

Long Island Bridge Demolition Phase



Squantum Community Meeting

FEBRUARY 26, 2015



Michael D. Dennehy
Commissioner



Martin J. Walsh
Mayor

Acknowledgments



Thomas P. Koch

Mayor



Bruce Ayers

State Representative



Brian McNamee

Ward 6 Councillor

Project Team



- City of Boston - Public Works Department
- Contractor - Walsh Construction
- Engineering Consultant - STV Incorporated
- Environmental Consultant – TRC Solutions, Inc.
- Quincy Conservation Commission Consultant – Polaris Consultants, LLC

Long Island Bridge



- **3,450' IN LENGTH**
- **15 MINUTES TRAVEL TIME FOR PEDESTRIANS**
- **16 SPANS**
- **WATER, ELECTRICITY & TELECOMMUNICATIONS LINES (UTILITIES) ATTACHED TO BRIDGE**
- **UTILITIES SERVE LONG ISLAND & SPECTACLE ISLAND**

Brief History



- Built in 1951
- Connects Moon Island to Long Island
- Limited operational use (10T) since 2006
- Bridge was closed on October 8, 2014

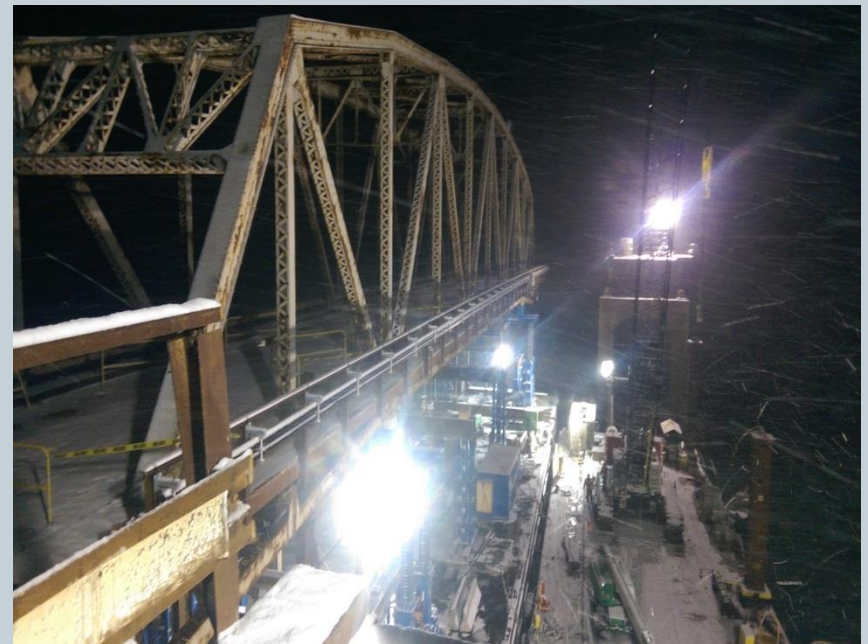
Current Conditions



Closed to all traffic



In demolition

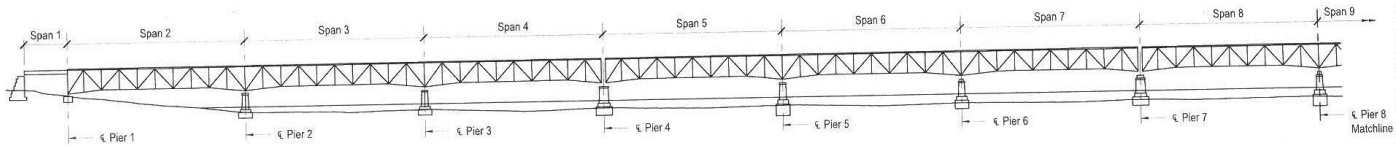


Permitting

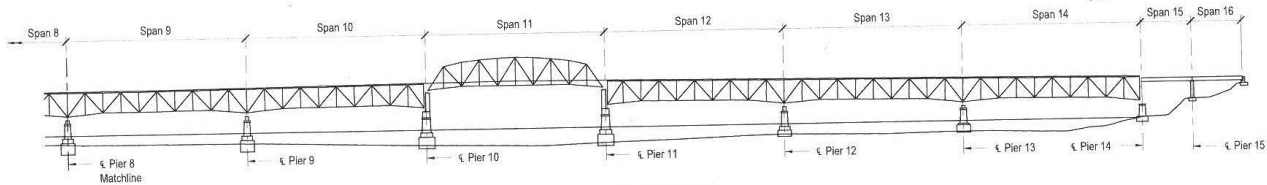


- MassEOEEA - MEPA Certificate-Emergency Authorization
- MassDEP - Chapter 91 Emergency Authorization
