

CULTURAL LANDSCAPE REPORT • HISTORIC STRUCTURE REPORT

APOSTLE ISLANDS NATIONAL LAKESHORE LIGHT STATIONS OF MICHIGAN ISLAND, OUTER ISLAND, DEVILS ISLAND, LONG ISLAND AND SAND ISLAND VOLUME II

100% DRAFT
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Apostle Islands National Lakeshore – Bayfield, Wisconsin

VOLUME II OF VI: MICHIGAN ISLAND CLR/HSR

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CHAPTER 1: INTRODUCTION

ORGANIZATION OF THE VOLUME

This volume presents the overall Light Station History, the Cultural Landscape Report (CLR), and the Historic Structure Report (HSR) for the Michigan Island Light Station. This document is one of six volumes that present the comprehensive CLR/HSR for five of the six light stations in Apostle Islands National Lakeshore (park or APIS). The five light stations are Michigan Island, Outer Island, Devils Island, Long Island, and Sand Island. The light station at Raspberry Island was previously addressed separately.

This volume presents detailed documentation of the light station's physical evolution and historical development; an evaluation of existing condition of its associated buildings, structures, features and vegetation; an analysis of the cultural landscape and historic structures; and the recommended treatment for the Michigan Island Light Station. Supplemental information applicable to all of the light stations, including Michigan Island, is presented in Volume I, Introduction and Overall Development History.

The island history is presented first, followed by the CLR and finally the HSR. Together, the combined CLR/HSR will guide the treatment of the significant resources associated with the Michigan Island Light Station and provide guidance for the continued management of these resources consistent with the park's General Management Plan (GMP).

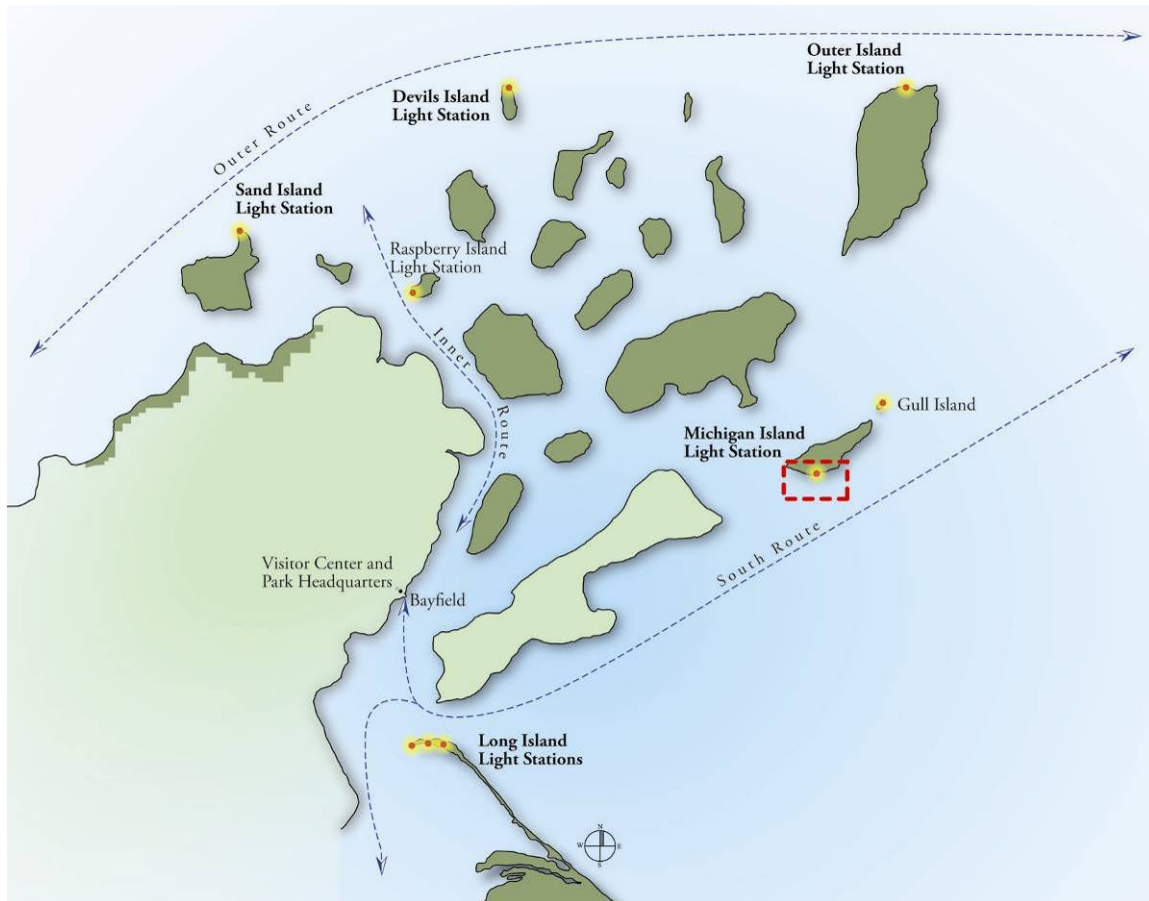
STUDY AREA

Michigan Island is one of seven islands within the park, the six light stations and Gull Island, which provide aids to navigation for Lake Superior. The study area includes the Michigan Island Light Station Reservation and Gull Tower on Gull Island.

Michigan Island is 3.5 miles long, 1.1 miles wide, 1,578 acres, and located at the eastern edge of the park, approximately 16 miles from Bayfield, Wisconsin and 26 miles from Little Sand Bay. The Michigan Island Light Station Reservation is on the southern shore of the island and occupies 152 acres. The remainder of the island, outside the light station reservation, is part of the Gaylord Nelson Wilderness area, designated in 2004. Gull Island is approximately 3,000' northeast of Michigan Island and contains the Gull Island Light Tower.

