UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY – NOMINATION FORM

FOR FEDERAL PROPERTIES

FOR NPS USE ONLY
RECEIVED
DATE ENTERED

SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC
New London Lighthouse; New London Harbor Light

AND/OR COMMON
New London Harbor Light

2 LOCATION

STREET & NUMBER
East side of Lower Pequot Avenue — NOT FOR PUBLICATION

CONGRESSIONAL DISTRICT

CITY, TOWN
New London — VICINITY OF

STATE
Connecticut

CODE

COUNTY
New London

CODE

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
_DISTRICT	X PUBLIC	_OCCUPIED	_AGRICULTURE	_MUSEUM
_BUILDING(S)	_PRIVATE	X UNOCCUPIED	_COMMERCIAL	_PARK
X STRUCTURE	_BOTH	_WORK IN PROGRESS	_EDUCATIONAL	_PRIVATE RESIDENCE
_SITE	PUBLIC ACQUISITION	ACCESSIBLE	_ENTERTAINMENT	_RELIGIOUS
_OBJECT	_IN PROCESS	_YES: RESTRICTED	_GOVERNMENT	_SCIENTIFIC
	_BEING CONSIDERED	X YES: UNRESTRICTED	_INDUSTRIAL	X TRANSPORTATION
		_NO	_MILITARY	_OTHER:

4 AGENCY

REGIONAL HEADQUARTERS (If applicable)
Lighthouse: U.S. Coast Guard Third District
Governors Island
New York, NY 10004

STREET & NUMBER
Keeper's Dwelling: Alice B. Dimock
810 Pequot Avenue

CITY, TOWN
New London — VICINITY OF

STATE
CT 06320

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC
Lighthouse: U.S. Coast Guard Third District, Legal Dept.
Governors Island, New York, NY 10004

STREET & NUMBER
Keeper's Dwelling: New London County Courthouse

CITY, TOWN
New London

STATE
CT

6 REPRESENTATION IN EXISTING SURVEYS

TITLE
see thematic form

DATE

_FEDERAL _STATE _COUNTY _LOCAL

DEPOSITORY FOR SURVEY RECORDS

CITY, TOWN

STATE

OMB Approval No. 1024-0018

NPS Form 10-900-a
(8-86)

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number _____ Page _____

SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: 89001470 Date Listed: 05/29/90

New London Harbor Lighthouse — Property Name
New London — County
CT — State

Operating Lighthouses in Connecticut — Multiple Name

This property is listed in the National Register of Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation.

for Beth L. Savage
Signature of the Keeper

05/29/90
Date of Action

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Amended Items in Nomination:

8. Statement of Significance: Level of Significance

All properties included in the multiple property nomination Operating Lighthouses in Connecticut were considered to meet the criteria within a statewide context.

10. Geographical Data: Acreage

The acreage is <1.

This information has been confirmed with John Herzan, National Register Coordinator, CTSHPO, by telephone.

DISTRIBUTION:
National Register property file
Nominating Authority (without attachment)

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
X EXCELLENT	_DETERIORATED	_UNALTERED	X ORIGINAL SITE
_GOOD	_RUINS	X ALTERED	_MOVED DATE_____
_FAIR	_UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

