

PH0026387

HB
2019
331930
4678810

**NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM**

(Type all entries - complete applicable sections)

STATE:
Massachusetts

COUNTY:
Norfolk

FOR NPS USE ONLY

ENTRY DATE
JUN 19 1973

1. NAME

COMMON:
Quincy Granite Railway Incline

AND/OR HISTORIC:
Granite Railway Incline

2. LOCATION

STREET AND NUMBER:
Mullin Avenue

CITY OR TOWN:
Quincy

CONGRESSIONAL DISTRICT:
Eleventh

STATE: Massachusetts CODE: 025 COUNTY: Norfolk CODE: 021

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP	STATUS	ACCESSIBLE TO THE PUBLIC
<input type="checkbox"/> District <input type="checkbox"/> Site <input type="checkbox"/> Object <input type="checkbox"/> Building <input checked="" type="checkbox"/> Structure <input type="checkbox"/> Public Acquisition: <input type="checkbox"/> In Process <input type="checkbox"/> Being Considered	<input checked="" type="checkbox"/> Public <input type="checkbox"/> Private <input type="checkbox"/> Both	<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 type="checkbox"/> Educational <input type="checkbox"/> Entertainment	<input type="checkbox"/> Government <input type="checkbox"/> Industrial <input type="checkbox"/> Military <input type="checkbox"/> Museum	<input type="checkbox"/> Park <input type="checkbox"/> Private Residence <input type="checkbox"/> Religious <input type="checkbox"/> Scientific	<input type="checkbox"/> Transportation <input checked="" type="checkbox"/> Other (Specify) <u>historic</u> <input type="checkbox"/> Comments

4. OWNER OF PROPERTY

OWNER'S NAME:
City of Quincy

STREET AND NUMBER:
Quincy

CITY OR TOWN:
Quincy

STATE:
Massachusetts

CODE:
025

5. LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC.:
Norfolk County Registry of Deeds

STREET AND NUMBER:
Dedham

CITY OR TOWN:
Dedham

STATE:
Massachusetts

CODE:
025

6. REPRESENTATION IN EXISTING SURVEYS

TITLE OF SURVEY:
Inventory of Historic Assets of the Commonwealth

DATE OF SURVEY: Federal State County Local

DEPOSITORY FOR SURVEY RECORDS:
Massachusetts Historical Commission

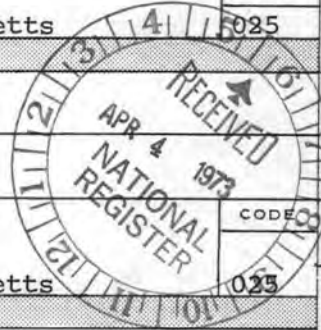
STREET AND NUMBER:
40 Beacon Street

CITY OR TOWN:
Boston

STATE:
Massachusetts

CODE:
025

SEE INSTRUCTIONS



STATE: Massachusetts

COUNTY: Norfolk

ENTRY NUMBER: JUN 19 1973

DATE: _____

FOR NPS USE ONLY

7. DESCRIPTION

CONDITION

(Check One)

Excellent Good Fair Deteriorated Ruins Unexposed

(Check One)

Altered Unaltered

(Check One)

Moved Original Site

DESCRIBE THE PRESENT AND ORIGINAL (if known) PHYSICAL APPEARANCE

The incline is located at the end of Mullin Street in Quincy, west of the south-east expressway to Boston. Mullin Street, a dead end, stops at the base (north end) of the Incline and partly forms the north perimeter of the defunct quarries. The terrain is rough and irregular, demonstrating the effects of the active years of quarrying. The area south of the Incline is characterized by numerous dirt roads and abandoned quarry pits.

The original Incline, 315' long at an angle of 15 degrees, was built to overcome an 84' elevation which blocked access to the Pine Hill Ledge Quarry. The Incline was built in a similar manner to the main Granite Railway bed, 1' - 4' deep, excavated and filled with stone. Granite sleepers or ties, 7' - 8' long, 8" - 14" across the top and 12" - 18" deep, were placed horizontally across the top of the bed at eight foot intervals. Cars moving up and down the plane were controlled by a chain attached to each car. Today, one can see the pulley wheels that carried the chain. This operation, just as Bryant designed and built it, remained in use until 1901 when regulation railroad tracks were laid over the original structure. In 1920, the tracks were removed, and two steel channels were placed on the westerly side of the original track structure. A steel cable, powered by steam, was used to move the huge granite blocks.

