NPS Form 10-900
(Rev. Aug. 2002)

OMB No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places
Registration Form

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NAT. REGISTER OF HISTORIC PLACES
NATIONAL PARK SERVICE

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This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Kenosha North Pierhead Light

other names/site number Kenosha North Pier Light

2. Location

street & number North pier at Kenosha harbor entry, 0.1 mile east of Simmons Island Park ☐ not for publication

city or town Kenosha ☒ vicinity

state Wisconsin code WI county Kenosha code 059 zip code 53140

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this X nomination ____ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property X meets ____ does not meet the National Register Criteria. I recommend that this property be considered significant ____ nationally ____ statewide X locally. (____ See continuation sheet for additional comments.)

[signature] RADM USCG 3/6/08
Signature of certifying official/Title Date

United States Coast Guard
State or Federal Agency or Tribal government

In my opinion, the property X meets ____ does not meet the National Register criteria. (____ See continuation sheet for additional comments.)

[signature], SHPO 4/24/08
Signature of commenting official/Title Date

State Historic Preservation Officer - Wisconsin
State or Federal agency and bureau

4. National Park Service Certification

I, hereby certify that this property is:
☒ entered in the National Register
☐ See continuation sheet.
☐ determined eligible for the National Register
☐ See continuation sheet
☐ determined not eligible for the National Register
☐ removed from the National Register
☐ other, (explain:) _____

Signature of the Keeper: Patrick Andrus Date of Action: 6/24/2008

5. Classification

Ownership of Property
(Check as many boxes as apply)

- ☐ Private
- ☐ Public-local
- ☐ Public-State
- ☒ Public-Federal

Category of Property
(Check as many boxes as apply)

- ☐ Building (s)
- ☐ District
- ☐ Site
- ☒ Structure
- ☐ Object

Number of Resources within Property
(Do not include previously listed resources in the count)

Contributing	Noncontributing	
		buildings
		sites
1	1	structures
		objects
1	1	Total

Name of related multiple property listing

Light Stations of the United States

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions
(Enter categories from instructions)

Transportation
Water-related

Current Functions
(Enter categories from instructions)

Transportation
Water-related

7. Description

Architectural Classification
(Enter categories from instructions)

No style

Materials
(Enter categories from instructions)

Foundation: Reinforced Concrete

Walls: Cast iron

Roof: Cast iron

Other: Lantern: metal, lexan glazing

Narrative Description

Summary

The Kenosha North Pierhead Light is a cast iron lighthouse that was built in 1906. It stands atop the offshore end of the north pier at the entry to the harbor for the city of Kenosha in Kenosha County, Wisconsin. This property consists of one contributing resource, a 50-foot tall lighthouse, and one non-contributing resource, the lighthouse's pierhead setting. The lighthouse includes a tapered, nearly cylindrical tower made of cast iron plates arranged in 11 courses that decrease slightly in diameter with height. The tower is topped with a cylindrical lantern surrounded by an open-air gallery. The light tower is painted red. The lantern and lantern gallery are painted black. The Kenosha North Pierhead Light is owned by the U.S. Coast Guard and is operated as an automated aid to navigation identified as number 20415 on the Great Lakes Regional Light List. The lantern is equipped with a modern optic that signals a red light that flashes on for six seconds followed by six seconds of darkness. It is visible for 12 miles in clear weather. The lighthouse optic's focal plane is 50 feet above lake level. An automated fog signal is installed on the lantern gallery. It sounds a three-second blast every 30 seconds from April to December. This property is accessible on foot by way of the harbor entry's north pier at the south end of Simmons Island Park on the Kenosha lakefront. The lighthouse's pierhead setting is designated as a non-contributing resource because of the substantial alterations made to it in 1969 to 1970.

The following description is based on historic research and a site visit in September 2005 conducted by Jayne Aaron and Daniel Hart, architectural historians, and Timothy McGrath, photographer, of Engineering-Environmental Management, Inc. Background research examined materials such as building plans, historical accounts of the lighthouse, U.S. Coast Guard maintenance records, and historical documentation gathered from published and unpublished materials in archival collections and government agencies.

Contributing Resource

This property includes one contributing resource, the Kenosha North Pierhead Light. The lighthouse structure includes a light tower and lantern. The tower is painted red. The lantern, including its roof and gallery, is painted black. This structure is owned by the U.S. Coast Guard (USCG) and is operated as an automated aid to navigation identified as number 20415 on the Great Lakes regional light list. The lighthouse rests atop the offshore end of the Kenosha north pier. This pier extends eastward into Lake Michigan from the south end of Simmons Island Park in the city of Kenosha, Kenosha County. Kenosha harbor is the southernmost port in the state of Wisconsin. Navigable waters in the lighthouse's vicinity are traversed today mainly by recreational watercraft.

