Commonwealth of Massachusetts

Executive Office of Energy and Environmental Affairs
Massachusetts Environmental Policy Act (MEPA) Office

Environmental Notification Form

For Office Use Only

EEA#: 16194

MEPA Analyst: Alex Strysky

The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Northern Avenue Bridge Replacement Project		
Street Address: Northern Avenue Bridge		
Municipality: Boston	Watershed: Boston Harbor	
Universal Transverse Mercator Coordinates: 331212.55 E 4691169.61 N, Zone 19T	Latitude: 42.354484° N Longitude: -71.049435° W	
Estimated commencement date: 01/2020	Estimated completion date: 2022	
Project Type: Bridge Replacement	Status of project design: 25 %complete	
Proponent: City of Boston Public Works Department		
Street Address: Boston City Hall, One City Hall Square, Room 710		
Municipality: Boston	State: MA	Zip Code: 02110
Name of Contact Person: Para Jayasinghe		
Firm/Agency: Boston Public Works Department	Street Address: 1 City Hall Square, Room 710	
Municipality: Boston	State: MA	Zip Code: 02110
Phone: (617) 635-4968	Fax:	E-mail: para.jayasinghe@boston.gov

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
☐Yes ☒No

If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a Notice of Project Change (NPC), are you requesting:

a Single EIR? (see 301 CMR 11.06(8))	☐Yes ☒No
a Special Review Procedure? (see 301CMR 11.09)	☐Yes ☒No
a Waiver of mandatory EIR? (see 301 CMR 11.11)	☐Yes ☒No
a Phase I Waiver? (see 301 CMR 11.11)	☐Yes ☒No

(Note: Greenhouse Gas Emissions analysis must be included in the Expanded ENF.)

Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?
301 CMR 11.03(3)(b)(6) Construction, reconstruction or expansion of an existing solid fill structure of 1,000 or more sf base area or of a pile-supported or bottom-anchored structure of 2,000 or more sf base area, except a seasonal, pile-held or bottom-anchored float, provided the structure occupies flowed tidelands or other waterways.

301 CMR 11.03(3)(b)(1)(a) alteration of coastal bank.

301 CMR 11.03(10)(b)(1) demolition of all or any exterior part of any Historic Structure listed in or located in any Historic District listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth;

Which State Agency Permits will the project require?
MA Wetlands Protection Act Order of Conditions, MADEP Water Quality Certification (CWA Section 401); MADEP Chapter 91 License and Dredge Permit, CZM Consistency Certification; MHC PNF, Determination of Adverse Effect

Identify any financial assistance or land transfer from an Agency of the Commonwealth, including the Agency name and the amount of funding or land area in acres:
There is no financial assistance or land transfer from any Agency of the Commonwealth. The City of Boston is funding 100% of the project

Summary of Project Size & Environmental Impacts	**Existing**	**Change**	**Total**
LAND			
Total site acreage	2.0 +/-		
New acres of land altered		0	
Acres of impervious area	1.16	0.57	1.73
Square feet of new bordering vegetated wetlands alteration		NA	
Square feet of new other wetland alteration		2,488, but since there is 3,913 in restoration from existing pile and pier removal, there is actually a net increase of 1,425 SF of Land Under the Ocean	
Acres of new non-water dependent use of tidelands or waterways		NA	
STRUCTURES			
Gross square footage	50,525	25,051	75,576
Number of housing units	NA	0	NA
Maximum height (feet)	59.33	8.42	67.75
TRANSPORTATION			
Vehicle trips per day	0	110 bus trips (potential for occasional emergency vehicles)	110 bus trips (potential for occasional emergency vehicles)
Parking spaces	0	0	0
WASTEWATER			
Water Use (Gallons per day)	NA	NA	NA
Water withdrawal (GPD)	NA	NA	NA
Wastewater generation/treatment (GPD)	NA	NA	NA
Length of water mains (miles)	NA	NA	NA
Length of sewer mains (miles)	NA	NA	NA

Has this project been filed with MEPA before?
☐ Yes (EEA #_____) ☒No

Has any project on this site been filed with MEPA before?
☐ Yes (EEA #_____) ☒No

Note: Existing bridge does not have an impervious surface.

GENERAL PROJECT INFORMATION – all proponents must fill out this section

PROJECT DESCRIPTION:

Describe the existing conditions and land uses on the project site:

The Northern Avenue Bridge is a steel four-span, 643-foot long, pivot swing bridge with a steel truss span. The bridge was constructed between 1905 and 1908 by the City of Boston's Engineering Department. The bridge was closed to vehicular traffic in 1997 because of severe deterioration and was repurposed as a pedestrian and cycle bridge as part of the Boston Harbor Walk with pedestrian traffic using the north bay. It was closed to pedestrian traffic in December 2014 for safety concerns and hazard concerns for vessel traffic below, so it was left in its current an open position. In addition, the bridge underside is submerged in water during larger storm events.

The existing Northern Avenue Bridge is located over the Fort Point Channel in Boston, Massachusetts that connects Downtown to the Seaport District in South Boston. The Fort Point Channel is a tidally influenced waterbody that is approximately one mile in total length and 600 feet in width at the Northern Avenue Bridge site. The Northern Avenue Bridge is located at the mouth of the Fort Point Channel where it empties into Boston Harbor. The water depth of the Fort Point Channel in the area of the Northern Avenue Bridge ranges from approximately 10 to 20 feet and is deeper within the portion of the navigable area on the eastern, South Boston, side of channel (please see Figures 1-5 for additional detail.)