The Michigan Island Second Tower and Gull Island Tower are the first navigational aids encountered on the south route when traveling southwest toward Bayfield. The light station is located on a bluff above Lake Superior and is surrounded by maturing second-growth northern hardwood forest. The grounds consist of historic clearings, buildings, structures, features and vegetation. Seven structures are on the List of Classified Structures (LCS), the Old Michigan Island Lighthouse, Keepers Quarters, Second Tower, Assistant Keepers Quarters and Workshop, Power House, Shed, and Privy.

Today, the island's land use is as the Apostle Islands National Lakeshore under the jurisdiction of the National Park Service (NPS). The light station and the Gull Island Tower continue to serve as aids to navigation with the automated light operated and maintained by the United States Coast Guard (USCG). The NPS maintains the site and buildings, and the light station is open to visitation and is frequented by visitors and park staff for its cultural and natural resources.



Michigan Island Light Station Context (Source: MBD 2010)

SIGNIFICANCE OF MICHIGAN ISLAND

Michigan Island Light Station is the first light station developed in the archipelago (1856). The period of significance is 1856 to 1943, beginning with the initial development of the light station and continuing until automation of the Second Tower. The entire 152 acres of the Michigan Island Light Station Reservation comprises its cultural landscape. The majority of the contributing features occur on a core area of 1.5 acres associated with the light station grounds, on the southern portion of the island.

Contributing buildings include the Old Michigan Island Lighthouse, Second Tower, Keepers Quarters, Assistant Keepers Quarters and Workshop, Power House, Shed, and Privy. Contributing features include the historic clearing, vegetation, organization of buildings and structures, tramway, tram tracks, concrete walks, small scale features and the bluff.

With many of its original features intact and in good condition, the Michigan Island Light Station clearly portrays the history of the light station as an aid to navigation. It continues to convey the development of navigational technology, the story of the people who resided at the light station, and the management of the station.

TREATMENT RECOMMENDATIONS SUMMARY

The treatment recommendations for the Michigan Island Light Station are focused on revealing the role the light station had in the navigational history of the Apostle Islands, and in conveying the historical significance of the light station's cultural landscape and structures. The treatment recommendations are addressed in detail in the CLR/HSR.

Rehabilitation has been identified as the general treatment approach for the Michigan Island Light Station, as it is a holistic approach that addresses the island's extant cultural resources and the relationships between those resources. This approach protects those characteristics and features that convey the island's full historical and cultural significance, while allowing for those repairs, alterations, and additions necessary for the compatible use of the island.¹

Rehabilitation also allows for noncontributing, compatible features to remain, and for the removal or relocation of noncontributing, noncompatible features. While the overall treatment intent of the cultural landscape is one of rehabilitation many individual treatment recommendations focus on preservation of existing features. Treatment recommendations include the following.²

- 1) Reestablish a portion of the historic cleared area of the light station;
- 2) Reestablish views from Lake Superior to the light station;
- 3) Repair circulation features including the tramway, tram tracks and concrete walks;
- 4) Retain the boat dock location;
- 5) Reestablish missing landscape plantings;
- 6) Remove noncompatible features;
- 7) Rehabilitate the Old Michigan Island Lighthouse, Michigan Island Second Tower, Keepers Quarters and Privy;
- 8) Preserve the Assistant Keepers Quarters and Workshop, Power House and Shed.

The recommendations for treatment are comprehensive and are intended to address all aspects of the cultural landscape and historic structures. To achieve full implementation of these recommendations a phased approach for construction activities will be required. Initial actions may include basic preservation measures to protect and stabilize contributing features followed by more detailed repair measures as park resources allow.

In addition to recommendations for physical improvements, actions are proposed to provide for improved visitor access; improved efficiency of park operational and maintenance activities; and improved protection of the light station's natural systems.

¹ Page et al 1998

² A glossary of terms used to describe treatment recommendations is included in the appendix of this volume.

CHAPTER 2: LIGHT STATION HISTORY

LIGHT STATION HISTORY

Old Michigan Island Lighthouse (LCS ID 006371) and Associated Development

A circuitous chain of events gave Michigan Island the first lighthouse in the Apostle Islands. On February 8, 1851, Wisconsin Senator Orasmus Cole requested an appropriation of \$5,000 to build a lighthouse at La Pointe on Madeline Island.³ Congress approved the request, and the 1853 annual report of the Lighthouse Board noted that a survey and the related title work had been initiated for the site.

District Inspector, Captain Lorenzo Sitgreaves, visited the site and observed the visibility limitations. He nixed the La Pointe location in favor of a position on Long Island. The Long Island lighthouse (still called LaPointe) was included in a package of lighthouse buildings advertised for competitive bids.

The Milwaukee firm of Alanson Sweet, Luzerne Ransom, and Morgan E. Shinn won the contract to build 11 lighthouses at prices ranging from \$2,940 at Round Island to \$4,650 at Rock Harbor (Isle Royale). At \$4,500, the LaPointe Tower was one of the more expensive.⁴ The specifications for LaPointe matched those for Rock Harbor (extant), Portage River (replaced in 1870), Grand Island (replaced date unknown), and Point Iroquois (replaced in 1871).