Lighthouse Exterior

The lighthouse is a slightly-tapered, nearly cylindrical structure that stands 50 feet all. It includes a three-story tower topped with a lantern that forms the fourth story. The tower is built of 11 courses of riveted cast iron plates. The courses become progressively smaller in diameter from the base upward. There is one entrance, a doorway on the southwest side that provides access from the pier deck to the lighthouse's first story. This doorway is fitted with a metal door that measures 30 inches wide by 5 feet, 6 inches tall. The door surround protrudes from the lighthouse's circular exterior to allow for a flat door. Another first-story doorway on the tower's eastern side is sealed with metal plates. It is 5 feet, 6 inches tall by 30 inches wide. This formerly provided access to a fog signal building that stood next to the light tower but has been removed. A portlight opening on the first story's south side was covered with a steel plate in 1982 after vandals broke into the lighthouse through it.

The second story has two portlights. They face east and north. The east light has been removed and its opening covered with a steel plate. A doorway on the second story's west side has been covered with metal plates. It was formerly an entry to the lighthouse from an elevated walkway that once extended along the pier. This elevated walkway was dismantled in the 1980s. The tower's third story has three portlights that face north, east and south.

The fourth story is the lighthouse's cylindrical lantern. It is surrounded by a circular open-air lantern gallery. The lantern's lower half is a cast iron parapet wall. This supports the glazed upper half. The glazing includes triangular and diamond-shaped lexan panes that are held by metal mullions arranged in a repeating X-shaped pattern. The metal roof is conical with a central ventilation opening capped with a vent ball and lightning rod. The lantern gallery is 32 inches wide. It is bordered by a 36-inch tall cast iron railing supported by stanchions capped with round finials. The railing includes a horizontal pair of upper rails connected with crossed metal slats arranged in a repeating X-pattern. A separate lower metal rail extends between the stanchions approximately 6 inches above the gallery deck. A modern automated fog signal is mounted on the gallery deck's eastern side. A modern fog detector device is mounted on the deck's northeast side. A metal pole attached to the gallery's northwest side supports an anemometer.

Lighthouse Interior

The interior of the light tower has three stories. The lantern room is the lighthouse's fourth story. All the rooms are circular in plan. The first story is 12 feet, 6 inches in diameter. The floor is concrete. The lighthouse's rectangular entrance doorway pierces the surrounding wall on the southwest side. It is 5 feet, 6 inches tall by 30 inches wide, and is fitted with a metal door. There is a 5-foot, 6-inch tall by 30-inch wide former doorway on the first story's eastern side. It is covered with metal plates. This doorway connected with a fog signal building that stood next to the lighthouse in the past but has been removed. The first story wall is also pierced on the southern side by an opening for a 16-inch portlight. This is now covered with a metal plate. Electrical circuit boxes and cables are attached to the first story's interior wall. The ceiling is 9 feet, 2 inches above the floor and is made of metal. The metal ceiling supports the second story's concrete floor. A curving, cast iron, open-riser staircase extends from the first story floor north of the entrance to an opening in the ceiling. Its handrail is made with 2-inch diameter pipe. This stairway provides access to the second story.

The second story room is 12 feet in diameter. The floor is concrete and is approximately 9 inches thick. There is a 24-inch by 56-inch opening in the floor's northern part. Its sides are curved in conformance with the room's surrounding wall. This floor opening accommodates the stairway leading up from the first story. There is a former 5-foot, 6-inch tall by 30-inch wide doorway on the second story's west side. It is now covered with metal plates.

In the past, this closed-off entry provided access to the elevated walkway that formerly extended along the pier to the lighthouse. A 16-inch portlight pierces the wall on the second story's northern side. There is also a 16-inch portlight opening on the room's east side located approximately halfway up to the third floor. It is covered with a metal plate. A 26-inch by 45-inch rectangular opening pierces the second story's wall on the eastern side. It is presently covered with metal plates. The ceiling is 15 feet, 4 inches above the floor. A curving, cast iron, open-riser staircase manufactured by the National Iron Company leads to the third story.

The third story room is 10 feet, 9 inches in diameter. Its floor is metal. The floor's northern part is pierced with a 24-inch by 56-inch opening for the stairway leading up from the second story. This stairway opening is curved along its sides in conformance with the curvature of the room's circular wall. Three 16-inch diameter portlights pierce the surrounding wall on the north, east, and south sides.

The third story room contains meteorological equipment that is connected to instrumentation inside the lantern and on the lantern gallery. The third story's ceiling is metal and is 12 feet, 3 inches above the floor. It includes metal joists that support the lantern. A steel double-rung ladder extends from the floor to a rectangular trapdoor in the ceiling. This provides access to the lantern room.

The fourth story lantern room is 7 feet in diameter. It has a metal floor pierced with a trapdoor that measures 2 feet by 2 feet, 4 inches. The lantern room is surrounded by a 3-foot tall parapet wall made with cast iron plates. The wall is pierced with four ventilation openings, two of which retain their original bronze caps. The parapet wall supports the lantern's metal mullions, which are arranged in a repeating X-pattern. The glazing held by the mullions consists of triangular and diamond-shaped lexan panes. A modern steel pedestal is affixed to the center of the lantern room floor. It supports a modern 300-milimeter acrylic beacon. This optic signals a red light that flashes on for six seconds followed by six seconds of darkness. The optic's focal plane is 50 feet above water level, and its signal light is visible for 12 miles in clear weather. Meteorological instruments are also installed in the lantern room. A doorway on the lantern's northwest side provides access to the lantern gallery. This doorway is fitted with its original curved 6-foot tall metal-framed door. The door includes a solid cast iron plate that forms its bottom half, a sheet of lexan glazing in its upper half, and a bronze door handle.

