



SAND POINT/MUNISING USCG LIFE SAVING STATION
PICTURED ROCKS NATIONAL LAKESHORE
Cultural Landscape Report and Environmental Assessment

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Public Review Draft



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National Park Service

Pictured Rocks National Lakeshore

Laura Rotegard, Superintendent

Tim Colyer, Acting Superintendent

Bruce Leutscher, Chief, Science and Resource Stewardship

Cindy Heyd, Wildlife Biologist

Robert A Maxon, Facility Management Systems Specialist

Brian A Hoduski, Keweenaw NHP, Museum Curator

Midwest Regional Office

Marla McEnaney, Historical Landscape Architect

Al O'Bright, Historical Architect

Consultant Team

Mundus Bishop

Tina Bishop, ASLA, Principal

Patrick Mundus, ASLA, Landscape Architect

Shelby Scharen, Preservation Planner

Madalyn Shalkey, Graphics

Allie Vostrejs, Intern

Anderson Hallas Architects, PC

Nan Anderson, FAIA, LEED AP, Architect

Kristen Craig, AIA, Architect

David Miller, Job Captain

Corvus Environmental Consulting

Mary Powell, Senior NEPA Specialist

Quinn Evans Architects

Ruth Mills, MA, MS, Architectural Historian

ACC Cost Consultants, LLC

Stan Pszczolkowski, Principal

Table of Contents

Acknowledgements	ii
Table of Contents	iii
Appendices.....	vi
List of Illustrations.....	vi
List of Matrices.....	vi
List of Figures.....	vii
 Chapter 1. Introduction	
Introduction.....	1-1
Study Area	1-1
CLR/EA Purpose and Need.....	1-4
CLR/EA Need.....	1-5
CLR/EA Objectives.....	1-5
Methodology.....	1-6
Park Purpose and Significance.....	1-6
Management.....	1-8
Management Issues.....	1-9
Environmental Assessment.....	1-11
Scoping.....	1-11
Issues and Impact Topics.....	1-12
Impact Topics Selected for Analysis.....	1-13
Impact Topics Dismissed from Further Consideration.....	1-13
 Chapter 2. Site History	
Introduction.....	2-1
Historical Context and Overview.....	2-1
Statement of Significance.....	2-2
Periods of Landscape Development.....	2-5
Indigenous Occupation to ca.1850.....	2-7
European American Settlement	2-11
(ca.1850 to 1932)	2-11
U.S. Coast Guard Development (1933 to 1958).....	2-17
NPS and Later Development (1960 to present)	2-45

Chapter 3. Existing Condition Assessment and Landscape Analysis

Introduction.....	3-1
Assessment of Integrity.....	3-2
Contributing and Non-Contributing Features.....	3-3
Natural Systems and Features.....	3-3
Spatial Organization.....	3-3
Viewshed and Vistas.....	3-3
Topography.....	3-3
Circulation.....	3-3
Buildings and Structures.....	3-4
Small Scale Features.....	3-4
Vegetation.....	3-4
Existing Condition and Analysis by Landscape Characteristic.....	3-9
Natural Systems and Features.....	3-9
Archeological Sites.....	3-13
Land Use.....	3-17
Spatial Organization.....	3-19
Topography.....	3-23
Viewshed and Vistas.....	3-25
Circulation.....	3-31
Buildings and Structures.....	3-45
Small Scale Features.....	3-51
Vegetation.....	3-57
Affected Environment.....	3-67
Historic Structures and Cultural Landscapes.....	3-67
Native Vegetation.....	3-68
Non-native Ornamental and Invasive, Exotic Plant Species.....	3-69

Chapter 4. Treatment Alternatives

Introduction.....	4-1
Treatment Approaches.....	4-2
Treatment Goals.....	4-4
No Action Alternative.....	4-4
Action Alternative A.....	4-5
Action Alternative B.....	4-9
Mitigation Measures.....	4-13
General Measures.....	4-13
Water Resources.....	4-14
Wildlife and Species of Concern.....	4-14
Native Vegetation and Non-native Ornamental and Invasive, Exotic Species.....	4-14
Historic Structures and Cultural Landscapes.....	4-15
Public Health and Safety.....	4-15
Comparison of Action Treatment Alternatives.....	4-15
Summary of Environmental Consequences.....	4-18
NPS Preferred Alternative.....	4-20

Chapter 5. Environmental Consequences

Assessment of Impacts.....	5-1
Cumulative Impacts.....	5-1
Historic Structures.....	5-2
No Action Alternative.....	5-2
Alternative A.....	5-2
Alternative B.....	5-3
Cultural Landscapes.....	5-3
No Action Alternative.....	5-3
Alternative A.....	5-3
Alternative B.....	5-4
Native Vegetation.....	5-5
No Action Alternative.....	5-5
Alternative A.....	5-5
Alternative B.....	5-5
Non-Native Ornamentals and Invasive, Exotic Plant Species.....	5-6
No Action Alternative.....	5-6
Alternative A.....	5-6
Alternative B.....	5-7
Wildlife.....	5-8
Affected Environment.....	5-8
Environmental Consequences.....	5-9
No Action Alternative.....	5-9
Alternative A.....	5-10
Alternative B.....	5-10

Chapter 6. Treatment Recommendations and Implementation

Introduction.....	6-1
Treatment Approach.....	6-1
Treatment Terminology.....	6-1
Desired Future Condition and Treatment Recommendations.....	6-3
Natural Systems and Features	6-3
Land Use.....	6-5
Archeological Sites.....	6-5
Spatial Organization.....	6-5
Topography.....	6-6
Views and Vistas.....	6-6
Circulation.....	6-6
Buildings and Structures.....	6-13
Small Scale Features.....	6-14
Vegetation.....	6-15
Implementation Guidance.....	6-17

Chapter 7. Consultation and Coordination

Scoping.....	7-1
Agency Consultation.....	7-1
Consultation with American Indians.....	7-1
U.S. Fish and Wildlife Service, Section 7 Consultation	7-2
Coastal Zone Consistency Determination.....	7-2

Appendices

Appendix A - Bibliography
Appendix B - Cost Estimate
Appendix C - Schematic Design Drawing
Appendix D - FMSS
Appendix E - Consultation/Coordination Documents

List of Illustrations

Illustration 2-1	1934 Historic Period Plan.....	2-43
Illustration 2-2	1975 Historic Period Plan.....	2-57
Illustration 3-1	Study Area Existing Condition Plan.....	3-5
Illustration 3-2	USCG Station Existing Condition Plan.....	3-7
Illustration 4-1	Treatment Alternative A.....	4-7
Illustration 4-2	Treatment Alternative B.....	4-11
Illustration 6-1	Treatment Plan.....	6-7

List of Matrices

Matrix 3-1.	Spatial Organization Matrix.....	3-19
Matrix 3-2.	Viewshed and Vistas Matrix.....	3-25
Matrix 3-3.	Circulation Matrix.....	3-33
Matrix 3-4.	Buildings and Structures Matrix.....	3-47
Matrix 3-5.	Small Scale Features Matrix.....	3-53
Matrix 3-6.	Vegetation Matrix.....	3-59
Matrix 4-2.	Comparison of Treatment Alternatives.....	4-16
Matrix 4-3.	Summary of Environmental Consequences.....	4-18

List of Figures

Figure 1-1.	Context Map. Pictured Rocks National Lakeshore preserves 42 miles of the south shore of Lake Superior within Michigan Upper Peninsula between the communities of Munising and Grand Marais. It is significant for the spectacular multicolored sandstone cliffs (Pictured Rocks) that attain a height of almost 200 feet in some locations. Sand Point/Munising USCG Life Saving Station is just north of Munising, accessed by Sand Point Road. (source: Mundus Bishop 2016, Adapted from NPS Map).....	1-2
Figure 1-2.	Study Area. The Sand Point/Munising USCG Life Saving Station cultural landscape includes buildings, structures, walks, views, vegetation and spatial patterns established by and associated with the USCG. (source: Mundus Bishop 2016).....	1-3
Figure 2-1.	Old Sand Point Cemetery. The cemetery was actively cared for by the Ojibwe ca. 1886. (source: Keweenaw NHP, Lake Superior Collection Management Center).....	2-6
Figure 2-2.	Sketch showing the three connected villages of the South Bay: Bay Furnace, Grand Island, and Sand Point. (source: Zedeno et al. <i>Traditional Ojibwe Resources, Le Veque Family Papers</i>).....	2-8
Figure 2-3.	Land owned by mining companies in the mid-Upper Peninsula. The pink denotes land owned by the Cleveland Cliffs Iron Co, green for the Munising Company. (source: “Land Owned by Mining Companies in the mid-Upper Peninsula,” 1913, Archives of Michigan.).....	2-10
Figure 2-4.	Plat map depicting proposed silica sand facility at Sand Point from the 1931 report. Prepared by R.A. Brotherton for the Cleveland Cliffs Company (source: PIRO Archives)	2-12
Figure 2-5.	Map illustrating portion of land set aside for the U.S. Coast Guard Station, 1932. The 7.11 acre plot encompassed the tip of Sand Point. (source: PIRO Archives).....	2-14
Figure 2-6.	Plot plan of the new station, 1932. (source: PIRO Archives)	2-16
Figure 2-7.	Munising Life Saving Station (HS-01) and Communication Tower, 1933. (source: Keweenaw NHP, Lake Superior Collection Management Center)	2-18
Figure 2-8.	Munising Life Saving Station (HS-01) and Boathouse and Launchway (HS-08), 1933. (source: Keweenaw NHP, Lake Superior Collection Management Center)	2-18
Figure 2-9.	Boathouse and Launchway (HS-08), 1933. (source: Keweenaw NHP, Lake Superior Collection Management Center)	2-19
Figure 2-10.	Station beach and lookout tower, undated but probably circa 1930s. (source: Alger County Historical Society).....	2-19

Figure 2-11.	Sand Point/Munising USCG Life Saving Station, plot plan showing location of structures, 1933. (source: PIRO Archives)	2-20
Figure 2-12.	Sand Point Road from Annual Report, 1933. (source: PIRO Archives)	2-22
Figure 2-13.	Many of the crew were married, and plans were developed to build homes across Sand Point Road. (source: PIRO Archives; Map of Lot 3 - Section 19-47-18, 1933.).....	2-23
Figure 2-14.	Munising Station Plot Plan, 1934. (source: PIRO Archives)	2-24
Figure 2-15.	The design of the station relied upon easy water access and views to Lake Superior. In the 1930s, a view from the lake to the Boathouse, Launchway and dock, and the Life Saving Station was available. (source: PIRO Archives).....	2-25
Figure 2-16.	In 1934 the grounds of the Life Saving Station were complete, with a perimeter walk and lawn surrounding the building. (source: PIRO Archives).....	2-26
Figure 2-17.	Munising Life Saving Station (HS-01) and Communication Tower, ca. 1940. (source: Keweenaw NHP, Lake Superior Collection Management Center)	2-28
Figure 2-18.	Three women and a girl with the Boathouse [at Munising Station], ca. 1940. (source: Keweenaw NHP, Lake Superior Collection Management Center)	2-28
Figure 2-19.	Aerial photograph of the USCG station, ca. 1940s. Taken in winter or spring, Sand Point Road is clearly seen in the lower section of the photograph, along with the system of concrete pedestrian walks. The Lookout Tower was sited at the top of the point, top of the image. (source: Keweenaw NHP, Lake Superior Collection Management Center)....	2-29
Figure 2-20.	The House near the Life Saving Station, ca. 1940. (source: Keweenaw NHP, Lake Superior Collection Management Center)	2-30
Figure 2-21.	Boathouse and Launchway (HS-08), ca. 1940. (source: Keweenaw NHP, Lake Superior Collection Management Center)	2-30
Figure 2-22.	The Lookout Tower at the end of Sand Point was a prefabricated metal structure that was removed once the station was decommissioned, c 1940. (source: Keweenaw NHP, Lake Superior Collection Management Center)	2-31
Figure 2-23.	Munising Life Saving Station (HS-01) and Communication Tower, ca. 1940. (source: Keweenaw NHP, Lake Superior Collection Management Center)	2-32
Figure 2-24.	Munising Life Saving Station (HS-01), ca. 1940. (source: Keweenaw NHP, Lake Superior Collection Management Center)	2-33

Figure 2-25.	Cutting grass at Munising Life Saving Station (HS-01), ca. 1940. (source: Keweenaw NHP, Lake Superior Collection Management Center)	2-33
Figure 2-26.	Houses at Munising Life Saving Station, January 1943. (source: Keweenaw NHP, Lake Superior Collection Management Center)	2-34
Figure 2-27.	Houses at Munising Life Saving Station, January 1943. (source: Keweenaw NHP, Lake Superior Collection Management Center)	2-34
Figure 2-28.	Munising Station from the Ice, 1945. (source: Keweenaw NHP, Lake Superior Collection Management Center).....	2-37
Figure 2-29.	Man and Boy at Munising Life Saving Station, ca. 1945. (source: Keweenaw NHP, Lake Superior Collection Management Center)	2-38
Figure 2-30.	Munising Life Saving Station with open windows in winter, ca. 1945. (source: Keweenaw NHP, Lake Superior Collection Management Center)	2-38
Figure 2-31.	Training at Munising Life Saving Station, ca. 1945. (source: Keweenaw NHP, Lake Superior Collection Management Center)	2-39
Figure 2-32.	Road to Munising Life Saving Station in winter, ca. 1945. (source: Keweenaw NHP, Lake Superior Collection Management Center)	2-39
Figure 2-33.	The Lookout Tower in winter, ca. 1945. (source: Keweenaw NHP, Lake Superior Collection Management Center)	2-40
Figure 2-34.	Munising Life Saving Station in winter, ca. 1945. (source: Keweenaw NHP, Lake Superior Collection Management Center)	2-40
Figure 2-35.	Aerial photograph, winter or spring. The complex was completed in 1934 with the Life Saving Station at the center, surrounded by lawn and a concrete curb. The system of pedestrian walks connected the complex to the residences across the road, bottom of photograph, 1948. (source: Keweenaw NHP, Lake Superior Collection Management Center).....	2-41
Figure 2-36.	Family at Munising Life Saving Station, ca. 1950. (source: Bud Campbell Photographs, Keweenaw NHP, Lake Superior Collection Management Center)	2-42
Figure 2-37.	Sand Point, 1960s. (source: PIRO Archives).....	2-42
Figure 2-38.	Sand Point, 1974. (source: PIRO Archives).....	2-46
Figure 2-39.	Site Analysis as part of the GMP, Sand Point, 1975. (source: PIRO Archives).....	2-48
Figure 2-40.	Munising Station, undated but estimated as 1980s. (source: PIRO Archives).....	2-50

Figure 2-41.	The yard behind the Life Saving Station, 1980. A fenced yard and garage at far left, with staff parking and drive. (source: PIRO Archives).....	2-52
Figure 2-42.	Munising Life Saving Station, 1982. (source: Keweenaw NHP, Lake Superior Collection Management Center)	2-52
Figure 2-43.	Munising Life Saving Station, 1982. (source: Keweenaw NHP, Lake Superior Collection Management Center)	2-53
Figure 2-44.	The Boathouse with a boat on the Launchway, the wood fence was built by the NPS, 1985. (source: PIRO Archives).....	2-53
Figure 2-45.	The Life Saving Station soon after the NPS took ownership, 1969. (source: PIRO Archives).....	2-54
Figure 2-46.	The NPS widened the service drive, expanded staff parking and added a garage behind the Life Saving Station, 1977. (source: PIRO Archives).....	2-54
Figure 2-47.	Maritime Exhibit, Sand Point, 1984. The trail and exhibit are non-extant. (source: PIRO Archives).....	2-55
Figure 2-48.	Fuel Station at Sand Point, 1984. (source: PIRO Archives).....	2-55
Figure 2-49.	The revetment was built in two stages, from the terminus of Sand Point Road to the tip of Sand Point, 1991. (source: PIRO Archives).....	2-56
Figure 2-50.	The second phase of the beach revetment work, 1991. (source: PIRO Archives).....	2-56
Figure 3-1.	PIRO is named for the exposed rocks of colorful sandstone that have been eroded into cliffs, caves and arches next to Lake Superior, such as Miners Castle. (source: Gregg Bruff NPS 2009).....	3-10
Figure 3-2.	Lake Superior reached record setting water levels in the mid-1980s, resulting in very rapid retreat (erosion and inundation) of the northern Sand Point shoreline. The NPS added a rock revetment to the north edge of Sand Point, in foreground of photograph. The sand beach has rebuilt, but not to the extent that existed during the period of significance. (source: Mundus Bishop 2016).....	3-10
Figure 3-3.	Forests dominate the landscape with deciduous trees and conifers growing on the inland portions of the landscape, and dune grasses at the shoreline. (source: Mundus Bishop 2016).....	3-12
Figure 3-4.	On the south side of the point the lakeshore cuts inland resulting in some vegetation being flooded. (source: Mundus Bishop 2016).....	3-12

