

# Massachusetts Cultural Resource Information System

## Scanned Record Cover Page

<b>Inventory No:</b>	CAM.907
<b>Historic Name:</b>	First Street Bridge over Broad Canal
<b>Common Name:</b>	
<b>Address:</b>	First St
<b>City/Town:</b>	Cambridge
<b>Village/Neighborhood:</b>	East Cambridge
<b>Local No:</b>	
<b>Year Constructed:</b>	1924
<b>Architect(s):</b>	Boston Bridge Works; Brown, Curtis S.; Cleverdon, Varney and Pike; Hastings, L. M.
<b>Architectural Style(s):</b>	Movable Multiple Trunnion Bascule; Movable Single Leaf Bascule; Plate Girder
<b>Use(s):</b>	Other Transportation
<b>Significance:</b>	Engineering; Transportation
<b>Area(s):</b>	CAM.AJ: Charles River Basin Historic District
<b>Designation(s):</b>	Nat'l Register District (12/22/1978)
<b>Building Materials(s):</b>	



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Commonwealth of Massachusetts  
Massachusetts Historical Commission  
220 Morrissey Boulevard, Boston, Massachusetts 02125  
[www.sec.state.ma.us/mhc](http://www.sec.state.ma.us/mhc)

This file was accessed on: Friday, October 2, 2020 at 12:02 PM

## MASSACHUSETTS HISTORIC BRIDGE INVENTORY

CAM 907

Municipality: Cambridge District: 8Street name/Rt. #: First Street (St. 3)

Over

Street name/Rt. #: Broad CanalBridge key #: MDC812045101 Photo #s: 2:1-6Bridge plan #: C-1-8

Common/historic name: \_\_\_\_\_

Current owner: MDC

UTM coordinates: \_\_\_\_\_

\*\*\*\*\*  
National Register status (insert date) \*\*\*\*\*

Charles River Basin

Field rating: \_\_\_\_\_

Entered: H.D. 1978 Potential: \_\_\_\_\_

Eligible: \_\_\_\_\_ Non-eligible: \_\_\_\_\_

3 (2) 1

\*\*\*\*\*  
Date built (source): 1924 (plaque) \*\*\*\*\*Date(s) rebuilt (source): 1938 (plan index)Builder (source): Boston Bridge Works (plaque)Designer (source): Burtis S. Brown, cons. eng.; L.M. Hastings, City Eng. (plaque) \*\*\*\*\*\*  
Structural type/materials:Draw - single-leaf, Strauss multiple-trunnion, overhead counterweight bascule, with  
half-through steel plate girder carrying members.

Approaches - 2 spans, steel stringer

\*1938 reconstruction - Cleverdon, Varney &amp; Pike, cons. eng. (plan index)

Overall length: 120' Deck width/layout: 55.5' out-outSkew: -Main unit, # spans: 1 lengths c. 52' to trunnion to tip of leafApproaches, # spans: 2 lengths: \_\_\_\_\_Plaque: 1 location: outer face, eastern tower

Alterations, unusual features, comments:

Counterweight tower has been strengthened by heavy braces added between tower and northern  
(back) span.

MDPW Plan Index lists plans for a 1938 major reconstruction (plans not found)

MDPW computer lists a major rebuilding in 1957

Visual quality (bridge and setting): High\_\_\_\_\_ Average X Low\_\_\_\_\_

Site integrity: Retained\_\_\_\_\_ Violated X

Describe: an early 20th c. industrial area along the Charles River now being revitalized by high-tech and r. + d. firms. On the edge of the Charles River Basin, and part of the Charles River Basin National Register Historic District. A similar Strauss trunnion bascule, erected in 1957, carries eastbound traffic over the canal a hundred or so feet to the south.

#### History of bridge and site:

The Broad Canal was created in 1805 as part of an effort (largely unsuccessful) to make Cambridge into an ocean port, with wharves and a waterfront in Cambridgeport. Most of this early canal system was filled in during the 19th century, but the Broad Canal, although shortened to its present 1000' length, has at least survived. In the late 19th century, plans were advanced to fill in and develop the marshland and tidal flats on both the Cambridge and Boston sides of the Charles, this culminated in the construction of the Charles River Dam in 1903-10. With the lower reaches of the Charles thus turned into a quiet basin, work progressed on the construction of a system of scenic parkways running along the banks of the basin. The First Street drawbridge carried traffic heading south from East Cambridge over the Broad Canal, and into the riverbank parkway system.