Non-Contributing Resource

The lighthouse's Pierhead is designated as a non-contributing resource. The lighthouse rests atop the offshore end of the Kenosha north pier, which exemplifies its setting as a pierhead light. The north pier was originally constructed at the beginning of the twentieth century. Since then, it has been rebuilt with substantial alterations. While the lighthouse is positioned at the existing pier's offshore end, the pier that supports it is not original to the property's period of historical significance (1906 to 1958).

Pierhead

The north pier is 1,077 feet long. It was built and is owned by the U.S. Army Corps of Engineers. This pier and the Kenosha south pier protect and stabilize the navigation channel leading from Lake Michigan to Kenosha's sheltered harbor. The north pier was constructed in 1899 to 1900 with wooden pilings and cribs filled with rock. A substantial rehabilitation project conducted by the Corps of Engineers in 1969 to 1970 encompassed the outer sides of the pier's wooden piling and crib structure with modern steel sheet piling. This rehabilitation included pouring concrete within the sheet pile perimeter to cap the pier and form a deck approximately eight feet above water level. The lighthouse sits atop the existing pier's concrete deck approximately 25 feet from its eastern (offshore) end. The light tower's setting is the section of the north pier extending from the offshore end to an imaginary north-south line that traverses the pier at a point 50 feet west of the pierhead. This portion of the pier encompasses the lighthouse structure. It is surrounded by water on the north, east and south sides. The western side adjoins the pier section extending from there to shore.

Changes in physical appearance and integrity issues

The Kenosha North Pierhead Light property formerly included the lighthouse and three related structures. A photograph dating circa 1915 shows the head of the north pier, lighthouse, and three structures (see Pepper 2003). At that time, the north pier was built of massive wooden cribs filled with rock, its exterior bulkheads were made of timber, and the deck was wooden planks. The three lighthouse-related structures included a wood-frame fog signal building, a wood-frame storage building, and a cast iron elevated walkway. These have been removed and now only the lighthouse remains. The lighthouse's original early 1900s fog signal was powered by steam, and its machinery was installed inside the fog signal building that stood next to the tower. The sound emitted from a single resonator horn attached to the building's eastern side. This was replaced in 1925 by a compressed-air fog signal powered by electricity. After the fog signal was replaced with modern equipment, the fog signal building was no longer needed and was demolished. The lighthouse's storage building stood next the lighthouse's western side, beneath the elevated walkway that extended from shore to the pierhead. When the U.S. Army Corps of Engineers rebuilt the north pier, the elevated walkway and storage building were removed. The existing north pier is a modern structure surrounded with bulkheads made with interlocking steel sheet pilings. Concrete has been poured into the space within the bulkheads, leaving the pier with a solid concrete deck.

Alterations to the lighthouse itself have been limited. Its basic structure remains the same as when built in 1906. The removal of the fog signal building and elevated walkway made the lighthouse's two second story doorways superfluous. As a consequence, they were permanently covered with metal plates. The first story's portlight was also sealed following a 1982 incident when vandals broke through it into the lighthouse. The lighthouse's original daymark has also been changed. During the early twentieth century it was a white-colored tower topped with a black-colored lantern. Today, the tower is panted red and the lantern is painted black. The lantern's original glass glazing has been replaced with lexan, a modern plastic material resistant to damage from weather or vandalism. Changes have also been made to the equipment installed in the Kenosha North Pierhead Light. Its original optic was a fourth order Fresnel lens with an oil-fueled lamp. This optic was electrified in 1925. The Fresnel lens was replaced with a modern optic circa the 1960s. When each of these changes occurred, machinery and other installed equipment that was no longer needed were also removed. This has resulted in more open space inside the light tower.

8. Statement of Significance

Applicable National Register Criteria
(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

- [X] A. Property is associated with events that have made a significant contribution to the broad patterns of our history.
- [ ] B Property is associated with the lives of persons significant in our past.
- [X] C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- [ ] D Property has yielded, or is likely to yield information important in prehistory or history.

Criteria Considerations (Mark "X" in all the boxes that apply.)

- [ ] A Owned by a religious institution or used for religious purposes.
- [ ] B Removed from its original location.
- [ ] C A birthplace or a grave.
- [ ] D A cemetery.
- [ ] E A reconstructed building, object, or structure.
- [ ] F A commemorative property.
- [ ] G less than 50 years of age or achieved significance within the past 50 years.

Areas of Significance
(Enter categories from instructions)

Maritime History
Transportation
Architecture
Engineering

Period of Significance
1906 to 1958

Significant Dates

Significant Person
(Complete if Criterion B is marked above)
N/A

Cultural Affiliation
N/A

Architect / Builder
Office of the Lighthouse Superintendent, Milwaukee, Wisconsin

Narrative Statement of Significance
(Explain the significance of the property on one or more continuation sheets.

