

**MNDOT HISTORIC ROADSIDE DEVELOPMENT
STRUCTURES INVENTORY**

CK-GMC-029
CS 1602
Grand Marais Harbor Sea Wall

Historic Name Other Name	Grand Marais Harbor Sea Wall	CS # SHPO Inv #	1602 CK-GMC-029
Location	S side of TH 61 between 3rd and 4th Ave W	Hwy District Reference	TH 61 1A 109.4
City/Township County Twp Rng Sec USGS Quad UTM	Grand Marais, City of Cook 61N 1E Sec 21 Good Harbor Bay Z15 E699540 N5291650	Acres Rest Area Class	.16 4
Designer	Nichols, A R, Attributed	SP #	61-1-45-2
Builder	WPA, Suspected	SHPO Review #	
Historic Use Present Use	Roadside Parking Area Hwy Retaining Wall/ Sea Wall Roadside Parking Area Hwy Retaining Wall/ Sea Wall	MHS Photo #	013541.18-23 013542.01-05
Yr of Landscape Design	1937	MnDOT Historic Photo Album	
Overall Site Integrity	Moderately Altered		
Review Required	Yes		
National Register Status	Not Eligible, see Statement of Significance		
Historic Context			
List of Standing Structures			
Feat#	Feature Type	Year Built	Fieldwork Date
01	Sea Wall	1937	10-11-97
			Prep by
			Gemini Research Dec. 98 G1. 32
			Prep for
			Site Development Unit Cultural Resources Unit Environmental Studies Unit
NOTE: Landscape features are not listed in this table			
Final Report	Historic Roadside Development Structures on Minnesota Trunk Highways (1998)		

■ BRIEF

The Grand Marais Harbor Sea Wall is located on the southern side of T.H. 61 (Wisconsin Street), between the highway and the shore of Lake Superior, at the Grand Marais harbor near the center of the city of Grand Marais. The wall runs along a one-block-long stretch of T.H. 61 between 4th Ave. W. on the west and 3rd Ave. W. (formerly Van Buren St.) on the east.

■ STANDING STRUCTURES

Sea Wall. Built 1937, probably by WPA. The principal structure on the site is a long breakwall, or sea wall, built of random rubble and roughly-cut ashlar (most of which is coursed), gabbro in shades of black and dark red. The stones vary in size, with many measuring approximately 6" by 8" by 10". The wall is about 400' long, 2' wide, 18" tall, and is anchored at intervals by piers that are 2'9" square and project above the wall about 4". It has a serpentine curve that follows the natural shape of the harbor shoreline, and an asymmetrical design. The wall serves to protect the shoreline and T.H. 61 from the crashing waves, as well as providing an overlook onto the harbor.

The wall has a curved lookout bay located about 100' from the eastern end. The wall segment west of the lookout bay, measuring about 260', is much longer than the wall segment east of the bay, which measures about 100'. Built against the southern side of the wall (toward the water) is a flagstone walkway that is approximately 7' wide. The flagstone has been covered with stone riprapping along the eastern wall segment (east of the lookout bay), and with poured concrete along the western wall segment.

A lectern-style marker has been added to the wall at the center of the lookout bay. The marker is built of smaller, more regularly-sized blocks of gabbro than the stone that comprises the wall. Mounted on the marker are two rectangular metal plaques -- a geological plaque that was cast in 1955 and an historic plaque that was added circa 1987-88. The text of the geological plaque addresses the geology of the Grand Marais Harbor and the text of the historic plaque addresses the history of the harbor. (See transcript of texts at the end of this document.)

■ OTHER LANDSCAPE FEATURES AND PLANTINGS

Most of the current landscape features date from a 1987-88 remodeling (S.P. 1602-29):

Along the southern side of the wall (toward the water), stone riprapping covers the eastern portion of the original flagstone walkway. A poured concrete walkway replaces the western portion of flagstone. The poured concrete walkway has a nautical rope and pylon guardrail along its southern edge. Along the northern side of the wall, an 8'-wide poured concrete walkway lines the eastern wall segment, and a gravel walkway lines the western segment. There are new streetlights along the wall, and a recent bench mounted to the sidewalk near its western end.