The Incline functioned until the early 1940's. Today, approximately 130' of the original structure remains; its top or south section has been removed along with the south portion of the elevation on which it was originally built. At the base of the Incline stand two commemorative pillars, 25' in height. The plaques on the pillar facings have been removed by vandals. The Incline is 14' wide and includes the original roadbed, as well as subsequent modifications. The terrain adjacent to the roadbed is thinly wooded, and has not been built upon.

Included in this submission is the entire 130' length of the Incline, and an area 40' wide on each side of the roadbed, measured from its center.



SEE INSTRUCTIONS

EVERETT MULLIN

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 type="checkbox"/> 19th Century | |

SPECIFIC DATE(S) (If Applicable and Known)

1826

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 type="checkbox"/> Engineering | <input type="checkbox"/> Religion/Philosophy | <input type="checkbox"/> Other (Specify) |
| <input type="checkbox"/> Historic | <input checked="" 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

The Granite Railway, which transported stone for the Bunker Hill Monument from the quarries of Quincy to the Neponset River in Milton, is the first example of the commercial use of rails in the United States. The Granite Railway was incorporated March 4, 1826 and the first horse drawn car traversed the three mile distance on October 7, 1826. At a time when canals were considered the optimum method for the efficient flow of goods and merchandise, this innovative use of rails was met with skepticism. Three years later, however, a committee appointed by the Massachusetts General Court recommended the construction of a similar line to Providence, Rhode Island. The skepticism had passed and the Granite Railway had issued forth a new era.

Although horse power was used, fundamental engineering problems were solved in the construction and operation of the Granite Railway that would stimulate the rapid growth of railroads in the 1830's and 1840's. Gridley Bryant, the engineer and projector of the Granite Railway, invented the eight-wheeled car which became the basic design for railroad cars throughout the country. He also invented the turntable, later used in round houses, and the switch and turnout.

The Incline in Quincy is a further example of Bryant's genius and one of the few extant remains of the Granite Railway. It was constructed in 1830 to provide access to Pine Hill Quarry. The Railway was constructed on a level plane with a minimum of grade to protect the horses. However, the main quarry could not be reached without overcoming an 84' vertical elevation. Bryant solved this problem by constructing a 315' long inclined or gravity plane at an angle of 15 degrees.

The Incline, like the rest of the road, was built using granite sleepers or ties. The cars were attached in ascent and descent to a chain which controlled their immense weight through a braking device. The Incline operated until the 1940's. It remains today with its original track structure and subsequent improvements as a reminder of the pioneering efforts of the first commercial railroad and further symbolizes the transportation revolution which took place in the United States in the mid-nineteenth century.

SEE INSTRUCTIONS

9. MAJOR BIBLIOGRAPHICAL REFERENCES

Kirkland, Edward Chase. Men, Cities, and Transportation: A Study in New England History, 1820-1900. Cambridge: Harvard University Press, 1948. 2 vols.

Scholes, Robert E. The Granite Railway and its Associated Enterprises. Mss., Quincy Room, Quincy Public Library, n.p.

Stuart, Charles B. Lives and Works of Civil and Military Engineers of America. New York: D. Van Nostrand, 1871.

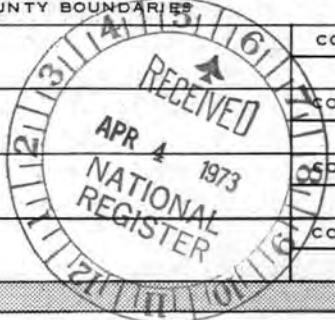
10. GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY				O R	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					
NW	0	'	"	0	'	"	42	0	14	44	71	0	02	12
NE	0	'	"	0	'	"								
SE	0	'	"	0	'	"								
SW	0	'	"	0	'	"								

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: 10,400 sq.ft. 38 sq. rods .2 acres

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

STATE:	CODE	COUNTY	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE



11. FORM PREPARED BY

NAME AND TITLE: Ms. Polly A. Matherly, Historian (727-8470)

ORGANIZATION: Massachusetts Historical Commission DATE: February 22, 1973

STREET AND NUMBER: 40 Beacon Street

CITY OR TOWN: Boston STATE: Massachusetts CODE: 025

12. STATE LIAISON OFFICER CERTIFICATION

NATIONAL REGISTER VERIFICATION

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: John F. Donovan
 Title: Secretary of the Commonwealth
 Chairman, Massachusetts
 Historical Commission

Date: March 13, 1973

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

Robert H. Utley
 Director, Office of Archeology and Historic Preservation

Date: 6/19/73

ATTEST:
[Signature]
 Keeper of The National Register

Date: 6/14/73

SEE INSTRUCTIONS

**NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM**

(Continuation Sheet)

STATE Massachusetts	
COUNTY Norfolk	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE
	JUN 19 1973

(Number all entries)

9. (Bibliography con't).