9. Major Bibliographical References

Bibliography (Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

- [ ] preliminary determination of individual listing (36 CFR 67) has been requested
- [ ] previously listed in the National Register
- [ ] previously determined eligible by the National Register
- [ ] designated a National Historic Landmark
- [ ] recorded by Historic American Buildings Survey record# _____
- [ ] recorded by Historic American Engineering record #_____

Primary location of additional data:

- [ ]
- [ ] Other State agency
- [X] Federal agency
- [ ] Local government
- [ ] University
- [X] Other

Name of repository: Wisconsin Maritime Museum, U.S. Coast Guard District 9 Office, Wisconsin Historical Society

Narrative Statement of Significance

The Kenosha North Pierhead Light marks the north pier at the entry to the port of Kenosha and is significant in the local history of Kenosha County. This lighthouse embodies the maritime heritage of this historic harbor while continuing to serve as a guide for waterborne traffic. The property's period of historic significance begins in 1906 when its construction was completed and ends in 1958, the most recent year of its operation 50 years before the present. The lighthouse was an important local aid to navigation throughout its period of historical significance, and is eligible for the National Register under Criteria A and C. It is significant in terms of Criterion A for its association with the efforts of the Federal government to provide for safe maritime transport on the Great Lakes. This lighthouse exemplifies how the long-term Federal program for establishing an integrated system of navigational aids throughout the United States was manifested in the Kenosha County locality. Kenosha North Pierhead Light is significant under Criterion C because it represents and embodies early twentieth century lighthouse architecture and engineering. It exemplifies design and construction methods used in building cast iron lighthouses on piers and breakwaters during that time period. This structure possesses its original location, setting and design, and embodies historical qualities of integrity in materials, workmanship, feeling and association. The character and appearance of Kenosha North Pierhead Light are largely unchanged from when it was established as an aid to navigation. Its existing structural integrity attests to the lasting value of its design, as well as the high quality of its materials and construction. Changes that have been made to the property include repainting the color of the light tower from white to red, replacing the lantern's original optic with modern equipment, and removing the fog signal building, storage building and elevated walkway that stood adjacent to the light tower during the early twentieth century. Other machinery formerly used in operating the lighthouse's previous aid to navigation equipment has also been removed. Despite these changes, the lighthouse's character and appearance remain essentially the same as during its 1906 to 1958 period of significance. This lighthouse has been an operating Federal aid to navigation and local landmark in the city of Kenosha vicinity for more than a century, and continues to guide vessels navigating Wisconsin's Lake Michigan waters. It still evokes feelings that recall the dedication to duty that characterized United States lighthouse keepers throughout the country's history.

This National Register of Historic Places registration form is submitted as an individual listing nomination associated with the overarching *Light Stations of the United States* multiple property documentation form (MPDF). The following discussion focuses on the nominated property. Information and historic contexts presented and available in the *Light Stations of the United States* MPDF are not repeated here. This submission focuses on additional facts and details linking Kenosha North Pierhead Light with the history of its geographic location and that support the significance of this specific property.

Significance under Criteria A and C

This property qualifies under Criterion A for its association with events related to Federal government efforts to provide for an integrated system of navigational aids throughout the United States, and for promoting maritime safety on the Great Lakes. Kenosha North Pierhead Light has been an important aid to navigation since it was built by the U.S. Lighthouse Board in 1906. It is historically significant because of its contribution to the broad historical patterns of maritime transportation and commerce associated with Kenosha County and state of Wisconsin waters in Lake Michigan. Lighthouses such as this have enabled safe passage for thousands of ships and exemplify the Federal government's role in providing for a nationwide system of aids to navigation. This lighthouse's signal light, fog signal and daymark have guided mariners through southern Lake Michigan waters and have been an important enhancement to navigational safety in and around Kenosha County for more than a century.

Kenosha North Pierhead Light also qualifies for the National Register under Criterion C. It embodies and represents distinctive design and engineering characteristics of lighthouses built on crib and pier foundations in the Great Lakes region during the early twentieth century. It was constructed during the time period when the Federal government engaged in a concerted effort to replace less substantial and outdated lights with permanent lighthouse structures. This structure's durable, compact and weather-resistant character embodies the success of its design, high quality of construction, and appropriateness to this natural setting. The property's good state of preservation represents the permanence and durability of early 1900s pierhead lighthouses throughout the Great Lakes. It stands as a monument to this locality's maritime and commercial history, and is widely regarded as a landmark in the Kenosha County vicinity.

Shipping, Commerce, and the Establishment of Navigational Aids on the Great Lakes

The Great Lakes region includes Lakes Ontario, Erie, Huron, Michigan and Superior, along with their connecting waters and the St. Lawrence River. It is one of the largest concentrations of fresh water on earth. This waterway system has a total shore length of approximately 11,000 statute miles and a total water surface area of about 95,000 square miles. The completion of the Erie Canal in 1825 linked Lake Erie at Buffalo, New York, with the port of New York City via the Hudson River. This marked the beginning of a period of enormous growth in population, maritime traffic and trade in the Great Lakes Region. In 1829, the Welland Canal opened and linked Lake Ontario and Lake Erie. The St. Mary's Falls Ship Canal (the Soo Locks) at Sault Sainte Marie, Michigan, opened in 1855, thus completing one of the last major links in the Great Lakes navigation system. With the opening of the St. Lawrence Seaway in 1959, the industrial and agricultural heartland of North America became accessible to deep-draft oceangoing vessels navigating the Great Lakes. In addition, barge and small craft traffic reaches the Great Lakes from the Gulf of Mexico via the Mississippi River and the Illinois Waterway, and also from the Hudson River by way of the New York State Barge Canal System.