Within the curved lookout bay is a recent, circular, poured concrete plaza with a metal medallion in the center that is cast with an image of Lake Superior with the location of

Grand Marais identified. Brass plaques indicating the compass points "N", "S", "E", and "W" are also set into the outer edges of the concrete plaza. The plaza is surrounded by colored paving blocks.

The site is planted with low spreading junipers, woody shrubs, and some small areas of grassy lawn along the northern side of the wall. The topography is basically flat. An original planting plan has not been located.

■ **SETTING**

The wall is located on the southern side of T.H. 61 (Wisconsin Street), between the highway and the shore of Lake Superior, at the Grand Marais harbor near the center of the city. It runs along a one-block-long stretch of T.H. 61 between 4th Ave. W. on the west and 3rd Ave. W. (formerly Van Buren St.) on the east. It is surrounded by the waters of Lake Superior on the south, T.H. 61 and a mixed residential and commercial area on the north, commercial buildings and the shoreline on the west, and downtown Grand Marais on the east. The wall looks out on the Grand Marais harbor facilities (breakwaters, lighthouse, marina, etc.) on the south, southwest, and southeast.

■ **INTEGRITY**

Alterations

The wall differs slightly from the only original plan that has been located (see Historical Background below). In this 1937 plan, the wall is symmetrical with a centrally-placed lookout bay. The lookout bay is actually asymmetrically placed, as described above.

A lectern-style stone marker with a geological plaque was added to the wall in 1955. A pedestrian opening has been cut into the western side of the lookout bay (date unknown). The wall was reinforced with mounded rubble in 1967 (1602-15). Portions of the flagstone walk were covered with poured concrete during a 1976 repair project (S.P. 1602-22). One effect of covering the walkways with concrete has been that the elevation of the walkways is now higher by several inches, which reduced the height of the wall. The site was recently altered by Mn/DOT in cooperation with the City of Grand Marais (1602-29). See description in Other Landscape Features above. An historic plaque was added to the lectern-style marker circa 1987-88.

The site's integrity of design, materials, workmanship, and feeling has been compromised by the covering of the walkways and the recent remodeling. The site retains integrity of location and setting.

Notes on Condition

The wall is in fair to good condition. It has been remortared rather poorly.

■ **HISTORICAL BACKGROUND**

The Grand Marais Sea Wall was apparently constructed in 1937. The only plan that has been located that appears to relate to the stone wall's original construction is a 3-sheet plan

(S.P. 61-1-45-2, S.P. 1602) with a title sheet signed by C. W. Lilly (Engineer of Plans), O. L. Kipp (Construction Engineer), and J. T. Ellison (Chief Engineer), whose signature is dated July 7, 1937. The Mn/DOT construction log confirms this 1937 project. The plan title sheet indicates the plan is for a 400'-long "bin type metal retaining wall" to be built along and over a previous crib wall. Sheet 2 shows a plan and construction details of the stone wall. The wall in the plan is 400' long (like the current wall) but is symmetrical in design with the lookout bay centrally located. (Apparently the design was altered after the plan was drawn.)

The wall was probably designed by Arthur R. Nichols of the firm Morell and Nichols. Nichols, who was one of Minnesota's most prominent and prolific landscape architects, served as Consulting Landscape Architect for the Minnesota Department of Highways during the 1930s and designed most of the roadside development structures of this period. Nichols designed the stone "Gateway to the Gunflint Trail" about three blocks to the east in 1938 (see below).

The wall was probably built by the Works Progress Administration (WPA), which built the "Gateway to the Gunflint Trail" in 1938, also under S.P. 61-1-45-2 (see below). The WPA also apparently built the breakwater at the mouth of the harbor. Grand Marais resident Pat Zenkman apparently has an undated photograph of the sea wall under construction. She believes the wall was built around 1937-1938, possibly by the WPA.

A geological marker was added to the wall in 1955 by the Geological Society of Minnesota and the Department of Highways. The project was funded in part by a grant from the Louis W. and Maud Hill Family Foundation.

The Gateway to the Gunflint Trail is a set of gabbro gates that were built in 1938 by the WPA and the Minnesota Department of Highways. There are located a few blocks east of the sea wall on the northern side of T.H. 61 at Broadway Avenue (CSAH 10) (S.P. 61-1-45-2, S.P. 1602-03). The gateway was designed by A. R. Nichols (Consulting Landscape Architect) and Harold E. Olson (Roadside Development Engineer). (The plans were drawn in 1937 and the project was complete by October 1938.) The gateway is intact and now owned by the City of Grand Marais.