New London Harbor Lighthouse (Light List #1007), constructed in 1801, stands on a rocky outcrop at the west side of New London Harbor near the mouth of the Thames River. The second lighthouse to have been built on this site, it consists of a tapering octagonal stone tower, presently painted white, with a cylindrical cast-iron lantern and ogee roof. Contributing to the site is a brick keeper's dwelling, built in 1863 and enlarged in 1900. The foundation of the lighthouse rests directly on the rock of the shoreline. Brownstone, granite and other native stone are laid up on the sloping site to form an uncoursed, rough-faced octagonal foundation topped by a tooled water table. The foundation measures twenty-five feet, eight inches in diameter. Resting on the water table is the granite sill of the west-facing entrance door. Above the water table, dressed blocks of brownstone laid in courses of varying height form the tapering walls of the tower, each face of the octagon measuring ten feet in width and nineteen inches in depth at water table level. A six inch deep, stepped octagonal brownstone ring, dating from 1833, projects horizontally from the walls of the tower and supports the cast-iron lantern gallery. Cast-iron lantern flooring, made of eight wedge-shaped sections bolted together on the underside, is supported in part by the central cast-iron column which rises from the entrance level of the tower and carries the cast-iron treads of the spiral stair as extensions of its vertical segments. A flat iron handrail around the lantern gallery is supported by 24 cylindrical stanchions with spherical knobs. A wrought-iron lightning conductor, composed of sections and affixed to the lighthouse wall with large staples, extends along the north facade from the lantern gallery to the ground. This feature is unique among Connecticut lighthouses and may be original to this structure.

Six rectangular windows, arranged vertically on the southwest wall, light the interior above the entrance level, where one north-facing window is located. Each window is framed by prominent brownstone jambs, resting on plinths, and a large flared lintel. Iron window frames, presently painted black, each contain a bronze, four over four sash. The west-facing, segmentally-arched entrance is ornamented with a keystone, flanked by curved blocks which rest on impost blocks, and projecting blocks at the base of the jambs which suggest plinths. All are executed in brownstone. The door opening has been filled in with a flat-topped iron door in a sheet iron surround. Brick vaulting and side

See Continuation Sheet

1470

8 SIGNIFICANCE

AUG 24 1989

NATIONAL REGISTER

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW				
_PREHISTORIC	_ARCHEOLOGY-PREHISTORIC	_COMMUNITY PLANNING	_LANDSCAPE ARCHITECTURE	_RELIGION	
_1400-1499	_ARCHEOLOGY-HISTORIC	_CONSERVATION	_LAW	_SCIENCE	
_1500-1599	_AGRICULTURE	_ECONOMICS	_LITERATURE	_SCULPTURE	
_1600-1699	_ARCHITECTURE	_EDUCATION	_MILITARY	_SOCIAL/HUMANITARIAN	
_1700-1799	_ART	X ENGINEERING	_MUSIC	_THEATER	
X 1800-1899	_COMMERCE	_EXPLORATION/SETTLEMENT	_PHILOSOPHY	X TRANSPORTATION	
_1900-	_COMMUNICATIONS	_INDUSTRY	_POLITICS/GOVERNMENT	_OTHER (SPECIFY)	
		_INVENTION			

SPECIFIC DATES built 1801; altered 1833, 1864 BUILDER/ARCHITECT A. Woodward, 1801; Charles H. Smith, 1833

STATEMENT OF SIGNIFICANCE

New London Harbor Lighthouse is highly significant in the history of aids to navigation in Long Island Sound: the first lighthouse on the Sound was established on that site in 1760. New London Lighthouse was established as the fourth lighthouse in the United States, following the Boston (1716), Brant Point (1746), and Beavertail (1749) Lighthouses. The original lighttower was one of the 12 colonial lights taken over by the newly-formed federal government in 1789. George Washington signed the contract with the lighthouse supplier in New London in 1791, indicating both the interest taken in the Lighthouse Service by the leaders of the new country, and the small size of the federal government in that period. Constructed in 1801 as a replacement for the deteriorated colonial structure, the present tower is the oldest lighthouse remaining in Connecticut, and typifies the federal government's standardized format for masonry light towers which continued as a model into the mid-nineteenth century. New London Harbor Lighthouse also is significant as the site of numerous tests for improvements in lighting apparatus and fog-signal devices used by the federal lighthouse service, from the earliest incorporation of Lewis's parabolic reflecter and Argand lamp system in a chandelier to the thousands of candlepower of the twentieth century acetylene gas lamp and electrical equipment.

