Small Scale Features

The small scale features at the Michigan Island Light Station include concrete walks, radio antenna poles, a cistern, well basin, signs and other small site elements. The small scale features range in condition from poor to good. The following describes the contributing small scale features that are important to the light station's history of navigation. They are the features that convey the development of navigational technology at the light station and influenced the manner in which the station operated. At the Michigan Island Light Station these notable features include, concrete walks, radio antenna poles and flagpoles. Descriptions of the remaining individual features, many of which are contributing and their respective condition are included in Table MI-2.

Concrete Walks

Existing Condition. The concrete walks on the grounds were installed during the Early Light Tower period (1929–1938) many of them following the previous layout of wood planks as was typical of the Apostle Islands. Typical to several of the Apostle Islands light stations, the walks appear to be constructed of precast units 2.5' × 4' × 4" thick with some small units also installed. The units have a fine aggregate finish and tooled edges. Historic photographs indicate that the concrete units may have been placed on top of the ground surface rather than excavated and placed. Other portions of the concrete walks appear to have been poured in place to infill odd shapes and address building edges. Overall the concrete walks are in good condition with only a few slabs requiring replacement due to excessive cracking.

Analysis. The concrete walks are important to the cultural landscape because their installation occurred during the period when the light station was at its most vibrant and they are closely related to the new technology and buildings that were developed at that same time. The walks are also important because of their production and installation as precast units was common to the other light stations. This construction character helps to depict the stories of each light station and more importantly how they are interrelated. The concrete walks are important contributing features.

The addition of concrete walks, radio antennae, and flagpoles relate to the evolution of the light station grounds and contribute to the significance of the cultural landscape. In addition to these features there are signs, a solar panel, and other site features that have been added to the site outside of the period of significance.

Radio Antenna Poles

Existing Condition. The radio antenna poles (north and south) were features that were originally installed between 1929 and 1931 along with the many other technological advances (Light Tower, Power House, and tramway) related to improvements in navigational aid. An annotated 1928 drawing at the APIS Archives indicates that one or both of the poles were moved from their original locations once if not twice. They are currently located just east of the Power House, and another directly north from the first, north of the tram tracks. They are cast iron poles, with a height of approximately 40', and identical concrete bases, approximately 18" tall, with a 36"×36" width. Radio Antenna Pole – South is in good condition. Radio Antenna Pole – North is in fair condition, the foundation needs to be reset as the pole is leaning to the north.

Analysis. The radio antenna poles are important features because they relate to improvements in navigation technology during the period of significance and are an element common to many of the light stations in the Apostle Islands. The radio antenna poles are a contributing feature.

Flagpole

Existing Condition. The flagpole is at the top of the tramway, just south of the Keepers Quarters. The flagpole is constructed of a single wood pole, approximately 25' high mounted between two smaller base posts, with through bolt connections. The entire structure is painted white with a concrete footing. The flagpole was installed during the Light Tower period and is in good condition.

Originally another flagpole existed southwest of the Old Michigan Island Lighthouse. This pole is no longer extant except for a remnant concrete collar, approximately 18" square. Historic photographs indicate that the first flagpole had a metal pole painted white.

Analysis. The flagpoles are important features because they relate to the historic use, operation and management of the light station at a time when the stations were occupied. Flagpoles are element common to all of the light stations in the Apostle Islands. The flagpole and extant concrete base are contributing features.

Table MI-2. Small Scale Features

Feature	Site Image #	Description	Condition	Contributing? /Rationale
Concrete Walks (1881- 1938)	MI-47, MI 48	Concrete walks connecting site buildings and structures	Good	Contributing; See text
Radio Antenna Pole –South (c. 1928)	MI-49	Steel pole with concrete foundation adjacent to Power House	Good	Contributing; See text
Radio Antenna Pole –North (c. 1928, relocated 1931)	MI-50	Steel pole with concrete foundation north side of grounds – tipped over	Fair	Contributing; See text
Flagpole (1929–1938)	MI-51	Wooden, painted flagpole	Good	Contributing; See text
USGS Marker	MI-52	Concrete USGS marker	Good	Contributing; USGS Marker is from the period of significance.
Original Flagpole Footing	MI-53	Remnant stones and concrete footing of original flagpole south of Old Lighthouse.	Poor	Contributing; See text
Lighthouse Cistern and Well Basin (c. 1881)	MI-54	Cistern and Well Basin adjacent to Old Lighthouse	Fair	Contributing; Cistern is from the period of significance.
Steel Piling (unknown date)	MI-55	Buried steel piling on beach – possible location of former boat dock or boathouse	Poor	Contributing; Steel Piling is from the period of significance.
Park Sign (1970–2009)	MI-56	Wooden Michigan Island park sign	Good	Noncontributing – contemporary
Interpretive Sign (1970–2009)	MI-57	Wooden park sign with a brief history of Michigan Island	Fair	Noncontributing – contemporary
Trail Sign (1970–2009)	MI-58	Aluminum trail sign on wood post - showing trail location and distance	Good	Noncontributing – contemporary Compatible
Information Kiosk (1970–2009)	MI-59	Wood sign/kiosk	Good	Noncontributing – contemporary