Ringwalt, John L. Development of Transportation Systems in the United States.
Philadelphia, 1888.

MAPS:

Massachusetts Archives, 1830 Map Series.



PROPERTY Quincy Granite Railway Incline STATE Mass Norfolk

WORKING NUMBER 4.4.73.2711

TECH REVIEW
Photos 1
Maps 1

8/8/73

CONTROL REVIEW See letter.

OK
5-3-
73

HISTORIAN

OK
Accept. AML
5/10/73

ARCHITECTURAL HISTORIAN

Accept 6-6-73
Accept KH
6/5/73
CSHull

ARCHEOLOGIST Inventoried by HAPER 6/1/73 End

REVIEW UNIT CHIEF

BRANCH CHIEF

OK
8/14/73
WDR
6/14/73

KEEPER

National Register write-up _____

Send-back _____

Federal Register entry 8-7-73

Re-submit _____

Entered JUN 19 1973



NPS Number 10/15/73

Title: Quincy Granite Railway

Loc. N

FORM 10-301 A
(6/72)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

**NATIONAL REGISTER OF HISTORIC PLACES
PROPERTY PHOTOGRAPH FORM**

(Type all entries - attach to or enclose with photograph)

1. NAME

COMMON

Quincy Granite Railway Incline

AND/OR HISTORIC

NUMERIC CODE (Assigned by NPS)

JUN 19 1973

2. LOCATION

STATE

Massachusetts

COUNTY

Norfolk

TOWN

Quincy

STREET AND NUMBER

Mullin Avenue

3. PHOTO REFERENCE

PHOTO CREDIT

J. Michael Franceschi

DATE

1972

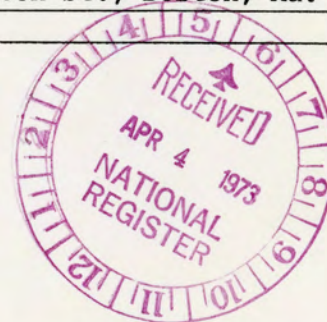
NEGATIVE FILED AT

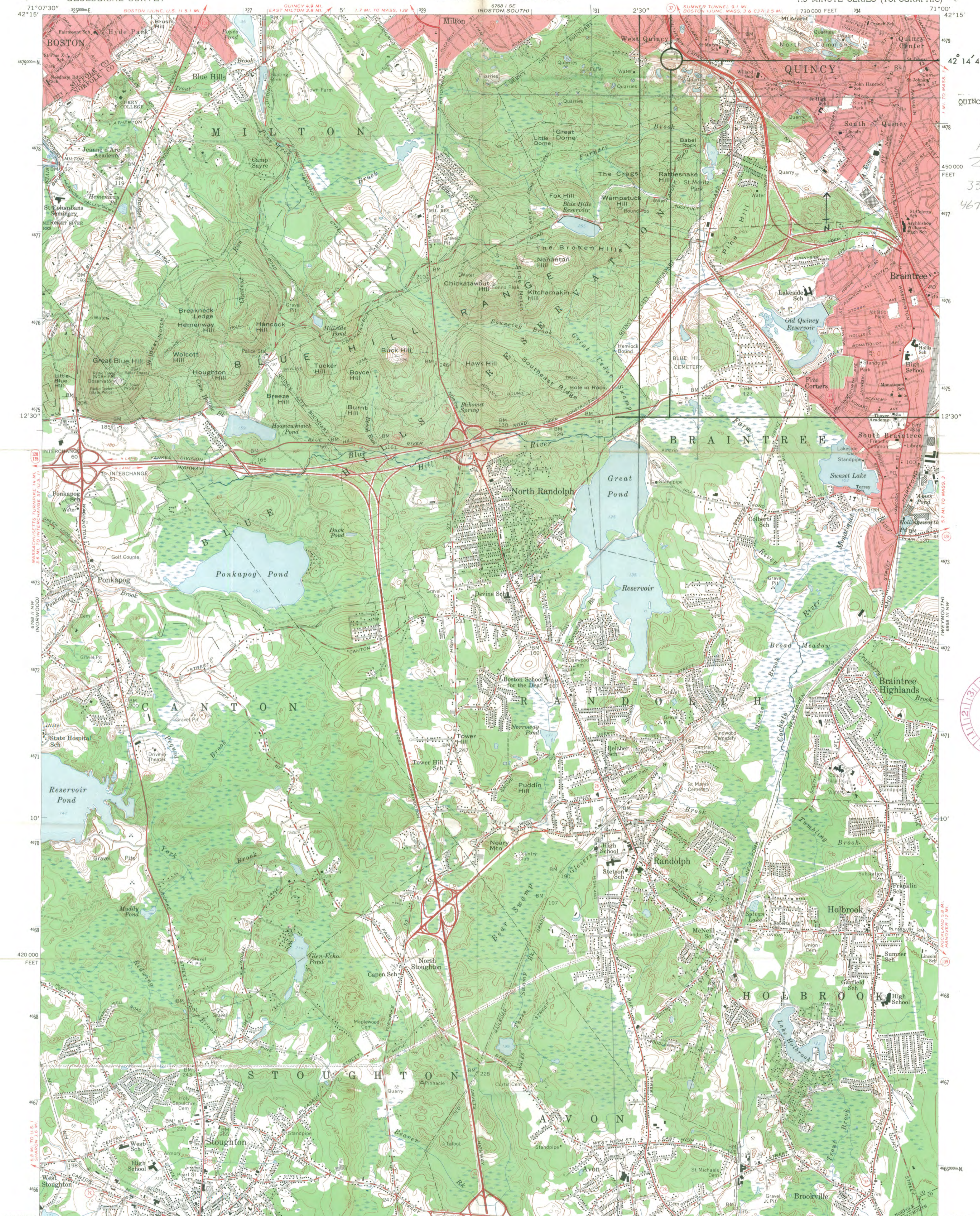
Mass. Historical Commission
40 Beacon St., Boston, Ma.