Sources: Charles Sullivan, Madacé Jenkins, Carol Ann Clark, Charles River Basin  
B.H. X National Register Historic District nomination, 1978.  
Maint. No  
Plans Not found  
R.R. No

\*\*\*\*\*

#### Summary statement of significance:

3rd oldest of 20 trunnion-type bascule bridges identified in the MDPW statewide computer print-out; the oldest of the 3 Strauss overhead counterweight-type bascules among those 20. In terms of size, integrity, and overall aesthetic impact, however, the 1930 Congress Street Bridge in Boston (B-16-32) is a better example of this particular subtype.

One of 29 bascule bridges of all types, and one of 44 movable bridges of all types, under MDPW purview.

Included in the bounds of the Charles River Basin National Register Historic District, but not a major contributor to the historical significance of the district.

Statement prepared by: S.J. Roper Date: 23 Jan. 1985

\*\*\*\*\*  
Field survey by: S.J. Roper, MDPW Hist. Bridges Specialist Date: May 1984

## MDPW RECOMMENDATION - NATIONAL REGISTER ELIGIBILITY

Municipality

Street on

No.

Bridge: Cambridge First Street / Broad Canal

C-1-88

## Historic evaluation

Significant because:

- 1) Unusual or unique type  
or rare survivor of common type
- 2) Early example of type
- 3) Design - Valuable contribution to bridge technology
- 4) Retains integrity
- 5) Builder known and important
- 6) Bridge historically important to area

Not significant because:

- 1) Common type
- 2) Post-1931
- 3) Design - no contribution to bridge technology
- 4) Integrity lost because of:
  - a) alterations
  - b) disintegration
- 5) Builder unimportant or not known
- 6) No known significance in area

Potentially eligible

X

☒ [Not eligible] but 'A' for C.R.B.H.D.

