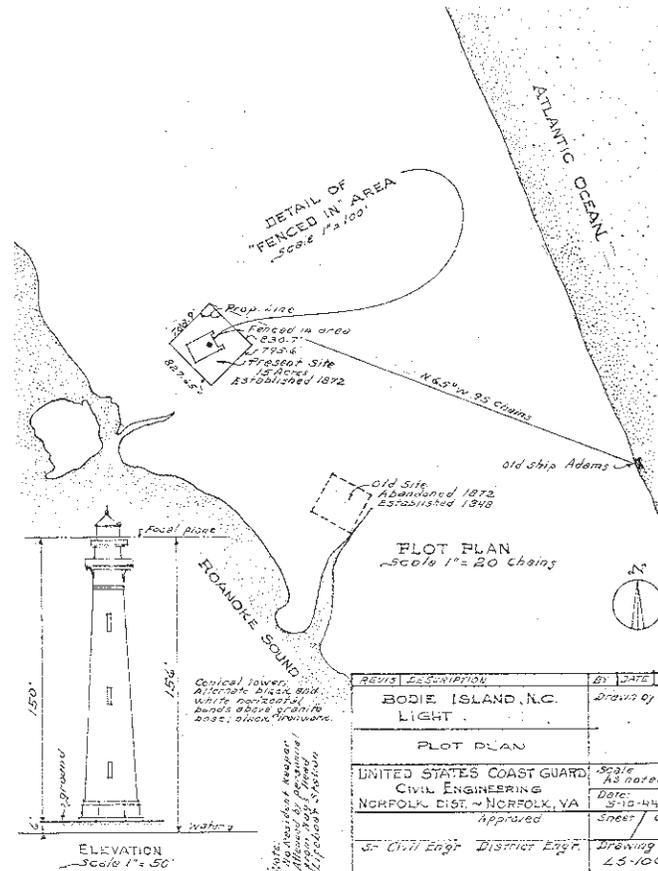
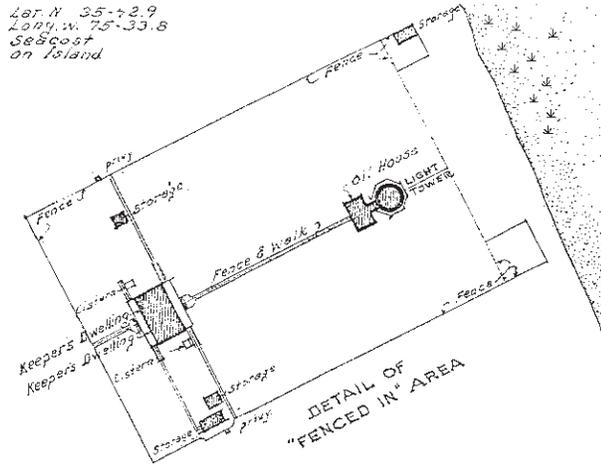
The present site of Bodie Island Lighthouse is the latest of three locations to mark this section of the Outer Banks. Constructed in 1848, the original tower was built further south near Oregon Inlet on a poor foundation. It soon began to settle unevenly and was replaced in 1858 due to safety concerns. The second tower was built near the present site, but was destroyed by Confederate troops during the Civil War. The third tower was completed in 1872 and remains intact.



East Coast



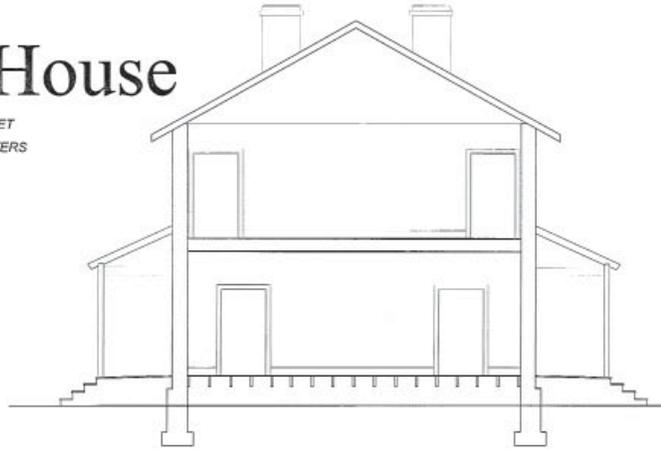
Cape Hatteras
(Cape Hatteras National Seashore)



REVIS	DESCRIPTION	BY	DATE
	BODIE ISLAND, N.C. LIGHT	Drawn by JLL	
	PLOT PLAN		
	UNITED STATES COAST GUARD CIVIL ENGINEERING NORFOLK DIST. - NORFOLK, VA	Scale As noted	Date: 3-10-44
	J. C. W. Engl. DISTRICT ENGR.	Approved	Sheet / of
			Drawing No LS-100

Keepers' House

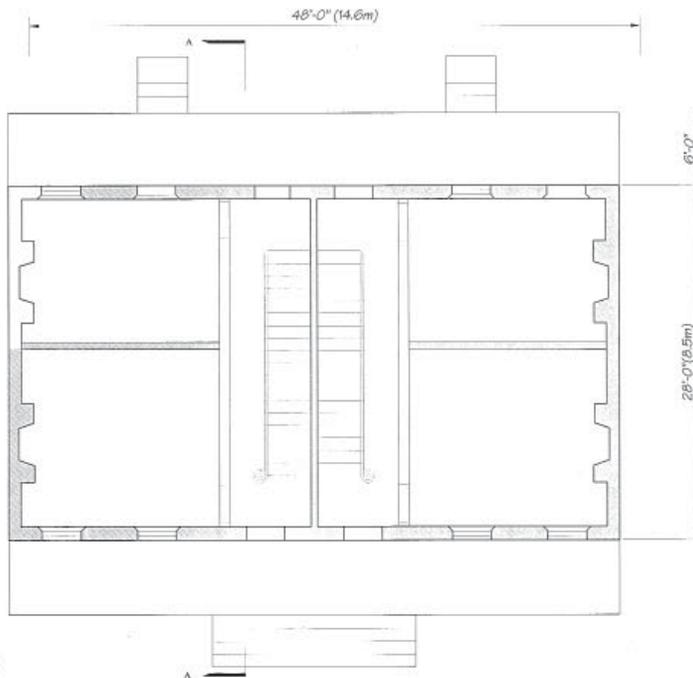
SCALE: 1/4" = 1'-0"
 0 5 10 FEET
 0 1 2 3 METERS



Section A-A



East Elevation



First Floor Plan

DELINEATED BY: REDGAIN, BY: TODD CROTEAU - 2003 (SCANNED FROM HISTORIC DRAWINGS LOCATED IN CAHA ARCHIVES)

HALES PLANNING
 RECORDING PROGRAM
 NATIONAL PARK SERVICE
 UNITED STATES DEPARTMENT OF THE INTERIOR

NAGS HEAD VICINITY

BODIE ISLAND LIGHT STATION
 CAPE HATTERAS NATIONAL SEASHORE - OFF HIGHWAY 12
 DARE COUNTY

NORTH CAROLINA

SHEET
 16 OF 36

HISTORIC AMERICAN
 BUILDINGS SURVEY
 NC-395

DATE PLOTTED
 DATE PLOTTED

IF REPRODUCED, PLEASE CREDIT THE HISTORIC AMERICAN BUILDINGS SURVEY NATIONAL PARK SERVICE, NORTH CAROLINA STATE OF COURTESY OF BODIE ISLAND LIGHT STATION

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As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

603/105052 August 2010