Commerce grew rapidly in the Great Lakes region throughout the second half of the nineteenth century and into the twentieth century. The lumber industry accounted for early development and expansion of marine traffic, leading to an increase in aids to navigation. Iron ore production in northern Wisconsin, Michigan's Upper Peninsula and Minnesota, as well as grain from farms and flour from mills in the northwest, furnished cargoes carried aboard vessels bound for the lower Great Lakes. These shipments corresponded with the heavy up-bound movement of coal and manufactured goods from ports in the lower lakes.

By 1910, the amount of goods shipped annually on the Great Lakes increased to 80 million tons. Most of this was bulk cargo such as iron ore and coal. Shipped freight tonnage reached a record of 217 million tons in 1948. The combined movement of lumber, grain, flour, iron ore and coal, together with limestone cargoes from the Lake Michigan area to the centers of steel production, resulted in the greatest bulk freight marine commerce the world had ever seen.

The need for aids to navigation on the Great Lakes increased along with the expansion of shipping and settlement. Seven lighthouses were built in the region between 1818 and 1822, and 32 were completed during the 1830s. From 1841 to 1852, the U.S. Lighthouse Establishment added 33 new lights. Between 1852 and 1860, the total number of aids to navigation increased from 76 to 102. Another construction boom occurred in the 1890s. By the beginning of the twentieth century, the Great Lakes had 334 major-lighted aids, 67 fog signals, and 563 buoys.

Several distinct designs or types of lighthouses emerged during the nineteenth century. Until 1870 or so, the most common design consisted of a wood, stone, or brick keeper's dwelling that exhibited the lighthouse's optic in a lantern on the roof or atop an attached square tower. By the 1870s, taller towers that were connected to a keeper's dwelling by an enclosed passageway became popular. From 1870 to around 1910, lighthouse engineers practiced and perfected the construction of light stations built on isolated islands and on crib structures placed atop submerged reefs and shoals.

Another widespread lighthouse type in the Great Lakes is the pierhead light, used for guiding vessels into harbors along the coasts. Such lights differ from East Coast lights that serve the same purpose in that they are constructed on piers that project from shore into the lakes rather than on land. Great Lakes breakwater lights are closely related to pierhead lights, and are usually positioned at the head of a breakwater. Both of these lighthouse varieties are usually tower-like structures constructed of metal plates.

Early pierhead lights were made with readily available local materials. They had to be strong but light so they could withstand constant buffeting from wind, waves, and vibrations, but not overstress the wooden piers that supported them. Early pierhead lights were built of wood, but that made them problematic to maintain in the harsh marine environment. Beginning in the middle 1850s, wooden towers began to be replaced with towers built of cast iron. This was a more suitable material because it resisted deterioration and was inexpensive and water-tight. It was also lighter than brick or stone.

As piers were extended through time, many of these pierhead lights were picked up and moved with the extensions. Elevated walkways were frequently built along the piers to provide safe access to the lights. They were configured as a catwalk that stood above the waves washing over the pier, as well as above the several feet of ice that accumulates during the winter.

Among the Great Lakes, pierhead lights are most common on Lake Michigan. Nineteenth century and early twentieth century piers consisted of timber cribs which were floated into place and then filled with rocks and other material, and sunk in place. A timber superstructure was then built above the water, including a wooden deck where pierhead lights were placed. These piers did not hold up to the harsh weather, ice, and fire hazards such as cinders from steamers and lightning. The older wooden piers were largely replaced by the U.S. Army Corps of Engineers between 1916 and 1930 using concrete caisson piers surrounded with steel sheet piling.

Light vessels also served in the Great Lakes region. During the nineteenth century and early twentieth century, they were a substitute for building expensive lighthouses at offshore sites. However, harsh weather in late autumn often forced lightships to leave their stations before the end of the shipping season. In the spring, light vessels often had to wait in port until larger, stronger vessels broke the ice. This sometimes prevented their timely return to assigned locations. Some dangerous areas were thus left unmarked for a period of time near the beginning or end of a year's shipping season. To overcome this, lighthouse engineers worked throughout the late 1920s and 1930s to replace all lightships on the Great Lakes with permanent aids to navigation. This contributed a great deal to enhancing maritime safety and commerce.

Historic Context of Kenosha North Pierhead Light

The harbor of Kenosha is situated at the mouth of Pike Creek on the west shore of Lake Michigan in southern Wisconsin. It is 35 miles south of Milwaukee and 55 miles north of Chicago. The first pioneer settlement in this locality was established in 1835. The surrounding area soon received an influx of settlers.

Among early arrivals in the area were two men from New York named John Dullen, Jr., and Charles Turner. They laid claim to the area south of Pike Creek for the Western Emigration Company. Soon after, other members of their organization arrived to populate the new settlement, which was initially known as "Pike." A post office of the same name was established in 1836. The following year, the community changed its name to Southport.

