

NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

(Type all entries - complete applicable sections)

STATE: Pennsylvania
COUNTY: Northampton
FOR NPS USE ONLY
ENTRY DATE

1. NAME

COMMON:
Chain or Change Bridge
AND/OR HISTORIC: Wire Towing Path at Pool No. 8, Lehigh Canal (Official Name)
Swinging Bridge, Donkey Bridge, Mule Bridge

2. LOCATION

STREET AND NUMBER:
Hugh Moore Parkway
CITY OR TOWN:
Glendon, Easton
CONGRESSIONAL DISTRICT:
Fifteenth
STATE: Pennsylvania
CODE: 42
COUNTY: Northampton
CODE: 095

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP	STATUS	ACCESSIBLE TO THE PUBLIC
<input type="checkbox"/> District <input type="checkbox"/> Site <input type="checkbox"/> Building <input checked="" type="checkbox"/> Structure <input type="checkbox"/> Object	<input checked="" type="checkbox"/> Public <input type="checkbox"/> Private <input type="checkbox"/> Both Public Acquisition: <input type="checkbox"/> In Process <input type="checkbox"/> Being Considered	<input type="checkbox"/> Occupied <input checked="" type="checkbox"/> Unoccupied <input type="checkbox"/> Preservation work in progress	Yes: <input type="checkbox"/> Restricted <input checked="" type="checkbox"/> Unrestricted <input type="checkbox"/> No
PRESENT USE (Check One or More as Appropriate)			
<input type="checkbox"/> Agricultural <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Educational <input type="checkbox"/> Entertainment	<input type="checkbox"/> Government <input type="checkbox"/> Industrial <input type="checkbox"/> Military <input checked="" type="checkbox"/> Museum	<input checked="" type="checkbox"/> Park <input type="checkbox"/> Private Residence <input type="checkbox"/> Religious <input type="checkbox"/> Scientific	<input type="checkbox"/> Transportation <input type="checkbox"/> Other (Specify) <input type="checkbox"/> Comments

4. OWNER OF PROPERTY

OWNER'S NAME:
City of Easton (administered as portion of the Hugh Moore Parkway)
STREET AND NUMBER:
Canal Museum at the Forks of the Delaware
P.O. Box 877; 200 South Delaware River
CITY OR TOWN:
Easton
STATE: Pennsylvania
CODE: 42

5. LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC.:
Northampton County Courthouse, Recorder of Deeds, Vol. 183 pgs. 388-408
STREET AND NUMBER:
Seventh and Walnut St.
CITY OR TOWN:
Easton
STATE: Pennsylvania
CODE: 42

6. REPRESENTATION IN EXISTING SURVEYS

TITLE OF SURVEY:
Historic Structures and Sites, Vol. 3 for the Regional Rec. and Open Space
DATE OF SURVEY:
DEPOSITORY FOR SURVEY RECORDS:
Joint Planning Commission for Lehigh-Northampton Counties
STREET AND NUMBER:
ABE Airport
CITY OR TOWN:
Catasauqua
STATE: Pennsylvania
CODE: 42

SEE INSTRUCTIONS

STATE: Pennsylvania
COUNTY: Northampton
ENTRY NUMBER
DATE
FOR NPS USE ONLY

7. DESCRIPTION

CONDITION	(Check One)					
	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input checked="" type="checkbox"/> Deteriorated	<input type="checkbox"/> Ruins	<input type="checkbox"/> Unexposed
	(Check One)			(Check One)		
	<input checked="" type="checkbox"/> Altered	<input type="checkbox"/> Unaltered	<input type="checkbox"/> Moved	<input checked="" type="checkbox"/> Original Site		

DESCRIBE THE PRESENT AND ORIGINAL (if known) PHYSICAL APPEARANCE

The Chain or Change Bridge is a composite of three stone piers and two spans. Each of the piers is approximately thirty feet high from ground or water level with additional footage below the surface level. The center pier is about forty feet across at water level and contains a depression at the top center about four feet deep and ten feet across. Through this depression runs the bridge road surface. The upstream side of this pier is shaped in the form of an ice breaking device. The bottom of the pier below water level has a wooden cribbing.

The two end piers have their foundation in land. They are typical of the nineteenth century stone bridge approach. Atop the end piers, there is a stone wall about three feet high and two feet thick on each side wall. On the end of each of the end piers is a metal capping and a cable anchorage, which holds and tightens the cables which in turn support the bridge.

The bridge surface was about ten feet across and had a wooden planking floor laid on wooden beams. A wooden rail about four feet high, was supported by wood posts and braced to the bridge joists. This surface was supported by a stranded cable similar to those of Roebling bridges. The stranded cable is approximately three inches in diameter and one of these runs on each side of the bridge.