4. IDENTIFICATION

DESCRIBE VIEW, DIRECTION, ETC.

View of Incline and commemorative pillars, taken from the north

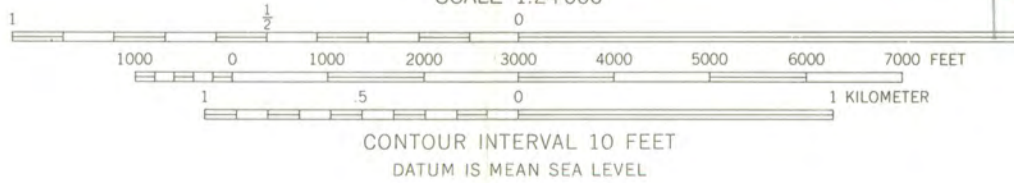
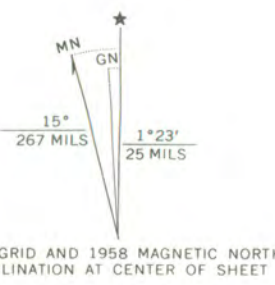




QUINCY RAILWAY INCLINE
QUINCY
H5
2n19
331930
4678810



Mapped, edited, and published by the Geological Survey
Control by USGS, USC&GS, Massachusetts Geodetic Survey,
and Massachusetts Harbor and Land Commission
Culture and drainage in part compiled from aerial photographs
Topography by planetable surveys 1936
Culture revised by photogrammetric methods from aerial photographs
taken 1957. Field check 1958
Polyconic projection. 1927 North American datum
10,000-foot grid based on Massachusetts coordinate system,
mainland zone
1,000-meter Universal Transverse Mercator grid ticks,
zone 19, shown in blue
Red tint indicates areas in which only
landmark buildings are shown



ROAD CLASSIFICATION

Heavy duty	Light duty
Medium duty	Unimproved dirt
Slate Route	

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, WASHINGTON, D. C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

BLUE HILLS, MASS.
N4207.5-W71007.5
1958

Form 10-301
(July 1968)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
NATIONAL REGISTER OF HISTORIC PLACES
PROPERTY MAP FORM
(Type all entries -attach to or enclose with map)

1. NAME COMMON Quincy Granite Railway Incline		AND/OR HISTORIC	NUMERIC CODE (Assigned by NPS) 1000 1000
2. LOCATION STATE Massachusetts		COUNTY Norfolk	TOWN Quincy
STREET AND NUMBER Mullen Avenue			
3. MAP REFERENCE SOURCE U.S.G.S. Blue Hills, Mass.		DATE 1958	SCALE 1:24,000

REQUIREMENTS: PROPERTY BOUNDARIES, WHERE REQUIRED, AND NORTH ARROW.



GPO 932-010

ENTRIES IN THE NATIONAL REGISTER

STATE MASSACHUSETTS

Date Entered JUN 19 1973

<u>Name</u>	<u>Location</u>
Quincy Granite Railway Incline	Quincy Norfolk County

Also Notified

Hon. Edward M. Kennedy
Hon. Edward W. Brooke
Hon. James A. Burke

Director, Northeast Region

State Historic Preservation Officer
Hon. John F. X. Davoren
Secretary of the Commonwealth
Chairman, Massachusetts Historical
Commission
40 Beacon Street
Boston, Massachusetts 02108