

Grand Island is a three by eight mile island, the largest such body of land along the southern shore of Lake Superior. Guarding the Munising Bay entrance, the Island's southern tip serves as a natural harbor to protect vessels from Superior's heavy storms, which occur with special ferocity late in the year. The North West company was the first organization to take advantage of the protection offered by the area, establishing a trading post at the city of Munising in the late 1700's. Thereafter, the American Fur Company located its trading post on Grand Island in the early 1800's. Fur trading had long since passed its peak when Vermont's Abraham Williams established homesteading on the island in 1837. Using abandoned buildings from the old trading post, Williams set up a blacksmith shop and sawmill, and started to sell cordwood to steam ships passing through and seeking harbor refuge.

1855 saw the finishing touches put on construction of the Soo locks, which allow for travel between Lake Superior and the lower Great Lakes without having to traverse any waterfalls. This development was expected to hugely boost maritime traffic, and demand for a lighthouse at the vital Grand Island location became pronounced. In anticipation of the lock's opening, Congress allocated \$5,000 for the island light, and a site was chosen on the north side. The state of Michigan provided the lease to a tract of ground located atop a cliff of 175 feet.

Local, easily accessible materials were used primarily for the construction. At a sizable distance from the lighthouse depot, Grand

Island did not yet enjoy the transport advantages of the Soo Locks. Any materials coming up from the lower lakes would therefore need to be unpacked at the bottom of the rapids, driven by cart up the rapids and reloaded onto vessels at that point for the final leg of shipping.

It is likely that Grand Island's north light was a timber, integrated structure with a prefabricated iron lantern. One of the few 'long distance' components for the remote station was the fourth order Fresnel lens ordered from L. Sautter of Paris. This lens was placed upon a turning pedestal driven by a winding mechanism. The lens was dotted with bull's eye panels on its surface, thus providing a white flash whenever the light passed over them. Otherwise the lantern provided a steady, clear white light, at a focal plane of 204 feet above the lake's surface (counting the significant vertical stature of the cliff). In clear weather, this lighting arrangement could be seen for up to 13 miles.

One consequence of placing the lighthouse on such a high cliff was that the boathouse for the station had to be built a quarter of a mile away at a much lower elevation. Gullies and ravines made the going treacherous, so walkways and a tram were installed in 1860. Four bridges, the longest of which was 70 feet, traversed this passage. Despite this improvement, in only ten years Grand Island's north station was in decrepit condition. The District Inspector attributed this to "inferior materials used in...construction," and suggested that the station could only be demolished and rebuilt. In

1866, Congress agreed, providing \$12,000 for the purpose. The following year, work crews rebuilt the station using brick as the main material. This must have been an arduous job, for the brick had to be hauled up the walkway and bridges connecting the station to the boat landing down the cliff-side. The station was built to a plan in common with 11 other contemporary lighthouses, consisting of a 1 ½ story keeper's quarters with an integrated, 40 foot tower (known as the 'schoolhouse' style). The Fresnel lens was taken down from the old tower and installed in its successor.

Meanwhile, pressure was building to place a lighthouse at Grand Island's southern end. While the north tower did a good job of providing harbor guidance and a beacon for ships turning north, it was practically useless to those vessels skirting the southern shore of Superior. Captains navigating passages to the harbor from the east or west found it difficult to navigate in poor visibility, prompting Senator Chandler to initiate an 1860 petition signed by concerned pilots and ship owners. Congress set aside \$6,000 for the job, although this sum was found to be inadequate and had to be increased to \$10,000. The money was finally in place by 1867, when a reservation on sandy ground was cleared. Given the site's low elevation and close proximity to the water, it was deemed advisable to install cribbing on the shore.

The same schoolhouse blueprint was used for the East Channel light, though as a cost cutting measure wood was used in place of brick or stone. The station boasted a 1 ½ story keeper's house with

a 45 foot tower, and a steamer lens fired by oil initially was used for lighting. Inaugural keeper Frederick Giertz exhibited the light in August of 1868, and it quickly became clear that a Fresnel lens was needed at the station. A 5th order specimen with a fixed white light was installed in 1869, and at the same time the ventilation in the lantern was upgraded to cope with the increased heat. In perfect weather, the light could be seen from 13 ¼ miles away.

The East Channel station was quickly undermined by its poor location, and for the next 30 years it required significant repairs on an annual basis. In 1899, 262 feet of cribbing was installed to stem the erosion problem. This cribbing was 8 feet tall, and 28 cords of stone were placed behind it for support. Over 300 feet of brush and stone beach protection were also added. In spite of these improvements, by 1905 it was clear that continued deterioration and the irreversible trend of larger ships made the light obsolete.

Congress appropriated over \$13,000 for a pair of range lights in Munising to replace the East Channel station. These were placed so that a captain could line them up to navigate directly into the safe harbor. With their establishment, Grand Island's south light was abandoned in 1908. The 44 acres comprising the station grounds were sold to a 20 person consortium in 1915, which had the effect of preventing a consensus and thus also either the demolition or restoration of the station. Since then, the schoolhouse structure has deteriorated and lost its pristine whiteness, and the shore cribbing has broken down and allowed water to lap at the foundation

stones. Nevertheless, the old East Channel station remains a very picturesque tourist destination, and has attracted concerned citizens to work on its restoration. Forming the East Channel Lights Rescue Project, these individuals have been seeking out funding to improve the shore cribbing and have found some financial support in that regard from the American Lighthouse Foundation.

The island's North lighthouse experienced a different fate. Throughout the 19th century, Abraham Williams and his clan had acquired much of the island's property, which prompted Congress to preserve the lighthouse grounds by buying them in 1887. Shortly thereafter, The Williams family sold almost the entirety of the island to the Cleveland Cliffs Company. This mining firm was a pioneer in excavating the areas around Lake Superior, and decided to establish on Grand Island a kind of hunting and vacation retreat for tourists and company executives. They stocked the island with cabins, horse trails and ample supplies of antelope, moose and caribou. The Lighthouse Board decided to make a profit by selling to Cleveland Cliffs the 400 acres previously given over to the lighthouse, thereby reducing the station grounds to a small cleared area.

Grand Island, like many lighthouses, was looked at as a candidate for automation when the Coast Guard took over the nation's lighthouse duties in 1939. The understaffed agency could not provide the manpower and maintenance for all structures, and therefore looked to sun valve automation as the answer for Grand Island. An acetylene

system was installed at Grand island in 1941, obviating the requirement for a human keeper. With this development, the station began an inevitable deterioration. In the late 1950's solar automation became possible, and an automatic bulb changing system combined with solar panels was used. In 1961, the light was transferred to a simple 25 foot steel pole atop the cliff.

The buildings at the station were deemed as surplus to the needs of the government, and were sold to MIT Professor Dr. Loren Graham. The writer of the book A Face in the Rock, Dr. Graham has an intense interest in the history of Grand Island. He and his wife Pat have restored the station property into a summer home. The island itself has been deemed a National Recreation Area, especially suited to hiking and biking pastimes.

Resources:

"Grand Island East Channel Light." Retrieved October 28, 2007

from: <http://www.terrypepper.com/Lights/superior/eastchannel/index.htm>.

"Grand Island North Light." Retrieved October 28, 2007 from:

<http://www.terrypepper.com/lights/superior/grandnorth/>.