Each of the two sections of span sag considerably. This was chosen over a taught rigid suspension in order to decrease tension on the cables. The bridge was intended to carry only pedestrian and animal traffic, not vehicular.

SEE INSTRUCTIONS

8. SIGNIFICANCE

PERIOD (Check One or More as Appropriate)

- | | | | |
|----------------------------------------|---------------------------------------|--------------------------------------------------|---------------------------------------|
| <input type="checkbox"/> Pre-Columbian | <input type="checkbox"/> 16th Century | <input type="checkbox"/> 18th Century | <input type="checkbox"/> 20th Century |
| <input type="checkbox"/> 15th Century | <input type="checkbox"/> 17th Century | <input checked="" type="checkbox"/> 19th Century | |

SPECIFIC DATE(S) (If Applicable and Known) 1856-1857

AREAS OF SIGNIFICANCE (Check One or More as Appropriate)

- | | | | |
|-----------------------------------------|-------------------------------------------------|----------------------------------------------------|------------------------------------------|
| <input type="checkbox"/> Aboriginal | <input type="checkbox"/> Education | <input type="checkbox"/> Political | <input type="checkbox"/> Urban Planning |
| <input type="checkbox"/> Prehistoric | <input checked="" type="checkbox"/> Engineering | <input type="checkbox"/> Religion/Philosophy | <input type="checkbox"/> Other (Specify) |
| <input type="checkbox"/> Historic | <input type="checkbox"/> Industry | <input type="checkbox"/> Science | _____ |
| <input type="checkbox"/> Agriculture | <input type="checkbox"/> Invention | <input type="checkbox"/> Sculpture | _____ |
| <input type="checkbox"/> Architecture | <input type="checkbox"/> Landscape Architecture | <input type="checkbox"/> Social/Humanitarian | _____ |
| <input type="checkbox"/> Art | <input type="checkbox"/> Literature | <input type="checkbox"/> Theater | _____ |
| <input type="checkbox"/> Commerce | <input type="checkbox"/> Military | <input checked="" type="checkbox"/> Transportation | _____ |
| <input type="checkbox"/> Communications | <input type="checkbox"/> Music | | _____ |
| <input type="checkbox"/> Conservation | | | _____ |

STATEMENT OF SIGNIFICANCE

This bridge was built between 1856 and 1857 by the Lehigh Coal and Navigation Company. The engineer for the bridge was E.A. Douglas, of the same company, who completed the bridge at a cost of \$3613.24. The purpose of the bridge was to enable mules and people to cross the Lehigh River near the point where the Lehigh Canal crossed from one bank to the other. It replaced an earlier bridge located nearer to a dam and thus more susceptible to the strong currents encountered in that area.

The bridge was used not only to ferry the mules across the river, but it also let the animals tow the boats and barges from one bank to the other. The stranded cable was made on the site and it is believed to have been done by the Roebling Company, who built several suspension bridges. Their most famous bridge was the Brooklyn Bridge. In the 1950's the road surface was removed from the piers because it had been in a poor state of repair.

The bridge as it stands today consists of the piers and the cable. It is owned by the City of Easton and under the administration of the Hugh Moore Parkway and is part of a canal museum. This concern has plans to restore the bridge as part of their recreational plan.

The bridge remains significant because it was an integral part of the long defunct canal system. It is also a fine example of the early use of stranded cable for bridge construction. The bridge represents a unique civil engineering solution to a canal era problem and played a vital role in the transportation system which opened up the Lehigh Valley to outside development and established coal as an invaluable heating and industrial fuel.

SEE INSTRUCTIONS

9. MAJOR BIBLIOGRAPHICAL REFERENCES

Durkee, Jackson L. and Carl H. Biers, Jr. (Editors) History and Directory Commemorating the Fiftieth Anniversary of the Section (Lehigh Valley Section, American Society of Civil Engineers) 1922-1972. Bethlehem, Pa.: December 1972.

Henry, Mathew S. History of the Lehigh Valley. Easton, Pa. Bixler and Cowin: 1860 pg. 168

Paradise Ditch. 16mm, black and white, sound movie. Distributed by Rothschild Film Corp. Brooklyn, New York 11230

10. GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY			LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES					
CORNER	LATITUDE	LONGITUDE	LATITUDE			LONGITUDE		
	Degrees Minutes Seconds	Degrees Minutes Seconds	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
NW	0' 0" 0"	0' 0" 0"	40°	39'	14"	75°	14'	56"
NE	0' 0" 0"	0' 0" 0"						
SE	0' 0" 0"	0' 0" 0"						
SW	0' 0" 0"	0' 0" 0"						

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: five

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY	CODE

11. FORM PREPARED BY

NAME AND TITLE:
Harry L. Rinker, President

ORGANIZATION: **Pennsylvania Canal Society** DATE: **Dec. 1972**

STREET AND NUMBER:
2158 Drury Lane

CITY OR TOWN: **Bethlehem** STATE: **Pennsylvania** CODE: **112**

12. STATE LIAISON OFFICER CERTIFICATION

As the designated State Liaison Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service. The recommended level of significance of this nomination is:

National State Local

Name William J. Wewer

Title Executive Director

Date 11/8/73

NATIONAL REGISTER VERIFICATION

I hereby certify that this property is included in the National Register.

