DESIGN PUBLIC HEARING WEBINAR

JUNE 30, 2020

FOR THE PROPOSED

MAIN STREET/ROUTE 133 OVER ESSEX RIVER
SUPERSTRUCTURE REPLACEMENT PROJECT
Project No. 608596
Bridge No. E-11-001(2TV)
Bridge Project Management Section

IN THE TOWN OF ESSEX, MASSACHUSETTS

COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

JONATHAN GULLIVER
HIGHWAY ADMINISTRATOR

PATRICIA A. LEAVENWORTH, P.E.
CHIEF ENGINEER

THE COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION – HIGHWAY DIVISION
NOTICE OF A PUBLIC HEARING WEBINAR
Project File No. 608596

A Design Public Hearing Webinar will be published on the MassDOT website to present the design for the proposed **Route 133 (Main Street) over the Essex River bridge superstructure replacement** project in **Essex**, MA.

WHEN: **Tuesday, June 30, 2020**

PURPOSE: The purpose of this hearing webinar is to provide the public with the opportunity to become fully acquainted with the proposed Route 133 (Main Street) over the Essex River Bridge superstructure replacement project. All views and comments submitted in response to the webinar will be reviewed and considered to the maximum extent possible.

PROPOSAL: The proposed project consists of a complete superstructure replacement of Bridge No. E-11-001, Main Street over the Essex River in the Town of Essex. The project is considered a "Footprint Bridge" project. The existing bridge beams have deteriorated and require replacement. Steel beams have been placed beneath the existing bridge structure and are held in place by girders located in the existing shoulders. The girders are protected by temporary traffic barriers and restrict the width of the existing sidewalks. The bridge is currently posted, and traffic barriers restrict traffic to the middle of the bridge.

Replacement of the superstructure will require closure of the existing bridge. However, traffic will be maintained during construction by constructing a temporary roadway and bridge to the south of the existing structure. The Temporary roadway and bridge will provide for pedestrians and local traffic, including school buses and emergency vehicles. Large tractor trailers and vehicles with more than 4 axles will be directed to use the detour currently in place.

Repairs will be made to the existing substructure. The proposed superstructure will consist of precast concrete box beams. The proposed roadway will consist of two 11' travel lanes and 4.50' shared shoulders (for bicycle accommodations). New 5.5' sidewalks will be provided on each side for Pedestrian accommodations.

A secure right-of-way is necessary for this project. Acquisitions in fee and permanent or temporary easements may be required. The **Commonwealth of Massachusetts** is responsible for acquiring all needed rights in private or public lands. MassDOT's policy concerning land acquisitions will be presented in the webinar.

Written views received by MassDOT subsequent to the date of this notice and up to five (5) days prior to the date of the webinar, plans and a project handout will be made available on the MassDOT website listed below.

Written statements and other exhibits regarding the proposed undertaking are to be submitted to Patricia A. Leavenworth, P.E., Chief Engineer, MassDOT, 10 Park Plaza, Boston, MA 02116, Attention: **Bridge Project Management** Project File No. **608596**. Mailed statements and exhibits intended for inclusion in the public hearing webinar transcript must be postmarked no later than ten (10) business days after the webinar is posted to the MassDOT website listed below. Project inquiries may be emailed to dot.feedback.highway@state.ma.us

This location is accessible to people with disabilities. MassDOT provides reasonable accommodations and/or language assistance free of charge upon request (including but not limited to interpreters in American Sign Language and languages other than English, open or closed captioning for videos, assistive listening devices and alternate material formats, such as audio tapes, Braille and large print), as available. For accommodation or language assistance, please contact MassDOT's Chief Diversity and Civil Rights Officer by phone (857-368-8580), fax (857-368-0602), TTD/TTY (857-368-0603) or by email (MassDOT.CivilRights@dot.state.ma.us). Requests should be made as soon as possible prior to the meeting, and for more difficult to arrange services including sign-language, CART or language translation or interpretation, requests should be made at least ten (10) business days before the webinar.

