

NEW YORK STATE BARGE CANAL, PROSPECT AVENUE LIFT
BRIDGE
(Erie Canal, Prospect Avenue Lift Bridge)
Prospect Avenue
Medina
Orleans County
New York

HAER NY-499
HAER NY-499

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
U.S. Department of the Interior
1849 C Street NW
Washington, DC 20240-0001

HISTORIC AMERICAN ENGINEERING RECORD

NEW YORK STATE BARGE CANAL, PROSPECT AVENUE LIFT BRIDGE (Erie Canal, Prospect Avenue Lift Bridge)

HAER No. NY-499

Location: Prospect Avenue, Medina, Orleans County, New York

Prospect Avenue Lift Bridge is located at latitude: 43.2256184, longitude: -78.3918991. The point represents the control tower and was obtained in 2009. There is no restriction on its release to the public.

Significance: Prospect Avenue Lift Bridge, located on the Erie Canal, is a component of the nationally significant New York State Barge Canal. It is one of sixteen such bridges constructed between Fairport and Lockport.

Description: The sixteen vertical-lift bridges on the Erie Canal are Warren pony trusses raised by an electrically-driven system of cables, counterweights, and sheaves. As described in the New York State Barge Canal National Register nomination, “the moveable truss is supported by vertical lifting frames at either end. When the bridge is ‘down’ the lifting frames retract into the pits” located behind the bridge abutments. “The bridge is raised by cables that run from fixed anchor points at the top of the pits, down around sheaves at the bottom of the lifting frame, back up to sheaves at the top of the pit, and down to cast concrete counterweights. When the counterweights sink into the pits...the cables pull the lifting frames upward by the sheaves at their lower corners.” Each bridge has a control tower, with the motors and gearing generally located in the pit nearest to the tower.¹

The vertical-lift bridge carries Prospect Avenue over the Erie Canal.² The steel Warren pony truss with decorative end posts sits on concrete abutments. It measures 130' long and 23.9' between curbs. The decking is open grate, and pedestrian walkways lined with steel lattice flank the roadway. Steel stairways at either end of the west side of the bridge have cross-hatch treads and steel lattice railings. The machinery pits behind the abutments are covered with cross-hatch plates. The bridge is in good condition.

The control tower is located on the north end of the bridge on the west side of the roadway. The tower is a two-story concrete building with a flat roof. There are two-over-two-light horizontal vinyl windows and a wood door with a wood storm door. The warning bell is modern. The tower is in good condition.

History: Contract 106, awarded on May 4, 1914, to W.S. Cooper Company of Cleveland, Ohio, encompassed the construction of four lift bridges and one guard gate, including the lift bridge at Prospect Avenue. Work on the bridge began in November 1914 and continued without

¹ Duncan Hay, “New York State Barge Canal,” National Register of Historic Places Registration Form, 2014, Section 7, Pages 21-22.

² Description of current conditions is based on a site visit made by the HAER recording team in summer 2009.

interruption until September 1915. Alteration 2, approved July 28, 1915, modified the west side of the south approach to the bridge. The contractor also had to complete an extra work order in February 1915 and build a temporary sidewalk crossing over the canal at this location.³

Sources:

Annual Report of the State Engineer and Surveyor of the State of New York for the Fiscal Year ended in September 30, 1914, Vol. 1. Albany: J.B. Lyon Company, 1915.

Annual Report of the State Engineer and Surveyor of the State of New York for the Fiscal Year ended in September 30, 1915, Vol. 1. Albany: J.B. Lyon Company, 1916.

Hay, Duncan. "New York State Barge Canal." National Register of Historic Places Registration Form, 2014.

Series B1762, New York State Archives, Albany, New York. "Western Division, Erie Canal, Section 10, Sta. 5016 to Sta. 5030." Approved December 3, 1924, 169.

Historians: Laura S. Black and Jami Babb, summer 2009

Project Information: The Historic American Engineering Record (HAER) is a long-range program that documents and interprets historically significant engineering sites and structures throughout the United States. HAER is part of Heritage Documentation Programs (Richard O'Connor, Manager), a division of the National Park Service, United States Department of the Interior. The New York State Barge Canal Survey was undertaken in summer 2009 in cooperation with the Erie Canalway National Heritage Corridor (ERIE), Beth Sciumeca, Executive Director. Justine Christianson, HAER Historian, and Duncan Hay, ERIE, served as project leaders. The staff of the New York State Canal Corporation provided access to the sites. Craig Williams of the New York State Museum provided research materials and assistance. The HAER field team consisted of Jami Babb and Laura Black.

³ *Annual Report of the State Engineer and Surveyor of the State of New York for the Fiscal Year ended in September 30, 1914, Vol. 1* (Albany: J.B. Lyon Company, 1915), 311; *Annual Report of the State Engineer and Surveyor of the State of New York for the Fiscal Year ended in September 30, 1915, Vol. 1* (Albany: J.B. Lyon Company, 1916), 284-85.

Appendix: Images of Current Conditions



Image 1: Prospect Avenue Lift Bridge elevation with control tower at left. Field photograph taken by HAER recording team, summer 2009.



Image 2: Control tower with modern warning bell. Field photograph taken by HAER recording team, summer 2009.