In 1855, Shinn sold his partnership to a man named J.B. Smith and the firm's name changed accordingly. Their construction foreman, Noel Brooks, arrived in 1856 to start construction only to find the local representative for the Lighthouse Board, Abraham Smolk, wanted the lighthouse constructed at a site on Michigan Island. The new location was about 17 miles farther out on the lake and on a construction site located more than 80' above the water. Although they protested the unexpected change, the contractors moved their workforce to Michigan Island and completed the project by October of 1856. The next year Smolk had a 3.5 order Fresnel lens installed. He also hired a keeper. The light operated in 1857, but District Inspector Sitgreaves was not pleased with the new location and rejected the station, ordering the contractors to build a station at the previously designated Long Island site.⁵

The contractors reluctantly agreed to the demand for a new station and built a much less expensive wood-framed facility at Long Island. Just who was in the right is not clear in the historical record, but in a complaint filed after the work was completed, the contractors noted their 38-man crew and their boats loaded with construction materials could not be paid to wait around until the matter was cleared up.⁶

The original plans and the list of additional expenses claimed by the contractor illuminate our understanding of the construction of the Michigan Island lighthouse.⁷ The original specifications for all of the lighthouses called for a 45' high rubble stone tower with 3' thick base walls tapering to 2' thick at the top. The LaPointe and Rock Harbor lights were an exception. They were to be 65' high, with walls tapering from 4' thick at the base to 2' thick at the top. All wall exteriors were "to be well plastered with Roman Cement and white washed twice." Six windows with 12 glass lights, each measuring 8" by 10" and a 6' by

³ Pepper, Terry. Lighthouses of Lake Superior website accessed September, 2009 at www.terrypepper.com/lights/superior/michigan_old/index.htm

⁴ Copy of Specification Document in Apostle Islands National Lakeshore offices subject files on Long Island and Michigan Island.

⁵ Busch, Jane C. "People and Places: A Human History of the Apostle Islands; Historic Resource Study of Apostle Islands National Lakeshore" Bayfield: Apostle Islands National Lakeshore. 2008. Pages 126.

⁶ Letter dated December 15, 1863 from J.B. Smith to Light House Board in Snyder, David L. "A Compendium of Written Communication of the Lighthouse Board for the Twelve Light Stations of the Midwest Region, the National Park Service, 1839-1881."

⁷ Copies of the original plans and the contractor's complaint, enumerating additional expenses are located in the Apostle Island National Lakeshore office topical files on Long and Michigan islands.

3' door would be used with dressed stone caps and sills for the doors and windows. The specifications also called for "A lightning rod of ½-inch copper, to extend 4' above the lantern and 4' into the ground."

The contractors' enumerated additional expenses at Michigan included the following:

- The tower ended up 7'5" taller than expected.
- An additional sewer was installed to drain the cellar and the foundation of the tower.
- Additional cellar work included a cellar door, door frame with caps and sills in and outside, and walling up the cellar way.
- Another "add on" required underpinning the laundry room with stone and finishing it with lath and plaster.
- An additional 10' by 16' "wood house" was built beside the laundry. The "house" was "enclosed" and had a shingle roof.
- Instead of procuring stone on-site, as had been anticipated for the Long Island location, "the stone had to be procured some 10 miles away, loaded on a vessel and shipped" to the site.

The greatest construction challenge appeared to be the remote and exposed building site, which was atop a bluff, far from any sources of building materials and subject to gale force winds. Freight and hoisting supplies to the site and delays and challenges from bad weather added to the expenses, which ended up at \$12,064. The total was almost \$7,600 more than the original estimated cost.

In spite of the twisting turn of events that twice changed the LaPointe Lighthouse location, the completed building is quite similar to the Lighthouse Board's specifications. The Michigan and Rock Harbor lighthouses are the two remaining lighthouses that represent the original specifications for the 11 lighthouses.

After one year of operation, the Michigan Light Station closed and the valuable Fresnel lens was removed. The lighthouse sat vacant for 10 years until changes in shipping routes on the lake caused the Lighthouse Board to reactivate the light. On July 20, 1868, Congress approved the Board's request for \$6,000 to refurbish the building and install a new lens. The repair crew faced a daunting task after 10 years of fierce weather, no maintenance and scavengers. Lighthouse Board correspondence noted "All the doors and windows have since been carried off and hardly anything remains of the buildings but the bare walls."⁸ In the 1869 restoration project, crews installed new doors and windows. The roof was "fitted with projecting eaves," and reshingled. A new kitchen, wood shed and privy were also constructed. In the tower the crew installed a new cast iron deck plate measuring 14' in diameter. The crew also repaired the original wooden stairway.⁹ The work also included a new metal lantern manufactured by the Detroit Locomotive Works. The 3.5 order Fresnel lens, manufactured by the Henry Lepaute Company of France was installed in the tower which operated for the first time on September 15, 1869.¹⁰

The first lighthouse keeper, Roswell H. Pendergast, was hired on July 15 at \$560 per year. One of a small stream of hopeful settlers and homesteaders, Roswell and his wife, Helen, planted more than 1,000 specimens of trees and shrubs to determine what would thrive. The Pendergasts developed an orchard and raised nursery stock, specializing in apple trees. In 1872 they sold more than \$3,000 of trees and shrubs. Pendergast remained at Michigan Island until he resigned his post in June of 1874 and moved his family to Minneapolis. Historian Arnold Alanen noted that Pendergast's landscape legacy remained at the light station for many decades, "...as evidenced by several large crabapple trees, a few cherry trees and a pear

⁸ Construction estimate to complete repairs in a letter dated March 24, 1869 in Snyder, David L. "A Compendium of Written Communication of the Lighthouse Board for the Twelve Light Stations of the Midwest Region, the National Park Service, 1839-1881."

⁹ We could not locate information regarding when the wood stairway was replaced with metal, but news stories in 1889 referred to the metal stairway.