■ PREVIOUS SHPO REVIEWS

A Section 106 review was conducted in 1996-1997 in preparation for the proposed realignment of T.H. 61 through Grand Marais (SHPO #97-0051). The Grand Marais Harbor Sea Wall, while located within the Area of Potential Effect, was not inventoried by surveyors conducting the cultural resource investigation (see Henning 1997).

■ STATEMENT OF SIGNIFICANCE

The Grand Marais Harbor Sea Wall was built circa 1937, probably by the WPA. It was probably designed by A. R. Nichols. Grand Marais is one of only two properties in this inventory that contain a "sea wall." (The other wall is a modern structure at the Frontenac R.P.A. on Lake Pepin.) Grand Marais is one of an important group of Depression-era sites that represent the MHD's earliest roadside development facilities. It is one of approximately 60 properties in this study that were designed by, or have been attributed to, A. R. Nichols.

It is one of few remaining roadside development facilities on T.H. 61 (former T.H. 1) that date from the MHD's early construction and improvement of this important scenic highway.

This property has been evaluated within the historic context "Roadside Development on Minnesota Trunk Highways, 1920-1960." It is recommended that, despite the factors listed above, the Grand Marais Harbor Sea Wall is NOT ELIGIBLE for the National Register under this historic context due to loss of integrity.

■ OTHER COMMENTS

This property may require further evaluation for potential archaeological resources.

T.H. 61 past this site is very busy during the summer months. However, since it is located within the city limits, the traffic passes by fairly slowly.

The text of both markers is associated with the harbor. It is not specifically associated with the site of the wayside rest.

■ REFERENCES

Construction log, Minnesota Department of Transportation.

Grout, Frank F., Robert P. Sharp, and George M. Schwartz. *The Geology of Cook County Minnesota*. Minneapolis: University of Minnesota Press, 1959.

Henning, Barbara J. "Phases I and II Cultural Resource Historical Investigation. Highway 61 at Grand Marais." Prepared for Minnesota Department of Transportation by Rivercrest Associates, Inc. September 1997.

Long, Barbara Beving. *Phase III Historical Mitigation: T.H. 61 in Gooseberry Falls State Park and Bridge No. 3585*. Prepared for Minnesota Department of Transportation by Rivercrest Associates, Inc. September 1996.

Site plans, Minnesota Department of Transportation.

Thiel, George A. and Carl E. Dutton. *The Architectural, Structural, and Monumental Stones of Minnesota*. Minneapolis: University of Minnesota Press, 1935.

■ ADDITIONAL BACKGROUND INFORMATION AND TEXT OF PLAQUES

Local Stone

The gabbro used to construct the sea wall was probably quarried locally. Duluth gabbro is an igneous rock that differs from granite because it contains feldspar, which gives it its green, dark gray, or black color. The stone is commercially referred to as "green granite," "black granite," and "trap rock." As early as 1896, gabbro was quarried in and around Duluth. There were many quarries in the Arrowhead Region including quarries in the Superior National Forest 18 miles southeast of Ely, an Arrowhead Granite Company quarry near Cook,

and the McDonald Quarry near Angora. Gabbro was used to construct most of the highway department overlooks and the Department of Conservation's State Park structures along the North Shore.

Grand Marais

The Grand Marais Harbor was known to the Ojibwe as "Kitchi-bitobig," which means "double body of water." Grout et al describes the natural harbor in *The Geology of Cook County*: "The harbor at Grand Marais is in part the product of shoreline deposition, for it is enclosed on the east by a wide gravel bar by which a rocky offshore point is joined to the mainland. This rocky point was once an island lying a short distance east of the west headland of Grand Marais harbor. Shallow water and an abundance of debris enabled waves to construct a bar, essentially a tombolo, between the island and the mainland" (Grout et al 1959:9). The first Euro-American settlement near the harbor was in 1854 when a trading post was established. The eastern breakwater was constructed in 1884, and the western breakwater was built by the Corps of Engineers in 1901. In 1885 the first lighthouse along the north shore was built in the harbor. The harbor was the center for commercial fishing, shipping and transportation, and the rafting of logs from lumber mills. The harbor was also vital to the early town of Grand Marais, since most all of the North Shore transportation was by steamers and sailing vessels by way of Lake Superior. Today the harbor's primary use is recreational.