Director, Office of Archeology and Historic Preservation

Date _____

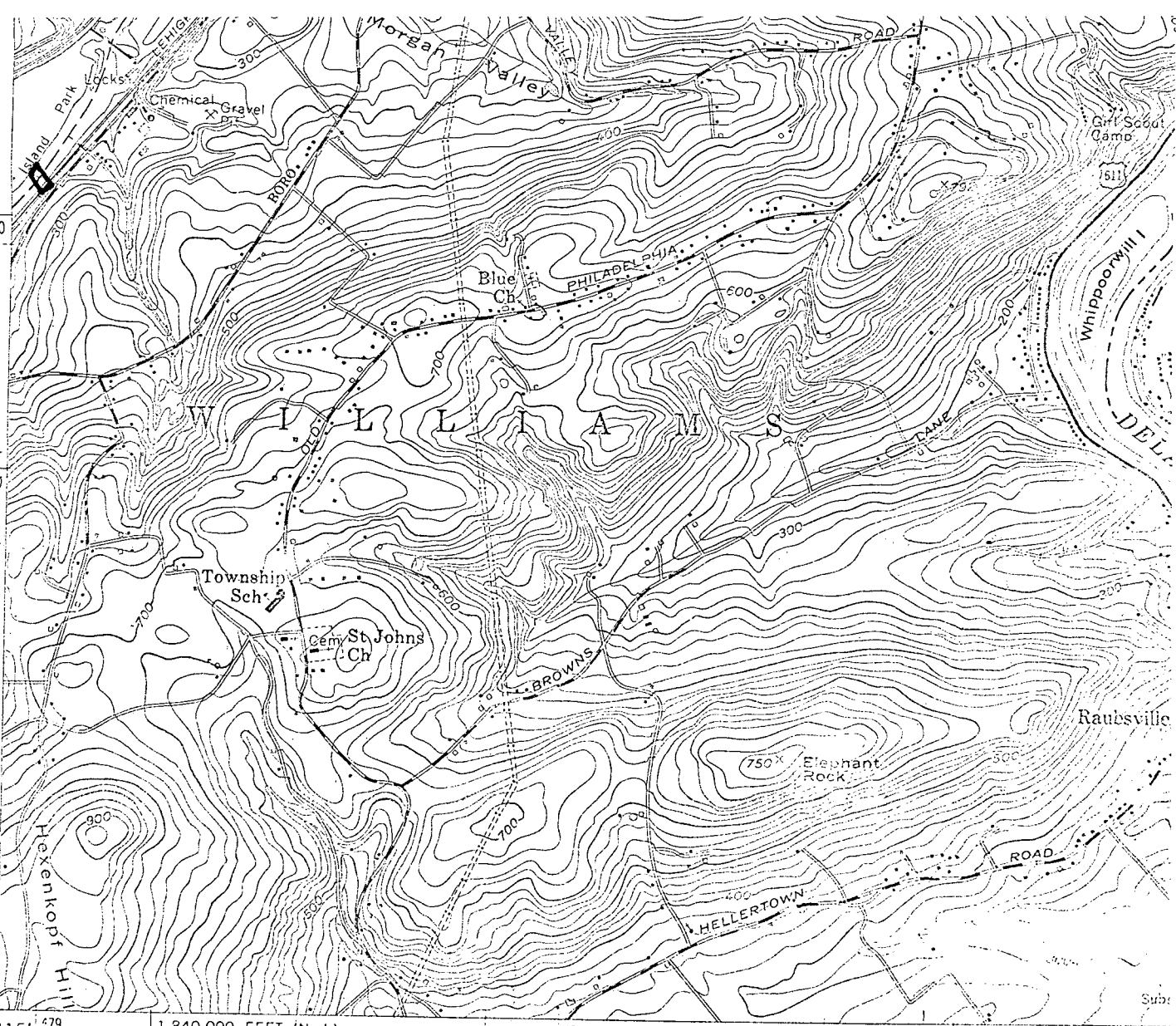
ATTEST: _____

Keeper of The National Register

Date _____

SEE INSTRUCTIONS

Chains on C.



660 000 FEET (N. J.)



4498

4497

75° 15' 479

1 840 000 FEET (N. J.)

481

482

12'30"

483

RTOWN) SE

Mapped by the Army Map Service
 Edited and published by the Geological Survey

Sub:
 COFFE
 RIEGEL