Figure 3-5.	The geological formation of Sand Point extends from the shoreline to the base of the elevated plateau to the east (left in photograph). The sand at Sand Point was a dominant feature of the landscape during the period of significance. Aerial of Sand Point, 1978. (source: PIRO Archives).....	3-14
Figure 3-6.	Erosion has removed much of the sand at Sand Point since the 1970s, altering the appearance of the point. "Aerial of Sand Point, 1994." (source: PIRO Archives).....	3-15
Figure 3-7.	Since the 1970s the shoreline has shifted with additional sand accumulating south of the point. "Aerial of Sand Point, 2016." (source: Google Earth).....	3-16
Figure 3-8.	The four components of the Sand Point/Munising USCG Life Saving Station were integrated for successful operation – Lookout Tower, Communications Tower, Boathouse and Life Saving Station. These four spaces were connected visually by clearings in the vegetation and physically by walkways. The arrangement of the station was influenced by the geography of the point and arranged as an efficient system. These relationships have been diminished due to vegetation that obscures the visual relationship between these spaces and the poor condition of the walks. (source: PIRO Archives / Mundus Bishop 2016).....	3-18
Figure 3-9.	The Life Saving Station was designed as the most prominent feature. A formal system of walks connected structures, and views to the water were clearly visible, 1944. (source: PIRO Archives).....	3-20
Figure 3-10.	Since the period of significance, the spatial organization has been modified by the expanded staff parking area and loss of views to the water. (source: Mundus Bishop 2016).....	3-20
Figure 3-11.	The Launchway was placed south of the point, in a sheltered location from strong winter storms. Th twin sets of rails are partially extant. The dock, at left, is a reconstruction in an historic location at the end of the Launchway. (source: Mundus Bishop 2016).....	3-21
Figure 3-12.	The Boathouse is oriented perpendicular to the water with the main entrance on the water side of the building. (source: Mundus Bishop 2016).....	3-21
Figure 3-13.	The topography is primarily level, with sand dunes creating small natural ridges across most of the study area. As part of the site design, the USCG modified the topography at the Life Saving Station, adding fill and leveling the space into a plinth, enclosed by a concrete curb, on which the building sits. This level topography remains from the period of significance but has been modified by the expanded staff parking area at right. (source: Mundus Bishop 2016).....	3-22
Figure 3-14.	The views associated with the USCG development have changed since the period of significance. Historically the vegetation was less dense, allowing for open views across the study area. These views were essential to the successful life saving	

	operations undertaken by the USCG. Over time vegetation has grown into the once open spaces, obscuring views to the water and the internal views and sight-lines between structures. (source: Mundus Bishop 2016).....	3-24
Figure 3-15.	The view from the Lookout Tower to Lake Superior was needed to keep watch for troubled ships on the lake. (source: PIRO Archives).....	3-26
Figure 3-16.	A similar view today, looking towards Grand Island. The view remains open across the beach but smaller trees encroach upon the view. (source: Mundus Bishop 2016).....	3-26
Figure 3-17.	The view from Sand Point towards Munising Bay. The point provided a wide cone of vision and was the basis for the USCG establishment. The foundation of the Lookout Tower can be seen as four submerged concrete blocks on the right of the photograph. (source: Mundus Bishop 2016).....	3-27
Figure 3-18.	The open view from the Boathouse and Launchway remains, contributing to the character and history of the cultural landscape. (source: Mundus Bishop 2016).....	3-27
Figure 3-19.	The Station Walk at the north connects the Life Saving Station to the Oil House, and continues on towards the former Lookout Tower. (source: Mundus Bishop 2016).....	3-28
Figure 3-20.	The walk to the former Communications Tower is covered with dirt and debris. Vegetation obscures the view between the Life Saving Station and the former tower. (source: Mundus Bishop 2016).....	3-29
Figure 3-21.	The walk between the Communications Tower and the Lookout Tower is in fair condition, portions are covered by encroaching vegetation. (source: Mundus Bishop 2016).....	3-29
Figure 3-22.	Sand Point Road is the only vehicular route into the study area. The visitor parking provides approximately 15 spaces including one accessible space. (source: Mundus Bishop 2016).....	3-30
Figure 3-23.	Circulation routes have remained in-tact from the period of significance. The overall circulation pattern remains, but the expanded vehicular circulation routes and poor condition of many walks threatens the integrity of the original design. (source: Mundus Bishop 2016).....	3-32
Figure 3-24.	Sand Point Road provides access to a service road and staff parking area, which were expanded to the east after the period of significance by the NPS. (source: Mundus Bishop 2016).....	3-34

Figure 3-25.	After the period of significance, the terminus of Sand Point Road was formalized into a paved loop turn around. Informal parking occurs along the outer edge of the road. (source: Mundus Bishop 2016).....	3-34
Figure 3-26.	The service drive connects to the Boathouse on the west, and is in its original width and alignment. (source: Mundus Bishop 2016).....	3-36
Figure 3-27.	The small parking area to the south of the Boathouse is lined with large boulders and provides staff parking only. This parking area has been expanded since the period of significance. (source: Mundus Bishop 2016).....	3-36
Figure 3-28.	The North South Main Walk provides an accessible walking surface from the visitor parking area to the front of the Life Saving Station. (source: Mundus Bishop 2016).....	3-37
Figure 3-29.	The Station Walk at the south facade of the Life Saving Station is in fair condition; damaged where the entrance drive crosses the sidewalk, at rear of photograph. (source: Mundus Bishop 2016).....	3-37
Figure 3-30.	The Station Walk on the southeast corner of the Life Saving Station is in fair condition. (source: Mundus Bishop 2016).....	3-38
Figure 3-31.	The Station Walk on the east side is damaged adjacent to the staff parking area. (source: Mundus Bishop 2016).....	3-38
Figure 3-32.	The North South Main Walk has been damaged at the south end by erosion and uplift due to tree roots, especially where it turns towards the Boathouse, above. (source: Mundus Bishop 2016).....	3-39
Figure 3-33.	The Station Walk extended to the east, to connect to the residences on the opposite side of Sand Point Road. This portion of the walk is in poor condition. (source: Mundus Bishop 2016).....	3-39
Figure 3-34.	The walk to the Lookout Tower is damaged by erosion of the beach, and the end of the walk has washed out. (source: Mundus Bishop 2016).....	3-40
Figure 3-35.	The walk to the Lookout Tower disappears into the sand. The loss of the walk diminishes the integrity of the circulation pattern. (source: Mundus Bishop 2016).....	3-40
Figure 3-36.	Concrete walks surround the Boathouse on three sides. The east walk has been covered over by the ramp, and is in poor condition. (source: Mundus Bishop 2016)....	3-41
Figure 3-37.	The porch and steps, and ramp into the Boathouse are recent additions in historic locations, although the ramp was shorter historically. Note poor condition of concrete walk in foreground. (source: Mundus Bishop 2016).....	3-41

- Figure 3-38. The concrete walk at the south facade of the Boathouse, in foreground, is in poor condition. The boardwalk, at left, connects to the Launchway with a wooden step. (source: Mundus Bishop 2016).....3-42
- Figure 3-39. The boardwalk introduces a new, meandering circulation pattern to the landscape, which historically focused on straight, linear routes. (source: Mundus Bishop 2016)...
3-42
- Figure 3-40. The boardwalk leads to the boat hull, behind fence in background, and then turns towards, where portions of the boardwalk are washed out. (source: Mundus Bishop 2016).....3-43
- Figure 3-41. The Launchway is in fair to poor condition. Today, water routes do not reflect the historic pattern because the Launchway and Boathouse are no longer actively used. (source: Mundus Bishop 2016).....3-43
- Figure 3-42. USCG Life Saving Station is the most prominent building in the landscape, with a formal arrangement of walks and lawn surrounding the structure. (source: Mundus Bishop 2016).....3-44
- Figure 3-43. The Oil House is a prefabricated metal structure, placed to the northwest of the Life Saving Station. (source: Mundus Bishop 2016).....3-44
- Figure 3-44. The Boathouse was constructed in the 1930s by the USCG, sited on the west side of the study area, facing Munising Bay. The east facade, above, originally had an exterior ramp and stairs. These features have been rebuilt in a similar fashion to the historic, but the exterior stair faces a different direction (south rather than east) and the ramp has been extended further to the east. (source: Mundus Bishop 2016).....3-46
- Figure 3-45. The Launchway, in foreground, was constructed of two bulkheads flanking either side, and two sets of metal rails that carried the USCG boats in and out of the water. When originally constructed, the waterline was closer to the Boathouse. The Launchway was extended in the 1940s as a result of the naturally shifting shoreline. (source: Mundus Bishop 2016).....3-46
- Figure 3-46. The Launchway is in fair to poor condition. Sand and vegetation have covered the west end of the Launchway, diminishing the spatial relationship that once existed between the structure and the lake. Northwest winds across Lake Superior shift the sands at Sand Point, creating a general trend of younger beach ridges from southeast to northwest along Sand Point. (source: Mundus Bishop 2016).....3-48
- Figure 3-47. The foundation of the Communications Tower is covered by dirt and debris, and enclosed by dense forest, making it difficult to discern the scale of the structure that once stood here. (source: Mundus Bishop 2016).....3-48
- Figure 3-48. The extant foundation of the Lookout Tower is visible as four concrete block submerged in the lake. Loss of the structure has negatively impacted the pattern of buildings and

	structures across the cultural landscape. The loss of sand at Sand Point is part of the natural cycle of beach erosion and accretion. (source: Mundus Bishop 2016).....	3-49
Figure 3-49.	The rock revetment at the north edge of the study area is a non-contributing feature added in the early 1990s. It does not reflect the historic condition of the landscape. (source: Mundus Bishop 2016).....	3-49
Figure 3-50.	The concrete curb at the south edge of the Life Saving Station is the most easily seen portion of the curb that once framed the formal outdoor space around the building. (source: Mundus Bishop 2016).....	3-50
Figure 3-51.	The concrete curb at the east edge is in poor condition and does not enclose the formal lawn space, as was the original design intent. (source: Mundus Bishop 2016).....	3-50
Figure 3-52.	Historically significant small scale features include the original flagpole installed by the USCG, and the concrete curb that surrounds the Life Saving Station, in foreground. The Headquarters sign is a recent addition, but does not distract from the historic setting. (source: Mundus Bishop 2016).....	3-52
Figure 3-53.	Non-contributing small scale features occur at the terminus of Sand Point Road, including wayfinding sign, trash receptacle, and the boulder edge along the turnaround. (source: Mundus Bishop 2016).....	3-54
Figure 3-54.	The concrete foundation remains of a garage that was added by the NPS and later removed. (source: Mundus Bishop 2016).....	3-54
Figure 3-55.	The split-rail fence, boardwalk, and boat hull in background, are non-contributing features. (source: Mundus Bishop 2016).....	3-55
Figure 3-56.	Boat trolley used to maneuver boats into the water along the rails. (source: Mundus Bishop 2016).....	3-55
Figure 3-57.	During the period of significance, the USCG allowed the larger pine trees to remain, but kept the rest of the vegetation low. Note the level, even stand of lawn around the Life Saving Station. (source: Alger County Historical Society, c. 1940; annotation by Mundus Bishop).....	3-56
Figure 3-58.	Vegetation and Land Use Map of Sand Point. (source: Environmental Assessment for Sand Point Revetment, November 2015).....	3-58
Figure 3-59.	Several trees remain from the period of significance, identified on a plan from 1934. It appears that these trees were not deliberately planted, but were allowed to remain, while many of the other trees and tall shrubs were removed to provide necessary views to the water. A formal lawn was established around the Life Saving Station, bounded on all edges by a concrete curb. (source: 1932 Building Plot Plan, 1933 Map of Lot 3 - Section 19-47-18, 1934 Station Plot Plan, Mundus Bishop 2016).....	3-60

Figure 3-60.	Existing vegetation includes native trees and shrubs, dune vegetation, and ornamental vegetation. Several white pine trees and a formal lawn are extant from the period of significance. (source: Mundus Bishop 2016).....	3-61
Figure 3-61.	Forest vegetation at the Boathouse and Launchway was kept clear for views of the water. In this winter photograph, note the view of Grand Island across the bay, in background at left of photograph, date unknown. (source: PIRO Archives).....	3-62
Figure 3-62.	Since the closing of the station, dune grasses and smaller vegetation have regrown into once cleared areas, including within the Launchway. Note the view to Grand Island is no longer apparent due to growth of mature forest trees. (source: Mundus Bishop 2016).....	3-63
Figure 3-63.	The concrete curb maintains the line between formal lawn and unmown lawn to the west, right side, of the photograph. (source: Mundus Bishop 2016).....	3-64
Figure 3-64.	Ornamental vegetation remains from the former residences at Sand Point, including lilac, honeysuckle, lily of the valley, and apple trees. (source: Mundus Bishop 2016)....	3-64
Figure 3-65.	Birch are a common tree species in the study area, and have regrown in areas that had been cleared by the USCG. (source: Mundus Bishop 2016).....	3-65
Figure 3-66.	White pine trees from the period of significance are in good condition and contribute to the historic character of the station. (source: Mundus Bishop 2016).....	3-66
Figure 6-1.	The historic character and patterns originally designed by the USCG will be rehabilitated by repairing historic walks, restoring views to the water, and repairing vegetation patterns. The formal military setting and use of the area will be made apparent by repairing spatial patterns and improving access to historic buildings and shoreline. (source: Mundus Bishop 2016).....	6-4
Figure 6-2.	Existing Life Saving Station, with staff parking and drive to be removed. (source: Mundus Bishop 2016).....	6-10
Figure 6-3.	The formal military setting of the Life Saving Station will be rehabilitated, with short mown lawn, orthogonal walks, and raised plinth surrounded by a concrete curb that frames the building. Walks will be added or modified to meet access needs to the building and will connect to an expanded visitor parking area. The existing NPS parking area and loop drive will be removed to repair the setting. (source: Mundus Bishop 2016).....	6-10
Figure 6-4.	The Existing Boathouse setting. (source: Mundus Bishop 2016)	6-12
Figure 6-5.	The Boathouse will be rehabilitated to provide universal access and interior restrooms. The adjacent setting will be repaired by thinning trees and establishing low growing native shrubs to maintain the visual connection to Lake Superior. (source: Mundus Bishop 2016)	6-12

Chapter 1. Introduction

Introduction

1 This document presents the Cultural
 2 Landscape Report and Environmental
 3 Assessment (CLR/EA) for the Sand Point/
 4 Munising United States Coast Guard (USCG)
 5 Life Saving Station at Pictured Rocks
 6 National Lakeshore (PIRO). This document
 7 is complemented by a Historic Structures
 8 Report (HSR), under separate cover, that
 9 details the development, condition of and
 10 treatment for the significant buildings.
 11
 12 This CLR/EA presents detailed
 13 documentation of Sand Point's historical
 14 development, existing condition and
 15 contributing features, and provides treatment
 16 recommendations that guide the long-
 17 term care and stewardship of the cultural
 18 landscape.
 19
 20 This work builds upon the numerous studies,
 21 investigations and documents that already
 22 exist for Sand Point. These include the 2004
 23 General Management Plan/EIS (GMP),
 24 2003 Resource Management Plan (RMP),
 25 2010 Long Range Interpretive Plan (LRIP),
 26 and 2005 Wildland Fire Management Plan
 27 (WFMP). The 2013 National Register of
 28 Historic Places (NRHP) Multiple Property
 29 Listing for U.S. Government Life Saving
 30 Stations provides a basis for the historical
 31 significance of the landscape and buildings.
 32
 33 The CLR/EA is the primary treatment
 34 document for the cultural landscape, and
 35 is used to guide implementation of the
 36 GMP preferred alternative for landscape
 37 resources. The Sand Point cultural landscape
 38 includes buildings, structures, walks, views,
 39 vegetation and spatial patterns established
 40 by and associated with the USCG. This
 41 document establishes a treatment philosophy
 42 and framework to provide cohesive
 43 recommendations for the cultural landscape.
 44 The CLR/EA establishes recommendations

1 that support operational and visitor use,
 2 enhance resource condition, support
 3 interpretive programming, and streamline
 4 compliance for implementation.
 5

Study Area

7
 8 Pictured Rocks National Lakeshore is on
 9 the south shore of Lake Superior within
 10 Michigan's Upper Peninsula. It features
 11 backcountry and drive-in campgrounds and
 12 trails, miles of sand beaches, and several
 13 maritime navigational sites. Sand Point/
 14 Munising USCG Life Saving Station is just
 15 north of Munising, Michigan (Figure 1-1).
 16 The study area encompasses the historic life
 17 saving station established during the 1930s
 18 by the USCG and covers the 7.11 acre (2.87
 19 hectares) area included in the historic USCG
 20 boundary (Figure 1-2).
 21
 22 Sand Point/Munising USCG Life Saving
 23 Station was established as one of a series of
 24 life saving stations along the shore of Lake
 25 Superior. In the late 19th century the Great
 26 Lakes region was experiencing a period
 27 of economic growth and the lakes were
 28 intensively used for transporting goods. The
 29 Great Lakes, and Lake Superior in particular,
 30 were difficult to navigate due to sudden
 31 storms and ships were forced to hug the
 32 shorelines due to the limitations of early
 33 navigation systems and the frequent need
 34 to re-supply with fuel (generally, cordwood
 35 prior to the Civil War and coal after). The
 36 Sand Point/Munising USCG Life Saving Station
 37 was one of the last life saving stations to be
 38 built on the Great Lakes, with construction
 39 commencing in 1933. From 1933 to 1958 it
 40 was an active life saving station. Changes in
 41 technology beginning in the 1940s led to the
 42 obsolescence of life saving stations including
 43 the Sand Point/Munising USCG Life Saving
 44 Station. It was demobilized in 1946 and
 45 officially decommissioned in 1961.