Grand Marais, a French word meaning "Great Marsh," was named for the marsh or swamp located at the head of the bay and harbor. By 1823, the American Fur Company had established a trading post in this area, but it was abandoned by 1840. The area was first settled by Euro-Americans in 1854. In 1871, three men -- Hazael Mayhew, Sam Howenstine, and Ted Wakelin -- established the town of Grand Marais which became the seat of Cook County in 1882. Grand Marais is also known as the gateway to the Gunflint Trail. This trail was originally a Native American route that extended from Gunflint Lake to the shore of Lake Superior. Lake Superior was the main transportation route along the North Shore during the 19th and early 20th centuries. It was also the economic mainstay of Grand Marais, drawing tourists and fishermen to the area, and providing business opportunities including lumbering and commercial fishing.

Lake Superior and T.H. 61

Lake Superior is the largest body of fresh water in the world. The lake is 383 miles long, 160 miles wide, and is 489' to 1,400' deep. The Ojibwe called the Lake "Kitchigumi," meaning "Great Water." The early French traders called the lake "Lac Superieur" because it was located at the head of the Great Lakes. By the early 1920s, Duluth and the North Shore area had become a mecca for tourists.

Trunk Highway 1 along the North Shore was built during the 1920s and 1930s and named the "Lake Superior International Highway" by the highway department in 1926. Its number was changed from 1 to 61 in 1934. The highway was the only thoroughfare to serve North Shore towns in Minnesota and to provide access to the Canadian North Shore from the state. It was specifically designed (and in some places, realigned) to provide outstanding views of the lake. Between Duluth and the Canadian border, T.H. 61 travels approximately 165 miles through three counties: St. Louis, Lake, and Cook. With the completion of the highway, recreation and tourism became important components of the North Shore economy.

Text of Metal Geological Plaque

"Geology of Minnesota Grand Marais

"The harbor of Grand Marais is the result of unequal weathering or erosion of two types of rock. One of these, called diabase, resulted from the cooling of molten material which was forced between two earlier lava flows. The dark massive diabase, being very hard and resistant to wave action, has become the outer barrier to the harbor, while the lava, which was much fractured and easily eroded, was worn away to form the harbor basin.

"To the west of Grand Marais, the serrated crest of the Sawtooth Range, clearly visible from the harbor breakwater, is another example of unequal erosion. Here the relatively soft basalt and the more resistant diabase have, through the process of weathering, produced the notched profile of the hills along the coast.

"To the east of Grand Marais rise the hills near the mouth of the Arrowhead River, while to the north along the Gunflint Trail are older rocks. At Saganaga Lake, the Saganaga Granite, one of the oldest granites in North America, marks a core of the ancient mountains of the Laurentian Highlands.

"Erected by the Geological Society of Minnesota and the Department of Highways, State of Minnesota aided by a grant from the Louis W. and Maud Hill Family Foundation, 1955."

Text of Metal Historic Plaque

"The Grand Marais Harbor Lake Superior Indians recognized the unique nature of this bay long ago, naming it 'Kitchi-bitobig', meaning 'double body of water.' When white man first settled around this bay, in 1854, a few Indian families lived in tepees and cabins around the shore. White population increased rapidly after the 1870s, and dependence on ship transportation became more critical; storms and shipwrecks led to demands for a lighthouse, which was finally built in 1885, the first on the American north shore. As added protection for this harbor of refuge, the east breakwater had been built a year earlier; the harbor became even more protected from violent seas in 1901, when the Corps of Engineers completed the west breakwater and continued the 16' dredging project. During three generations, this bay was a busy hub of economic and social activity: commercial fishing, shipping and rafting of sawlogs and pulp wood, dredging gravel, picnics and bonfires on the point, 4th of July celebrations, skating and swimming, sailboat races, the arrivals and departures of the steamships 'Dixon' and 'America' and many other vessels. Until the new highway along the North Shore was built in the 1920s, this magnificent harbor was the focus of life in Grand Marais."