The United States government's official survey of the area was completed in 1836, and the land was divided into individual lots. The Federal government determined that the Western Emigration Company could not hold land under preemption laws, leading to the company's dissolution. Individual settlers associated with the company obtained title to lands they occupied by buying the property at an official land sale in Milwaukee in 1839. Charles Turner went on to establish another small community approximately one mile north of Pike Creek called "North Village."

The Southport settlement soon became an active port for maritime traffic. However, transferring goods and passengers between vessels and shore was difficult because the mouth of Pike Creek was too shallow for navigation except by small boats. Schooners coming to the port had to anchor offshore and use boats to ferry people and cargo. Southport's early commerce was oriented largely to accommodating the maritime transport of materials needed by settlers in the vicinity and surrounding countryside.

As early as 1837, the people of Southport requested that the U.S. Congress appropriate funds for making improvements to the harbor. Their lobbying efforts were hindered by opposition from the community of North Village and the settlement at Racine, 14 miles farther north. During the late 1830s, the only light at Southport for guiding mariners was a 10-foot tall tree stump with a fire on top. This served until 1840 when a new sash lantern was mounted atop a platform supported by four 24-foot wooden posts. The community's inhabitants also took it upon themselves to make maritime access to the port easier. In 1842, local interests built a pier supported by wooden pilings that extended from the shoreline out to navigable water. This important improvement allowed vessels to moor alongside the pier for unloading and loading cargo. That same year, the Federal government built a lighthouse to mark the harbor and named it Southport Light. The increasing volume of maritime traffic motivated local interests to build two additional piers in order to accommodate more vessels. This boosted maritime traffic and spurred the local economy.

In 1844, the U.S. Congress finally authorized a Federal appropriation of $12,500 to fund additional improvements to the harbor. Additional work to improve access to the port was accomplished in 1856 when piers flanking the harbor entry were elongated and a 12-foot-tall timber beacon was erected atop the north pier. It was equipped with a sixth order Fresnel lens. This light had a focal plane of 16 feet above water level and could be seen for 9 miles in clear weather.

By the late 1840s, the Southport settlement had expanded to absorb the North Village settlement and the local economy was beginning to thrive. In 1850 the community renamed itself and incorporated as the town of Kenosha, based on the American Indian name for this locale. The first railroad to reach Kenosha arrived in 1855. It was part of a railway line that ran between Chicago and Milwaukee.

The principal exports from Kenosha from the 1850s to the 1880s were timber and wheat. The port's commercial importance led to multiple harbor improvement projects being undertaken by the U.S. Army Corps of Engineers during that period. A Corps of Engineers team was dispatched to Kenosha in 1865 to accomplish dredging to keep the harbor's entrance free of shifting sand and to refurbish the timber piers.

A new taller beacon built of wood was placed on the north pier in 1867. It was equipped with a fixed red sixth order Fresnel lens. This optic had a focal plane 30 feet above water level and its signal light could be seen for 12 miles in clear weather.

By 1880, the market demand for Kenosha's exports of timber and wheat declined due to production increases elsewhere in the Great Lakes region. This jeopardized Kenosha's economic base. However, by 1890, a major boom in industrial manufacturing had begun in the Midwest. There was land available in Kenosha for both manufacturing and harbor facilities, and the town's proximity to the metropolis of Chicago was a big advantage. During the decade from 1890 to 1900, industrial development and population growth in Kenosha increased more than it had in the previous 60 years. By this time, however, the railroad had become the dominant focus of transportation there. At the beginning of the twentieth century, industrial raw materials and finished products were mostly transported to and from Kenosha by rail, rather than aboard waterborne vessels.

Even though commercial maritime traffic at Kenosha had declined from earlier levels, improvements to the harbor continued to be made. Construction of a concrete offshore breakwater northeast of the harbor entrance's north pier began in 1899. It was oriented northwest to southeast in order to shield the harbor entry from northerly waves. In addition, work began on replacing the rock-filled timber piers flanking the harbor entrance channel with stronger structures that extended farther into Lake Michigan. Funds were also appropriated to construct a new cast iron lighthouse at the head of the improved north pier. Though building materials for it were received in 1900, the structure was not erected until the pier improvements were completed.

The existing North Pierhead Light was erected at the end of a 750-foot-long pier in 1906. The fourth order Fresnel lens from the old Southport Lighthouse on shore was removed and installed in the new pierhead light, which was first lighted in 1907. At the same time, a cast iron elevated walkway was built along the pier from shore to the lighthouse to provide for access during bad weather. In addition, a wood-frame fog signal building was constructed in the space between the head of the pier and the light tower.

The manufacturing boom that brought prosperity to Kenosha lasted through the first half of the twentieth century. Industrial production spiked during World War I, and by 1930 Kenosha ranked third in manufacturing among cities in Wisconsin. Though economic activity declined during the Great Depression of the 1930s, it surged with the U.S. entry into World War II that resulted in an increase in government contracts for war materials.

Following the war's end in 1945, the automobile industry continued as a mainstay of the local manufacturing economy. From the 1950s to the 1980s, the American Motors Corporation (AMC) was a major element of Kenosha's local industry. AMC was headquartered in Kenosha and was the last independent car manufacturer in the United States. It eventually merged with the French automaker Renault in the 1970s. Economic problems led to AMC being bought by the Chrysler Corporation in 1987.