¹⁰ Mannikko, Nancy Farm and Robert W. Mackreth. "Apostle Islands Light Stations," National Historic Landmark Nomination—Draft.

tree.”¹¹ Ed Lane, the lighthouse keeper from 1902 to 1939, expanded Pendergast’s flower and vegetable gardens, and added “...more cherry trees, several lilac bushes, a cedar hedge and a croquet green.”¹²

The station employed a keeper and an assistant keeper, who must have shared the living quarters. The close living arrangement might have contributed to the frequent turnover of assistant keepers until Mrs. Pendergast took over the job in 1872 and held it until the family left in 1874. The next keeper and assistant keeper were also a husband and wife team, Pliny and Matilda Rumrill, who remained until 1883. Men and their families shared the quarters after that time with some turnover in position until Keeper Edward Lane began his term in 1902.¹³

The keepers experienced some excitement resulting from the attached light tower. In 1889 a lightning bolt hit the tower and the electrical current flowed down the metal spiral staircase and out onto the concrete. A separate account told of the electricity flowing down the tower from a bolt of lightning and tearing the keeper’s bed to pieces.

Periodic improvements to the station were noted in the Lighthouse Board correspondence and reports. The District Engineer wrote in 1881 that sidewalks were laid that year to connect the house to the privy. A new 5 by 8 by 8 foot cistern was also installed that year. In 1889 the Lighthouse Board report recognized the need for an oil house. By 1894 an oil house had been constructed (just south of the cast iron skeletal light tower), but was torn down on August 30, 1929 as part of changes to the site when the skeletal tower was installed.

Other minor changes occurred. Leaks in the lantern roof required a new tin hood, and the barn (aka the Shed, LCS ID 006373) was built or rebuilt in 1901 or 1902.¹⁴ Plans on file at park offices show dormers added to the upstairs in 1914.

Although small, one of the more important buildings on the island was the Privy (LCS ID 006385). A two-holer, this vital feature was built in Detroit – complete with a casement window – and delivered by the *Amaranth* lighthouse tender ship sometime between 1901 and 1912. Many years later the arrival of the Privy was recalled with glee by the lighthouse keeper’s daughter who lived on the island between 1901 and 1912.¹⁵ The privy presumably replaced an older outhouse.

Dock

The current dock at Michigan Island is a modern installation. The first dock was located about 45’ to the east and had steps that climbed the slope to a point fairly close to the Old Michigan Island Lighthouse.¹⁶ The constant barrage of wind, water and ice required many repairs. In 1890 the 446-foot-long wooden walk and stairway was rebuilt, followed by two rebuilding projects of the dock in 1897 and 1902.¹⁷ Between 1902 and 1917, the 96 wooden steps were rebuilt.¹⁸

¹¹ All information and quotes regarding Pendergast are taken from Alanen, Arnold R. and William H. Tishler. “Farming the Lake Superior shore: agriculture and horticulture on the Apostle Islands, 1840–1940,” *Wisconsin Magazine Of History*. Volume: 79 /Issue: 3 (1995–1996) Pages 175–176.

¹² Letter from the Superintendent of Lighthouses, Fred P. Dillon to Edward J. Lane, Keeper, Michigan Island Light Station establishes Lane’s retirement date; on file at Apostle Islands administrative offices.

¹³ Lighthouse keepers are listed at www.terrypepper.com/lights/superior/michigan_old/keepers.htm based on research provided by Phyllis L. Tag.

¹⁴ Light House Board records show approval of rebuilding the barn in 1901, Terry Pepper’s research at www.terrypepper.com/lights/superior/michigan_old/index.htm indicates a new barn was built in 1902.

¹⁵ Information supplied by Susan Mackreth of the park staff based on a letter located in the Lakeshore’s museum accession files.

¹⁶ Mannikko, Nancy Farm and Robert W. Mackreth. “Apostle Islands Light Stations,” National Historic Landmark Nomination—Draft

¹⁷ Pepper, Terry. Lighthouses of Lake Superior website www.terrypepper.com/lights/superior/michigan_old/index.htm

¹⁸ From APIS Museum Collection Photos, #2384.

The current dock location was in use by 1929. The dock was rebuilt in 1987, replacing a timber crib structure. Additional work in 1993 further altered the 1987 dock and extended the stair and tram to the dock.

Nearby Activity

After World War I the increased demand and prices for lumber justified logging on remote Michigan Island. The Schroeder Lumber Company purchased much of the island, excluding the lighthouse reservation, and logged from 1919 to 1923. The operation included a railroad across the island and a lumber camp at the southwestern end. Crews worked in the summer and transferred to other islands in the winter. Schroeder moved the railroad to Outer Island when logging finished in 1923.

The Second Tower (LCSID 006372) and Associated Development

The demand for a taller light tower and for a fog station increased with the ever growing ship traffic. The 65-foot-tall light tower on Michigan Island was not visible to the lake traffic to the north. The local *Bayfield County Press* expressed this complaint in a 1908 article, reinforced by a December 4, 1908 report from Charles Keller, the Lighthouse District Engineer, recommending a light and fog signal at a new location on the island.

The Lighthouse Board deliberated over placing a tower on nearby Gull Island, and eventually settled on a plan to build a new station with multiple buildings on Michigan Island. The estimated cost was \$100,000. The Board embarked on a 20-year campaign of annual requests of Congress to appropriate enough money for a new station. In the midst of their crusade, in 1918, the Lighthouse Board acquired a 112-foot-tall cast iron skeletal tower from Schooner Ledge on the Delaware River. The tower, which had been first constructed in 1880 and came from the Phoenix Iron Company of Philadelphia, was disassembled and stored at Michigan Island in 1919.

The Lighthouse Board modified the Michigan Island plan by eliminating a proposed diaphone fog signal and installing a combination of navigational aids including the Schooner Ledge Tower, a new radio beacon on Michigan Island and an unmanned acetylene powered light on Gull Island. The recycled 112-foot-tall Schooner Ledge Tower would be the tallest in the Apostle Islands. The revised estimated costs came to \$85,000 for the light tower, beacons and support buildings for the light station.



The Schooner Ledge Tower as it looked on the Delaware River (Source: Coast Guard archives – accessed at http://www.uscg.mil/history/CG_Photo_Index.asp). Photo date unknown.

