

NEW YORK STATE BARGE CANAL, ADAMS STREET LIFT
BRIDGE
(Erie Canal, Adams Street Lift Bridge)
Adams Street
Lockport
Niagara County
New York

HAER NY-510
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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, ADAMS STREET LIFT BRIDGE (Erie Canal, Adams Street Lift Bridge)

HAER No. NY-510

Location: Adams Street, Lockport, Niagara County, New York

Adams Street Lift Bridge is located at latitude: 43.1787437, longitude: -78.6830236. The point represents the control tower and was obtained in 2009. There is no restriction on its release to the public.

Significance: Adams Street 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 Adams Street over the Erie Canal.² The steel Warren pony truss sits on concrete abutments. It is 130' long and 23.7' between curbs. The bridge has open-grate decking on the roadway and wood decking on the pedestrian walkways, which are lined with steel lattice. 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 concrete abutments are covered with cross-hatch plates. The bridge plate reads “Lackawanna Bridge Company, Buffalo, NY 1917.” The bridge is in good condition.

The control tower is located at the northwest corner of the bridge. The two-story concrete tower has a flat roof. There are six-over-six-light wood windows and some modern replacements. The entrance is through a pane-and-panel door. A concrete block addition at the northwest side of the tower has a corrugated metal shed roof and steel doors. It is in good condition.

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.

History: The Adams Street Lift Bridge was built as part of Contract 98, but no information could be found about this contract.³ The bridge plate indicates it was built by the Lackawanna Bridge Company in 1917.

Sources:

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. 5834 to Sta. 5866." Approved December 3, 1924, 195.

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 The contract number is noted on a site map, Series B1762, New York State Archives, Albany, New York, "Western Division, Erie Canal, Section 10, Sta. 5834 to Sta. 5866," approved December 3, 1924, 195.

Appendix: Image of Current Conditions



Image: Adams Street Lift Bridge and control tower. Field photograph taken by HAER recording team, summer 2009.