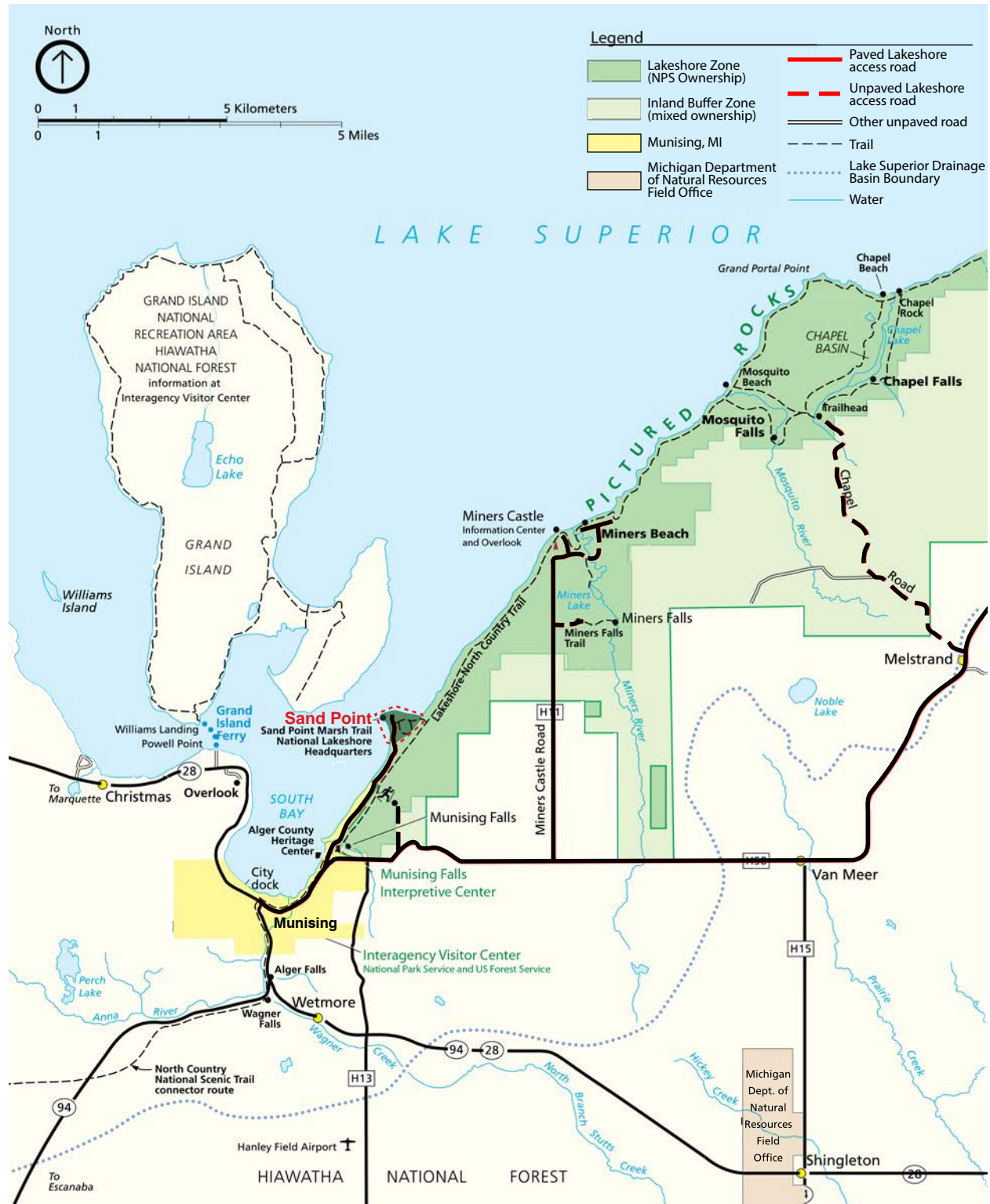


Figure 1-1. Context Map. Pictured Rocks National Lakeshore preserves 42 miles of the south shore of Lake Superior within Michigan Upper Peninsula between the communities of Munising and Grand Marais. It is significant for the spectacular multicolored sandstone cliffs (Pictured Rocks) that attain a height of almost 200 feet in some locations. Sand Point/Munising USCG Life Saving Station is just north of Munising, accessed by Sand Point Road. (source: Mundus Bishop 2016, Adapted from NPS Map)

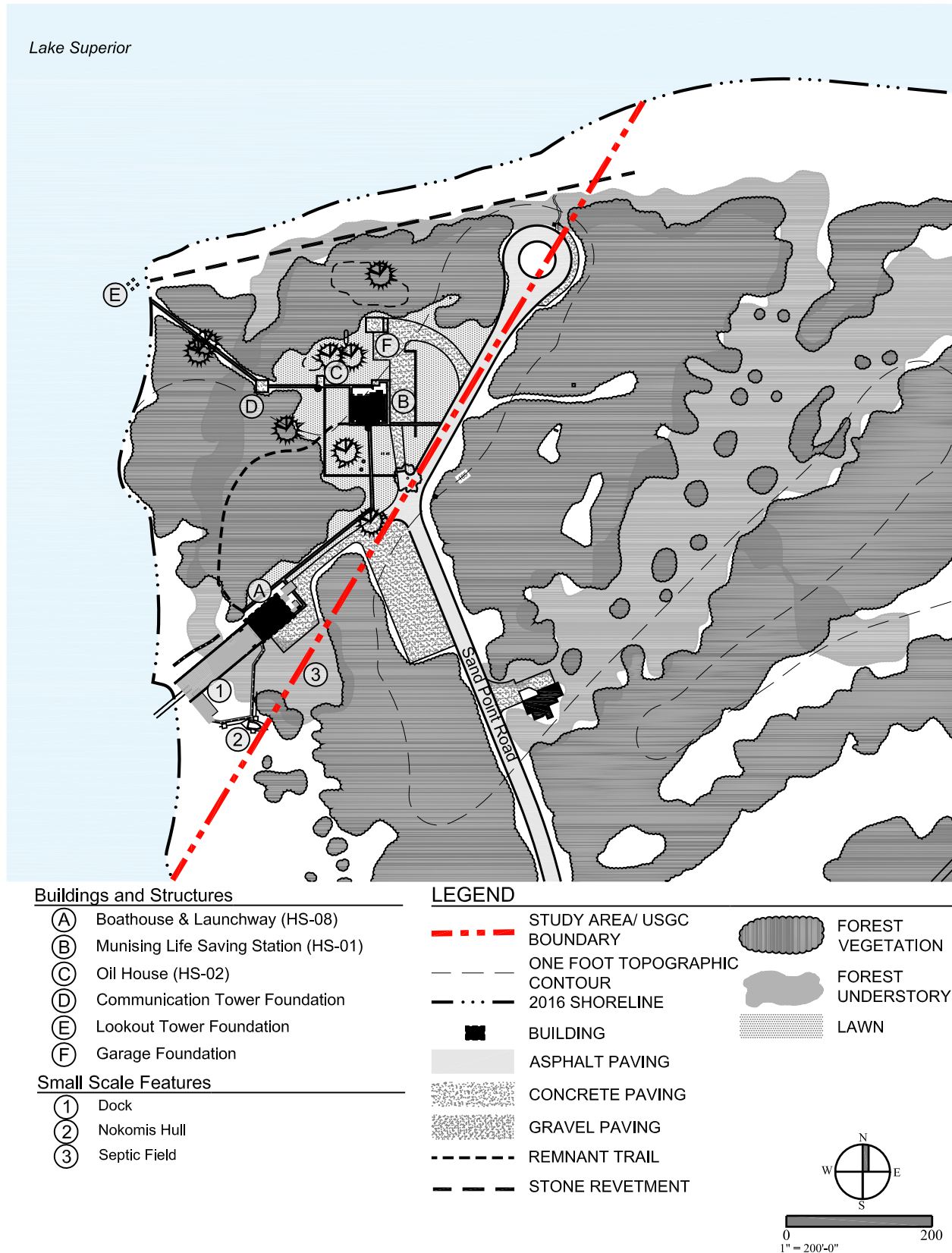


Figure 1-2. Study Area. The Sand Point/Munising USCG Life Saving Station cultural landscape includes buildings, structures, walks, views, vegetation and spatial patterns established by and associated with the USCG. (source: Mundus Bishop 2016)

1 Sand Point/Munising USCG Life Saving Station
2 was developed on the geological formation
3 of Sand Point, a prominent natural feature
4 along the coast of Lake Superior that juts into
5 Munising Bay. The location was ideal for a life
6 saving station due to the 270 degree views
7 of the water and the level, sandy topography.
8 The lookout tower was placed at the end of
9 Sand Point where crew monitored the water.
10 The natural vegetation was maintained sparse
11 and low to provide views to and from the lake.
12
13 The Michigan State Historic Preservation
14 Office determined in 1999 that Sand Point /
15 Munising Life Saving Station is eligible for the
16 NRHP. It is significant under Criterion A due
17 to its association with the maritime heritage
18 of the Upper Great Lakes, and under Criterion
19 C as it represents the final era of life saving
20 station design. Its period of significance of
21 1933 to 1958 reflects its use as a life saving
22 station.
23
24 Features of the cultural landscape include
25 concrete walks and curb, former building
26 foundations, historic vegetation, views,
27 archeological and ethnographic resources,
28 and three historically significant buildings
29 — Munising Life Saving Station (HS-01),
30 Munising Life Saving Station Oil House
31 (Oil House) (HS-02), and Munising Life
32 Saving Station Boathouse and Launchway
33 (Boathouse and Launchway) (HS-08). The
34 Sand Point/Munising USCG Life Saving Station
35 cultural landscape consists of a combination
36 of native woodlands, dune vegetation, lawn
37 and ornamental plantings. A sandy shoreline
38 with a failing revetment borders the study
39 area on three sides. Former keepers' quarters
40 lined Sand Point Road, where ornamental
41 vegetation, remnant foundations and other
42 archeological resources may be present.
43
44 Since the period of significance the cultural
45 landscape has become revegetated, the
46 shoreline has shifted submerging the lookout

1 tower, and walkways have settled into the
2 sand.

3 4 **CLR/EA Purpose and Need**

5
6 Purpose of this CLR/EA is to prepare critical
7 planning and design documents to guide the
8 ultimate treatment for the cultural landscape.
9 In conjunction with the Historic Structure
10 Report (HSR) the CLR/EA will serve as a
11 record of the history of the property including
12 pre-USCG, USCG, and NPS ownership and
13 provide documentation and analysis of
14 features. The two documents will provide
15 guidance on the long-term care of the site.
16 A cohesive treatment for the buildings and
17 cultural landscape will provide guidance
18 for repair and preservation of features that
19 support operational and visitor uses.

20
21 This project will guide the long-term
22 stewardship of the Sand Point/Munising
23 USCG Life Saving Station for the enjoyment
24 of current visitors and future generations
25 by improving cultural resource protection,
26 and providing a cohesive, unified visitor
27 experience.

28
29 Implementing the preferred alternative will
30 meet the following objectives.

- 31
32 • Focus maintenance efforts to maintain
33 conditions of historic buildings and
34 structures;
35
36 • More accurately represent cultural
37 landscape features characteristic between
38 1933 and 1958, when the historic
39 structure was in use as a life saving
40 station;
41
42 • More accurately represent historic
43 clearings and associated viewsheds
44 characteristic between 1933 and 1958,
45 when the historic structure was in use as
46 a life saving station;

- 1 • Provide a high quality (authentic) visitor
2 experience;
- 3
- 4 • Define visitor access and use of the
5 buildings and structures;
- 6
- 7 • Minimize increases to operations and
8 maintenance efforts.
- 9

10 **CLR/EA Need**

11
12 This CLR/EA addresses the need to preserve
13 the Sand Point/Munising USCG Life Saving
14 Station's historically significant structures
15 and features. This document will provide
16 the needed baseline documentation,
17 supplement existing historical data, provide
18 recommendations for future study, and
19 provide guidance for treatment and resource
20 protection.

21
22 This document is needed to record the
23 changes to the cultural landscape over
24 time, transfer knowledge about the cultural
25 landscape, and provide holistic and integrated
26 guidance for the longterm stewardship of
27 the cultural landscape. The document will
28 also be used to connect cultural landscape
29 maintenance to other resource management
30 plans and projects.

31 32 **CLR/EA Objectives**

33
34 The CLR/EA identifies landscape
35 characteristics and features that convey the
36 historical significance and character of the
37 property. The CLR/EA provides a holistic and
38 integrated plan for long-term preservation
39 and stewardship of the cultural landscape and
40 buildings. This report addresses the following
41 objectives.

- 42
- 43 • Perform an accessibility assessment for
44 the Sand Point/Munising USCG Life Saving
45 Station to identify barriers to universal
46 access.

- 1 • Develop treatment alternatives for
2 altering/expanding staff and visitor
3 parking, providing restrooms, and
4 increasing accessible pathways at the site.
- 5
- 6 • Provide support for engaging affiliated
7 tribes to increase knowledge and
8 potential interpretation of the theme
9 of aboriginal use of the area as well as
10 contemporary cultural significance to the
11 Ojibwe people. Very little is known about
12 indigenous use of Sand Point.
- 13
- 14 • Evaluate the need for a kayak launch area.
- 15
- 16 • Provide recommendations on locating
17 a barrier free vault toilet in a manner
18 compatible with the overall treatment
19 approach for the property.
- 20

21 In tandem with this CLR/EA, the HSR will
22 evaluate how the structures are used today
23 and recommend changes if needed. This
24 will include recommendations for building
25 stabilization, repair and maintenance,
26 and code compliance. Refer to the HSR for
27 additional objectives for the buildings.

Methodology

1 The CLR/EA was conducted at a thorough
2 level of investigation and documentation
3 for historical research, existing condition
4 assessment, and landscape analysis. The
5 thorough level research methodology, as
6 defined by the NPS, focused on the use
7 of select documentation of known and
8 presumed relevance, including primary and
9 secondary sources that are readily available.^{1.1}
10
11 The existing condition investigation was
12 conducted according to best practices. A
13 review of readily available documentation
14 was undertaken. It included information
15 from PIRO, Alger County Historical Society,
16 Northern Michigan University, National Park
17 Service's Denver Service Center - Technical
18 Information Center (NPS-TIC), National Park
19 Service's Midwest Archeological Center (NPS-
20 MWAC), and the Records of the 9th Coast
21 Guard District, Cleveland.
22
23 This review included planning documents,
24 administrative reports, technical reports,
25 natural resource studies, and correspondence.
26 Review of historical documentation included
27 historic drawings and photographs, and
28 correspondence from primary and secondary
29 sources. Background data provided by
30 the NPS was used to prepare drawings
31 and illustrations. This included original
32 construction drawings for the Sand Point/
33 Munising USCG Life Saving Station and recent
34 LiDAR information, Great Lakes Network I&M
35 imagery products, supplemented with field
36 observations and measurements.
37
38 Site investigations in June 2016 documented
39 existing conditions. Archeological research
40 focused on review of previous archeological
41 investigations. This CLR/EA did not include
42 any additional archeological investigations.

44 1.1 Page, Robert R., Cathy A. Gilbert, and Susan A. Dolan.
1998. *A Guide to Cultural Landscape Reports: Contents,
Processes and Techniques*. Washington D.C.: National Park
Service.

Park Purpose and Significance

1 PIRO was established in October 1966 by
2 Public Law 89- 668 to "preserve for the
3 benefit, inspiration, education, recreational
4 use, and enjoyment of the public, a significant
5 portion of the diminishing shoreline of the
6 United States and its related geographic
7 and scientific features." PIRO provides
8 access to, and preserves the natural beauty
9 and resources of this region, and provides
10 recreation and enjoyment.
11
12 The purpose of PIRO is to:
13
14 • Preserve a portion of the Great Lakes
15 shoreline for its geographic, scientific,
16 scenic, and historic features.
17
18 • Provide opportunities for public benefit
19 in recreation, education, enjoyment, and
20 inspiration.
21
22 • Protect the character and use of the
23 shoreline zone while allowing economic
24 utilization of the inland buffer zone
25 renewable resources.
26
27 PIRO extends 42 miles along the south shore
28 of Lake Superior between the communities of
29 Munising and Grand Marais. It is significant
30 for the spectacular multicolored sandstone
31 cliffs (Pictured Rocks) that extend about 12
32 miles along Lake Superior in the western
33 portion of PIRO and attain a height of almost
34 200 feet. The eastern portion of PIRO contains
35 the perched Grand Sable Dunes, which rise
36 more than 300 feet above the lake. The dunes,
37 a major park attraction, are a rare occurrence
38 in the Great Lakes region and contain
39 uncommon plant species and communities.^{1.2}
40
41 PIRO is within a day's drive of several
42 major metropolitan areas and offers

44 1.2 PIRO GMP, 3.

1 many recreational attractions. Numerous
 2 picturesque waterfalls cascade over the
 3 Pictured Rocks and the inland escarpment.
 4 Lake Superior and the inland lakes
 5 accommodate boating, fishing, and swimming,
 6 and backcountry areas are ideal for camping
 7 and hiking. PIRO has a variety of cultural
 8 resources that depict the maritime, iron,
 9 logging, and histories of the area. Winter
 10 activities include ice fishing, snowshoeing,
 11 cross-country skiing, and snowmobiling.^{1.3}
 12
 13 The Long-Range Interpretive Plan describes
 14 the significance of PIRO in the following
 15 statements.^{1.4}

- 16
 17 • PIRO affords public access to a
 18 spectacular and diverse segment of the
 19 Lake Superior shoreline.
 20
- 21 • Unmatched in their scenic value, the
 22 200-foot high Pictured Rocks cliffs
 23 rise perpendicular from Lake Superior
 24 creating a mosaic of rock form, color and
 25 texture, enhanced by cascading waterfalls.
 26
- 27 • Five square miles of pristine sand dunes
 28 and their unique plant communities,
 29 perched atop 300- foot sand banks, rise
 30 abruptly at the shore of Lake Superior.
 31
- 32 • Twelve miles of unspoiled and
 33 undeveloped Lake Superior beach
 34 contrast the Pictured Rocks cliffs and
 35 Grand Sable Dunes.
 36
- 37 • Bedrock geology and glacial landforms
 38 create a tapestry of topography marked
 39 by streams, inland lakes and a diversity of
 40 associated vegetation.

43 1.3 PIRO GMP, 3.

44 1.4 PIRO LRIP, 3-6.

- 1 • The shoreline offers extraordinary
 2 and inspirational scenic vistas of Lake
 3 Superior, the largest body of fresh water
 4 on earth.
 5
- 6 • PIRO offers a variety of affordable year
 7 round recreational opportunities for
 8 appropriate public use.
 9
- 10 • Within a distinct area, PIRO contains a
 11 spectrum of cultural resources focused on
 12 the human use of Lake Superior and the
 13 shoreline.
 14
- 15 • Lying in a transition zone between boreal
 16 and eastern hardwood forest, PIRO's
 17 scientifically recognized collection of flora
 18 and fauna is found nowhere else within
 19 the Lake Superior Basin.
 20
- 21 • Pictured Rocks is the only NPS area with a
 22 legislated buffer zone.
 23
 24
 25
 26
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 28
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 44

Management

The study area consists of the Sand Point/
Munising USCG Life Saving Station, part of
PIRO, managed by the National Park Service
(NPS). The management of PIRO is primarily
guided by the 2004 GMP, 2003 Resource
Management Plan (RMP), 2010 LRIP, and the
2005 WFMP.

The GMP recommends the following actions.

- Expanded opportunities for visitor use by
providing additional and more convenient
access to significant park features.

- Efforts would continue to restore
PIRO to as natural a state as possible,
with proposed areas to be designated
as Wilderness. Natural ecological
processes would be allowed to occur, and
restoration programs would be initiated
where necessary.^{1.5}

- The GMP recommended NPS operations
move from Sand Point and be relocated
adjacent to the Munising maintenance
facility. If this were to occur, Sand Point
would be managed to provide visitors
with opportunities to learn about Coast
Guard history.

- The Munising Life Saving Station (HS-01)
and Boathouse and Launchway (HS-08)
would be rehabilitated/preserved to
protect the architectural values associated
with their period of significance (1933 to
1946, with an emphasis on the 1940s).

- The cultural landscape would be
rehabilitated and preserved, to reflect the
ambiance and most significant elements
of the period of significance. The site
would also be actively interpreted.

1.5 PIRO GMP, 3.

- The first floor of the Munising Life
Saving Station would be restored to the
1940s Coast Guard era, and the Station,
Boathouse and Launchway would be
interpreted.^{1.6}

The 2010 LRIP presents a vision for
PIRO's interpretive future including
recommendations for visitor experience; new
interpretive media; and staffing, partnership,
and research needs.