Hearing webinar cancellation announcements will be posted on the internet at **http://www.massdot.state.ma.us/Highway/**

JONATHAN GULLIVER
HIGHWAY ADMINISTRATOR

PATRICIA A. LEAVENWORTH, P.E.
CHIEF ENGINEER

Dear Concerned Citizen:

The Massachusetts Department of Transportation (MassDOT) is committed to building and maintaining a transportation infrastructure that is both safe and efficient for all who use our roadways, bridges, bicycle facilities and pedestrian paths, while maintaining the integrity of the environment.

As part of the design process for this project, we are conducting this public hearing to explain the proposed improvements, listen to your comments and answer any questions you may have. At the conclusion of the hearing, MassDOT will review all of your comments and, where feasible, incorporate them into the design of the project.

We recognize that road and bridge construction can create inconveniences for the public. MassDOT places a great deal of emphasis on minimizing the temporary disruptive effects of construction.

MassDOT encourages input from local communities and values your opinions. Please be assured that we will undertake no project without addressing the concerns of the community.

Sincerely,
Patricia A Leavenworth, P. E.
Chief Engineer

WHAT IS A PUBLIC HEARING?

WHY A PUBLIC HEARING?

To provide an assured method whereby the Commonwealth of Massachusetts can furnish to the public information concerning the State's highway construction proposals, and to afford every interested resident of the area an opportunity to be heard on any proposed project. At the same time, the hearings afford the Commonwealth an additional opportunity to receive information from local sources which would be of value to the State in making its final decisions to what design should be advanced for development.

WHY NOT A VOTE ON HIGHWAY PLANS?

The hearings are not intended to be a popular referendum for the purpose of determining the nature of a proposed improvement by a majority of those present. They do not relieve the duly constituted officials of a State highway department of the necessity for making decisions in State highway matters for which they are charged with full responsibility.

WHAT DOES A PUBLIC HEARING ACCOMPLISH?

It is designed to ensure the opportunity for, or the availability of, a forum to provide factual information which is pertinent to the determination of the final alternative considered by the State to best serve the public interest, and on which improvement projects are proposed to be undertaken.

It is important that the people of the area express their views in regard to the proposal being presented, so that views can be properly recorded in the minutes of the meeting. These minutes will be carefully studied and taken into consideration in the determination of the final design.

RIGHT OF WAY CONCERNS

The State is responsible for securing the Right of Way for this project. If your property, or a portion of it, must be acquired by the State for highway purposes in the interest of all people of the Commonwealth, your rights are fully protected under the law. Briefly, here are some of the answers to questions you might ask.

1. WHO CONTACTS ME?

   Representatives of the Right of Way Bureau of the Massachusetts Department of Transportation's Highway Division. They will explain the impacts and your rights as protected under Massachusetts General Laws Chapter 79.

2. WHAT IS A FAIR PRICE FOR MY PROPERTY?

   Every offer is made to ensure that an equitable value is awarded to you for the property, or to appraise the "damage" to the property as a result of the acquisition. MassDOT appraisers, independent appraisers, MassDOT "Review Appraisers" and a Real Estate Appraisal Review Board may all contribute in arriving at an award of damages. The State also pays a proportionate part of the real estate tax for the current year for fee takings, and interest from the date the property is acquired to the payment date, on all impacts.

3. MUST I ACCEPT THE DEPARTMENT'S OFFER?

   No. If, after the figure established as market value has been offered to the owner, the owner feels he or she is not being offered a fair price, he or she has the right, within three years, to appeal to the courts. Pending a court decision, he or she can be paid on a "pro-tanto" basis (or "for the time being") that in no way prejudices the court appeal.

4. WHAT WILL HAPPEN TO MY HOUSE?

   The owner will have the opportunity to buy back his or her house, provided he or she has a location to which it can be moved, and the proper permits for its removal. If the owner does not wish to repurchase, the house will be advertised for bids. The highest bidder, who must also have a location and permits for removal, will be awarded the house. Otherwise, the structure will be slated for demolition.