- Section 401 Water Quality Certification-Authorization of Emergency Action
- Coast Guard Approval
- Boston Conservation Commission Emergency Certification
- Quincy Conservation Commission Emergency Certification

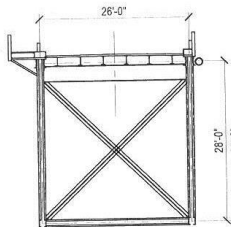
General Layout



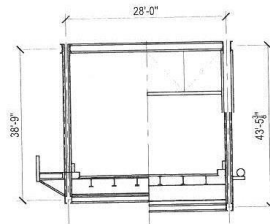
11 ELEVATION



12 ELEVATION



13 TYPICAL APPROACH SPAN



14 TYPICAL CHANNEL SPAN

Notes:
1. The anticipated bridge impact zone is located directly below the bridge. Bridge segments may lean over after contacting the harbor floor. The total possible disturbed area may include an area 30' to the North and 30' to the South of the bridge footprint.

GENERAL LAYOUT LONG ISLAND BRIDGE

GENESIS STRUCTURES, INC.
104 W. 9TH, SUITE 200
KANSAS CITY, MO. 64105
(773) 816-4211-1520
www.genesisstructures.com

DRAWN BY	CHK'D BY
DMR	DMR
DATE	
01-22-15	
SHEET NO.	
G01-101	

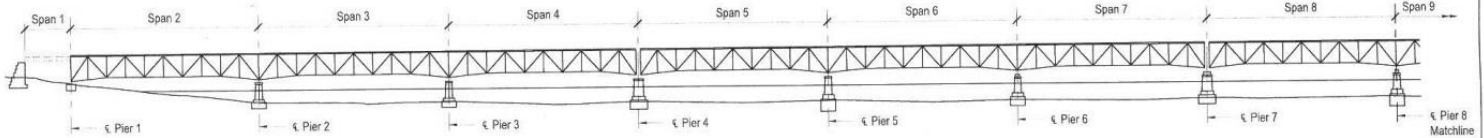
PERMIT REVIEW
NOT FOR CONSTRUCTION

NO.	DATE	REMARKS	BY

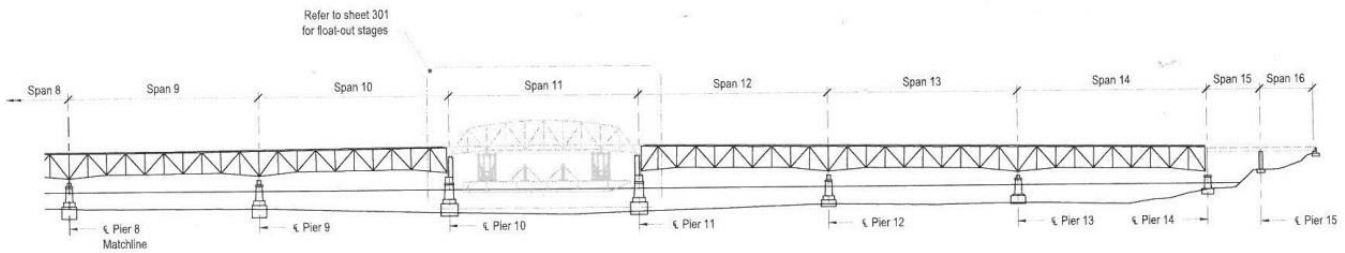


PROJECT
0693 - LONG ISLAND BRIDGE

Float/Dry Method



ELEVATION




ELEVATION

- Sequence Notes:
1. Remove Span 1, Span 15 and Span 16 using land based cranes and excavators.
 2. Remove Span 11 floating out on a barge using hydraulic jacks and tidal lift.