- Four topics were identified as primary
interpretive themes: change, diversity,
protection, and magnificence. The
interpretive themes cover the changes to
geology and human activity; diversity of
natural resources and people; protection
of natural and historic resources; and
the magnificence of PIRO with its range
of breathtaking settings, from magically
intimate forest paths to spectacular vistas
of the largest, deepest, coldest, and most
pristine of the Great Lakes.^{1.7}

- The LRIP recommends seeking funding to
significantly expand the museum exhibits
in the Sand Point boathouse.^{1.8} The plan
recommends new waysides to tell the
stories of the U.S. Life Saving Service and
U.S. Coast Guard. The narratives could be
presented at multiple locations, including
Sand Point.^{1.9}

- If administrative offices were moved
from Sand Point, the LRIP recommends
the former Munising Life Saving Station
be refurnished (1940s) on the first
floor, with the second floor remodeled
for seasonal staff housing. The grounds

1.6 PIRO GMP, 61.

1.7 PIRO LRIP, 3-6.

1.8 PIRO LRIP, 49.

1.9 PIRO LRIP, 54.

would be restored to their 1940s appearance.^{1.10}

The WFMP's overriding goal is restoration or maintenance of the historic scene and the associated cultural resources, while providing for firefighter and public safety, protection of natural, and cultural resources, and human developments from wildfire.^{1.11}

Management Issues

Several management issues were identified at the project outset through PIRO staff, during the existing conditions evaluation, and from the GMP, RMP, and LRIP. Treatment recommendations assist in addressing the following identified management issues.

Protection of Cultural Resources

Several threats to cultural resources from non-contributing features and environmental issues are of concern. The Sand Point cultural landscape has been impacted over time by modifications and natural processes that have diminished its integrity.

The original design of the circulation system was modified in the 1970s and again in the 1990s by the NPS when a road and parking area were formalized adjacent the Munising Life Saving Station (HS-01). The vehicular route was modified which damaged small scale features and changed the circulation patterns.

The functional use patterns of the working Munising Life Saving Station are difficult to discern due to loss of the Communications Tower and Lookout Tower, and dense vegetation in areas previously cleared.

^{1.10} PIRO LRIP, 59.

^{1.11} PIRO WFMP, i.

Deferred maintenance has resulted in vegetation that has become overgrown and ornamental vegetation that has expanded into areas not previously planted. Sidewalks and boardwalks have been damaged due to weathering and erosion, and have not been repaired.

The Launchway is partially covered in sand, and guidance is needed on its preservation or repair.

The shoreline at Sand Point is highly volatile and frequently shifting. Loss of sand at Sand Point has altered the sediment cycle and appearance of the site - although this may be a natural, cyclical occurrence.

Sand Point Shoreline Revetment

Sand Point shoreline revetment was completed between 1989 and 1990. The revetment was installed incorrectly and does not function as designed. It unintentionally disrupted the once open beach landscape.

The effects of the shoreline revetment is being evaluated in a separate EA, currently in draft form. One Revetment EA alternative evaluates replacing the revetment with new material, properly installed. Another alternative evaluates removing the revetment and restoring the sand. Climate models are unclear as to the changes anticipated in lake level and are inconclusive on future flooding of the area.

Vegetation Resources and Management

Vegetation has regrown in places where it was historically cleared. Views to and from the water from the Munising Life Saving Station (HS-01) are no longer apparent. The dense vegetation does not reflect the historic character; however PIRO is concerned about removing vegetation due to the difficulty

1 of re-establishing vegetation on sand and
2 problems with invasive plant species.
3
4 Original or volunteers from original
5 ornamental/planted vegetation remain in
6 some areas, specifically at the row of former
7 keepers' quarters. Plants include common
8 garden species: honeysuckle (*Lonicera spp.*),
9 lilac (*Syringa spp.*), and asparagus (*Asparagus*
10 *officinalis*). These are non-native but have not
11 been problematic. Several original pine trees
12 remain from the earliest development of the
13 site from the 1930s.

14 15 Sensitive Ethnographic and Archeological 16 Resources

17 Archeological sites occur within the study
18 area and future work will be needed to
19 identify and protect these areas. There are
20 known burial sites, however little is known
21 about indigenous use of Sand Point. There is
22 an opportunity to engage affiliated tribes to
23 increase the park's knowledge and potential
24 interpretation of the theme of aboriginal use
25 of the area as well as contemporary cultural
26 significance to the Ojibwe.

27
28 Wildlife Resource and Management
29 Wildlife includes merlins (*Falco columbarius*),
30 peregrines (*Falco peregrinus*), bald eagles
31 (*Haliaeetus leucocephalus*), golden eagles
32 (*Aquila chrysaetos*), sandhill cranes (*Grus*
33 *canadensis*), northern long-eared bats
34 (*Myotis septentrionalis*), and little brown
35 bats (*Myotis lucifugus*). Northern long-eared
36 bats, a threatened/endangered species, may
37 roost in the attic of the Munising Life Saving
38 Station. Little brown bats, which are not
39 currently listed as endangered, also roost in
40 the building. White-Nose Syndrome, a disease
41 caused by fungus and associated with severe
42 bat mortality, has been found in multiple
43 Michigan counties, including Alger County.
44 The disease is a critical issue for all bats, and

1 could lead to more bat species being federally
2 listed as endangered.

3 4 Recreational Kayak Launch and Beach Access

5 The number of visitors is increasing
6 throughout the region, including PIRO and
7 the adjacent National Forest. Individuals and
8 commercial recreational boating operations
9 share parking and access to the water.
10 Parking areas are often full during the busy
11 summer season. Beach use at Sand Point is
12 very popular and kayak use is increasing.
13 Evaluation is needed into the feasibility of
14 incorporating a kayak launch in the general
15 area.

16
17 Commercial kayak operations carpool to the
18 boat launch at Sand Point. This area is heavily
19 used and recommendations are needed on
20 how to best manage visitor use.

21
22 A permanent comfort station is needed within
23 the study area, in addition to the one at the
24 swim beach. A barrier free vault toilet should
25 be incorporated into the cultural landscape
26 in a manner compatible with the treatment
27 approach and recommendations for the
28 property.

29 30 Future Use of the Munising Life Saving Station

31 The Munising Life Saving Station (HS-01) is
32 currently headquarters for PIRO, however the
33 park would like to relocate to a new facility
34 for offices in the long-term. Staffing in the
35 current building is maximized, and the weight
36 of the office on the second floor is a structural
37 issue.

38
39 The building unofficially serves visitors, who
40 enter to use the restroom or stamp their NPS
41 passport. If administrative staff moves out,
42 then the building could be employed for more
43 public and/or interpretive uses.

44

Environmental Assessment

Accessibility and Architectural Barriers

An accessibility assessment for the Munising Life Saving Station (HS-01) is required to identify barriers to universal access. Accessibility is needed for staff and visitor use of the Munising Life Saving Station. The park is required to provide basic accessibility to the main entry, office, and restroom. The Boathouse also requires accessible access and paths need to be modified for accessibility.

The Environmental Assessment (EA) is provided to evaluate potential effects on resources from the proposed treatment alternatives and a no action alternative. This CLR/EA provides the decision-making framework that: 1) analyzes a reasonable range of alternatives to meet objectives of the proposal; 2) evaluates potential issues and impacts to PIRO's resources and values; and 3) identifies mitigation measures to lessen the degree or extent of these impacts.

This EA evaluates in detail impacts to two types of cultural resources - historic structures and cultural landscapes, and two categories of vegetation resources - native vegetation and non-native ornamental and invasive, exotic plant species. Some impact topics were dismissed because the project would result in no more than minor effects. No major effects were identified as a result of implementing the proposed alternatives in an initial analysis of effects.

The public, regulatory agencies, tribal partners, and other stakeholders have had an opportunity to comment on this CLR/EA. Comments received will be considered in the final evaluation of effects.

Scoping

Scoping is an early and open process to determine the breadth of issues and alternatives to be addressed in an EA. Park staff and resource professionals of the NPS Midwest Regional Office conducted internal scoping. This interdisciplinary process defined the purpose and need, identified potential actions to address the need, determined the likely issues and impact topics, and identified the relationship of the proposed action to other planning efforts at PIRO.

1 As part of tribal consultation, scoping letters
2 were sent to federally recognized tribes for
3 consultation with PIRO on September 15,
4 2016, to determine if any ethnographic or
5 other resources are in the project area and
6 to inquire whether local tribes wanted to be
7 involved in the environmental compliance
8 process. The tribes and governments that
9 received letters were:

- 10
- 11 • Bad River Band of Lake Superior Tribe of
 - 12 Ojibwe Indians
 - 13 • Bay Mills Indian Community of Michigan
 - 14 • Fond du Lac Band of Lake Superior
 - 15 Ojibwe
 - 16 • Grand Portage Band of Ojibwe Indians
 - 17 • Keweenaw Bay Indian Community
 - 18 • Lac Courte Oreilles Band of Lake Superior
 - 19 Ojibwe Indians
 - 20 • Lac du Flambeau Band of Lake Superior
 - 21 Ojibwe Indians
 - 22 • Lac Vieux Desert Band of Lake Superior
 - 23 Ojibwe Indians
 - 24 • Red Cliff Band of Lake Superior Ojibwe
 - 25 Indians
- 26

27 The NHPA (16 USC 470 et seq.) requires
28 the consideration of impacts on cultural
29 resources, either listed in or eligible to be
30 listed in, the National Register. Park staff sent
31 a scoping letter to the Michigan SHPO on
32 September 15, 2016 to solicit input on issues
33 of concern. PIRO will continue to consult
34 with the SHPO to determine the effects of
35 the action alternatives on eligible historic
36 resources and to develop mitigation for
37 impacts on historic features, if any, from the
38 preferred alternative.

39

40 In compliance with Section 7 of the
41 Endangered Species Act, PIRO also sent a
42 scoping letter on September 15, 2016 to the
43 U.S. Fish and Wildlife Service (USFWS) to
44 solicit input on issues of concern. As part of
45 formal Section 7 consultation, the NPS will
46 also forward this CLR/EA and NPS' effects

1 determination to the USFWS to determine
2 if they concur with the NPS' findings of
3 effect, and whether additional conservation
4 measures are needed to protect listed species.

6 **Issues and Impact Topics**

7

8 An important part of the decision-making
9 process is seeking to understand the
10 consequences of making one decision
11 over another. This CLR/EA identifies the
12 anticipated impacts of possible actions on
13 certain resources, park visitors, and park
14 staff. The impacts are organized by topic, such
15 as "vegetation" or "cultural resources." Impact
16 topics serve to focus the environmental
17 analysis and ensure the relevance of impact
18 evaluation.

19

20 Impact topics were developed from the
21 questions and comments brought forth
22 during scoping; site conditions; staff
23 knowledge of resources; and any laws,
24 regulations, policies, or orders applicable
25 to the project. Some topics were dismissed
26 from detailed analysis because the resource is
27 not present in the study area or because the
28 treatment alternatives would either have no
29 effect on the impact topic, or the effects would
30 be negligible to minor. Some impact topics
31 were retained even though the effects of the
32 alternatives would be negligible to minor
33 because the impact topic is a particularly
34 sensitive resource, or was identified as an
35 important topic in scoping.

36

37 As a general rule, an issue or impact topic is
38 carried forward for detailed analysis if:

- 39
- 40 • the environmental impacts associated
 - 41 with the issue are central to the proposal
 - 42 or of critical importance;
 - 43
 - 44 • a detailed analysis of environmental
 - 45 impacts related to the issue is necessary
 - 46 to make a reasoned choice between
 - 47 alternatives;

- the environmental impacts associated with the issue are a point of contention among the public or other agencies; or
- there are potentially significant impacts to resources associated with the issue.

Impact Topics Selected for Analysis

The topics evaluated in detail in this CLR/EA are:

- Historic structures;
- Cultural landscapes;
- Vegetation;
- Visual resources;
- Visitor experience;
- Wildlife;
- Park operations.

Impact Topics Dismissed from Further Consideration

According to NPS guidance on preparing Environmental Assessments (EAs), it is not necessary to carry an issue or impact topic forward for detailed analysis simply because a resource is present or is affected. Detailed analysis under each alternative is reserved for significant issues (i.e., pivotal issues or issues of critical importance) that will play a key role in making a decision on selecting a preferred alternative. Other than the retained impact topics previously listed, remaining impact topics were eliminated from consideration because either the resources are not present in the areas proposed for management implementation or because the effects, if any, would be negligible to minor, either with impacts alone or with mitigation measures. Because they are often considered in EAs or were preliminarily identified during scoping and are dismissed in this CLR/EA, reasons for dismissing certain impact topics or issues are summarized below.

Geology and Soils

While geologic resources contribute to the significance of PIRO, the treatment alternatives would have little to no impact on site geology because no subsurface excavation is anticipated to be deep enough to affect important or unusual geologic formations. Any activities proposed on the Sand Point/Munising USCG Life Saving Station would have negligible effects on soils because activities would occur within previously disturbed areas, would not significantly affect the soil profile, and/or would include measures to minimize or avoid changes in soil erosion.

Wetlands

Large-scale vegetation inventory mapping of vegetation communities on Sand Point depicts more than 30 acres of wetland-dominated vegetation communities, including Leatherleaf – Sweetgale Shore Fen, Dogwood – Willow Swamp, and Northern Water-lily Submerged Aquatic Wetland. None of these communities is mapped in the study area. The inventory also depicts about .2 acres of White Pine – Red Maple Swamp occurring in the study area.^{1.12} Although not dominated by wetlands, White Pine – Red Maple Swamp communities may include patches of wetlands in seasonally saturated or poorly draining areas. Small wetlands may also be present in the study area in roadside ditches or depressions in the generally upland White Pine/Blueberry/Dry-Mesic Forest that is the dominant community in the study area.^{1.13} Proposed treatment alternatives would primarily be in developed or disturbed areas or in the dry-mesic forest, although some treatment alternative activities, such as removing sediment from the boat ramp, may impact wetlands if they are present in the

^{1.12} Kevin Hop, Sara Lubinski, and Jennifer Dieck. *National Park Service Vegetation Inventory Program: Pictured Rocks National Lakeshore, Michigan. Natural Resource Report NPS/GLKN/NRR-2010/201*. (Fort Collins, CO: U.S. Department of the Interior, National Park Service 2010).

^{1.13} Hop, Lubinshi, And Dieck, *Vegetation Inventory Program*.

1 sediment. Areas of vegetation that would be
2 impacted by treatment alternative activities
3 would be surveyed for wetlands prior to
4 initiating work. If wetlands were identified
5 within the activity footprint, impacts would
6 be avoided by revising the activity, if possible.
7 If unavoidable impacts would occur because
8 of the activity, NPS would comply with
9 the provisions of Executive Order 11990
10 (Protection of Wetlands), NPS Director's
11 Order #77-1 (Wetland Protection), the Clean
12 Water Act, and state regulations and would
13 minimize impacts as much as practicable.
14 With minimization, unavoidable impacts
15 would have a small effect on wetlands,
16 particularly in the overall context of Sand
17 Point wetlands, so wetlands were dismissed
18 as an impact topic.

19

20 Special Status Species

21 Special status species include species listed
22 as threatened or endangered under the
23 Endangered Species Act and other species
24 considered sensitive by the park, including
25 species listed by the State of Michigan that
26 are either state threatened, endangered,
27 or of special concern. The NPS is aware of
28 federally endangered and threatened species
29 in the park, including northern long-eared bat
30 (*Myotis septentrionalis*) documented on Sand
31 Point.^{1.14} As part of informal consultation with
32 the US Fish and Wildlife Service (see Chapter
33 7) on the presence of listed species in the
34 study area and the potential project effects
35 on the species, the NPS prepared a technical
36 report that evaluated if suitable habitat
37 for listed species is present in and around
38 the study area and whether the proposed
39 treatment alternatives would affect species
40 known to be, or with potential to be, present
41 (under NPS review). Based on the findings

42

43 1.14 Kruger, Laura, and Rolf Peterson. Occurrence of
44 Temperate Bat Species at Three National Parks in the
45 Great Lakes Region. Natural Resource Technical Report
46 NPS/GLKN/NRTR-2008/128. (National Park Service, Fort
Collins, Colorado, 2008).

1 of the technical report, with mitigation
2 measures included in the treatment
3 alternatives, the NPS does not anticipate
4 that any of the proposed alternatives would
5 have more than insignificant or discountable
6 adverse effects on federally listed species.
7 NPS will continue to consult with US Fish and
8 Wildlife Service on effects while finalizing the
9 CLR/EA and selecting an alternative. NPS also
10 determined that, with mitigation measures,
11 adverse impacts to state listed species would
12 be somewhat noticeable and long-term, but
13 not substantial. Because effects on special
14 status species would not be substantial, they
15 are not further evaluated.

16

17 Water Resources

18 The Clean Water Act and NPS Management
19 Policies 2006 direct the NPS to protect park
20 waters and avoid pollution of park waters
21 by human activities. Revegetating disturbed
22 areas and other permanent drainage and
23 erosion-control measures would minimize
24 the potential for short-term adverse effects
25 to water quality. The potential for impacts to
26 water quality from the treatment alternatives
27 would be local, short-term, and minor.

28

29 Floodplains/Coastal Processes

30 Although one of the treatment alternatives
31 includes removing and disposing an
32 estimated 150 cubic yards of sand in the
33 Launchway, the effect on the floodplain would
34 be negligible and the proposed alternatives
35 would not change the floodplain status of
36 areas of the study area mapped as being in the
37 floodplain. The alternatives would also not
38 change the structure, composition, or function
39 of the floodplain. Additionally, none of the
40 proposed alternatives would interfere with or
41 alter natural coastal processes. Because there
42 would be no effect on floodplains or coastal
43 processes, these topics were dismissed from
44 further consideration. While there would be
45 no effect on coastal processes, Sand Point is a
46 State of Michigan Coastal Zone Management

1 Area and the NPS will provide the state with
 2 NPS' Consistency Determination under the
 3 Coastal Zone Management Act (16 United
 4 States Code [U.S.C.] § 146(c) and Code of
 5 Federal Regulations Part 930 Subpart (C) for
 6 the ultimately selected treatment alternative.

8 Indian Trust Resources

9 The federal Indian trust responsibility is
 10 a legally enforceable fiduciary obligation
 11 on the part of the United States to protect
 12 tribal lands, assets, resources, and treaty
 13 rights. Secretarial Order 3175 requires that
 14 any anticipated impacts to Indian trust
 15 resources from a proposed project or action
 16 by Department of the Interior agencies
 17 be explicitly addressed in environmental
 18 documents. The order represents a duty to
 19 carry out the mandates of federal law with
 20 respect to American Indian and Alaska Native
 21 tribes. Because none are present on the
 22 Munising Life Saving Station or Sand Point,
 23 the proposed alternatives would have no
 24 effect on Indian trust resources.