Congress approved the revised plan and construction began +/- 1927 -1928. The project included the brick two-story Keepers Quarters (LCS ID 006389), a two-story wood-framed building with storage and a bathroom on the first floor and a residence on the second floor (Assistant Keepers Quarters and Workshop; LCS ID 006388), a wood-framed boat house to replace the old boat house and a dock/tram installation and extension. The plans also included remodeling of the interior of the old lighthouse, and a new brick powerhouse (LCS ID 006386) to accommodate generators, fuel and water storage, an electric hoist mechanism and machinery for the radio beacon. The estimated costs for the project came in at \$55,000. The reported actual costs were \$61,041.¹⁹

In May and June of 1928 light keeper Ed Lane reported in his keeper's logs that "Mr. Bellamy" and his crew surveyed for the tram and the new tower foundation. They tested the visibility of the proposed tower site by floating helium filled balloons from the tower site and viewing them from the water.

In September 1928 the *Amaranth* made multiple trips to the island, delivering construction supplies, including large quantities of bricks and sacks of cement. The tram was installed on the steep slope up from the dock to the bluff to transport materials up the hill. Work on the tram was underway by October 1. The concrete mixer started up on October 2, and by October 4 the work crew had started placing concrete. Crew members completed the foundation of the power house by October 15 and continued to lay bricks in October, until wintry weather ended the 1928 construction season and forced them off the island.

The crew returned to Michigan Island on May 11, 1929, along with more supplies from the *Amaranth*. The *Bayfield County Press* closely followed the work and reported in an article on June 27, 1929, that local mason Hans Erickson was in charge of the brick work and that Ed Lough of Detroit was the construction superintendent. The keeper's log entries clearly showed his bias, as many of the mundane construction

¹⁹ Data on 1929 plans from architectural plans and copies of general specifications for the structures were found in the topical files of the park offices.

1 details were omitted, while the arrival of the new lantern for the lighthouse merited an entry in the log on
2 August 26, 1929. Edna Lane Sauer recalled in a letter that a temporary cook shack was built for the crew.²⁰
3

4 The September 23, 1929, the log noted a team of horses was landed on the island and that the keeper
5 worked on the “new dwelling.” The keeper’s family moved into their new brick home (the Keepers
6 Quarters, LCS ID 006389) on September 27, and the keeper kept busy varnishing the floors. The
7 electricians arrived to wire the house on October 6.
8

9 On October 29, 1929, Keeper Lane excitedly recorded the completion of the new light tower in his log. The
10 3.5 order Fresnel lens in the old light tower had been removed and installed in the new tower. “Started up
11 new tower at sunset,” he wrote. “Everything in good shape but station looked odd, the old tower being dark
12 for the first time in navigation in 72 years. NEW TOWER IN COMMISSION TONIGHT.” The new
13 24,000 candlepower electric lamp (bulb), the first electric light in the Apostle Island lighthouses, placed on
14 the much taller structure increased the light’s visibility range to 22 miles.
15

16 The Gull Island Station was lit on September 30, 1929. The Michigan Island radio beacon went into
17 commission at 11 p.m. on November 3.
18

19 The next two years saw some adjustments to the new construction. The light keeper’s logs have numerous
20 entries about problems and solutions for the diesel engines (a Kohler and a Cummings) in the power house.
21 Between the mechanical break downs, life went on at the station. The keeper planted pine trees on the north
22 side of the track on October 9, 1930. On October 24, he set up the new oil stove in the Keepers Quarters
23 kitchen and was pleased with the results. The stove is no longer extant but two historic stoves do still
24 remain in the Old Lighthouse and the Assistant Keepers Quarters and Workshop.
25

26 The files at the park offices contain a map with hand written amendments noting the radio beacon tower
27 was moved in 1931 from a location north of the tram tracks to a location just east of the Power House. The
28 notes on the map indicate a second tower was placed near the old lighthouse. The bases of these two
29 beacon towers are still on the site.
30

31 The Gull Island light station, an automated acetylene-powered light with a carbon dioxide fog signal, was
32 also under the care of the Michigan Island lighthouse keeper, who periodically checked on Gull Island and
33 replaced the gas tanks.
34

35 Electrification and automation reduced the workload. In 1939, the Coast Guard took over lighthouse
36 operations in the Apostle Islands and throughout the country. Michigan Island became a one-man station.
37 In 1943, the light was automated and the keeper left the island. A Coast Guard crew, based on Devils
38 Island, monitored the Michigan Island light. Kitchen cabinets and a sink were scavenged from one of the
39 Michigan Island residences and show up on the 1946 work plans for the second floor of the Keepers
40 Quarters at Devils Island. The Fresnel lens was removed in 1972 and is now on display at the park Visitors
41 Center. A DCB-224 aerobeacon replaced the Fresnel lens. The current optic is a Sabik 350 two-tier solar-
42 powered LED beacon.
43
44

45 **HISTORIC EVIDENCE**

46 The historic photos date back to 1913 and show the non extant boat house, wood stairs to site, and various
47 changes to the buildings, such as the Keepers Quarters’ boarded-over windows and the Shed’s change in
48 grade. For more detailed descriptions of the photos, see the CLR and each building’s Chronology of
49 Alterations and Use in the HSR.

²⁰ Information supplied by Susan Mackreth of park staff based on a letter located in the Lakeshore’s museum accession files.