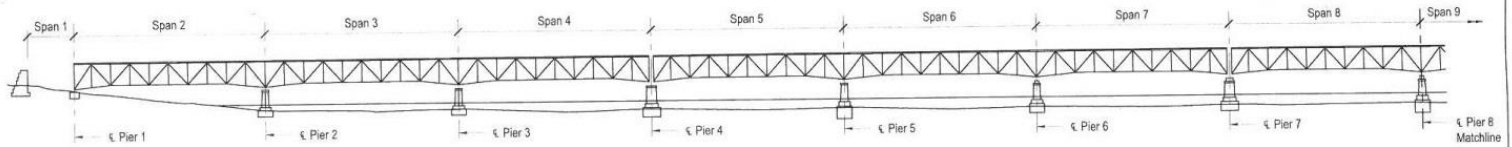
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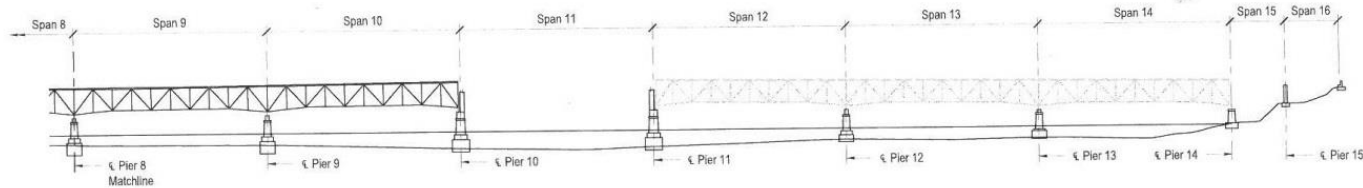
NO.	DATE	REMARKS	BY

STAGE 1 DEMOLITION LONG ISLAND BRIDGE	
 GENESIS STRUCTURES, INC. 104 W. 9TH. SUITE 200 KANSAS CITY, MO. 64105 (77) 616-421-1500 www.genesisstructures.com	DRAWN BY DBR
	CHKD BY DMR
PROJECT 0693 - LONG ISLAND BRIDGE	DATE 01-22-15
BY	SHEET NO. G01-102

Detonation/Wet Method



SECTION 11 ELEVATION



SECTION 12 ELEVATION

Sequence Notes:

1. Remove Spans 12/13/14 simultaneously, using shape charges to drop all three spans clear of existing piers.
2. Using barge mounted equipment (cranes and excavators) and divers with video capability, remove truss 12 and 13 pieces from water and deposit on deck of material barge for further processing.
3. Using barge mounted equipment (cranes and excavators), divers with video capability and land based equipment (excavators), remove truss 14 pieces from water and deposit on deck of material barge for processing.
4. A silt curtain will be installed to contain sediment around drop zone.
5. Vibrators will be used along the face of the piers to scare fish away prior to detonation.
6. Turbidity monitoring will take place before and after detonation.

PERMIT REVIEW
NOT FOR CONSTRUCTION

NO.	DATE	REMARKS	BY

STAGE 2 DEMOLITION LONG ISLAND BRIDGE		DRAWN BY	CHECKED BY
GENESIS STRUCTURES, INC. 104 W. 9TH, SUITE 200 KANSAS CITY, MO. 64105 (P) 816-421-1520 www.genesisstructures.com		DBR	DMR
PROJECT		DATE	
0693 - LONG ISLAND BRIDGE		01-22-15	
SHEET NO.		G01-103	

Construction sequence



- **Bridge Demolition**

- Navigational Span 11 ✓
- Spans 12, 13, 14
- Spans 10, 9, 8
- Spans 7, 6, 5
- Spans 4,3,2