The original lighthouse was funded through a lottery at a time when lighthouses were built individually by local shipping interests. Between prosperous harbors great stretches of coast remained unmarked. Prior to the Revolution, the 1760 tower was maintained with funds granted by the state legislature; following the Revolution taxes on shipping were used. By 1789, when the federal government assumed responsibility for all lighthouses in the U.S., the New London light tower had developed a crack ten feet long in its hammered stone wall, and at 64 feet, its height was determined insufficient to be clearly visible from the west. On May 5, 1800, Congress appropriated $15,700.00 for rebuilding, altering and improving the lighthouse. A. Woodward of New London received the contract for construction of a lighthouse, an oil vault and a cistern for $16,500, eight hundred dollars more than the Congressional appropriation. Construction was begun in 1800. Completed in 1801, this structure remains as the present New London Harbor Lighthouse.

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By 1833, the 1801 lighthouse needed extensive repair. In that year, Charles H. Smith contracted to furnish a new stone deck, lay on a brick arch, and supply the following: a new lantern surrounded with two iron rails one inch square, a new copper dome and vane, a new flight of wood stairs, and a new outer door and lock. He agreed to cement the outer joints in the tower with hydraulic or Roman cement and whitewash the whole. The lantern, deck, and dome were to be equal in size to those at Morgan's Point in Groton, built in 1831-2. Repairs were to cost $1500.

In 1863 a third set of stairs, an iron circular stairway was installed in the tower. In all likelihood this installation also included the brick lining wall which supports the outer ends of the stair treads.

A remarkable succession of innovative lighting devices have been used at New London Harbor Lighthouse. Oil lamps and an eclipser were installed in the newly constructed lighttower, only five years after the first use in the U.S. of such an intermittent lighting device at Cape Cod. Although Winslow Lewis's patent lamps and parabolic reflectors were adopted for the U.S. lighthouses in 1812, New London Harbor Lighthouse was darkened during the war. In 1816 it was among the last of the forty-nine American lighthouses to be refitted with the Lewis apparatus. When the new lantern was installed at the lighthouse in 1833, the Lewis apparatus was re-installed, but by 1850 a visiting inspector had declared the lighting apparatus in poor condition, noting that several arms to the reflectors were either loose or missing. Within the next decade, a Fresnel lens was installed. The Henry Lepaute fixed lens presently houses here may be the original equipment; it matches the description of the fourth order, fixed Henry Lepaute lens in place at New London Lighthouse in 1876, 1903 and 1911. In 1909, illumination was furnished by an incandescent oil-vapor lamp, changed to acetylene on July 20, 1912. In 1930, New London Harbor Lighthouse had a 2200 candlepower electric lamp.

A dwelling for the lighthouse keeper measuring thirty-six by eighteen feet in plan, was constructed some distance to the west of the light tower in 1818. A contract for this job in the amount of $1200.00 was awarded to Kimball Prince and Lewis Crandall of New London. In 1836 John Bishop of New London enlarged the house with a one story kitchen wing for the sum of $590.00.

The present keeper's dwelling was built in 1863, somewhat altered from the plans drawn up by the Lighthouse Board's engineers. Alterations to the dwelling carried out in 1900 reflect a major development in the Lighthouse Service personnel policy. Prior to this time the assistant keeper position was available only to single men. However, the service realized that by providing accommodations for married assistant lighthouse keepers it could attract and train good candidates for future lighthouse keeper positions. To accommodate a married assistant keeper, the New London Harbor keeper's dwelling was raised one story in 1900, with two shed roof dormers installed on either slope of the gabled roof. A one-story, shed roofed porch on the south elevation also dates from this general period.