Feature	Site Image #	Description	Condition	Contributing? /Rationale
				Compatible
Septic Tank (1970–2009)		Steel septic tank set in small clearing to southwest of Keepers Quarters	Good	Noncontributing – contemporary Compatible
Propane Tank (1970–2009)	MI-60	Steel propane tank set in small clearing to southwest of Keepers Quarters	Good	Noncontributing – contemporary Compatible
Fire Pit (1970–2009)	MI-61	Round steel fire pit	Good	Noncontributing – contemporary Noncompatible
Solar Panel (1970–2009)	MI-62	Mounted on steel pole with underground line to Power House	Good	Noncontributing – contemporary Noncompatible; Could be compatible with appropriate siting

Small Scale Feature Photographs



Site Image MI-47: Concrete walks – walk to left once led to former wooden staircase down bank, 2009 (Source: MBD P1010741.JPG)

100% DRAFT March 2011



Site Image MI-48: Broken section of concrete walk north of Power House, 2009 (Source: MBD DSC_0108.JPG)



 $\textit{Site Image MI-49: Radio antenna pole - south, 2009 (Source: MBD DSC_0050.jpg)}$

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Site Image MI-50: Radio antenna pole – north (possibly relocated), 2009 (Source: MBD DSC_0052.jpg)



Site Image MI-51: Flagpole, 2009 (Source: MBD DSC_0088.jpg)



Site Image MI-52: USGS marker, 2009 (Source: MBD DSC_0053.jpg)



Site Image MI-53: Concrete footing – base for original flagpole, 2009 (Source: MBD P1010738.JPG)

1 2



Site Image MI-54: Lighthouse cistern (left) and well basin (right), 2009 (Source: MBD DSC_0060.jpg)



Site Image MI-55: Steel piling, 2009 (Source: MBD DSC_0084.jpg)



Site Image MI-56: Park sign, 2009 (Source: MBD DSC_0040.jpg)



Site Image MI-57: Interpretive sign, 2009 (Source: MBD DSC_0046.jpg)

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Site Image MI-58: Trail signs, 2009 (Source: MBD DSC_0059.jpg)



Site Image MI-59: Information kiosk and donation box, 2009 (Source: MBD DSC_0089.jpg)



Site Image MI-60: Propane tanks, 2009 (Source: MBD P1010800.JPG)



Site Image MI-61: Fire pit, 2009 (Source: MBD P1010774.JPG)

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Site Image MI-62: Solar panel, 2009 (Source: MBD P1010719.JPG)



Site Image MI-63: Broken concrete footing, 2009 (Source: MBD DSC_057.JPG).

Vegetation

Existing Condition. Vegetation at Michigan Island includes natural forested areas, cleared and maintained areas, agricultural plantings (e.g. fruit trees) and domestic plantings. The mixed northern hardwood forest dominates the landscape of the island. The forest has encroached upon the historic light station reservation. The core of the light station proper is maintained as mown lawn.

Remnants of plants or gardens installed by lighthouse keepers and other personnel stationed on the island are still visible. The light station was known to have had extensive orchard and fruit tree plantings early in the period of significance. One apple tree remains from the former orchard southeast of the Old Michigan Island Lighthouse and several cherry trees volunteers. Domestic plantings include a formal row of pines along the north edge of the grounds, mature cedar hedge plantings near the Keepers Quarters and one prominent pine planted southwest of the Original Michigan Island Lighthouse. Landscape plants found on the light station are both nonnative and domesticated native species including: Cherry (*Prunus* sp.), Apple (*Malus* sp.), White birch (*Betula papyrifera*), White pine (*Pinus strobus*), Sugar maple (*Acer saccharinum*), Cedar (*Thuja* sp.), Periwinkle (*Vinca minor*), Daylily (*Hemerocallus* sp.), and common ferns. A list of domestic plantings extant on the light station and nonextant material identified from historic photographs and documentation is included in Table MI-3.

Some domestic plantings, primarily Periwinkle (*Vinca minor*), have been introduced to the island and have encroached into the forest area. Periwinkle, considered an invasive plant species, was planted during the period of significance and is extant in a planting bed beneath the contributing pine tree west of the Old Michigan Island Lighthouse. Periwinkle is also extant in the forest adjacent to the grounds and is spreading into the surrounding forest.