25

26 Ethnographic Resources

27 Ethnographic resources are defined by
 28 the NPS as any "site, subsistence, or other
 29 significance in the cultural system of a group
 30 traditionally associated with it." No specific
 31 issues related to ethnographic resources
 32 have been identified within the boundary
 33 of the study area.^{1.15} Although a previously-
 34 disturbed, 19th century Ojibwe cemetery is
 35 located 200 meters south of the Munising
 36 Life Saving Station (HS-01), it is outside of
 37 the study area and none of the treatment
 38 alternatives include activities at or within
 39 50 meters of this location.^{1.16} Because

40

41 1.15 M. Nieves Zedeno et. al., Traditional Ojibwe Resources
 42 in the Western Great Lakes: An Ethnographic Inventory
 43 in the States of Michigan, Minnesota, and Wisconsin
 44 (Tucson, Arizona: University of Arizona in Tucson Bureau
 45 of Applied Research in Anthropology, prepared for the
 46 National Park Service Midwest Regional Office, 2001).

1.16 Schilling, Timothy. Sand Point Archeological Investigation,
 Trip Report. Unpublished document, MWAC, 2016.

1 ethnographic resources are not known
 2 to occur in the study area, and because
 3 appropriate steps would be taken to
 4 protect any ethnographic resources that are
 5 inadvertently discovered or disclosed during
 6 on-going tribal consultation, ethnographic
 7 resources were dismissed as an impact topic.

8

9 Environmental Justice

10 Executive Order 12898, "General Actions
 11 to Address Environmental Justice in
 12 Minority Populations and Low-Income
 13 Populations" requires all federal agencies
 14 to incorporate environmental justice into
 15 their missions by identifying and addressing
 16 the disproportionately high and/or adverse
 17 human health or environmental effects of
 18 their programs and policies on minorities and
 19 low-income populations and communities.
 20 The proposed treatment alternatives would
 21 have no direct effect on minority or low-
 22 income populations because none are present
 23 on Sand Point and there would be no indirect
 24 effects that would affect minority or low-
 25 income populations outside of PIRO, if any are
 26 present.

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Chapter 2. Site History

Introduction

1 The Sand Point cultural landscape
 2 encompasses the 7.11 acres developed
 3 by the USCG and the natural landform of
 4 Sand Point. The study area was used by the
 5 native Ojibwe people for centuries prior to
 6 European American settlement. Development
 7 by the USCG began in the 1930s with
 8 the establishment of a formal pattern of
 9 buildings, structures, circulation routes and
 10 vegetation that exists today. Established as
 11 part of Pictured Rocks National Lakeshore
 12 in 1968, portions of the cultural landscape
 13 have been modified by the NPS to meet
 14 contemporary needs.
 15
 16 The site history provides a description of
 17 the cultural landscape through the use of the
 18 area by American Indians, early settlement
 19 by European Americans, development by
 20 the USCG, and subsequent alterations by
 21 the NPS. This includes the construction of
 22 the Munising Life Saving Station (HS-01)
 23 and Boathouse (HS-08); circulation routes,
 24 vegetation, and changes to the shoreline over
 25 time.
 26
 27 This chapter begins with a historical overview
 28 of the development of the region and
 29 study area. This is followed by a statement
 30 of significance describing the historical
 31 significance of Sand Point / Munising USCG
 32 Life Saving Station, and a description of the
 33 period significance of 1932 to 1958.
 34
 35 This chapter includes four periods of
 36 landscape development, from the earliest
 37 settlement by American Indians to the
 38 present-day. The four periods of development
 39 include: 1.) Indigenous occupation to ca.1850;
 40 2.) European American Settlement (ca.1850
 41 to 1932); 3.) U.S. Coast Guard Development
 42 (1933 to 1958); and 4.) NPS Development
 43 (1960 to present).
 44

Historical Context and Overview

1 Sand Point was a strategic location inhabited
 2 for hundreds of years by Anishinaabe-
 3 speaking Ojibwe people who camped at
 4 various locations around the southern
 5 shore of Lake Superior. In particular, there
 6 are historical accounts of an Ojibwe village
 7 between Munising and Sand Point in the 18th
 8 and 19th centuries, where the people fished,
 9 hunted, and harvested wild or cultivated rice.
 10 An Ojibwe cemetery was located on Sand
 11 Point, and remained in active use into the
 12 early 20th century.
 13
 14 While European Americans such as French fur
 15 traders had been present in the Upper
 16 Peninsula since the 17th century, the first
 17 permanent white settlement of the area began
 18 in the early to mid 1800s. During the latter
 19 decades of the 19th century, a number of
 20 industries in the Upper Peninsula drew more
 21 settlers to the area. These included logging,
 22 iron smelting, and commercial fishing; along
 23 with a small tourist industry.
 24
 25 In 1900, three hundred thousand acres of
 26 land in Alger County, including a tract on
 27 Sand Point, were purchased by the Cleveland
 28 Cliffs Iron Company, the largest independent
 29 producer of iron ore in the United States.
 30 There is no evidence that, aside from the a
 31 proposed silica sand operation, the company
 32 logged or otherwise utilized the land it
 33 owned at Sand Point. In the early 1930s, the
 34 Cleveland Cliffs Company agreed to provide
 35 land on Sand Point to the United States Coast
 36 Guard for a new station.
 37
 38 The United States government had been
 39 engaged in maritime life saving operations
 40 since 1848, when the U.S. Congress
 41 appropriated the first funds to build and
 42 equip life saving stations on the East Coast.
 43
 44

Statement of Significance

1 The U.S. Life-Saving Service was officially
2 incorporated as a separate agency in 1878.
3 The first life-saving stations appeared on
4 the Great Lakes in the early 1870s including
5 several on Lake Superior. In 1900 a station
6 was established at Grand Marais. There were
7 also many lighthouses built on Lake Superior
8 in the late 19th and early 20th centuries. At
9 the time the Lighthouse Service was separate
10 from the Life-Saving Service, and it remained
11 so until 1939. In 1915 the Life-Saving Service
12 merged with the Revenue Cutter Service to
13 form the United States Coast Guard.

14
15 Interestingly, the decision to build a Coast
16 Guard Station at Sand Point came at a period
17 when the Coast Guard was in a period of
18 contraction rather than expansion. The Great
19 Depression resulted in reduced funding
20 for the Coast Guard and the service went
21 through a period of reorganization. Fifteen
22 lifeboat stations on the East Coast were
23 decommissioned while construction of Sand
24 Point was underway. Additional closures
25 continued during the 1930s.

26
27 The Sand Point/Munising USCG Life Saving
28 Station was an active station from its
29 construction from 1932 to 1933 until it
30 was decommissioned in 1961. The station
31 personnel were active in local rescues
32 for over two decades before the site was
33 decommissioned, however they rarely
34 participated in any high-profile rescue
35 operations.

36
37 Following the station's decommissioning,
38 the property reverted to the Cleveland Cliffs
39 Iron Company, who donated it to the City of
40 Munising. In turn, in 1968 the City deeded
41 the land and station buildings to the National
42 Park Service following the establishment of
43 the Pictured Rocks National Lakeshore. The
44 NPS continues to use the station buildings
45 and landscape for administration and
46 interpretive purposes.

1 The Sand Point/Munising USCG Life Saving
2 Station has not been listed in the National
3 Register of Historic Places (NRHP), or on
4 any local or state listings of historic places.
5 Other Life Saving/Coast Guard stations in
6 Michigan previously listed either as individual
7 structures or as contributing to a district
8 include Sleeping Bear Point Life Saving
9 Station (built 1901, designated 1979), South
10 Manitou Island Life Saving Station (built
11 1901, designated 1983), North Manitou
12 Island Life Saving Station (built 1875,
13 designated 1998), and Pointe aux Barques
14 Life Saving Station (built 1876, designated
15 1995). The scope of work for this project
16 notes that the station was determined eligible
17 for listing in 1999 under Criterion A due to its
18 association with the maritime heritage of the
19 Upper Great Lakes, and under Criterion C, as
20 it represents the final era of life saving station
21 design. Pursuit of National Register listing is a
22 stated internal National Park Service goal, but
23 not part of the current project.

24
25 Sand Point/Munising Life Saving Station is
26 potentially eligible for listing in the NRHP
27 under the "U.S. Government life saving
28 Stations, Houses of Refuge, and Pre-1950
29 U.S. Coast Guard Lifeboat Stations" Multiple
30 Property Documentation Form (MPDF).
31 Under this MPDF, certified by the Keeper of
32 the National Register in 2013, Sand Point/
33 Munising Life Saving Station meets the
34 requirements for listing.

35
36 Built in 1932 to 1933 on Sand Point, east of
37 Munising, Michigan, Sand Point/Munising
38 USCG Life Saving Station is an example of
39 the station complex property type where
40 the living quarters, boat storage and other
41 functions were dispersed in multiple
42 dwellings around the property. This property
43 type replaced the earlier integrated station
44 type (in which living quarters and boat
45 storage were in the same building) in the

1 early 20th century when the Coast Guard
 2 began using larger and heavier boats and
 3 required more storage that could not
 4 be accommodated in a single building.
 5 Typical elements of the station complex
 6 type represented at Sand Point/Munising
 7 Life Saving Station were a boathouse with
 8 launchway, living quarters, lookout station,
 9 flagpole, and miscellaneous outbuildings such
 10 as a garage and oil house.

11
 12 The Coast Guard selected station locations
 13 based on a number of factors. These
 14 included proximity to areas that would make
 15 navigation in a particular area dangerous
 16 (shoals, rocks, currents), ease of access to the
 17 water and visibility from the water, position
 18 relative to coverage by other stations, and
 19 degree of protection from storms and other
 20 weather factors. A good station would have
 21 a slightly elevated area where the personnel
 22 in the station could easily see the water and
 23 where the buildings would be somewhat
 24 protected from storms and high water, as
 25 well as a level area near the water where the
 26 station boats could be quickly launched from
 27 a separate boathouse. Sand Point/Munising
 28 USCG Life Saving Station was built midway
 29 along the southern Lake Superior shoreline
 30 between existing stations at Marquette to the
 31 west and Grand Marais to the east. Its location
 32 along the east side of South Bay across from
 33 Grand Island meant it was relatively protected
 34 from the notorious fury of Lake Superior, but
 35 still closer to the open water than the main
 36 part of Munising. The siting of the boathouse
 37 on the south side of the point provided
 38 further protection, while the relatively
 39 elevated location of the living quarters gave it
 40 good visibility toward the lake, augmented by
 41 the watchtower west of the quarters.

42
 43 Coast Guard stations were organized by a
 44 naval structure with its personnel serving in
 45 various ranks. The military-style operation

1 of a station (as opposed to the more family-
 2 oriented Lighthouse Service) resulted in
 3 specific elements such as barracks-style
 4 rooms in the living quarters, mess halls rather
 5 than dining rooms, and separate quarters
 6 including a bedroom and office for the officer
 7 in charge. In addition to their regular life-
 8 saving drills, crews were required to perform
 9 most of the maintenance and upkeep of
 10 the station. Station facilities were regularly
 11 inspected by the commanding officer and by
 12 district inspectors. This included maintenance
 13 of the station's landscape to present a "ship-
 14 shape" appearance. This meant the vegetation
 15 did not block sightlines and crew could easily
 16 access the boathouse and other storage
 17 facilities in an emergency (again, contrasted
 18 to the more domestic character of the
 19 landscape at civilian light stations during this
 20 same period).

21
 22 From its establishment in the 1870s, the
 23 Life-Saving Service/Coast Guard utilized
 24 standard designs for its station buildings. This
 25 practice, implemented first in the Lighthouse
 26 Service in the 1850s, made it more efficient
 27 and less expensive to construct stations even
 28 in remote locations. The service utilized a
 29 series of standard designs throughout the late
 30 19th and early to mid 20th centuries. Sand
 31 Point/Munising USCG Life Saving Station is
 32 an excellent example of the Chatham design,
 33 created in 1914, just before the establishment
 34 of the Coast Guard, and popular into the
 35 mid to late 1940s. At least 30 stations
 36 around the country were built to this design,
 37 characterized by a symmetrical, two-story
 38 living quarters with minimal trim and
 39 typically painted standard Coast Guard colors
 40 of white with a red shingle roof and trim.
 41 This design exhibited some minor variations,
 42 typically at the roofline. Sand Point/Munising
 43 USCG Life Saving Station has a "kick" at the
 44 base of the first floor that was an interesting
 45 variation of the typical Chatham design.

1 Sand Point/Munising USCG Life Saving
2 Station is significant under National
3 Register Criterion A, at the local level, for
4 its association with the history of maritime
5 transportation and life saving activities
6 on Lake Superior. Although built when the
7 Coast Guard was in a period of contraction
8 following the Great Depression, the need for a
9 station at Sand Point reflected the continued
10 importance of shipping on Lake Superior
11 during this period, and the continued
12 dangers posed by the often uncertain marine
13 conditions on the massive lake. While the
14 crew at Sand Point only participated in a few
15 notable rescues, the logs reflect the day-to-
16 day importance of their less well-known
17 duties — rescuing fishermen, pleasure
18 boaters, and other mariners who fell into
19 harm's way on the lake. The occupation of the
20 Sand Point Station was short, only 25 years,
21 due to improvements in technology that
22 made boats safer and gave individual stations
23 greater range. However, during that period,
24 the station served an important function in
25 the Munising area.

26
27 Sand Point/Munising USCG Life Saving
28 Station is significant under National Register
29 Criterion C for embodying the distinctive
30 characteristics of the station complex style
31 of landscape design and the Chatham style
32 of architecture, both standard designs
33 of the Coast Guard during the early 20th
34 century. The station retains integrity overall,
35 with some minor impacts. It has integrity
36 of location, design, setting, materials,
37 workmanship, feeling, and association. The
38 most significant impacts to integrity are
39 the loss of the watch tower and some other
40 minor associated features. The cultural
41 landscape has also been impacted by beach
42 fluctuations, previous attempts to stabilize
43 the shoreline, and reduction of visibility due
44 to the subsequent overgrowth of trees and
45 vegetation. The cultural landscape around

1 the living quarters has integrity and retains
2 the crucial functional connection to the
3 boathouse, a character-defining feature of
4 life saving stations. The buildings in general
5 retain most of their historic materials, and
6 replacement materials have generally been
7 in kind. A few minor alterations adapted
8 the living quarters to office use and the
9 installation of exhibits and storage in the
10 boathouse, but these have generally been
11 compatible and have minimally impacted
12 integrity.

13
14 The period of significance for Sand Point/
15 Munising USCG Life Saving Station is 1932
16 to 1958, the period during which it was an
17 active Coast Guard facility. This reflects the
18 significant associations of the property with
19 the Coast Guard's life saving operations and
20 its architectural significance as a exemplar of
21 life saving station design.

Periods of Landscape Development

- 1 Four periods of landscape development
- 2 describe the physical evolution of the
- 3 Sand Point cultural landscape from the
- 4 earliest use of the area by American Indian
- 5 groups through present-day.
- 6
- 7 The beginning and end of each period
- 8 corresponds to and documents, points
- 9 of major physical change in the cultural
- 10 landscape of Sand Point.
- 11
- 12 • Indigenous occupation to ca.1850
- 13
- 14 • European American Settlement (ca.1850
- 15 to 1932)
- 16
- 17 • U.S. Coast Guard Development (1933 to
- 18 1958)
- 19
- 20 • NPS Development (1960 to present)
- 21
- 22 The following narrative text, photographs,
- 23 drawings, and illustrations describe
- 24 each period of landscape development.
- 25 Introductory paragraphs provide an overview
- 26 of how the cultural landscape appeared
- 27 during that period of development.
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Figure 2-1. Old Sand Point Cemetery. The cemetery was actively cared for by the Ojibwe ca. 1886. (source: Keweenaw NHP, Lake Superior Collection Management Center)

1 Indigenous Occupation to ca.1850

2
3 The early landscape of Sand Point provided an
4 easy resting place for American Indians who
5 traveled by canoe on Lake Superior. Part of a
6 larger village, settlement on Sand Point was
7 seasonal. A cemetery was established near
8 the point as early as the mid-1800s. Early
9 photographs and sketches show a landscape
10 dominated by sandy dunes, and interspersed
11 with tall groves of conifer trees.

12

13 3,000 to 1,000 BP

14 During the Late Archaic period, the northern
15 forests changed from a predominantly mesic
16 ecosystem to boreal forest ecosystems and
17 to northern hardwoods forest ecosystems.
18 American Indians in the Great Lakes forest
19 region were organized in small hunting and
20 gathering bands but showed sedentism,
21 agricultural specialization, and long distance
22 trade in some regions, such as the lower
23 peninsula of Michigan.^{2.1}

24

25 1150 AD to 1450 AD

26 Research suggests that the geologic formation
27 of Sand Point was formed between 500 to 800
28 years ago.^{2.2}

29

30 1400 to 1600

31 The Ojibwe, Potawatomis and/or Ottawas,
32 may have resided in the Sand Point area
33 during the Juntunen phase of the late
34 Woodland period, ca. AD 1400-1600.^{2.3}
35 During this time, the seasonal village complex
36 gave rise to the lakeshore fishery complex
37 along the lakes. Mixed crop farming extended
38 further inland to include wetland areas. It was
39 in this age of increased specialization that
40 the Anishinaabe peoples (ancestral or proto-
41 Ojibwe) migrated into the region.^{2.4}

42

43 2.1 Zedeno, et. al., *Traditional Ojibwe Resources*, 27.

44 2.2 Fisher, Timothy G. et al., Coastal geology and recent
45 origins for Sand Point, Lake Superior, *Papers in the Earth
and Atmospheric Sciences*. Paper 418. 2014, 24.

46 2.3 Zedeno, et. al., *Traditional Ojibwe Resources*, 26.

2.4 Zedeno, et. al., *Traditional Ojibwe Resources*, 27.

1 In the 17th century French fur trappers
2 arrived in the Great Lakes region. The first
3 written reports appear at this time. Trade
4 between the trappers and the Ojibwe became
5 an important source of food for the French
6 and goods such as guns, tobacco, and textiles
7 for the Ojibwe.^{2.5}

8

9 1600 to ca. 1850

10 Sandy beaches, coves and sheltered bays
11 located intermittently along the southern
12 shore of Lake Superior were choice camping
13 places for Ojibwe parties traveling by canoe.
14 These natural features offered dry ground
15 and protection from the elements, as well as
16 places to gather wild rice and hunt.^{2.6}

17

18 Sand Point was a strategic location for the
19 Ojibwe who camped at various locations
20 around the southern shore of Lake Superior.
21 The aboriginal population had three
22 connected villages referred to as the South
23 Bay. This included villages at Bay Furnace,
24 Sand Point, and Grand Island. The villages of
25 the South Bay were connected through the
26 annual subsistence and ceremonial cycles.

27

28 A single band of Ojibwe could be as large as
29 600 people consisting of around 30 families
30 or clans, 20 persons each. These clans each
31 had a symbolic animal which represented its
32 collective identity and talents. The main clans
33 were the crane, catfish, bear, martin, wolf and
34 loon.^{2.7}

35

36 Typically, beginning in the summer bands
37 would unite at a large seasonal village along
38 the coasts: they would fish for sturgeon,
39 plant vegetable gardens, plant and harvest
40 wild rice and gather seasonal berries and
41 mushrooms.^{2.8} At the end of the summer
42 months, the tribe would begin drying and

43

44 2.5 Levine, Michelle. *The Ojibwe*. Lerner Publications, 2007.