New London Harbor Lighthouse is particularly significant in the history of fog-signals. The Daboll trumpet, widely adopted by the Lighthouse Board after the mid-nineteenth century, was named after its developer, a citizen of New London. In 1858, a special committee was formed to investigate the Daboll invention. At New London Harbor, a fog-signal engine was in place by 1869, and in 1874 a 2nd order fog-signal in duplicate was completed and in operation. In 1877, the equipment at New London Harbor Lighthouse was decribed as a 2nd class Daboll trumpet in duplicate, operated by an 18m Ericsson hot-air engine, and housed in a brick fog signal building, Measuring eighteen feet by fourteen feet in plan, this structure stood 148 feet from the lighthouse. The fog signal was in 1165 hours during the year. Need for a better signal was expressed, and in 1883 a first class fog trumpet was installed. Thirteen years later, in 1896, the fog signal was improved with the installation of two 3-1/2 horsepower Hornsby-Akroyd oil engines and air compressors to operate the Daboll trumpets. In 1900 the old fog-signal house was converted into an oil storehouse, and in 1904, was moved from its old site to the north side of a new fog-signal house, built in 1903. There it was converted into a workshop. The new fog-signal house contained two 13 horsepower engines for the trumpets and a siren. City water pipes were laid to the fog-signal house, as well as the dwelling the same year. In 1911 the fog-signal was discontinued on the site and moved to the new New London Ledge Lighthouse.

Lighthouse inspection reports and early photographs provide evidence of several structures related to the lighthouse station which no longer remain standing: a barn, an engine room, an oil house and a privy. Only the lighthouse and the keeper's dwelling remain.

Caulkins, Frances Manwaring. History of New London, Connecticut. New London: author, 1852.

Report of the Fifth Auditor to the Secretary of the Treasury, 1850. Washington: 1851.

U.S. Lighthouse Board. Annual Report of the Lighthouse Board, 1868-69, 1874-1889, 1896, 1899-1900, 1902-1904, and 1907.

U.S. Lighthouse Board. Inspections of New London Light, 1876, 1903, and 1911, U.S. Coast Guard Third District, Legal Department, Governors Island, N.Y.

U.S. Treasury Department. Contracts for Lighthouses, Connecticut, National Archives Record Group No. 217:
May 30, 1818 - "For Building Keeper's House at New London".
July 5, 1833 - "Contract for New Deck, Lantern, Dome, etc. to New London Lighthouse."
October 10, 1836 - "Agreement...for Building an Addition to the Dwelling House...of the New London Lighthouse."

Description (continued):

In 1989, New London Harbor Light was re-photographed and examined in the field in order to bring the National Register documentation fully up to date.

Since its condition and appearance remain virtually unchanged from the description in the National Register Inventory/Nomination form prepared in 1985, New London Harbor Light still retains the requisite degree of integrity for National Register eligibility.

OMB Approval No. 1024-0018

NPS Form 10-900-a
(8-86)

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

All photographs:

1. NEW LONDON HARBOR LIGHT
2. New London, CT
3. Photo Credit: HRC, Hartford, CT
4. April 1989
5. Negative filed with Connecticut Historical Commission, Hartford, CT

Keeper's dwelling to left, lighthouse to right, camera facing north
Photograph 1 of 8

Entry to lighthouse, camera facing east
Photograph 2 of 8

View through vault in brick lining at the entry, camera facing east
Photograph 3 of 8

