

NEW YORK STATE BARGE CANAL, MAIN STREET LIFT BRIDGE
(MIDDLEPORT)
(Erie Canal, Main Street Lift Bridge (Middleport))
Main Street
Middleport
Niagara County
New York

HAER NY-502
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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

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NEW YORK STATE BARGE CANAL, MAIN STREET LIFT BRIDGE (MIDDLEPORT) Erie Canal, Main Street Lift Bridge (Middleport)

HAER No. NY-502

Location: Main Street, Middleport, Niagara County, New York

The Main Street Lift Bridge is located at latitude: 43.213091, longitude: -78.476625. The point represents the control building and was obtained in 2009. There is no restriction on its release to the public.

Significance: The Main Street Lift Bridge at Middleport, 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 Main Street over the Erie Canal in Middleport.² The steel Warren pony truss with decorative end posts sits on concrete abutments. The bridge is 142' long and 23.7' between curbs. The deck is open grate, and flanked by pedestrian walkways lined with steel lattice. Steel stairways are located at either end of the west side of the bridge. The machinery pits behind the concrete abutments are covered with cross-hatch plates. A bridge plate reads: “Built by the McMyler-Interstate Co. Cleveland, Ohio, 1915.” The bridge is in good condition.

The control building is a replacement one from 1971, so it is not a tower as is typical at the lift bridges on the canal. Instead, the control building is a single-story brick structure set back from the bridge on the north bank of the canal. The building has an asphalt-covered hipped roof, three-light steel casement windows, and a steel double door. It is in good condition.

History: The bridge was built as part of Contract 106. W.S. Cooper Company of Cleveland, Ohio, won the contract on May 4, 1914, which called for building four lift bridges

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.

and one guard gate, including this bridge. Construction began in October 1914 and progressed steadily until its completion in September 1915. An extra work order from November of that year directed the contractor to erect a temporary bridge for use by vehicular traffic while construction took place.³

The bridge was rehabilitated beginning in 1971 as part of Contract M71-1. The project included replacement of the original control tower.⁴

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.

Maintenance Contracts 1971, 1972, 1973.

Series B1762, New York State Archives, Albany, New York. "Western Division, Erie Canal, Section 10, Sta. 5221 to Sta. 5252." Approved December 3, 1924, 176.

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.

⁴ Maintenance Contracts 1971, 1972, 1973.

Appendix: Image of Current Conditions



Image: Main Street Lift Bridge with control building at right. Field photograph taken by HAER recording team, summer 2009.