5. WHAT HAPPENS IF I MUST RELOCATE?

   In addition to the market value of the property, the Department pays certain relocation benefits for both owners and tenants of acquired residences and businesses who meet eligibility requirements. Assistance in relocation is also provided. Department brochures are available for details on these benefits.

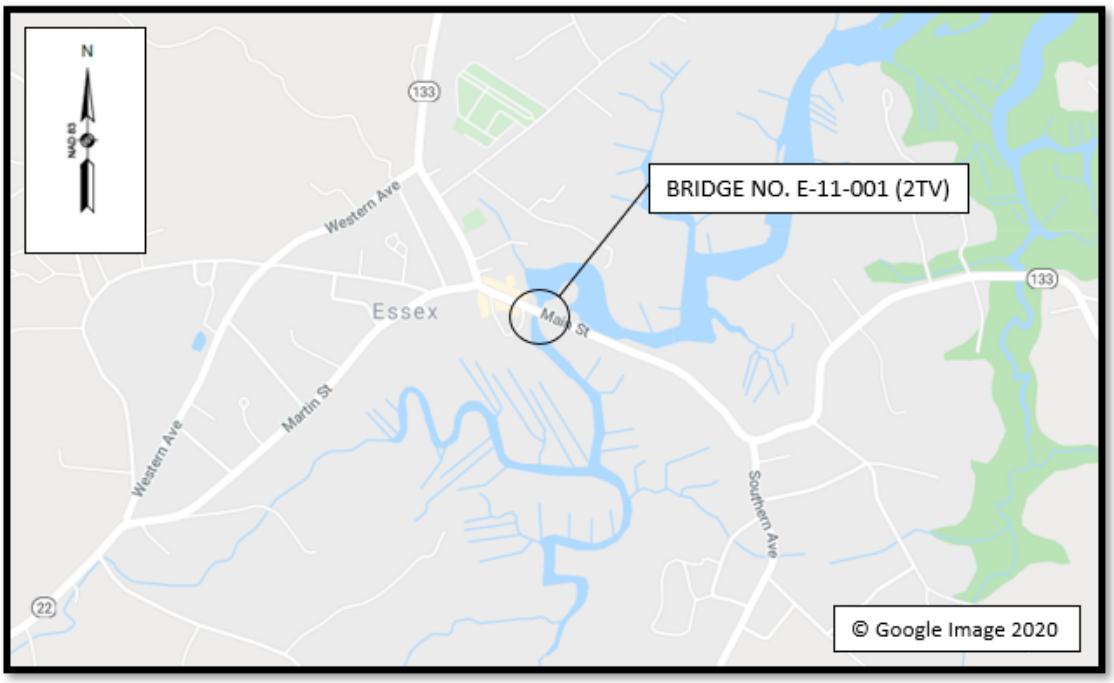

Figure 1: Google Image Locus Map

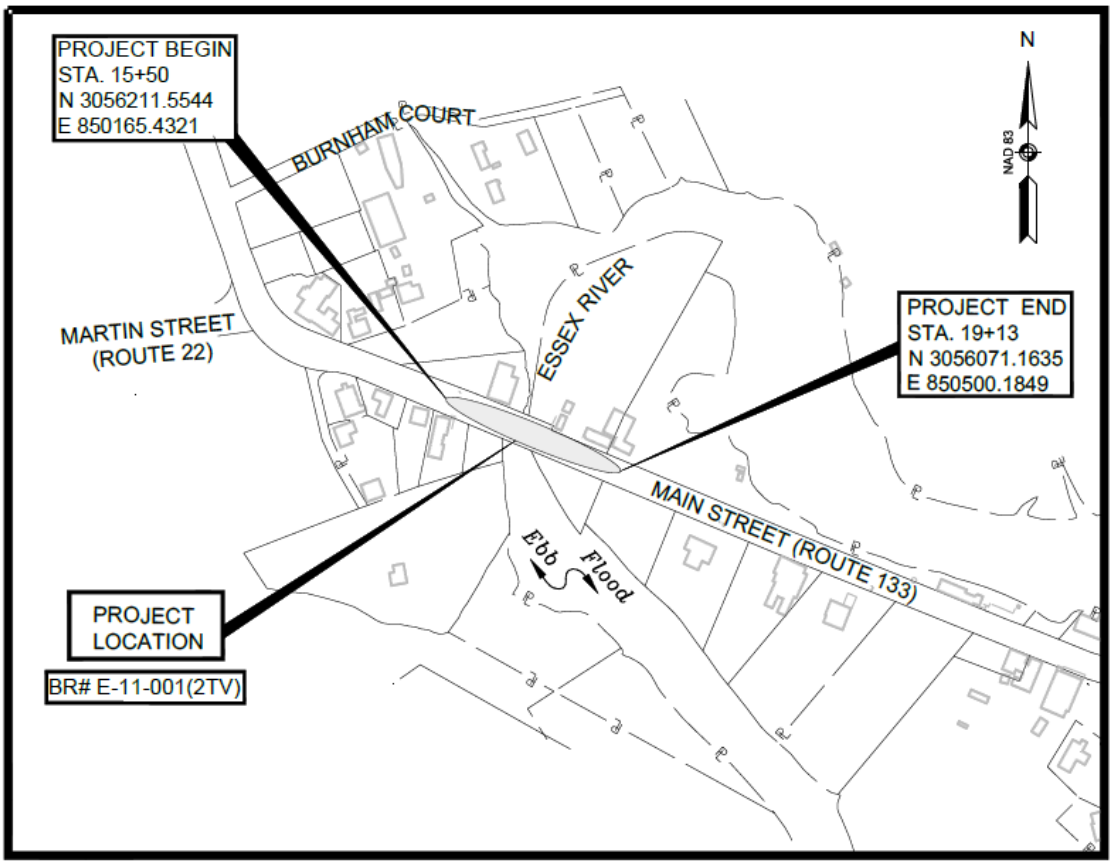

Figure 2: Plan Set Locus Map

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
BRIDGE PROJECT MANAGEMENT
PUBLIC HEARING

BRIDGE REPLACEMENT – BRIDGE NO. E-11-001 (2TV)
PROJECT FILE NO. 608596
IN THE TOWN OF ESSEX, MASSACHUSETTS

Project Location and Limits:

The project is located in the Town of Essex and includes the Main Street/Route 133 Essex River Bridge over the Essex River as MassDOT Bridge No. E-11-001 (2TV) and the roadway approaches to the bridge. The attached locus maps show the location of the project. The length of the project is 363 feet between the limits of work.

Purpose and Need:

The purpose of this project is to replace the existing Essex River Bridge superstructure with a new superstructure, in the same location. The existing structure has significant deterioration of the box beams and has been posted. The Massachusetts Department of Transportation (MassDOT) proposes bridge safety improvements with the replacement of the superstructure by maintaining the existing bridge width and with minimal roadway approach work.

Existing Conditions:

Roadway Characteristics –

- The Essex River Bridge approaches are paved and carry two (2) 11.0'-12.0' wide travel lanes with a varying width shoulder (2.75'-7.50') and sidewalk (4.0'-6.0') on either side of the roadway. The curb reveal on either side varies from 6"- 12" at the approaches. The curb-to-curb pavement width at the approaches is approximately 32.0' at the west approach and approximately 30' at the east approach and appears to be in good condition.
- Approach guardrail is provided at the northwest, southwest, and southeast corners, connected to the bridge end posts. The approach guardrail at the northeast bridge end post has been removed.
- There are two (2) drainage structures located at west approach, one on either side of the roadway. The structures discharge to the Essex River through outfall pipes in the west abutment.
- Along the north side of the approaches there is an underground water main as well as overhead wires. Along the south side of the approaches there are underground sanitary sewer, telephone, and gas facilities. The utilities located underground at the approaches are attached to the exterior beams across the existing bridge span. Other than the water, sanitary sewer, telephone, and gas facilities, as well as the overhead wires, no other utilities are in the roadway or carried by the bridge.