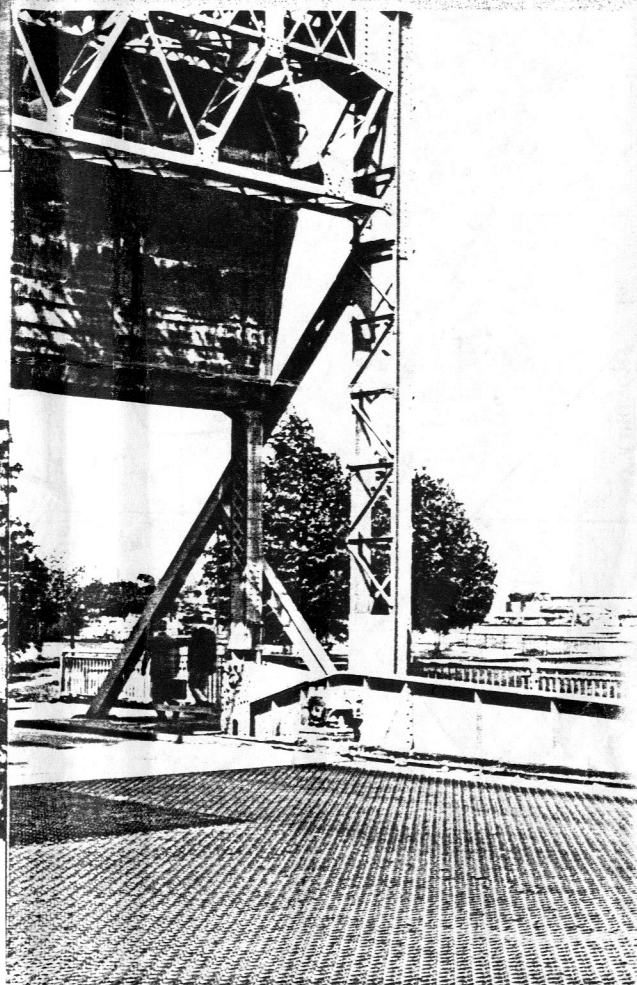
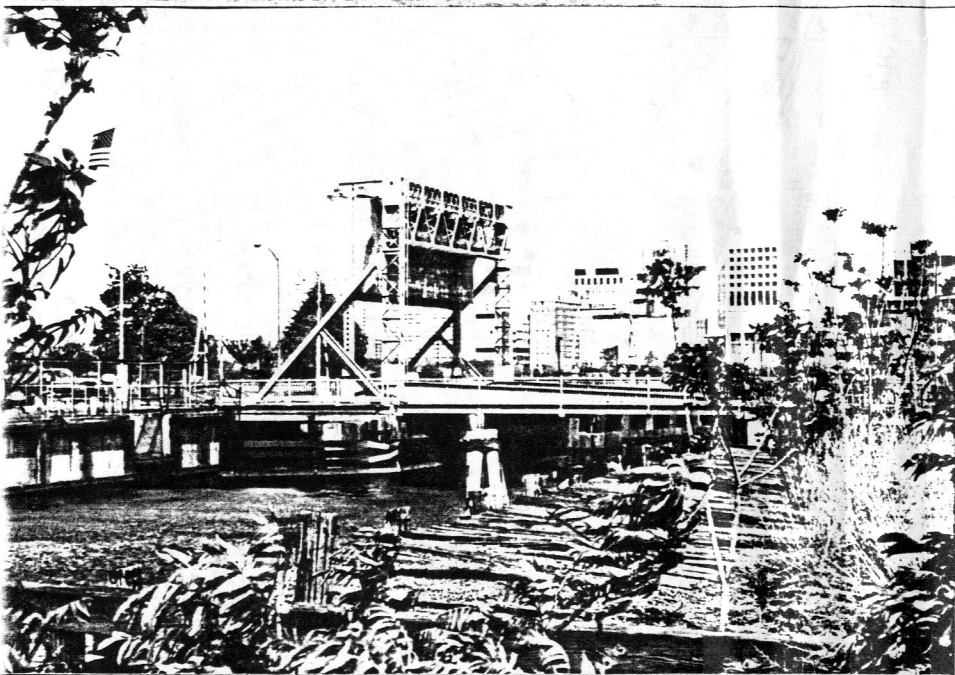
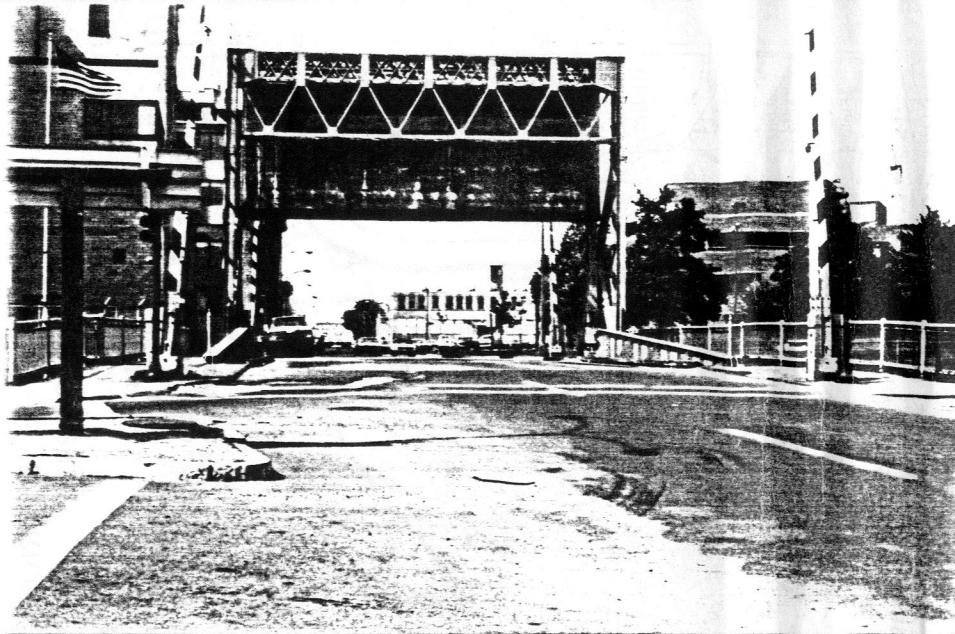
This bridge does not make a major contribution to the Charles River Basin Historic District (N.R. 1973) within which it is located.