The plantings in general are in fair to poor condition due to age of the plantings and missing plantings. The plantings on the light station grounds are an important contributing feature because of their relationship to the light keepers and their families.

Table MI-3. Historic Vegetation

Trees		Shrubs		Perennials		Annuals	
Cherry (Prunus	X	Japanese roses (Rosa		Peonies (Paeonia sp.)		Pansies (Viola sp.)	
sp.)		sp.)					
Apple (Malus	X	Cedar (Thuja sp.)	X	Daylily (Hemerocallus sp.)	X	Nasturtium (Nasturtium sp.)	
sp.)							
White birch		Lilac (Syringa sp.)		Coneflower (Gaillardia sp.)		Impatiens (Impatiens sp.)	
(Betula							
papyrifera)							
White pine	X			Common ferns	X		
(Pinus strobus)							
Sugar maple	X			Iris (Iris sp.)			
(Acer							
saccharinum)							

Note: "X" indicates species currently present at Michigan Island Light Station

Reservation Analysis. Historic drawings and photographs indicate that a significantly larger cleared area on the reservation existed than that which exists today. Since the Light Tower period (1929–1938), the cleared area of the light station has continued to decline from approximately 6.3 acres at the end of the period to approximately 1.3 acres in 2009. During the Early Lighthouse and Light Tower periods the light station grounds were maintained as lawn or other low vegetation. The field area to the east of the Old Lighthouse was maintained as an open field by seasonal burning. Today, a large portion of this open field has been filled by encroaching forest and the field vegetation type is missing from the landscape. The cleared area of the light station is an important contributing feature. The relationship between the extent of the cleared area and forest vegetation on the reservation has changed significantly since the period of significance. The extensive encroachment of forest vegetation diminishes the integrity of the cultural landscape.

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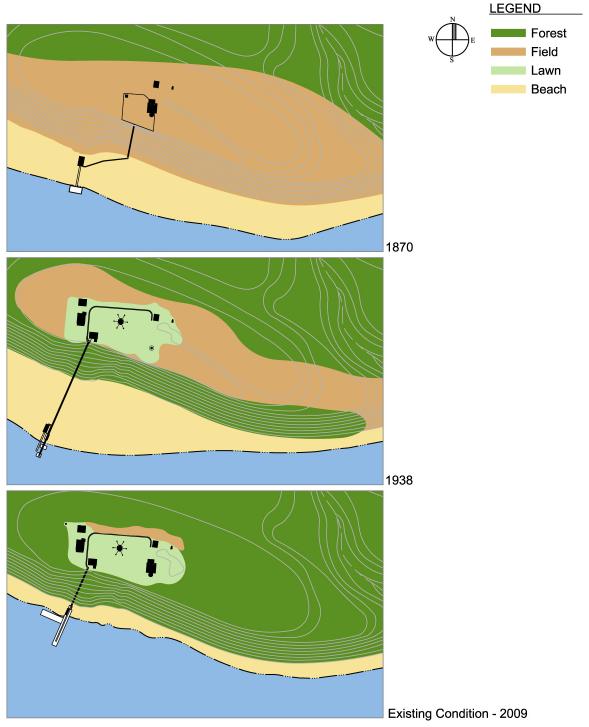
Light Station Grounds Analysis. Michigan Island has a long history of landscape and garden planting installed by the lighthouse keepers and their families. This rich history helps to tell the story of the light keepers and their families. Lighthouse Keeper Roswell Pendergast, who served from 1869 to 1874, planted many orchard trees on the light station grounds and grew nursery stock plants on the island. Historic photographs indicate fruit trees were planted around the Old Michigan Island Lighthouse as well as domestic landscape plantings. Keeper Ed Lane and family continued this tradition of landscape plantings on the light station grounds from 1902 –1938. Some of these plantings remain in place today, such as the Daylily (*Hemerocallus* sp.) plantings on the west side of the house; the Cedar (*Thuja* sp.) hedge (now overgrown) planted at the west side of the Keepers Quarters; and the ferns east of the Keepers Quarters. The Lanes created many stone planters and used stone edging around planting beds on the light station grounds. While most of the planters have been removed, a circular depression exists today where a stone-edged planter once was between the Light Tower and the fern bed.

Vegetation features present on the site are described in table MI-4 and their condition is stated.