45 2.6 Zedeno, et. al., *Traditional Ojibwe Resources*, 72.

46 2.7 Levine, Michelle. *The Ojibwe*. Lerner Publications, 2007.

2.8 Levine, Michelle. *The Ojibwe*. Lerner Publications, 2007.

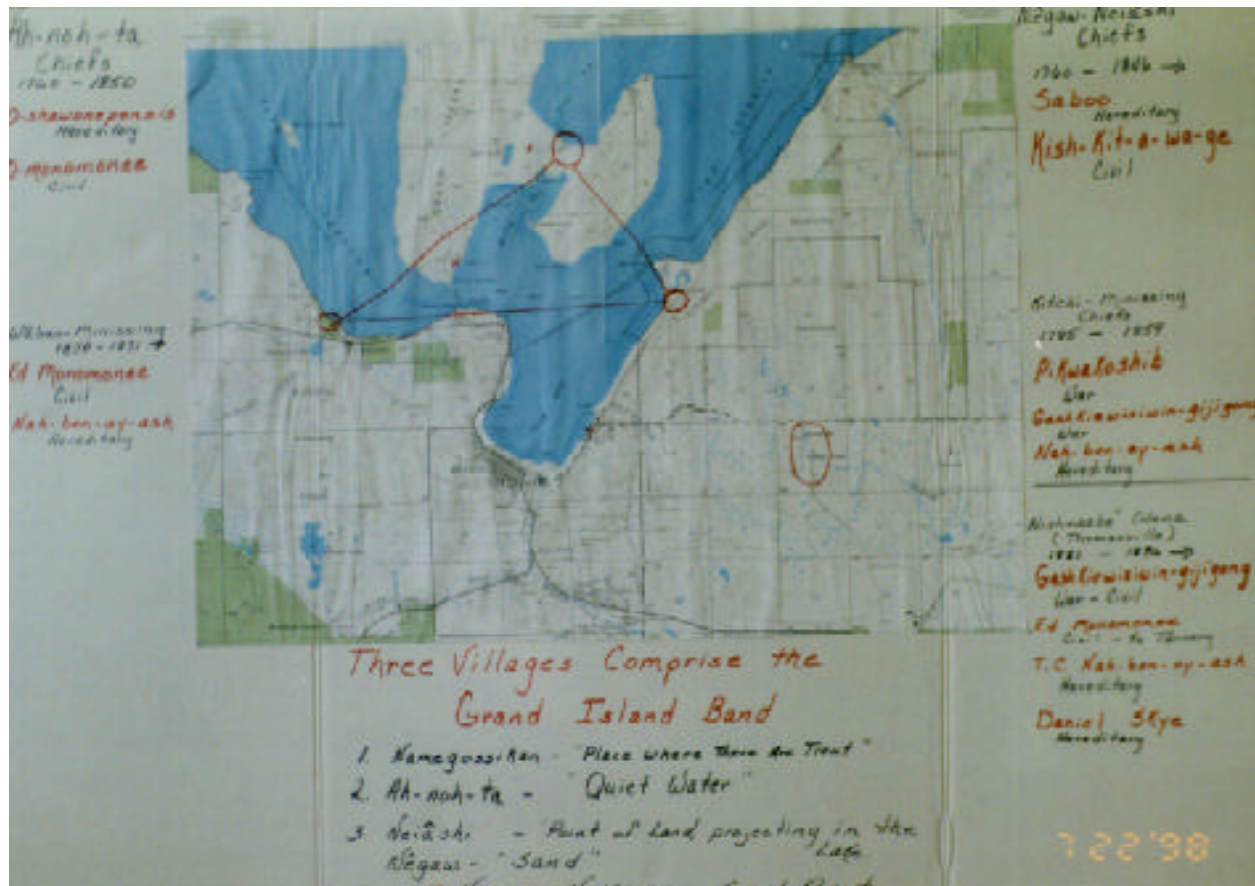


Figure 2-2. Sketch showing the three connected villages of the South Bay: Bay Furnace, Grand Island, and Sand Point. (source: Zedeno et al. *Traditional Ojibwe Resources, Le Veque Family Papers*)

1 storing food and prepare to move to winter
 2 camps. Fishing was a prominent activity this
 3 time of year. After inventories were made and
 4 transportation made ready, the band would
 5 disperse into family units and move to winter
 6 camps. The Ojibwe built wigwams, meat
 7 drying racks, and tanned hides and mended
 8 and sewed clothing. Men hunted large game
 9 and waterfowl in the winter months. At the
 10 advent of spring the Ojibwe moved to maple
 11 sugar camps such as those found on Grand
 12 Island. They would also hook and line fish,
 13 gather cedar bark which was used for a
 14 variety of objects and tools. As the seasons
 15 changed, the Ojibwe would move to their
 16 summer garden camps along the lakeshore
 17 and begin the annual cycle again.^{2.9}

18
 19 Grand Island and Munising bay were rich
 20 natural areas necessitating less travel than
 21 other areas in the Lake Superior region. A
 22 wealth of plant and animal resources made
 23 this area ideal for year-round settlement. The
 24 swampy grounds south of Sand Point were
 25 an important source for rice, both wild and
 26 cultivated.

27
 28 Places at and near the South Bay were
 29 connected through kinship and family
 30 ties, and ceremonies conducted at these
 31 locations. Ceremonies were held at solstices
 32 and equinoxes as well as during times of
 33 gathering.

34
 35 While European Americans such as French fur
 36 traders had been present in the Upper
 37 Peninsula since the 17th century, the first
 38 permanent white settlement of the area began
 39 in the early to mid 1800s. During the latter
 40 decades of the 19th century, a number of
 41 industries in the Upper Peninsula drew more
 42 settlers to the area. These included logging,
 43 iron smelting, and commercial fishing; along
 44 with a small tourist industry. Ojibwe people

45
 46 2.9 Levine, Michelle. *The Ojibwe*. Lerner Publications, 2007.

1 continued to occupy this area through out
 2 that time, engaging in trade and negotiating
 3 for their rights to the land and their historic
 4 use of it through treaties.

5
 6 ca. 1850

7 The Ojibwe established a cemetery at Sand
 8 Point, which was actively cared for by the
 9 Ojibwe in ca. 1886. It contained burials of
 10 non-Ojibwe fishermen from Powell Point as
 11 well as older Ojibwe burials.^{2.10}

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 46 2.10 Zedeno, et. al., *Traditional Ojibwe Resources*, 128, 153-55.

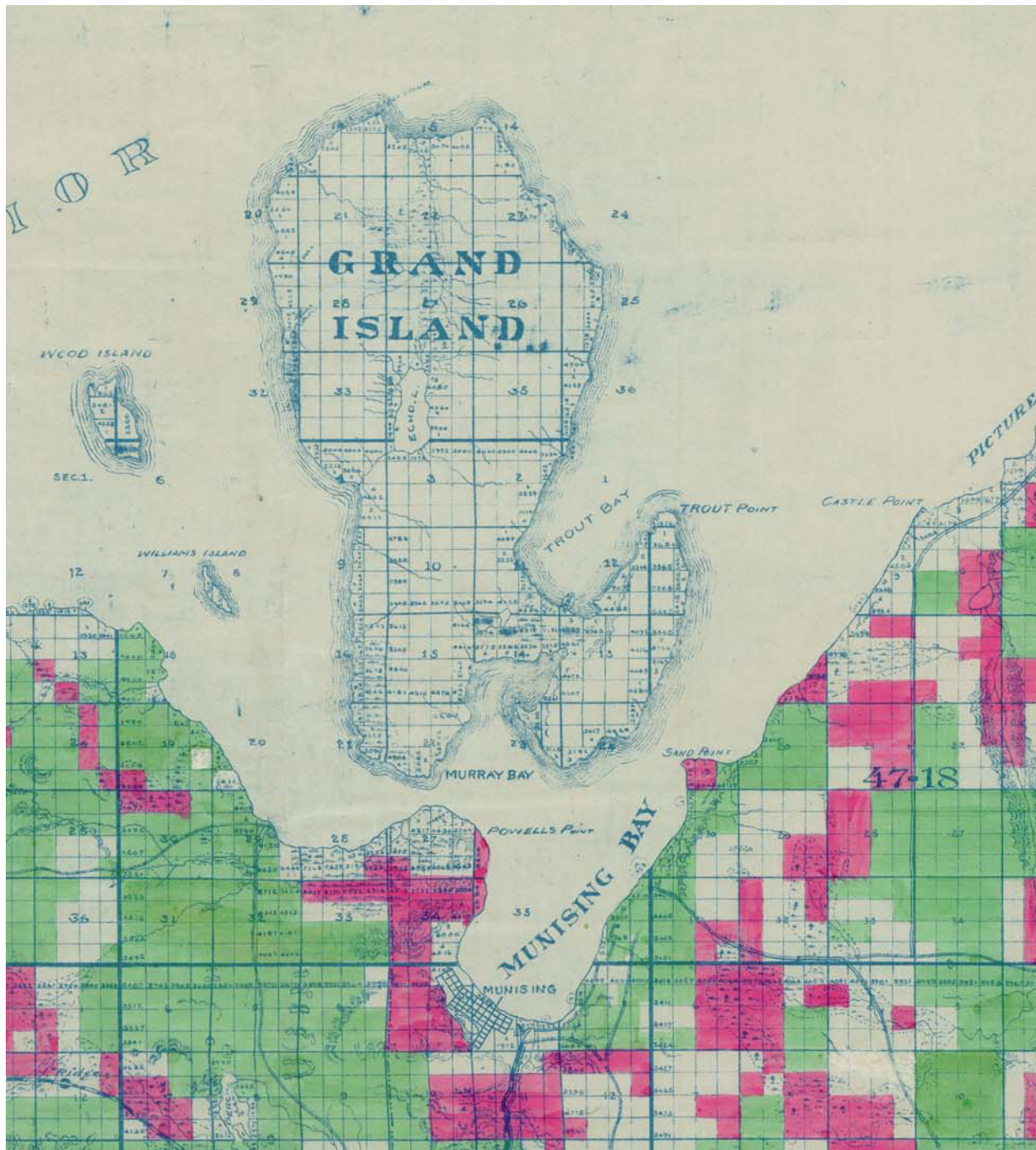


Figure 2-3. Land owned by mining companies in the mid-Upper Peninsula. The pink denotes land owned by the Cleveland Cliffs Iron Co, green for the Munising Company. (source: "Land Owned by Mining Companies in the mid-Upper Peninsula," 1913, Archives of Michigan.)

1 European American Settlement

2 (ca.1850 to 1932)

3
4 Pictured Rocks became well-known for its
5 scenic qualities soon after the first European
6 Americans arrived in the region. The natural
7 resources brought settlers who established
8 logging and mining communities nearby. Sand
9 Point was acquired by the Cleveland Cliffs
10 Iron Company, who planned to clear cut the
11 timber and open a silica sand mine. However
12 it appears that their plans were never
13 realized.

14

15 1850

16 Munising town site was platted but never
17 developed.^{2.11}

18

19 1867

20 Munising Township organized.^{2.12} Logging,
21 iron smelting, agriculture, commercial fishing,
22 and tourism were all important industries
23 in the late 19th and early 20th centuries. No
24 evidence was found to suggest there were
25 logging or fishing camps on Sand Point.

26

27 1870s

28 United States Life Saving Service was
29 established. The first life saving stations
30 opened on Lake Superior.^{2.13}

31

32 1880s, ca.

33 Sand Point used for Methodist camp meetings
34 as well as seasonal Ojibwe camps.

35

36 1885

37 Alger County was formed from Schoolcraft
38 County.^{2.14}

39

40

41 2.11 Charles A. Symon, Ed., *Alger County: A Centennial History, 1885-1985* (Munising, MI: Alger County Historical Society, 1986), 154.

43 2.12 Symon, *Alger County: A Centennial History*, 6.

44 2.13 Frederick Stonehouse, *Historic Resource Study, Pictured Rocks National Lakeshore, Michigan* (National Park Service 1981), 2.

46 2.14 Symon, *Alger County: A Centennial History*, 8.

1 1895/ 1896

2 Ground was cleared for a town site and
3 Munising was founded. A large number of
4 sawmills were part of the town in its early
5 years.^{2.15}

6

7 1900

8 Cleveland Cliffs Iron Company purchased
9 300,000 acres in Alger County. They planned
10 to clear cut the land for timber and sell the
11 cleared land for agriculture.^{2.16}

12

13 Grand Marais Life Saving Station opened.

14

15 1905

16 An article in the Marquette Daily Mining
17 Journal in September 1905 described
18 active burials at the Sand Point cemetery by
19 Ojibwe.^{2.17}

20

21 1909

22 Munising Range Lights were put into regular
23 service.^{2.18} They replaced the ineffective Grand
24 Island East Channel Light to guide vessels
25 safely into the Munising harbor.

26

27 1915

28 The U.S. Life Saving Service merges with the
29 Revenue Cutter Service to form the United
30 States Coast Guard.

31

32 1929 to 1933

33 Economic decline connected to the stock
34 market crash and Great Depression lead to
35 reductions in federal expenditures and the
36 reorganization of the Coast Guard for more
37 efficiency. Funding for life saving operations
38 was reduced and 15 lifeboat stations were

39

40 2.15 Symon, *Alger County: A Centennial History*, 155.

41 2.16 Institute for Community Development, *The Proposed Pictured Rocks National Lakeshore: An Economic Study* (National Park Service, 1963), 7. The ownership of the property prior to Cleveland Cliffs' purchase was not found during research.

44 2.17 Cited in Stonehouse, *Historic Resource Study*, 1.

45 2.18 Stonehouse, *Historic Resource Study*, 99.

46

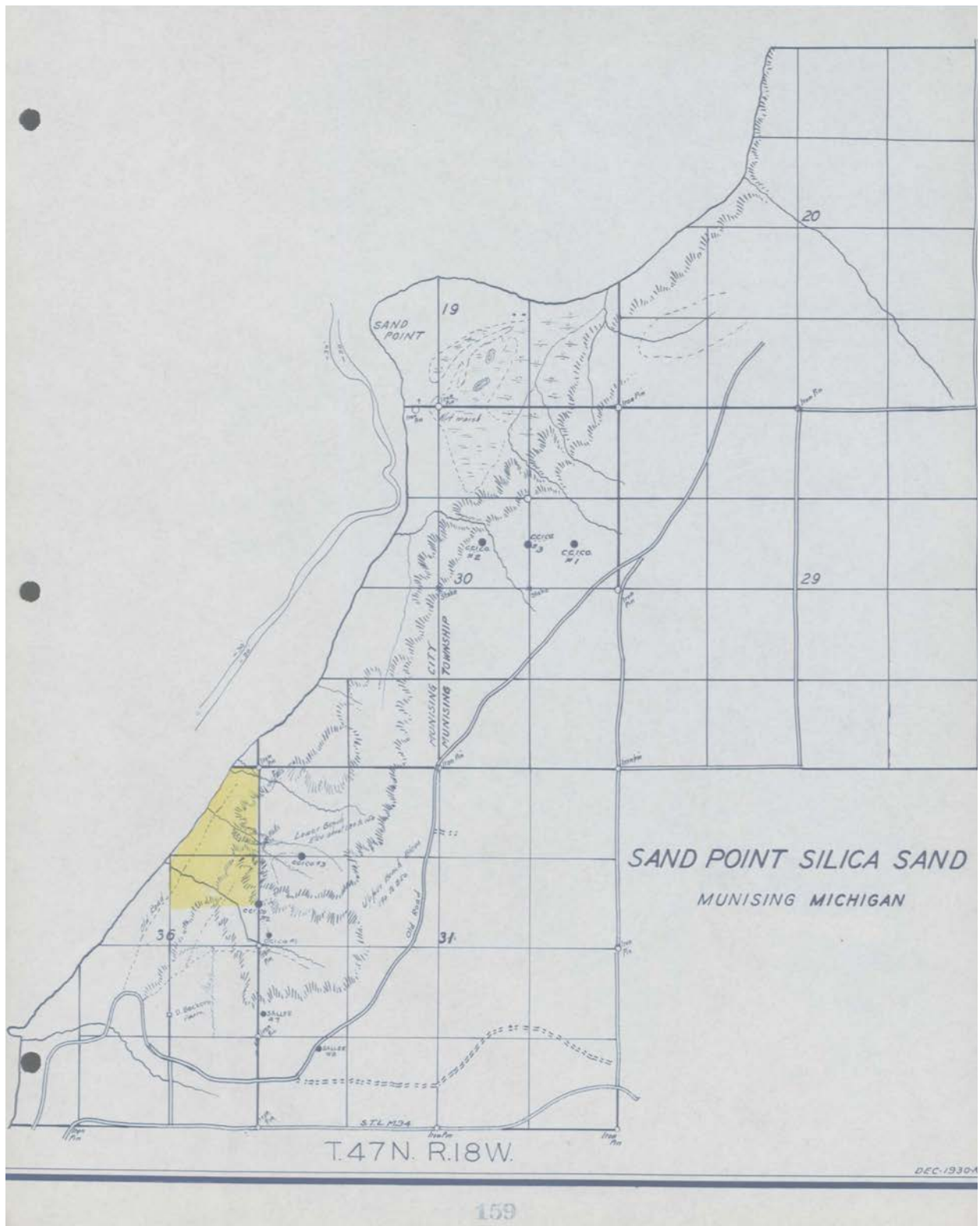


Figure 2-4. Plat map depicting proposed silica sand facility at Sand Point from the 1931 report. Prepared by R.A. Brotherton for the Cleveland Cliffs Company (source: PIRO Archives)

1 deactivated in 1933, mostly on the East Coast,
 2 with more closures into the late 1930s.^{2.19}
 3
 4 1931
 5 Cleveland Cliffs Company investigated
 6 opening a silica sand plant near Sand Point.
 7 In his report, R. A. Brotherton recommended
 8 subdividing the section and setting corners,
 9 as well as running contours on the land from
 10 which the sand would be mined (Figure
 11 2-4).^{2.20}
 12
 13 1932
 14 May 2: Cleveland Cliffs Company annual
 15 report noted Conveyance number 5049, dated
 16 May 2, 1932, to the United States of America
 17 for \$1 (Figure 2-5). The remarks column
 18 stated "Coast Guard Station site. Nominal
 19 charge. Expect this will be paid in 1933.
 20 Invoice rendered August 15, 1932." Payment
 21 not noted in subsequent annual reports.^{2.21}
 22 The quit claim deed notes: "For Coast Guard
 23 Station, in case same is not used for such
 24 purpose for 2 yrs said lot to revert to first
 25 party with all buildings thereon."^{2.22}
 26
 27 May 6: The Marquette Daily Mining Journal
 28 reported the federal government sent bids out
 29 for the construction of the new Coast Guard
 30 Station the previous day. Congressman [Frank
 31 P.] Bohn had secured an appropriation of
 32 \$60,000 for the station, which was originally
 33 planned for Grand Island. Sand Point was
 34 instead selected as a better location. It noted
 35 that the station would be erected "at the base
 36
 37 2.19 Daniel Koski-Karell, Ph.D. et. al. *National Register of*
 38 *Historic Places Multiple Property Documentation Form for*
 39 *U.S. Government Life Saving Stations, Houses of Refuge and*
 40 *pre-1950 U.S. Coast Guard Lifeboat Stations* (National Park
 41 Service, 2013), E-14.
 42 2.20 "Cleveland Cliffs Iron Company Land Records, Subseries
 43 2: Agents Annual Reports of the Land Department
 44 1904-1942, Land Department Report for the Year Ending
 45 December 31, 1931". Central Upper Peninsula and
 46 Northern Michigan University Archives. Accessed June
 2016. <http://archives.nmu.edu/ci/Land.html>. 114-5.
 2.21 "Cleveland Cliffs Iron Company Land Records," 135.
 2.22 Transcription of Quit Claim Deed in PIRO Lands Files, Box
 13, Folder 144.