- **Utilities (Water, Electricity, Telecommunications)**

- Dig trench
- Install utilities
- Backfill trench

Schedule



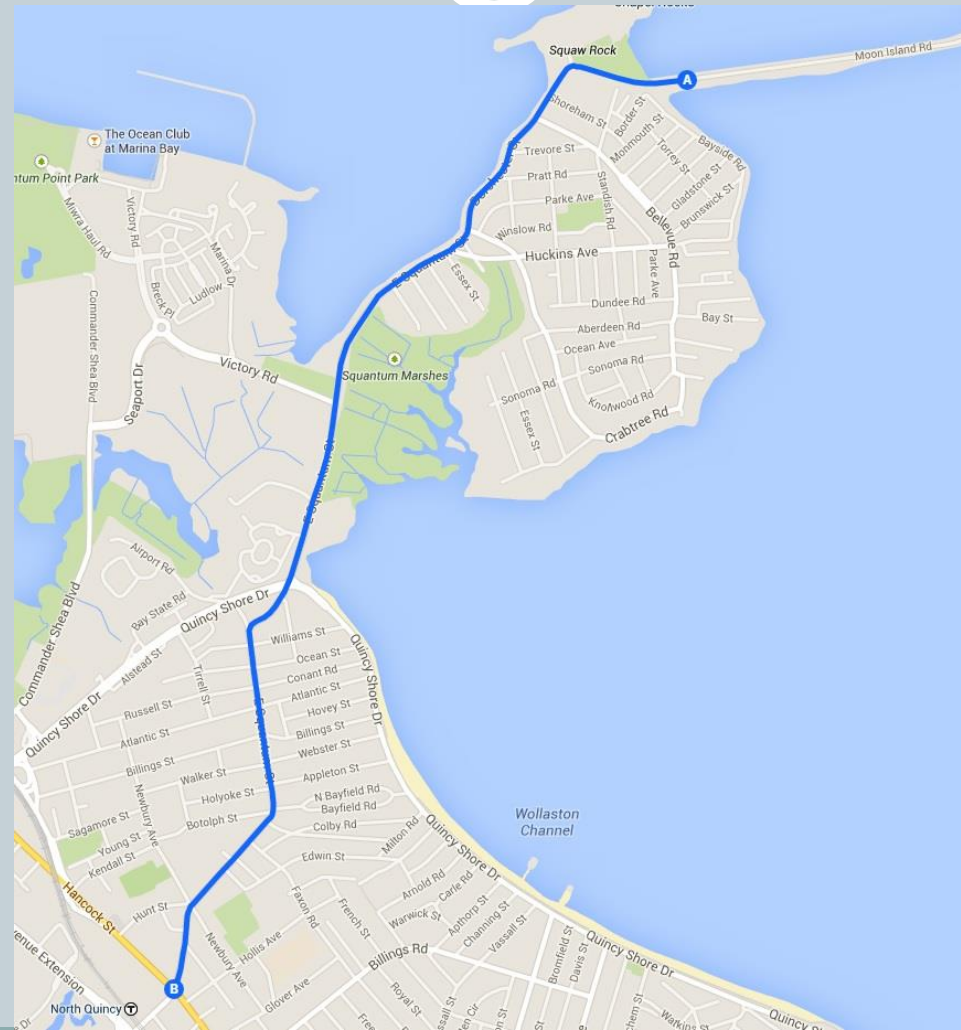
Bridge Demolition

- In demolition
- Navigational span to be removed – week of February 23, 2015
- Detonations in March
- Overall work to be completed by April 30, 2015

Utility Installation

- Materials/pipes have been ordered
- Trench work to begin in April/May 2015
- Overall work to be completed by June 15, 2015

Construction Vehicle Access Route



Additional Information



- <http://bostonworks.org/portfolio/long-island-bridge-demolition/>
- Para Jayasinghe, City Engineer
 - (617) 635-4968
 - Para.Jayasinghe@boston.gov

Questions?