Table MI-4. Vegetation

Feature	Site Image	Description	Condition	Contributing? /Rationale
Cleared Area	MI-64	Areas of forest vegetation cleared for reservation and light station	Poor	Contributing; present during the period of significance
Lawn Area	MI-65	Maintained lawn area of light station grounds – mown grass landscape	Good	Contributing; present during the period of significance
Pine Plantings (c. 1930)	MI-66	Line of planted pines (Pinus strobus) along northern edge	Fair – several pines have been removed – pines reaching end of lifespan	Contributing; planted by Lighthouse Keeper Ed Lane during the period of significance
Cedar Hedge (c. 1929)	MI-67	Planted hedge (Thuja sp.) at Keepers Quarters	Poor – plants are overgrown and reaching end of lifespan	Contributing; planted during the period of significance
Fern Planting Bed (1930s)	MI-68	Historic Fern bed east of the Keepers Quarters	Fair	Contributing; planted during the period of significance
Circular Depression (1930s)	MI-69	Depression at site of large stone edged planter between Light Tower and Fern bed.	Fair	Contributing; evidence of planter from period of significance
Orchard Planting (c. 1875)	MI-70	Remnant apple tree southeast of Old Lighthouse	Poor	Contributing; remnant of orchard present during the period of significance
Cherry Tree East of Old Lighthouse	MI-71	Cherry (Prunus sp.) tree at Old Lighthouse	Fair	Noncontributing; planted after the period of significance
Cherry Trees North of Privy	MI-72	Cherry (Prunus sp.) trees just beyond lawn clearing, north of the Privy	Fair	Contributing; present during the period of significance
Domestic Perennial Plantings	MI-73	Daylilies (Hemerocallus sp.) planted on west side of Keepers Quarters	Fair	Contributing; planted during the period of significance
Vegetation at Tramway	MI-74	Encroaching Forest Vegetation at Tramway	Fair	Noncontributing; has encroached following the period of significance
Invasive Domestic Plantings	MI-75, MI-76	Periwinkle (Vinca sp.) plantings in grounds	Fair	Contributing; planted during period of significance
Maple trees (2)	MI-77	Maple trees (Accer saccharinum) (2) and a stump east of Second Tower	Fair	Contributing; present during the period of significance
Pine tree	MI-75, MI-78, MI-79	Pine tree (Pinus strobus) in a cluster of trees southwest of Old Lighthouse	Fair	Contributing; present during the period of significance
Cluster of trees between Power House and Old Lighthouse	MI-79	Several trees including pine and poplar	Fair	Noncontributing, noncompatible; not present during the period of significance

Vegetation Diagram and Photographs



Site Image MI-64: Michigan Island vegetation diagram (Source: MBD 2009)



Site Image MI-65: Lawn area and domestic plantings, 2009 (Source: MBD DSC_0018.jpg)



Site Image MI-66: Pines planted along tram track, 2009 (Source: MBD DSC00598.JPG)

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Site Image MI-67: Cedar Hedge plantings, 2009 (Source: MBD DSC_0047.jpg)



Site Image MI-68: Historic fern bed east of Keepers Quarters, 2009 (Source: MBD P1010786.jpg)



Stone Edged Planter

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Circular depression in area of stone-edged planter

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Site Image MI-69: Circular depression in area of stone edged planter; top, c. 1930; bottom, 2009; (Source: MBD P1010785.jpg)



Site Image MI-70: Orchard planting; remnant apple tree southeast of Old Lighthouse, 2009 (Source: MBD P1010687.jpg)



Site Image MI-71: Cherry tree, 2009 (Source: Susan Mackreth MI 2009 006.JPG)



Site Image MI-72: Cherry Trees north of Privy (note arrow), 2009 (Source: Susan Mackreth Cherry Trees a 2009.JPG)



Site Image MI-71: Domestic plantings, 2009 (Source: MBD DSC_0107.jpg)

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4 5



Site Image MI-74: Vegetation along tramway; left, c. 1930; right, 2009; (Source: MBD DSC0037.jpg)

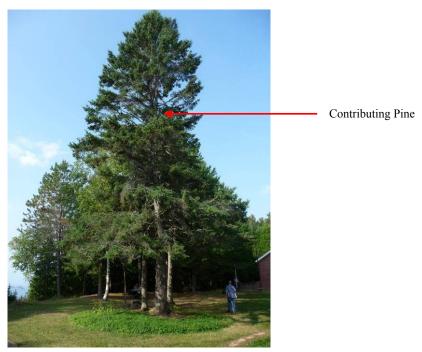


Site Image MI-75: Vinca/Periwinkle plantings at light station grounds, 2009 (Source: MBD P1010757.jpg)



Site Image MI-77: Maple trees east of Second Tower, 2009 (Source: MBD P1010754.JPG)

1 2 3



Site Image MI-78: Pine tree (front-most tree) west of Old Michigan Island Lighthouse, 2009 (Source: MBD P1010758.JPG)



Site Image MI-79: Cluster of trees between Power House and Old Michigan Island Lighthouse (Noncontributing); pine tree (Site Image MI-78) at right of image is contributing, 2009 (Source: MBD P1010766.JPG)