Historic plans date back to 1869 with the original construction drawings for the Old Michigan Island Lighthouse. This sheet also has the 1914 addition of the dormers drawn over the original (HSR Historic Drawing MI-01). There are drawings that also show details for the Schooner Ledge Range Light, which would later be moved to Michigan Island and become the Second Tower (HSR Historic Drawings MI-02 and 03). A set of specifications for the Second Tower's Lantern is also available and mentions the use of curtains in the tower (HSR Historic Drawing MI-04). In 1929, the construction set for the erection of the Second Tower and its Light Base, alterations to the Old Lighthouse, and the new plans for the Keepers Quarters, the Assistant Keepers Quarters and Workshop, and the Power House were created (HSR Historic Drawings MI-5 to MI-12).

OVERVIEW OF DEVELOPMENT AND USE

Date	Work Described
1852	Congress authorizes construction of first lighthouse in the Apostle Islands (J. Busch 2008)
1856	Michigan Island Lighthouse constructed, placed into service in 1857 (LCS 2009; J. Busch 2008)
1858	Lighthouse taken out of service, replaced by LaPointe Light Station on Long Island (J. Busch 2008)
Annual Report of 1867	"This light was discontinued in 1857, but it seems to be desirable to reestablish it. Since its discontinuance the buildings have fallen somewhat into decay, and a small appropriation to put them in good order again. The requisite estimate is submitted herewith." ("1867 Annual Report of the Lighthouse Board," Michigan Island Light in annual reports 1850–1920)
Annual Report of 1868	"During next season it is proposed to renovate and relight this station, in accordance with the provision of the act of Congress approved July 20, 1868." ("1868 Annual Report of the Lighthouse Board," Michigan Island Light in annual reports 1850–1920)
Annual Report of 1869	"The light here, discontinued and abandoned since 1858, was put in operation again on the 15th of September last. The repairs required amounted to but little less than rebuilding it." ("1869 Annual Report of the Lighthouse Board," Michigan Island Light in annual reports 1850–1920)
1869	New "summer kitchen" added to lighthouse quarters (1869 Letter of Alterations) New "wood-shed" added to lighthouse quarters (1869 Letter of Alterations) New doors and windows installed in lighthouse quarters (1869 Letter of Alterations) Privy built (LCS 2009) Shed built (LCS 2009) New lantern installed with 14-foot-diameter cast iron deckplate and wood tower stair repaired (1869 Letter of Alterations)
c.1870	Orchard planted by lighthouse Keeper Roswell Pendergast (J. Busch 2008) Top of bluff cleared of tress, increase visibility of Old Lighthouse (1877 Reservation Boundary map)
1881	Sidewalks laid from the Lighthouse to the Privy (1881 District Engineer Letter)
1894	Brick Oil House constructed west of Old Lighthouse, concrete sidewalk constructed to Oil House from Old Lighthouse, and area east of Old Lighthouse cleared but not manicured (Historic Photos, 1904, 1908, and 1913, APIS Archives IID4C)
Annual Report of 1894	"The walk and stairway, 446 feet long, leading from the dwelling to the boathouse, was rebuilt, and various repairs were made." ("1894 Annual Report of the Lighthouse Board," Michigan Island Light in annual reports 1850–1920)
Annual Report of 1895	"A brick oil house was erected with metal roof, door and shelving, located 75 feet west of the dwelling. Various repairs were made." ("1895 Annual Report of the Lighthouse Board," Michigan Island Light in annual reports 1850–1920)
1894–	Original manicured area adjacent to Old Lighthouse expanded, fences removed and replaced to

Date	Work Described
1908	include Brick Oil House in manicured areas (Historic Photos, 1904 and 1908, APIS Archives IID4C)
1901	Lighthouse Board records show approval of rebuilding the Shed in 1901; according to Terry Pepper's research, a new shed was built in 1902 (Terry Pepper, www.terrypepper.com/lights/superior/michigan_old/index.htm)
1901-1912	1869 Privy replaced with Detroit-made two-holer with casement window (1978 Letter from Edna Lane Sauer, from Mannikko, Nancy Farm and Robert W. Mackreth. "Apostle Islands Light Stations," National Historic Landmark Nomination—Draft. Bayfield, WI.: Apostle Islands National Lakeshore, n.d.).
1902–1917	96 steps from the dock to the site replaced by Ralph Tinkham (APIS Museum Photo 2384)
1907, Feb 7	<p>"This Department has the honor to acknowledge the receipt of the committee's letter of February 1, 1907, inclosing for examination and report thereon a copy of Senate bill No. 8251, "For the establishment of a lighthouse and fog signal station at the easterly end of Gull Island, Apostle Group, westerly end of Lake Superior, Wisconsin."</p> <p>In reply this Department has the honor to state that the Lighthouse Board, to whom this was referred, recommends the establishment of this lighthouse and fog signal on Gull Island. Vessels bound for Ashland from Keweenaw Point are unable to see Michigan Island light until abreast of it, and this difficulty is increased in time of fog, as there is no fog signal at Michigan Island.</p> <p>Several vessels have run aground in this vicinity during storms. If there had been a light and fog signal there, the wrecks might have been prevented.</p> <p>The Lighthouse Board reporting also that a light and fog signal can be built here at a cost not exceeding \$85,000, this Department recommends that after being so amended this bill do pass. The Board is now of the opinion that the bill should be amended as to provide for the establishment of a lighthouses and fog signal at or near the easterly end of Gull Island." ("1907 Annual Report of the Lighthouse Board," Michigan Island Light in annual reports 1850–1920)</p>
Annual Report of 1908	<p>"Gull Island Light Station, Lake Superior, Michigan. – The act of May 27, 1908 appropriated \$2,000 to make a survey and estimate the cost and report upon the feasibility and need of establishing a light and fog signal station upon Gull Island, or the easterly end of Michigan Island, Apostle Group.</p> <p>The survey has been completed, and upon consideration of the data furnished the conclusion has been reached that the light should be established on Michigan Island and the fog signal on Gull Island, and the Board recommends that an appropriation of \$150,000 be made for the construction of a light and fog signal station at the points mentioned." ("1908 Annual Report of the Lighthouse Board," Michigan Island Light in annual reports 1850–1920)</p>
1914	Dormers added to east and west elevations of Old Lighthouse (1914 Michigan Island Elevations)
1919	Second Light Tower moved from Pennsylvania to Michigan Island, stored (LCS, 2009)
Annual Report of 1920	<p>"Michigan Island, Wis., Light Station. – Establishing and improving aids to navigation at or near Michigan Island, Lake Superior, Wis., \$85,000.</p> <p>NOTE. – The act approved May 27, 1908 (35 Stat., 332), appropriated \$2,000 to make a survey and estimate of cost and report upon the feasibility and need of establishing a light and fog signal upon Gull Island or the easterly end of Michigan Island, Apostle Group. As a result of this survey, the conclusion has been reached that the eastern end of Michigan Island is the better site. The act of June 17, 1910 (36 Stat., 536), authorized the construction of a light and fog signal station at Michigan and Gull islands at a cost not to exceed \$140,000, but no appropriation has been made therefor. A further study indicates that the best plan is to elevate the present light near the westerly end of Michigan Island, add a fog signal, and establish a nonattended acetylene light on Gull Island. This arrangement would serve as a better guide to vessels passing in either direction. The project now contemplated will both cost as much as the</p>