1 of the point near the old Ojibwe cemetery."^{2.23}
 2 On the same day, the Munising News ran a
 3 similar story, noting that local contractors
 4 George Leiphart and William Muffett had
 5 received the invitation to bid. This article also
 6 notes that there were no definite plans for
 7 construction of a roadway to the station.^{2.24}
 8
 9 May 25: Bids were submitted for the Live
 10 Saving Station. They called for a "two-story
 11 frame dwelling, 30 feet by 45 feet, with
 12 concrete foundations; a one-story frame
 13 boathouse, 37 feet by 55 feet, with creosoted
 14 pile foundation; a creosoted wood pile and
 15 timber marine launchway, 32 feet by 128 feet;
 16 two creosoted pile and timber bulkheads,
 17 each 129 feet long; and a creosoted timber
 18 and pile landing wharf, 10 feet by 40 feet;
 19 together with all necessary excavation,
 20 grading, dredging, etc." Forty bid invitations
 21 were sent out, with fifteen returned, ranging
 22 from \$42,230 to \$26,750.^{2.25}
 23
 24 June 3: G. A. Gustafson of Iron Mountain was
 25 awarded the construction contract for the
 26 station. Gustafson was the low bid at \$26,700.
 27 Fifteen other bidders from around the region
 28 (as far as Chicago) sent in bids up to \$42,230.
 29 Gustafson had also recently been awarded
 30 a contract to construct a concrete highway
 31 bridge over the Au Train river.^{2.26}
 32
 33 June 6: "Munising Coast Guard Station"
 34 officially designated by the Coast Guard.^{2.27}
 35
 36 July 29: Construction began on the station
 37 with the landing of a scow and equipment by
 38 Anderson and Meade of Marquette, who were
 39
 40 2.23 "New Coast Guard Station Approved," *The Daily Mining*
 41 *Journal*, May 6, 1932, 4.
 42 2.24 "Ask Bids on Coast Guard Station," *The Munising News*,
 43 May 6, 1932, 1.
 44 2.25 *Munising U.S.C.G. Station, Pictured Rocks National*
 45 *Lakeshore*. U.S. Department of the Interior, National Park
 46 Service.
 2.26 "Gustafson Low on Station Job," *The Munising News*, June
 3, 1932, 1.
 2.27 *Munising USCG Station Pamphlet*.

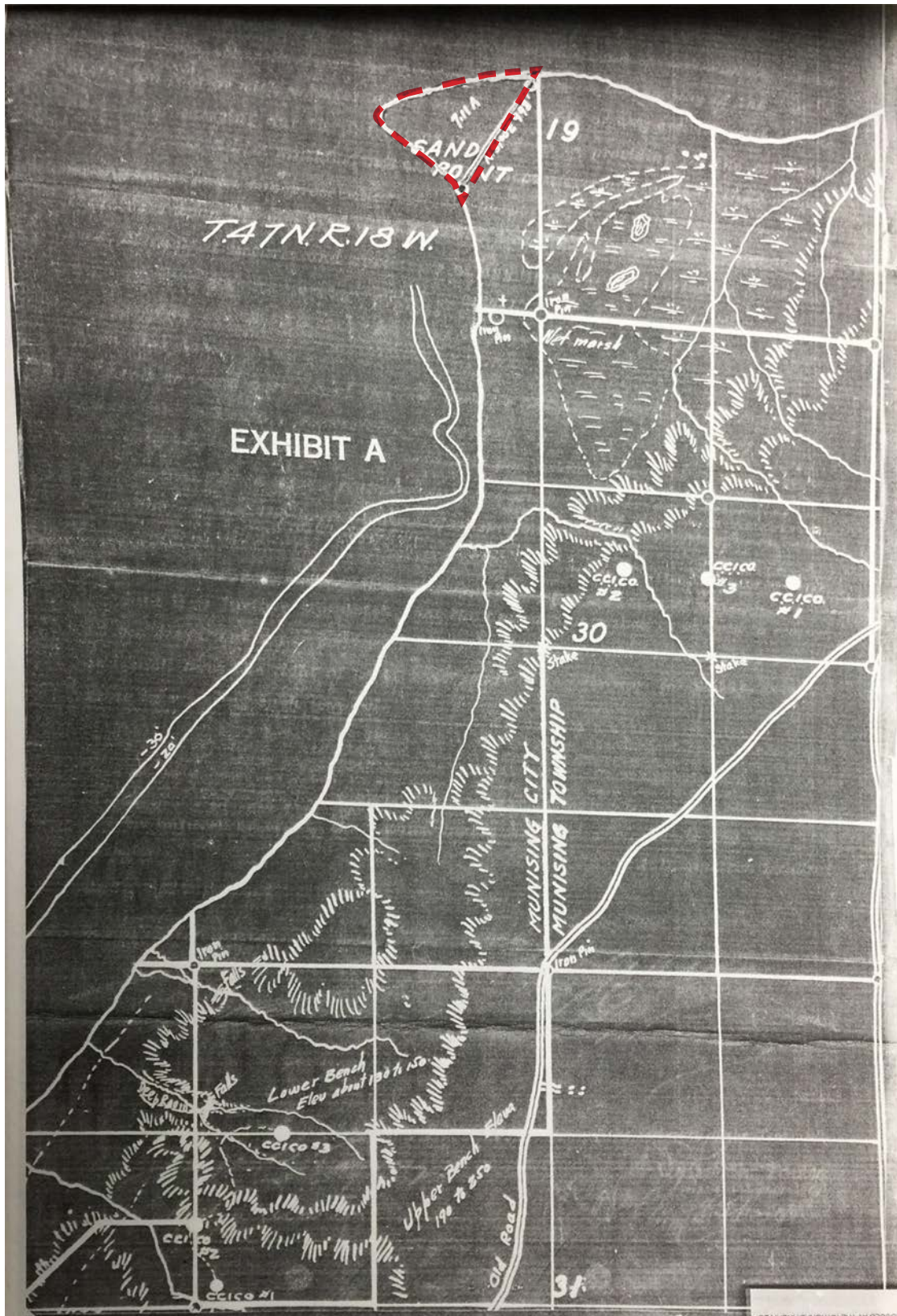


Figure 2-5. Map illustrating portion of land set aside for the U.S. Coast Guard Station, 1932. The 7.11 acre plot encompassed the tip of Sand Point. (source: PIRO Archives)

1 subcontracted for the pile driving and marine
 2 work. The crew began dredging out a spot
 3 near the shore for unloading materials.^{2.28}

4
 5 August 17: A 7.11 acre plot at Sand Point
 6 was acquired from the Cleveland Cliffs
 7 Iron Company for \$1.00. This is the date of
 8 record.^{2.29}

9
 10 The Lookout Tower and watch house
 11 were manufactured by McClintic-Marshall
 12 Corporation of Bethlehem, PA. It was one
 13 of eight, total cost for all eight was \$2,092.
 14 Contractor F. A. Hunnelwell erected it for
 15 \$865.80.^{2.30}

16
 17 Fall: Survey for the Sand Point Road was
 18 undertaken by the Cleveland Cliffs Company.
 19 It passed over land being considered for the
 20 silica sand project.^{2.31}

21
 22 December: Work on the road to Sand Point
 23 was halted because there was a question as
 24 to whether the federal government or the city
 25 would pay for it. The right of way for the road
 26 had been cleared but none of the “grading,
 27 grubbing, and gravelling” had been done.^{2.32}

28
 29 Construction of the station was delayed due
 30 to a shortage of yellow pine lumber for the
 31 boathouse.^{2.33}

32

33

34

35

36

37

38

39

40 2.28 “Scow Arrives at Sand Point to Make Ready,” *The Munising*
 41 *News*, July 29, 1932, 1.

42 2.29 *Munising USCG Station Pamphlet*

43 2.30 *Munising USCG Station Pamphlet*

44 2.31 “Cleveland Cliffs Iron Company Land Records,” 127.

45 2.32 “Halt Work on New Road to Station,” *The Munising News*,
 December 2, 1932, 1.

46 2.33 “New Guard Station,” *Ironwood Daily Globe*, December 7,
 1932, 6.

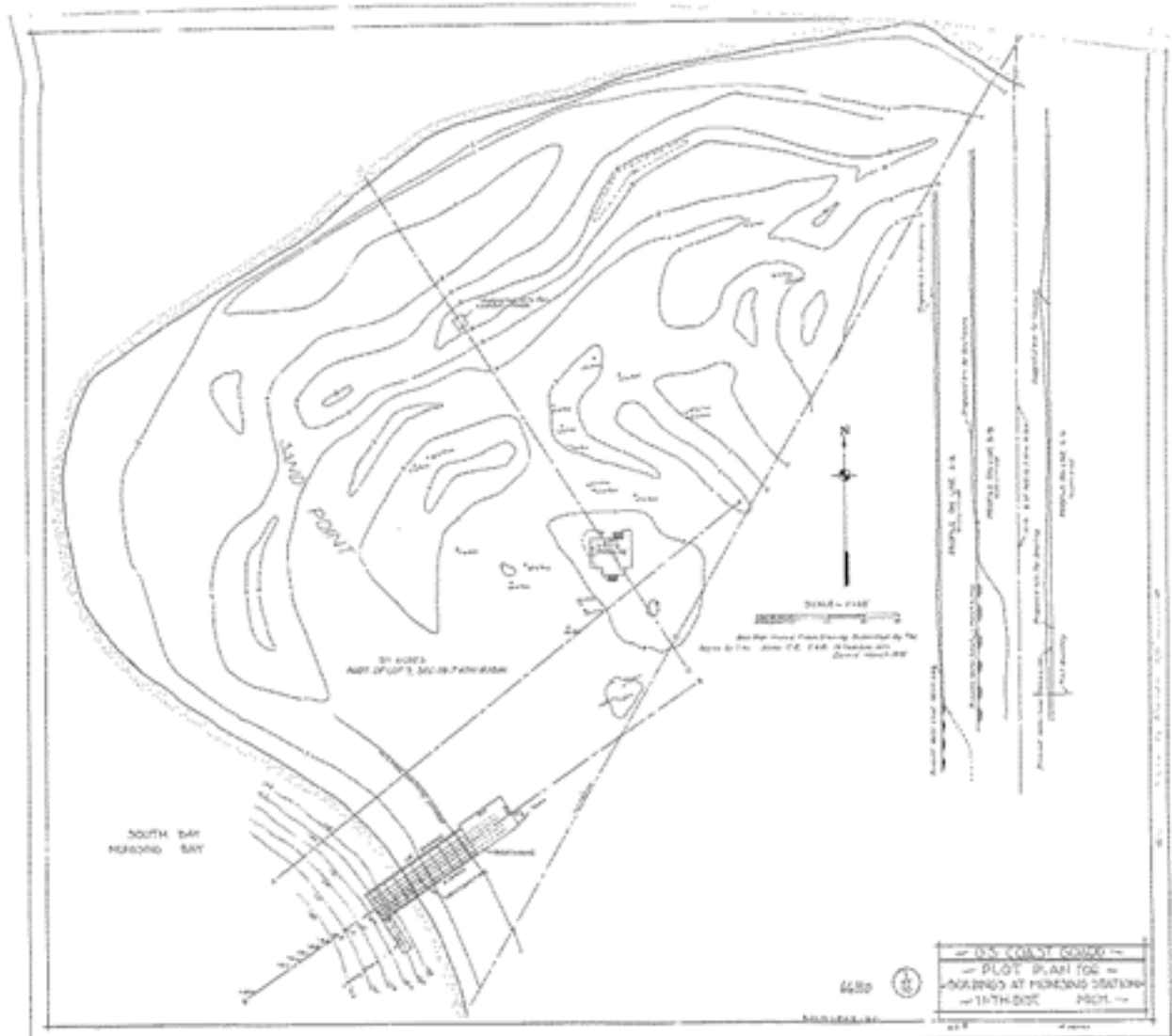


Figure 2-6. Plot plan of the new station, 1932. (source: PIRO Archives)

1 U.S. Coast Guard Development (1933 to 1958)

2
3 During development and use of Sand Point by
4 the U.S. Coast Guard, the overall appearance
5 of the cultural landscape took on a strict,
6 formal military-esque aesthetic of trimmed
7 lawn and straight paths with clear lines of
8 sight. Trees were removed to provide crucial
9 views to the water and between buildings and
10 structures. The station complex was designed
11 as a series of separate buildings that provided
12 specific functions (housing, boathouse,
13 storage, etc.). The topography was modified
14 to give the appearance that the Munising Life
15 Saving Station (HS-01) was set on a plinth,
16 surrounded by a concrete curb that enclosed
17 a short mown lawn. A residential area with
18 ornamental vegetation was set across Sand
19 Point Road. The beach was excavated to
20 create the Launchway, where access to and
21 from the water was vital to operations.

22 23 1933

24 April 1: The station was officially accepted
25 by the supervising engineer and a caretaker
26 assigned until the assigned crew could
27 arrive.^{2.34}

28
29 April 11: the Senior Civil Engineer for the
30 USCG reported that the Sand Point/Munising
31 USCG Life Saving Station buildings were
32 ready for occupancy. He noted that the work
33 “comprised a dwelling, for the personnel, with
34 all modern conveniences including hot water
35 heating system, toilet facilities and electric
36 lights, a boathouse with two track launchway,
37 a landing wharf, and the usual steel flag tower
38 and drill pole.” The memorandum referenced
39 enclosed photographic views of the dwelling,
40 boathouse, launchway and landing dock,
41 dated March 3, when “there was considerable
42 snow and ice remaining in the locality.”^{2.35}

44 2.34 *Munising USCG Station Pamphlet*

45 2.35 Julian P. Latham Memorandum for Operations,
46 Washington D.C. April 11, 1933. Photographs were not
attached to the document.

1 May 15: The Marquette Daily Mining Journal
2 noted that while the Marquette Coast Guard
3 Station had resumed its summer duties, the
4 Munising Station was still waiting for their
5 boats, which were trapped in Marquette by
6 ice in Munising Bay.^{2.36}

7
8 May 16: The station was officially
9 commissioned; two weeks late due to delays
10 in transferring boats and equipment from
11 Marquette because of thick ice in Munising
12 Bay. The crew totaled ten. The station had
13 four boats, a motor lifeboat, motor surfboat,
14 surfboat, and skiff. The station had a truck but
15 it had to remain in storage as the road from
16 Munising to Sand Point was not complete.^{2.37}

17
18 The crew was mustered at 8:00 am in
19 uniform; orders were read and the national
20 ensign was hoisted. The Officer in Charge, J.
21 F. Janssens, inspected the station buildings
22 and apparatus and found all to be in excellent
23 condition.^{2.38}

24
25 May 20: Three station boats arrived at
26 Munising Station. These were a 36 foot boat
27 with a 90hp motor and two 26 foot surf boats.
28 Captain John F. Janssens was in command of
29 the station of eight men, instead of the ten
30 originally expected. Crew members were
31 George A. Smith, boatswains mate, first class;
32 Fred O. Hella, motor machinist, first class;
33 Lloyd Campbell, George T. Salminen, Leon
34 Parks, Tolvi Linnamaki, and Bror E. Carlson.
35 Six of the crew were married and planned to
36 build homes near the station “as soon as the
37 site can be procured.” Crew members were
38 responsible for the cost of building their own
39 home. The road was still incomplete, as was

41 2.36 “Coast Guards Doing Routine Summer Duty,” *The Daily*
42 *Mining Journal*, May 15, 1933, 3.

43 2.37 *Munising USCG Station Pamphlet*. Date of commission is
44 confirmed by a memorandum from the Commandant of
the Eleventh USCG District to the Commandant of the
USCG, PIRO Archives.

45 2.38 Allison to Commandant (via Commander, Eleventh
46 District), Munising, MI, May 16, 1933.



