

NEW YORK STATE BARGE CANAL, PARK AVENUE LIFT BRIDGE
(Erie Canal, Park Avenue Lift Bridge)
Park Avenue
Brockport
Monroe County
New York

HAER NY-477
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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
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HAER No. NY-477

Location: Carries Park Avenue across the Erie Canal, Brockport, Monroe County, New York

The Park Avenue Lift Bridge is located at latitude: 43.215590, longitude: -77.935409. The point represents the control tower and was obtained in 2009. There is no restriction on its release to the public.

Significance: Park 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 Park Avenue over the Erie Canal.² The steel Warren pony truss has an open-grate deck. The abutments are concrete. Steel stairways at either end of the west side of the bridge provide access to the pedestrian walkway on the bridge, which is separated from the roadway by steel lattice. The machinery pits are covered with cross-hatch plates. The bridge is in good condition.

The control tower is located on the north end of the bridge. The two-story frame building sits on a concrete foundation and is clad in vertical-board siding. There is a pyramidal asphalt-shingled roof, and the fenestration consists of one-over-one-light and casement vinyl windows. The entrances are steel doors. The tower is in good condition.

Near the tower is a storage shed. The frame building with vertical-board siding is on a concrete foundation. The gable-front roof is covered with asphalt shingles, and there are one-over-one-

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.

light vinyl windows with steel mesh coverings and a vertical-board paneled door. The shed is in good condition.

History: The Park Avenue Lift Bridge was built as part of Contract 105, awarded to Skene & Richmond of Louisa, Kentucky, on April 19, 1912. The contract included the construction of five lift bridges over the Erie Canal, including the one at Park Avenue. The work had been completed by August 1913. There were alterations to the contract, including one approved on May 27, 1913, that called for substituting Portland cement for the gravel walks in order to conform to local improvements.³

The superstructure may have been rehabilitated under Contract D500552, which called for the replacement of the steel trusses at three bridges: two in Brockport and one in Holley.⁴

Sources:

Annual Report of the State Engineer and Surveyor of the State of New York for the Fiscal Year ended in September 30, 1913, Vol. 1. Albany: J.B. Lyon Company, 1914.

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.

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

Maintenance Contracts 1991.

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, 1913, Vol. 1* (Albany: J.B. Lyon Company, 1914), 308; *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.

⁴ Maintenance Contracts 1991.

Appendix: Images of Current Conditions



Image 1: Park Avenue Lift Bridge in raised position. Field photograph taken by HAER recording team, summer 2009.



Image 2: Storage shed. Field photograph taken by HAER recording team, summer 2009.