Date	Work Described
	amount authorized. Detailed estimate: Foundation, main light =\$3,000 Dwellings for three keepers =20,000 Tower complete (erection only) =6,000 Minor light =9,495 Illuminating apparatus. =10,000 Fog signal and hoisting apparatus =13,550 Fog signal building, boathouse, and other buildings =13,455 Boats, tramway, walks, etc. =9,500 Total =85,000” (“1920 Annual Report of the Lighthouse Board,” Michigan Island Light in annual reports 1850–1920)
1927	1½-story wood-framed Assistant Keepers Quarters built (J. Busch, 2008)
1927–1929	Assistant Keepers Quarters and Workshop constructed. (Documentation varies between keeper’s logs vs. construction drawing’s date.)
1927–1936	Documented varnishing of floors eight times, possibly less due to terminology used by Keeper E. Lane; including: Old Tower stairway; Old Quarters in general, specifically kitchen, dining room, and hallway (“linoleum in hallway,” 5/1/28); Keepers Quarters in general, specifically kitchen; and Second Tower steps (“Varnished Tower steps,” 7/16/25) (E. Lane, MI Log, Nov 23, 1926–Aug 19, 1936)
1928, May 28	Survey crew comes to Island: surveys for Gull Island Light, foundation for Second Tower and height for Second Tower, and new tramway. Leaves June 10, 1928 (E. Lane, MI Log, Nov 23, 1926–Aug 19, 1936)
1928–1936	Documented whitewashed buildings four times; including at times the following buildings: Old Keepers Quarters and Tower, Shed, and concrete base of Second Tower (E. Lane, MI Log, Nov 23, 1926–Aug 19, 1936)
1928–1936	Documented painting of the interior of buildings eight times; including at times the following buildings: Old Quarters (specifically mentioned the dining room, stairway, and bathroom), Old Tower (specifically mentioned Lantern, floor, and window sash), Second Tower (specifically mentioned Lantern, window sash, and Tower Base’s floor), Keepers Quarters (specifically mentioned kitchen, wood work in living room, and porch floor), Power House (specifically mentioned window sash and floor), and Assistant Keepers Quarters and Workshop (specifically mentioned floors and stairway) (E. Lane, MI Log, Nov 23, 1926–Aug 19, 1936)
1928–1936	Documented painting of the exterior of buildings eight times; including at times the following buildings: Old Quarters, specifically mentioned screen doors, window shutters, dormer windows, chimney, and eaves and downspouts (called “scupper pipes,” 7/29/30); Second Tower, specifically mentioned Lantern, railing, trim (painted black), tower base and trim; Keepers Quarters, specifically mentioned back entry, storm doors, and porch screen frames; Power House, specifically mentioned chimney flashing; and Tramway, specifically mentioned railing and track. (E. Lane, MI Log, Nov 23, 1926–Aug 19, 1936)
1929	Second Tower erected, Power House built, tramway constructed up bank and through grounds, Keepers Quarters rehabilitated. Old Lighthouse altered to become First Assistant Quarters and oil house removed. (J. Busch 2008; 1928 Drawing of Tramway Plan and Details)
1930	Pine trees transplanted in a line on north side of tram track by Keeper Lane, adds to formal enclosure and marks manicured grounds (Michigan Island Keepers Log)
c.1930	Keeper Lane adds ornamental plantings in small beds, linear hedge in southwest corner near Keepers Quarters and foundation plantings along Keepers Quarters (Historic Photos, c.1930, APIS Archives IID4C)
1933, Nov 28	“Finished installing winter Light and, weather permitting, Mechanic O.H. Joyner will leave for town.” (E. Lane, MI Log, Nov 23, 1926–Aug 19, 1936)
1939	Bureau of Lighthouses eliminated, Coast Guard takes over management (Michigan Island Keepers Log)

