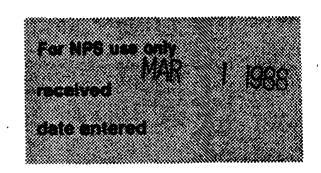
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- 1. NAME: Plum Beach Lighthouse
- 2. LOCATION

Off Plum Beach, West Passage, Narragansett Bay North Kingston, Rhode Island Washington County

3. CLASSIFICATION

Category - structure
Ownership - public
Accessible - yes, restricted
Present Use - other: abandoned

4. OWNER OF PROPERTY

U. S. Government, Department of Transportation First U. S. Coast Guard District Headquarters 150 Causeway Street Boston, Massachusetts 02114

5. LOCATION OF LEGAL DESCRIPTION

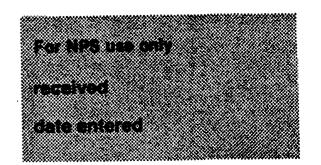
First U. S. Coast Guard District Headquarters 150 Causeway Street Boston, Massachusetts 02114

6. REPRESENTATION IN EXISTING SURVEYS

Historic American Engineering Record
Inventory of Historic Engineering and Industrial Sites in
Rhode Island, 1978

Historic American Engineering Record U. S. Department of the Interior Washington, D. C. 20240

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7. DESCRIPTION

Condition - deteriorated / altered / original site

Plum Beach Light stands offshore in the middle of Narragansett Bay's West Passage at the eastern edge of Plum Beach Shoal, 250 yards to the north of the Jamestown Bridge. Built in 1899 from standardized plans that were modified for its individual site and requirements, the tower is referred to as a caisson light, after the type of foundation on which it rests, and is of the same basic design as the Conimicut, Hog Island and Sakonnet Lights. Now deactivated and abandoned, the light marked the east edge of Plum Beach Shoal.

The tower stands in 15 feet of water on a cylindrical cement foundation, 33 feet in diameter, that is sunk 20 feet into the bottom of the shoal which extends about 4 feet above the high water level. Bands of cast-iron sheathing plates that surround the entire length of the foundation cylinder and extend upward above the waterline to also enclose the basement level. The uppermost band of sheathing flares outward to enclose iron bracketing which supports the base of the lower gallery at the first floor level.

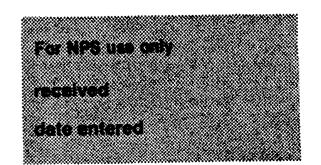
Surrounding the foundation at the water level is pile of loose riprap boulders, placed to deflect ice floes from striking the tower's base. A small cement landing pier is located on the east side.

The tower itself is a cylindrical prefabricated cast-iron structure containing five levels plus the lantern; it is 36 feet in diameter and 54 feet from the high water level to the top of the lantern ventilator. The diameter of the first (basement) level is 33 feet, the next three levels are approximately 20 feet in diameter, while the fifth level is 11 feet wide.

Four round porthole-type windows pierce the foundation sheathing to light the first level. The next two floors are each lit by four windows with arched casings, while six portholes are found at the fourth level. The four windows on the second and third level originally had two-over- two sash, but these have been removed and most openings have been boarded over.

Surrounding the outside are three galleries. The bottom one, around the second level, is 8 feet wide and 36 feet in diameter. It was originally covered, but the roof has been

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removed, leaving only the superstructure framing. Around the watchroom at the fifth level is a six-foot-wide open overhanging gallery, 24 feet in diameter, surrounded by an iron railing and supported from beneath by cast-iron brackets. Mounted on the deck of this gallery at the west side is a vertical exhaust pipe which extends above the roof of the lantern. The third and uppermost gallery which surrounds the lantern is 2-1/2 feet wide, 12-1/2 feet in diameter, and is also open.

Some of the windows in the octagonal lantern have been broken. It was originally equipped with eight sheets of glass held in place by an iron frame. Above the lantern's conical roof is a spherical ventilator topped with a lightning rod.

The original entrance to the light was provided by a ladder along the base of the tower at the south side that extended into the water from the lower gallery. This was removed when the riprap was placed around the foundation in 1919 and replaced by a small cement pier on the east side with a ladder leading to the first gallery.

A doorway at first gallery leads to the interior the walls are lined with brick and the inside diameter of each of the first four levels is 36 feet. A spiral stairway along the outside walls connects the first four floors. The basement was used for storage; a kitchen and living area were in the first floor; a bedroom above; and a tool room at the fourth level. An open iron stairway leads from the tool room to the watchroom and then on to the lantern. The lamp and lens have been removed.

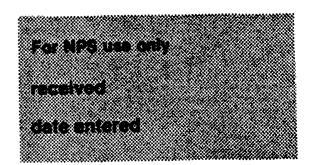
The tower and lantern are painted white while the sheathing around the base is blue. Although it may still be structurally sound, the tower is in need of maintenance. The outside is streaked with rust and much of the paint has failed. The outside door is not secure, some of the windows are open and glass from the lantern has been removed allowing the entry of vandals, birds, and weather.

8. SIGNIFICANCE

Period: 1800-1899, 1900- Specific Dates: 1897

Established in 1899, Plum Beach Light is significant as a well-known and distinctive landmark in the West Passage of Narragansett Bay which serves as a vivid reminder of Rhode

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Island's maritime history. Placed offshore only 250 yards to the north of the Jamestown Bridge, the lighthouse is highly visible to the steady flow of motorists who use the bridge daily. The light is important as a navigational aid, built in response to a number of steamers which grounded on Plum Beach Shoal in trying to avoid Dutch Island while travelling up the Bay. Architecturally, it is significant as an example of latenineteenth-century engineering and prefabricated construction, and as one of four surviving caisson lighthouses in Rhode Island.

In 1892 the annual report of the Lighthouse Board recommended the establishment of a lighthouse and fog signal north of Dutch Island to warn ships of Plum Beach Shoal. In 1895 \$10,000 was appropriated to begin construction of an offshore iron light tower at the east end of the shoal. The contract was awarded to Toomey Brothers of Guilford, Connecticut. A temporary lantern was established on the completed foundation cylinder on February 1, 1897, and the following June a fog signal was installed. Work on the tower was finished in 1899.

When first built, the lighthouse lacked the collar of rocks surrounding its base. However, due to heavy spring flows of ice on the bay which nearly toppled the tower in the spring of 1919, the present pile of rocks was laid around the base to prevent future damage.

The 1938 hurricane nearly destroyed the tower, which was manned during the storm. The intensity of the storm was so great that it carried away Whale Rock Light, another tower of the same design, only five miles from Plum Beach Light.

After the hurricane the light was unmanned and automated. With the completion of the well-lit Jamestown Bridge in 1941 just south of the tower, Plum Beach Light was rendered unnecessary and deactivated on May 1, 1941, after forty-four years of service.

10. GEOGRAPHICAL DATA

Acreage: less than 1 acre Quadrangle name: Wickford, RI Quadrangle scale: 1:24,000

UTM References: A 19 299280 4600200

Verbal Boundary Descriptions: The nominated property inludes only the land on which the lighthouse sits.

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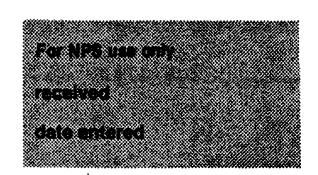
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SHPO

Level of Significance:
FPC Certification:

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Period of Significance: The period of significance extends from 1897, when construction of the lighthouse began, to 1938.

Level of Significance: State