During the 1960s, the North Pierhead Light's fourth order Fresnel lens was removed and replaced with a modern beacon. This Fresnel lens is presently on display at the U.S. Coast Guard Station at Kenosha. The lighthouse's existing optic is a modern 300-millimeter acrylic beacon that displays a red signal. The cast iron elevated walkway that extended along the north pier was severely damaged in a storm during the early 1980s and was dismantled. The lighthouse's fog signal was upgraded through time and eventually replaced with modern equipment mounted atop the light tower. The pierhead fog signal house where earlier equipment had been installed was demolished. In 1997, the existing VM-100 fog detector was installed on the lighthouse's lantern gallery. The aids to navigation at the lighthouse are now entirely automated.

Today, the Kenosha North Pierhead Light remains standing in its original location at the end of the harbor entry's north pier. Its basic structure, appearance, and setting remain essentially unchanged from the property's 1906 to 1958 period of historical significance. This lighthouse continues to fulfill its original role of aiding mariners by marking the head of Kenosha's north pier and providing a guide for vessels entering the harbor from Lake Michigan. This lighthouse is widely recognized as a prominent landmark in Kenosha County. It serves as a lasting reminder of the city of Kenosha's historical role as one of Lake Michigan's important commercial ports.

Annual Report. 1864–1908. Miscellaneous Annual Report excerpts, copies on file at the U.S. Coast Guard Historian's Office, U.S. Coast Guard Headquarters, Washington, DC.

City of Kenosha Police Department. 1982. Investigation Report dated 3 March 1982. Case number 186205.

Department of Commerce and Labor. 1900 and 1906. List of Lights and Fog Signals of the United States on the Northern Lakes and Rivers and also of the Lights and Fog Signals of the Dominion of Canada on those Waters. Washington: Government Printing Office.

Hyde, Charles K. 1996. *The Northern Lights: Lighthouses of the Upper Great Lakes.* Reprint. Detroit: Wayne State University Press.

National Park Service. n.d. *Kenosha Light Station*, National Register of Historic Places registration form. On file at the National Register of Historic Places, Washington, DC.

Pepper, Terry. 2003. Kenosha Pierhead and Breakwater Lights. Internet web page: http://www.terrypepper.com/lights/michigan/ kenoshapier/kenoshapier.htm

Roberts, Bruce and Ray Jones. 2001. *Western Great Lakes Lighthouses: Michigan and Superior.* Guilford, CT: Globe Pequot Press.

Sapulski, Wayne S. 2001. *Lighthouses of Lake Michigan: Past and Present.* Manchester, MI: Wilderness Adventure Books.

United States Coast Guard. 1905. Engineer drawing, Plate 1, dated 18 May 1905. Office of Engineer, Ninth Light House District, Milwaukee, WI.

_____. 1965. Aids to Navigation Operation Request Supplement dated 27 January 1965.

_____. 2005. Memorandum, Subject: Transfer of Fresnel lens, dated 16 May, 2005.

_____. 2005. Historic photographs of light on file at District 9 headquarters, Cleveland, OH.

United States Army Corps of Engineers. 1967. Letter to District 9 Coast Guard, dated 23 May 1967.

United States Engineer Office. 1935. Kenosha Harbor, Wisconsin: From sounding survey in April 1911. Map, dated 31 December 1935. U.S. Engineer Office, Milwaukee, WI.

_____. 1936. *History of Kenosha Harbor, Wis.*, dated Oct. 22, 1936. U.S. Engineer Office, Milwaukee, WI.

Wardius, Ken, and Barb Wardius. 2003. *Wisconsin Lighthouses: A Photographic and Historical Guide.* Black Earth, WI: Prairie Oak Press.

Werner, Edward C. 1990. A History of the Lighthouse at Kenosha (Southport) Wisconsin. Kenosha, WI: Kenosha County Historical Society.

10. Geographical Data

Acreage of Property less than 1 acre

UTM References:	Zone:	Easting:	Northing:
1	16	433665	4715260

Verbal Boundary Description

The property's boundary is the perimeter of the Kenosha north pier from its eastern (offshore) end to an imaginary north-south line that traverses the pier at a point 50 feet west of the eastern (offshore) end. This portion of the pier encompasses the lighthouse structure. The designated boundary is surrounded by water on the north, east and south sides. The western side adjoins the pier section extending from there to shore.

Boundary Justification

The boundary encompasses the section of the pier that supports the Kenosha North Pierhead Light and exemplifies the significant qualities of its setting.

11. Form Prepared By

name / title Daniel Koski-Karell, Ph.D., USCG Environmental Management Office, & Jayne Aaron and Daniel Hart, e^2M, Inc.

organization United States Coast Guard Headquarters (COMDT CG-443) date 20 February 2008

street & number 2100 Second Street SW telephone 202.475.5683

city or town Washington State DC zip code 20593

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps: USGS map (7.5 or 15-minute series) indicating the property's location.

Photographs: Representative **black and white photographs** of the property.