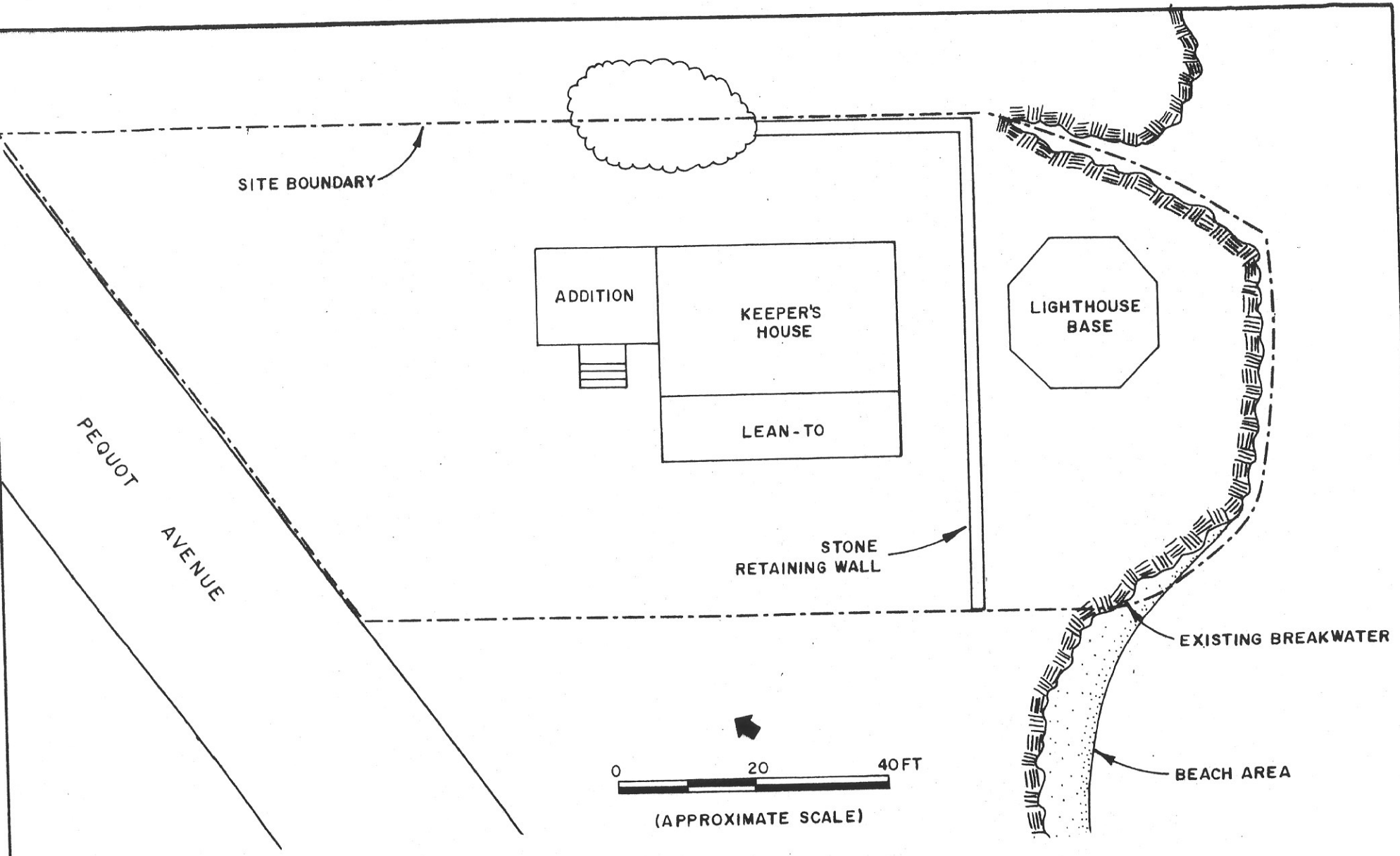
View down spiral staircase from fifth floor
Photograph 4 of 8

Typical interior window treatment, showing vault through lining and sash
Photograph 5 of 8