Figure 2-7. Munising Life Saving Station (HS-01) and Communication Tower, 1933. (source: Keweenaw NHP, Lake Superior Collection Management Center)



Figure 2-8. Munising Life Saving Station (HS-01) and Boathouse and Launchway (HS-08), 1933. (source: Keweenaw NHP, Lake Superior Collection Management Center)



Figure 2-9. Boathouse and Launchway (HS-08), 1933. (source: Keweenaw NHP, Lake Superior Collection Management Center)



Figure 2-10. Station beach and lookout tower; undated but probably circa 1930s. (source: Alger County Historical Society)

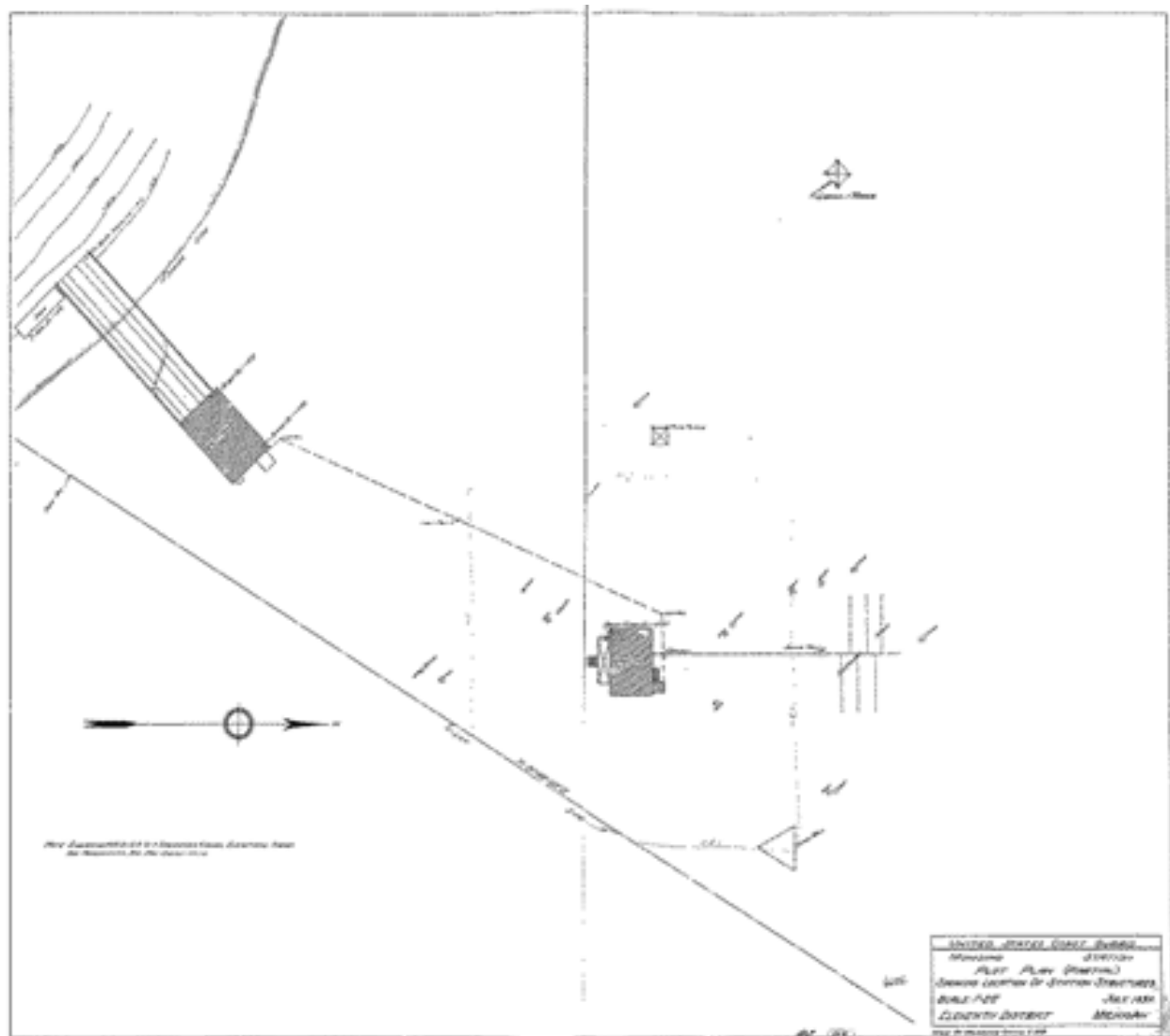


Figure 2-11. Sand Point/Munising USCG Life Saving Station, plot plan showing location of structures, 1933.
(source: PIRO Archives)

1 the placement of telephone and power lines.
 2 In addition to the buildings, there was a 55
 3 foot steel flag tower. There was no wireless
 4 station; distress calls were instead telephoned
 5 from Sault Ste. Marie, Grand Marais, or
 6 Marquette.^{2.39}

7
 8 Work was started on the Sand Point road as a
 9 County Aid project.

10
 11 December: The Civil Works Administration
 12 (CWA) took over the project. By the end of
 13 December, the right-of-way had been cut out
 14 and three-quarters of a mile of grading and 1
 15 ½ miles of grubbing completed.^{2.40}

16
 17 1934
 18 April: The CWA was a short-lived program
 19 in the hard winter of 1933-34, and work
 20 on the Sand Point Road by the CWA had
 21 been abandoned several months prior. New
 22 bids were to be submitted to continue the
 23 work under the Federal Emergency Relief
 24 Administration (FERA). "Numerous" graves
 25 were uncovered along the road during the
 26 previous fall and winter and reinterred
 27 nearby.^{2.41}

28
 29 June: The crew had increased to ten,
 30 consisting of the Officer in Charge, boatswains
 31 mate, motor machinist, and seven surfmen.
 32 No improvements had been made to the
 33 grounds, with the reason cited as the delay in
 34 finishing the road to the station, which was
 35 "now under construction." It was expected
 36 that a lawn would be built around the station
 37 when the road was completed and a truck
 38 assigned to the station. The crew experienced
 39 difficulty with the water supply, which was
 40 yellow in color and contaminated with fine

41
 42 2.39 "Coast Guards Get Most of Equipment," *The Daily Mining*
 43 *Journal*, May 20, 1933, 5; "New Guard Station," *Ironwood*
 44 *Daily Globe*, December 7, 1932, 6.

44 2.40 "Cleveland Cliffs Iron Company Land Records," 127.

45 2.41 "Sand Point Project," *The Escanaba Daily Press*, April 15,
 46 1934, 5. Zedeno, et. al., *Traditional Ojibwe Resources*, 156-
 7. Zedeno et al dates the road construction to 1936.

1 sediment. A new spring had been found
 2 near the station and the crew planned to
 3 pipe water from this spring to eliminate the
 4 sediment.^{2.42}

5
 6 November: The crew was now eleven
 7 in number. They were still awaiting the
 8 completion of the road so they could haul
 9 black dirt and clay to fill in around the
 10 station. The District commander noted that
 11 a new sidewalk was needed around the
 12 station and from the station to the signal
 13 tower and recommended this be done under
 14 contract rather than by the crew. He noted
 15 that the road was nearly complete, with
 16 expenditure estimated at nearly \$80,000.
 17 Road construction was hampered by springs
 18 which kept washing out the road.^{2.43} The road
 19 was eventually completed later that year.

20
 21 The construction of Sand Point Road was
 22 substantially completed in the fall of 1934.
 23 Cleveland Cliffs Company Annual Report
 24 for 1934 stated, "This road was practically
 25 completed during the year but there still
 26 remains considerable work to be done to
 27 put the road in good shape. FERA labor
 28 does not accomplish much, due to lack of
 29 proper supervision and the small amount
 30 of work done by the men during the hours
 31 worked. Work done on these Government
 32 projects costs four to five times more than it
 33 should."^{2.44} No mention of this road was found
 34 in the 1935 report.

35

36

37

38

39

40

41

42

43

44 2.42 T.S. Klinger to Commandant, Green Bay, WI, June 29, 1934.

45 2.43 S.F. Gray to Commandant, Green Bay, WI, November 2,
 1934.

46 2.44 "Cleveland Cliffs Iron Company Land Records," 134.

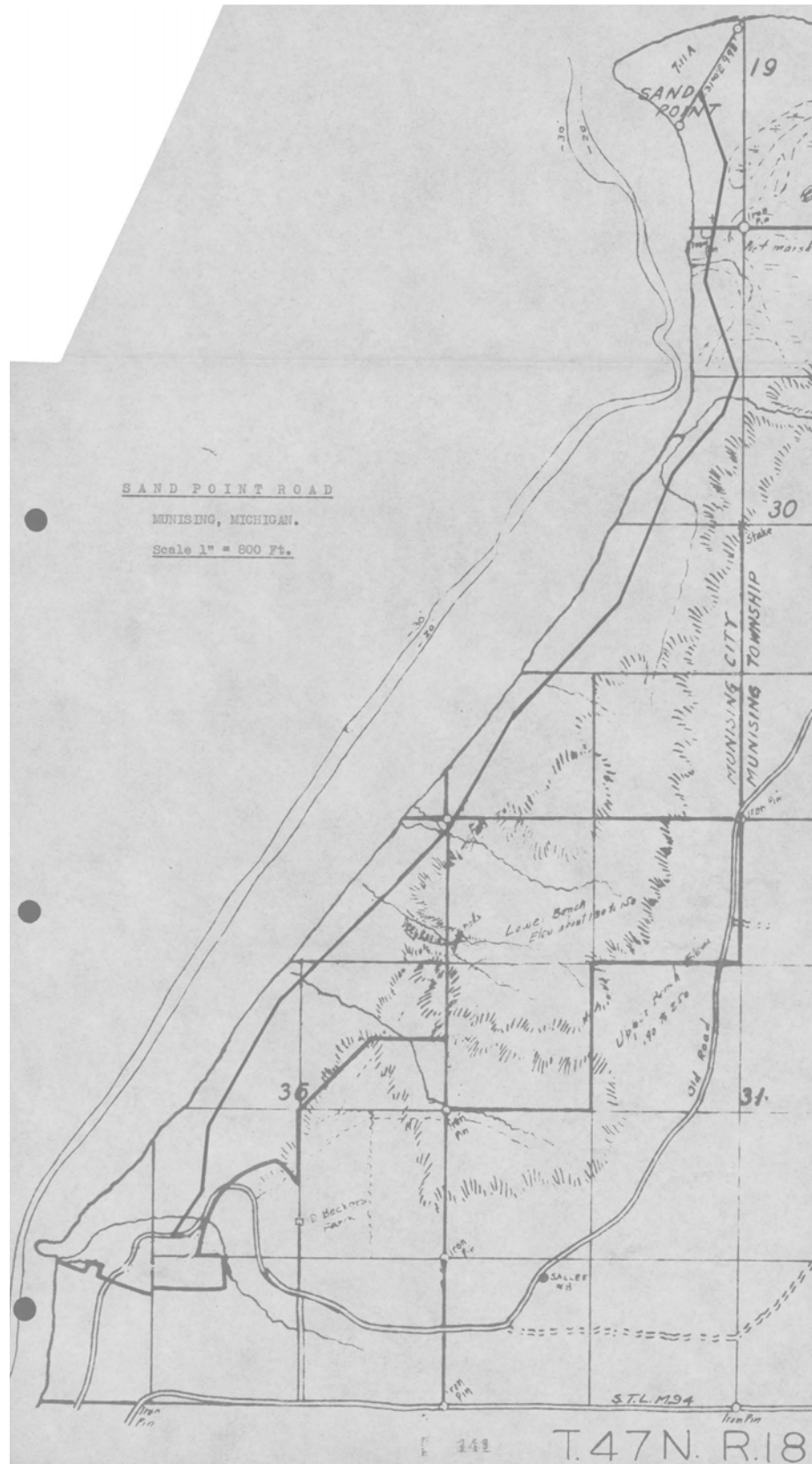


Figure 2-12. Sand Point Road from Annual Report, 1933. (source: PIRO Archives)

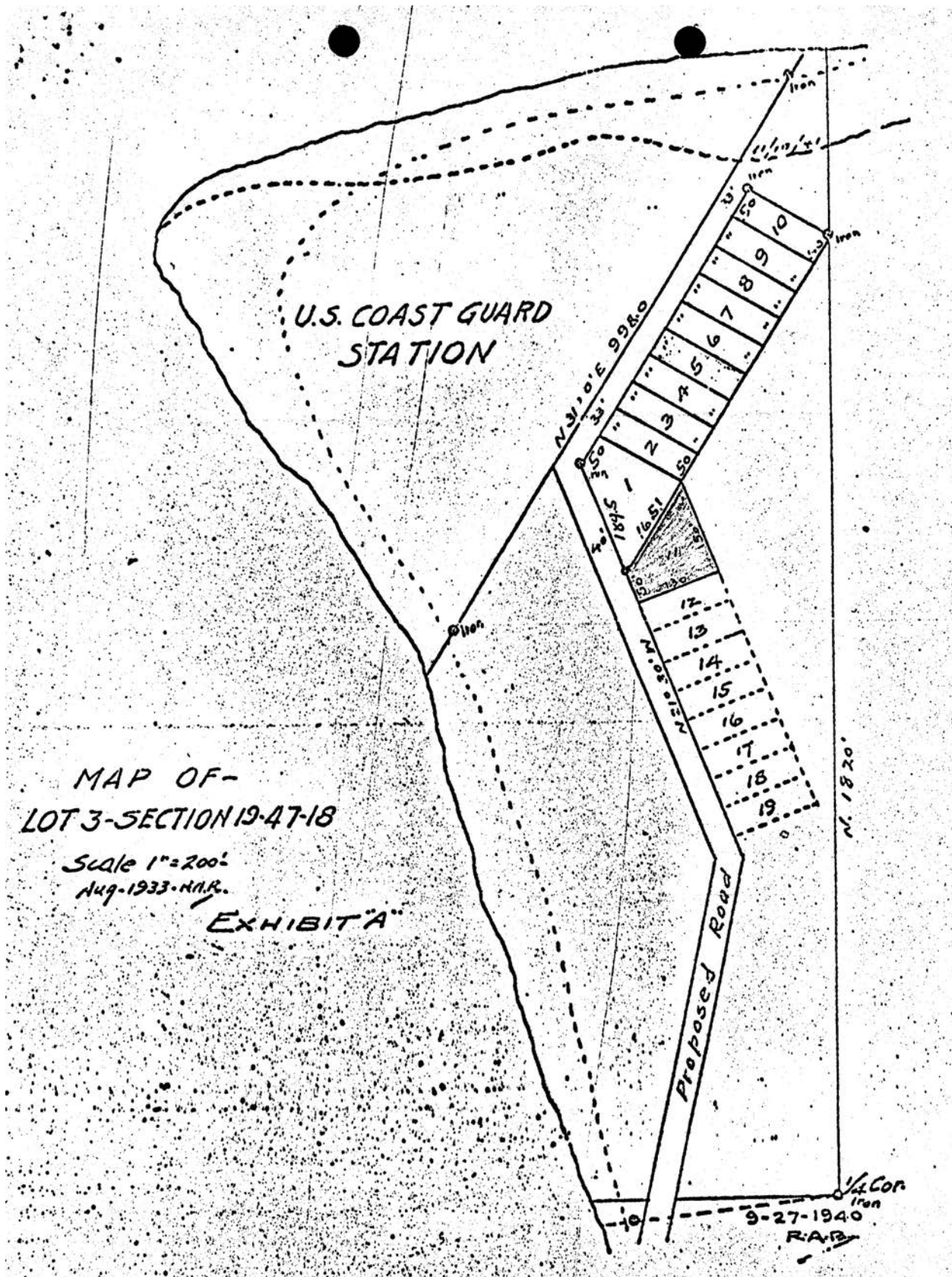


Figure 2-13. Many of the crew were married, and plans were developed to build homes across Sand Point Road. (source: PIRO Archives; Map of Lot 3 - Section 19-47-18, 1933.)

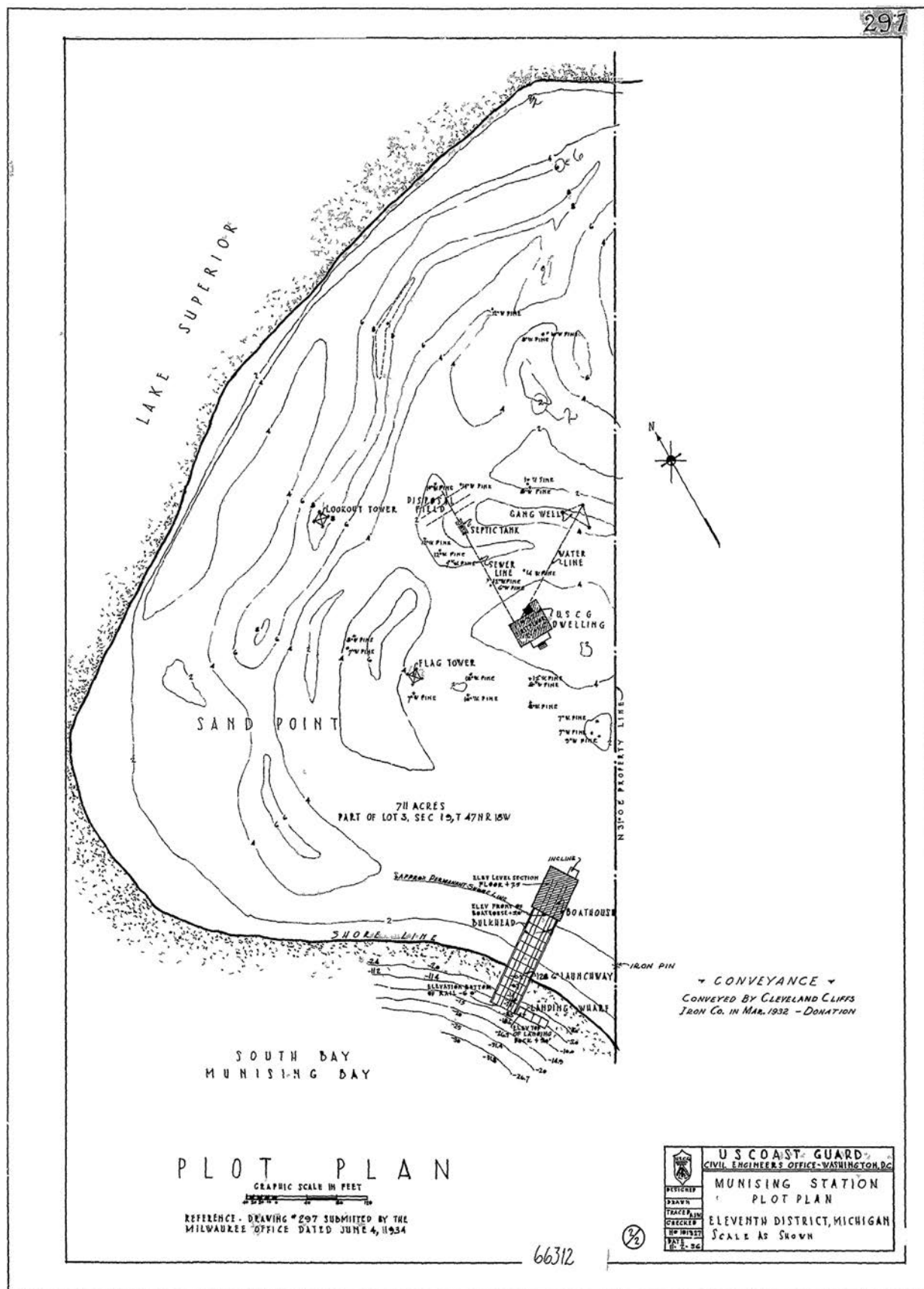


Figure 2-14. Munising Station Plot Plan, 1934. (source: PIRO Archives)



Figure 2-15. The design of the station relied upon easy water access and views to Lake Superior. In the 1930s, a view from the lake to the Boathouse, Launchway and dock, and the Life Saving Station was available. (source: PIRO Archives)



Figure 2-16. In 1934 the grounds of the Life Saving Station were complete, with a perimeter walk and lawn surrounding the building. (source: PIRO Archives)