Property Owner

name United States Coast Guard

street & number 2100 Second Street SW telephone 202.267.1587

city or town Washington state DC zip code 20593

United States Department of the Interior
National Park Service

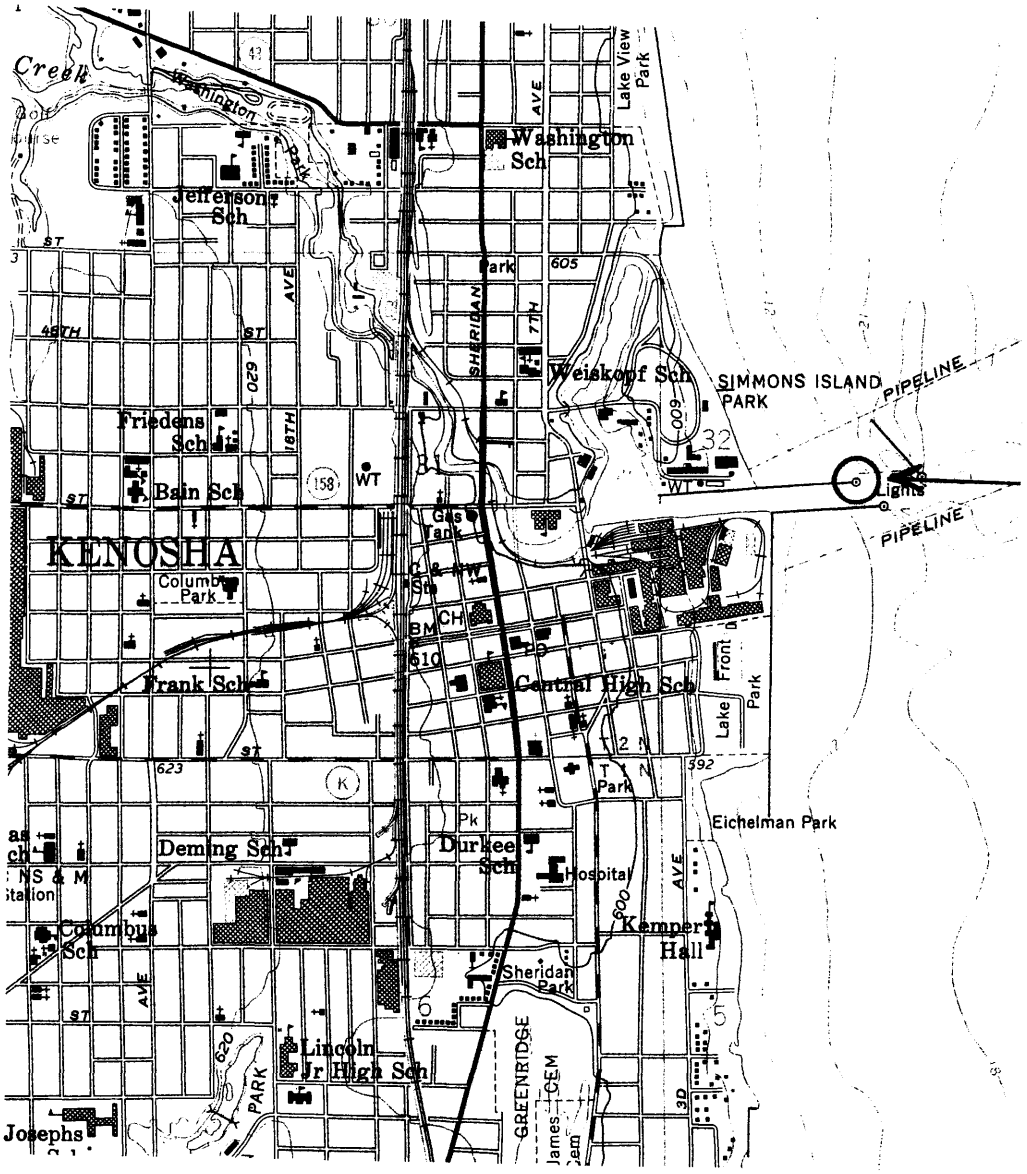
NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

LOCATION MAP

KENOSHA NORTH PIERHEAD LIGHT
KENOSHA COUNTY, WI
(LIGHT STATIONS OF THE UNITED STATES
MULTIPLE PROPERTY LISTING)

This map is a port of the "Kenosha, WIS" 7.5 minute topographical map, scale 1:24,000 (U.S. Geological Survey 1958, photorevised 1971, minor revision 1994).

0 2000 ▲
|___Feet___| North



Kenosha North Pierhead Light
Kenosha County, WI
UTM 16 / 433665 / 4715260

PHOTOGRAPHS

The following information is common to all the photographs:

Name of Property: Kenosha North Pierhead Light
County and State: Kenosha County, Wisconsin
Photographer: Timothy McGrath
Date of Photographs: 25 October 2005.
Original negatives at: U.S. Coast Guard Historian's Office
U.S. Coast Guard Headquarters, Washington, DC

Photograph Number	Description
1.	Light tower west façade, looking east.
2.	Second story, stairway to third story, looking northeast.
3.	Third story, portlight and opening for stairway from second story, looking northeast.
4.	Third story, ladder leading to fourth story lantern, looking north.
5.	Fourth story lantern, trapdoor and parapet wall, looking west.
6.	Fourth story lantern, doorway and gallery, looking northwest.
7.	Fourth story, lantern room ceiling, looking north.