Cast-iron ladder from watch deck to lantern deck
Photograph 6 of 8

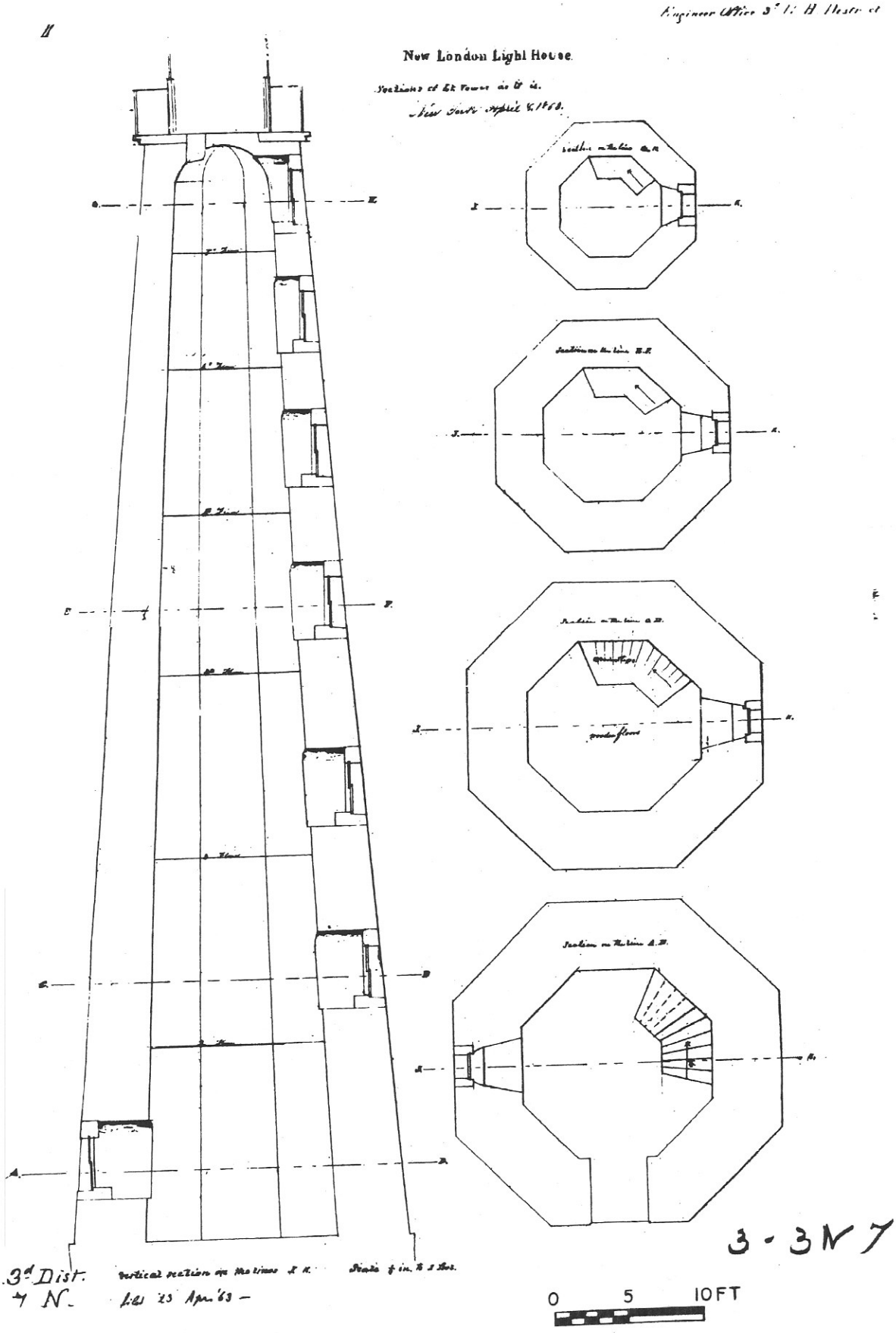
Watch-deck ceiling
Photograph 7 of 8

Fresnel lens
Photograph 8 of 8



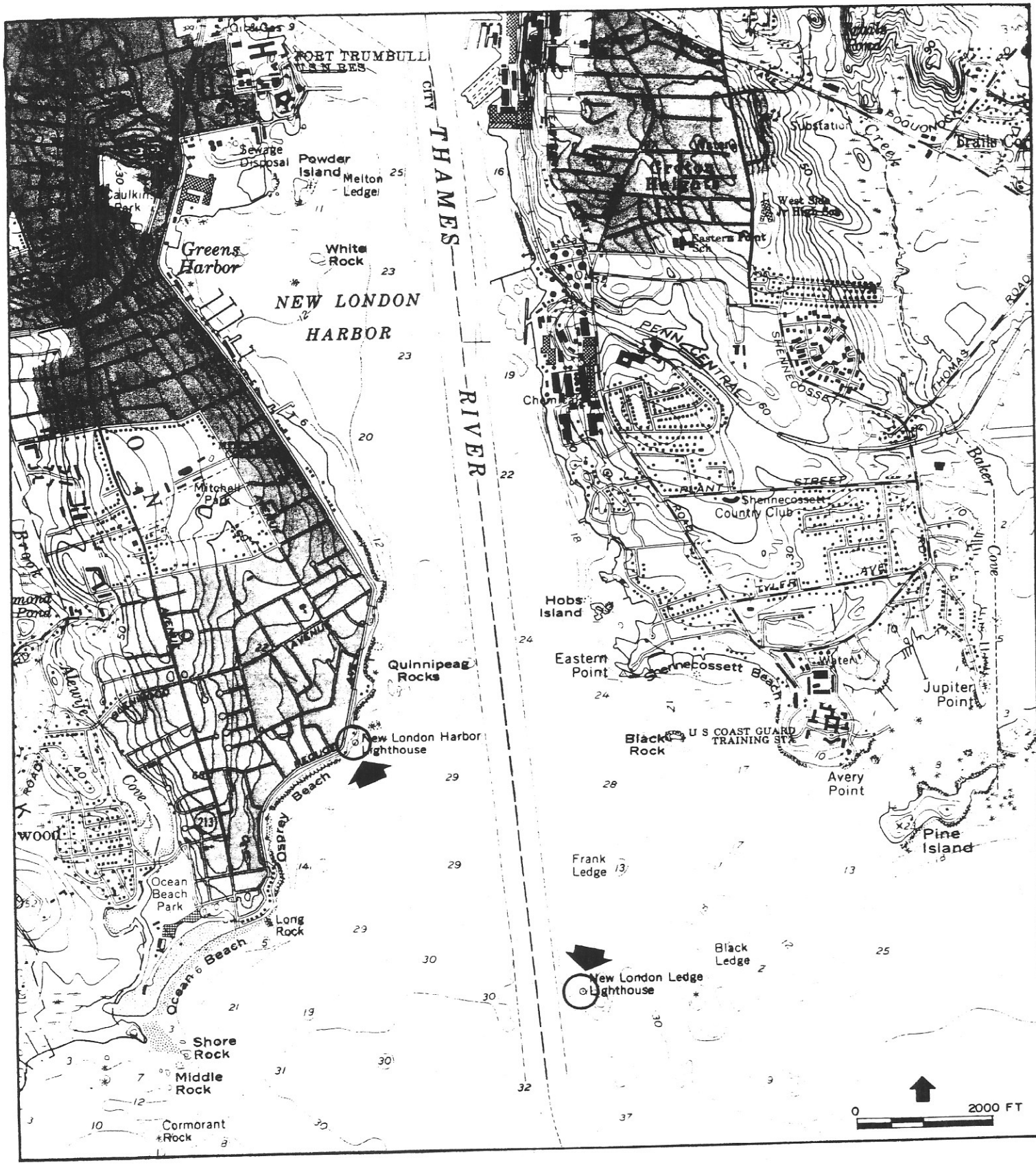
SITE PLAN

NEW LONDON HARBOR LIGHTHOUSE
New London County, Connecticut



PLAN AND SECTION (1863)

NEW LONDON HARBOR LIGHTHOUSE
New London County, Connecticut
(U.S. Coast Guard Third District, Civil Engineering Branch)



CONNECTICUT

QUADRANGLE LOCATION

NEW LONDON LEDGE LIGHTHOUSE, NEW LONDON HARBOR LIGHTHOUSE
New London County, Connecticut

New London, Connecticut Quadrangle, 1958
1:24000

New London Ledge Lighthouse
UTM References:

New London Harbor Lighthouse
UTM References:
18 742670 4577750