The bridge rests on granite block piers and abutments which are supported by concrete foundations and friction piles. The center swing pier, approximately 69-feet in diameter, is a massive concrete and granite structure which supports the swing span operating equipment set in a three-foot thick concrete turntable pit. A large draw/swing pier is located within the middle/central portion of the channel that contains the existing main portion of the bridge that previously pivoted open and close. There are two abutments and three piers comprised of large granite block walls located on each side of the channel and also within the channel. There is also an existing fender system and wooden piles (including remnant deteriorated piles) scattered within the middle/central portion of the channel.

An existing Bridge Tender's House is located to the north of the bridge.

The surrounding land use includes densely developed areas of commercial office buildings, residential apartment buildings and restaurants.

Describe the proposed project and its programmatic and physical elements:

The City of Boston Public Works Department (PWD) proposes to replace the Northern Avenue Bridge as a stationary pedestrian and bicycle bridge that would also allow potential transit (bus) and emergency vehicle access. The new bridge will be closed to other private vehicular traffic.

The project purpose is to re-establish, for public enjoyment, the connection of the Downtown and the South Boston Waterfront neighborhoods of Boston via a new bridge in the footprint of the old bridge. An ancillary project purpose is to raise the bridge to improve its climate resilience during future storm events. The ends of the bridge on both sides of the channel will be raised for both climate resilience and navigational purposes. It will be raised slightly more at the navigable channel in order to match the navigable clearance of the adjacent Seaport Boulevard Bridge (Moakley Bridge) of 16 feet above Mean High Water, allowing the bridge to remain stationary.

The project features a "Promenade" located where the old bridge swung open, which will be utilized as open space to enhance public access to and enjoyment of the waterfront.

Different conceptual designs for a new bridge were developed during the public participation and planning process for this project that was led by the City of Boston. To varying degrees, these conceptual designs reflected the history of the existing bridge and its historical context within the rich history of the Fort Point Channel and surrounding locales. The proposed new bridge design takes its inspiration from its Fort Point Channel location as a current and historical focal point of Boston Harbor.

The existing superstructure will be dismantled in place and loaded intact onto barges, which will then make their way to Dry Dock 4 where the superstructure will be deleaded. It is anticipated that the dismantling of the superstructure will be accomplished via barge mounted cranes.

Physical Elements of the Proposed New Northern Avenue Bridge

The Project will incorporate existing bridge elements into decorative, but not structural, components of the new bridge. Intended to be seen as an iconic beacon at the entrance of the Fort Point Channel, the new bridge is designed to be bold and unique, representing the future of the City as it celebrates the history of the City.

The proposed horizontal clearance will exceed the existing 75-foot wide clearance offered by the existing structure. The vertical clearances of the new bridge will match the clearances of the Evelyn F. Moakley Bridge (Seaport Boulevard Bridge), which is located to the south of the proposed bridge.

The proposed bridge will range in width, as it will be split into two separate travel lanes in the middle portion of the bridge over the Promenade. The bridge approaches to the East and West of the Promenade will begin at 44 feet and 63 feet in width, respectively, and gradually widen as they approach the promenade. The bisected lanes will each be 24 feet wide.

The bridge will be approximately 690 feet in length and will span the Fort Point Channel using new proposed piers located within the same alignment. Two of the new piers will be constructed immediately adjacent to the existing Piers 2 and 3 (on the landward side of the existing piers), and a new pier will be constructed in the footprint of the existing Pier 3. Additionally, new piers will be installed immediately adjacent to the center swing pier. Due to the structural deterioration and instability of the existing piers they cannot be reused to support the new bridge structure (see Attachment 6 – Substructure Inspection Report).

The Promenade will be built in three phases as depicted on the plans located in Attachment 2 and will be approximately 432 feet in length and 80 feet in width once complete. Phase 1, which measures 124 feet in length and 80 feet in width, will be constructed at the same time as the replacement bridge, and Phases 2 and 3 will be constructed as additional funding becomes available. Phase 1, the Promenade, will be constructed within the footprint of the existing fender pile field which supports the bridge as it is swung in the open position., and the Bridge Tenders house. The Promenade will not extend beyond the limits of the current bridge and its supporting elements. The waterfront Promenade will be located in the middle of the channel for the public to gather and view the harbor. It will provide a connection to adjacent public spaces, providing an inviting vibrant waterfront park envisioned to include with benches, swings, and grassy patches for lounging, a boardwalk area, and a long staircase lined with bushes and shrubs.

The project will result in temporary and permanent impacts to waters of the U.S. within the Commonwealth and include minor dredging for the purposes of new pier construction, existing pier demolition, and reconstruction of the western and eastern abutments. The dredging is required for construction purposes only, and no maintenance dredging will be required. It is not anticipated that dredging activities for construction will encroach into the federal navigational channel.

The construction will cause temporary and permanent impacts to coastal wetland resource areas including Land Under the Ocean, Land Containing Shellfish, Coastal Bank, Land Subject to Coastal Storm Flowage (LSCSF) and the 100-foot buffer zone to Coastal Bank that will be associated with