Date	Work Described
1943	Second Tower light automated, keepers leave Island (J. Busch, 2008)
1962–1970	Don Bliss, private citizen, occupied the light station (D. Cooper, 2010)
c.1968	Last logging occurred for yellow birch (report from 1979 meeting of volunteer and owner of cabin on Island, Mel Van Fit; from “Excerpts from Michigan Island Volunteer Logs- 1978–1999,” page 2)
1970	Apostle Islands National Lakeshore authorized
1972	Second Tower’s Fresnel lens replaced by automated light (LCS, 2009)
1973	Second Tower’s brass mullions and lantern glass removed by the Coast Guard (APIS/NPS Business Office File D3423)
1974	Vegetation cleared and shutters installed on Old Lighthouse (APIS/NPS Business Office File D3423)
1975	Stabilization of Old Lighthouse, Shed, Privy, Power House, Assistant Keepers Quarters and Workshop, and Keepers Quarters (APIS/NPS Business Office File D3423)
1976	Repair drainage at Keepers Quarters and Old Lighthouse (APIS/NPS Business Office File D3423)
1977	Emergency stabilization of Second Tower (APIS/NPS Business Office File D3423)
1979	June 13th: general building maintenance, including painting and tuck pointing (from “Excerpts from Michigan Island Volunteer Logs- 1978–1999,” page 2)
1979	Emergency stabilization of Keepers Quarters brick at porch and northeast stoop, repair foundation and paint exterior walls of Shed, repair and paint exterior walls of Keepers Quarters and Assistant Keepers Quarters and Workshop, repoint Power House and repoint and paint exterior wall of the Old Lighthouse (APIS/NPS Business Office File D3423)
1981	Asbestos roofing installed at the Keepers Quarters, Assistant Keepers Quarters and Workshop and the Power House (APIS/NPS Business Office File D3423)
1982	Reshingle Power House roof, reroute propane lines and install new hoses, install gasoline storage cabinets (APIS/NPS Business Office File D3423)
1983	July 9: new pit dug for Privy and Privy moved to new site; July 19: met with the Coast Guard in regard to painting, possibly Old Tower; July 20: sand blasting “on sidewalk and steps” (unknown where, Tom Caines); July 25: “monitored painting operations” (Tom Caines, from “Excerpts from Michigan Island Volunteer Logs- 1978–1999,” page 4)
1985	July 16: sunk post for solar collector that charges the batteries for the alarm system; August 21: finished installation of “burglar-smoke alarm system” (Terry Blomberg, from “Excerpts from Michigan Island Volunteer Logs- 1978–1999,” pages 7 and 8)
1985	July 26: “Maintenance workers were out today taking final measurements for the new electric winch and generator, etc. to be installed next week. They were discussing how they could remove the old donkey engine and whether it should be left there for historic purposes.” (Terry Blomberg, from “Excerpts from Michigan Island Volunteer Logs- 1978–1999,” page 7)
1985	August 10: “,,maintenance crew added more steps up the bluff...” (Sandy Massett, from “Excerpts from Michigan Island Volunteer Logs- 1978–1999,” page 8)
1986	June 24: Coast Guard removed two underground gas tanks at base of Second Tower and old batteries thrown over south hill (from “Excerpts from Michigan Island Volunteer Logs- 1978–1999,” page 9)
1987	Electrical line run from Keepers Quarters to Power House and new kitchen floor and sink plumbing installed in Keepers Quarters (from “Excerpts from Michigan Island Volunteer Logs- 1978–1999,” page 10)
1987	August 27: “Bill Eldridge stopped in this afternoon. He is the project supervisor for the new dock...A barge is to be sunk as a breakwater tomorrow. Also rocks by landing are to be used as well. Landing is to stay, but steps will go down to new dock” (Lynn France); dock completed November 2, 1987 (from “Excerpts from Michigan Island Volunteer Logs- 1978–1999,” p 11, 14)

Date	Work Described
1988	September: digging began for drains around both lighthouses; drain tile installed once digging completed (from “Excerpts from Michigan Island Volunteer Logs- 1978–1999,” page 14)
1988–1989	Moisture mitigation in Old Lighthouse (from “Excerpts from Michigan Island Volunteer Logs- 1978–1999,” page 15)
1989	July: whitewash (unknown areas, “Excerpts from Michigan Island Volunteer Logs- 1978–1999,” page 15)
1990	June 19: Historic American Building Survey (HABS) team surveying (from “Excerpts from Michigan Island Volunteer Logs- 1978–1999,” page 16)
1990	August 29: “pouring cement for new outhouse; trading out outhouses,” “...what a job – to get that old one down the hill and on the boat...” (Pat Dekker, from “Excerpts from Michigan Island Volunteer Logs- 1978–1999,” page 17)
c.1990	Bottom portion of tramway modified with track/steps/ handrail extending to new dock (NPS Drawing, Tramway Details, 1992, APIS Archives)
1992	August 5: Guests arrive, locals had told the Park Service that they needed to build the dock with open spaces so the water could go through; disappointed the Park Service did not listen, now dock has to be rebuilt; guest requested the tram system be rehabilitated so the “area could be accessible by the elderly and handicapped.” (Barbara and Jack Childers, from “Excerpts from Michigan Island Volunteer Logs- 1978–1999,” page 20)
1993	Dock rebuilt (from “Excerpts from Michigan Island Volunteer Logs- 1978–1999,” pages 20–21)
1993	August 13: wooden steps and platform leading to concrete steps torn out (from “Excerpts from Michigan Island Volunteer Logs- 1978–1999,” page 21)
1994	The Park Service reinstalled the lantern glass (APIS/NPS Business Office File D3423)
1994	September 1 and 2: Asbestos crew removes asbestos in basements of Keepers Quarters and Old Quarters (from “Excerpts from Michigan Island Volunteer Logs- 1978–1999,” page 22)
1996	Interior of Second Tower sand blasted and repainted (APIS/NPS Business Office File D3423)
1998–1999	July 9: Old Lighthouse exterior under maintenance, interior cleaned and all equipment and material removed (“Excerpts from Michigan Island Volunteer Logs- 1978–1999,” pages 24–25)
1999	June 22: “[repairing] the fractured concrete sidewalk slabs leading to the steps of the ‘New Tower’...” (Gene Wilkins, “Excerpts from Michigan Island Volunteer Logs- 1978–1999,” p 25)
2004	Rehabilitation of Keepers Quarter’s interior floors (HSPT Reports, 2009)