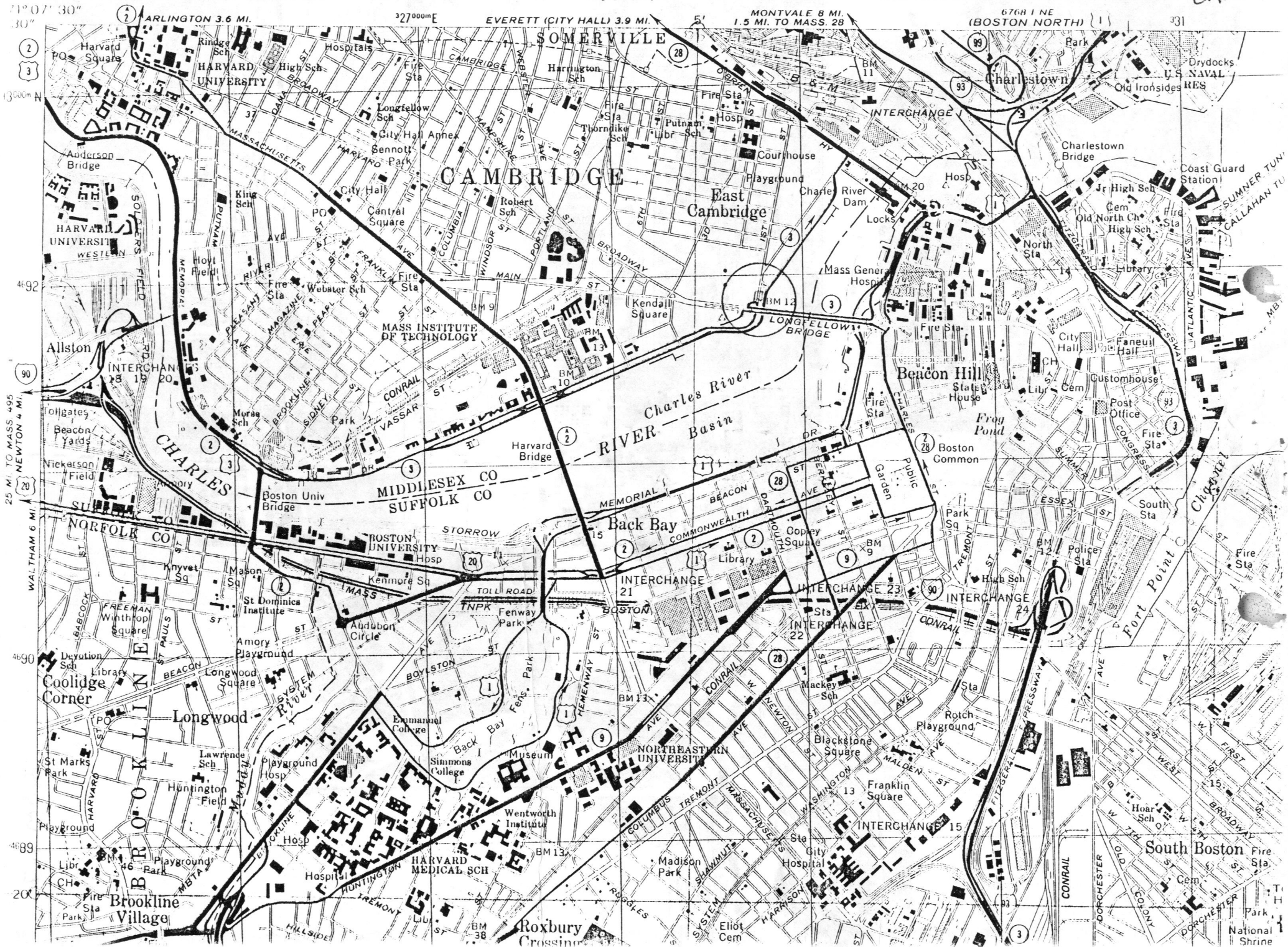
Comments:

The oldest of the three Strauss multiple-trunnion, overhead-counterweight bascule bridges identified in the MDPW statewide computer print-out, but now somewhat altered. The Congress Street Bridge in Boston (B-16-32) is a better example of the type.

9 October 1984

SJ Roper  
MDPW Historic Bridges  
consultant





[45]

NR013-72/22/78

Pl. E. Cam

USGS - BOSTON

SECT D

CAM.907

TO: \_\_\_\_\_

RETURN TO REVIEWER BY \_\_\_\_\_

(DATE)

FROM: W. SmithDATE: 6/25/85TOWN: CambridgePROPERTY: C-1-8 First St. / Broad Canal  
(NAME AND ADDRESS)

1. Does this property meet the criteria for NR eligibility?

☐ YES☒ NO

A. Criteria

- a. events
- b. lives
- c. characteristics
- d. information

B. Local \_\_\_\_\_ State \_\_\_\_\_ National \_\_\_\_\_

"Bascale Trunnion"

2. Statement of Significance: OR Why not eligible?

1924 single-leaf Strauss Multiple-Trunnionover-head counter-weight BascaleWithin Charles River H.D.☐ DOE LETTER WRITTEN

FILED IN ER FILE \_\_\_\_\_

(DATE)