Bridge Characteristics –

- The Essex River Bridge, constructed in 1970, is a 71.0' long simple-span prestressed concrete butted box beam bridge with a bituminous concrete wearing surface that sits on a substructure consisting of two (2) reinforced concrete cantilever abutments founded on spread footings. The bridge is oriented east to west and sits on a tangent alignment (no skew to the bridge).
- The bridge carries two (2) 12.0' wide lanes with a 4.0' wide shoulder on either side for a curb-to-curb width of 32.0', and a 5.0' wide sidewalk (inclusive of the curb) and a bridge railing on either side for an out-to-out width of 44.75'. There is a 12" curb reveal on either side of the bridge.
- The existing bridge railing consists of non-standard metal bridge railing, Type AL-3, on either side of the bridge connected to concrete end posts at the approaches.
- Eleven (11) concrete butted prestressed box beams support a 5" reinforced composite deck that is crowned in the middle with a 2% cross-slope. The surface of the deck is paved with a 3.5" bituminous wearing surface.
- The superstructure has a condition rating of 3-serious as many of the beams are below the statutory rating, which has resulted in the posting of the bridge. Currently the bridge has girders placed on the deck in the shoulders to support the underside of the interior beams.
- The bridge is open to two-way traffic; however, traffic barriers have been placed in each shoulder to shield the girders from traffic, reducing the travel way width on the bridge to 24'±.

Utilities Within Bridge Site –

- Utilities located within the approaches are attached to the exterior beams across the bridge span on both the north and south side of the bridge.
- Along the north side of the bridge there is a 12" diameter transite water main attached to the exterior beam. Along the south side of the bridge there is an 8" diameter force sanitary sewer main, a 6" diameter gas main, and nine (9) 4" diameter PVC telephone conduits within a corrugated steel pipe, all attached to the exterior beam on a single set of supports.
- There are overhead electric and telephone wires along the north side of the bridge, spanning across the river.

Hydraulics at Bridge Site –

- The bridge spans over the Essex River, which flows south to north, with an existing hydraulic clear span of 68.33'and an overall out-to-out width of 45.10'.
- The channel is tidal, with depth ranging from 4.0'-10.0' deep. The approximate elevation of the stream bed is 4.5' and the elevation of the bottom of the concrete beams is 8.28' (NAVD), providing 1.15' of freeboard during a King Tide event and 0.17' of freeboard during a 25-year storm surge event (freeboard is defined from the water surface to the bottom of the bottom chord).
- Evidence of scour (scour hole) is present downstream of the bridge. The structure has a National Bridge Inspection Standard (NBIS) Item 113 (Scour Critical Bridges) of 8; bridge foundations determined to be stable for the assessed or calculated scour condition.
- The bridge spans over the National Flood Insurance Program (NFIP) Special Flood Hazard Area (SFHA) Zone AE for Atlantic Ocean.

Environmental –

- The Essex River does not appear to contain any rare wildlife or rare species and is not a Coldwater Fish Resource.
- The Bridge is NOT NR Eligible however project area is adjacent to significant historic resources Essex Ship Building Museum.
- The site was not listed on the Massachusetts Department of Environmental Protection Waste Site/Reportable Release list.

Proposed Design:

Modified Geometry –

- A footprint bridge is proposed for this project. Though the out-to-out width of the bridge will remain the same, the proposed roadway cross-section configuration changes slightly from the existing. The existing lane widths are reduced from 12.0' to 11.0' in order to widen the existing sidewalks from 5.0' to 5.5' (inclusive of the curb) to meet the Americans with Disabilities Act (ADA) requirements.
- Minor modifications in geometry will be made to widen approach section sidewalks, as necessary, in order to conform to all ADA requirements.
- The proposed lane, shoulder, and sidewalk widths will transition to meet the existing cross-section configurations beyond the bridge and approaches.

Safety Enhancements –

The following safety improvements are included in the project:

- Replacement of the deteriorated bridge superstructure.
- Rehabilitation of the existing substructure abutments.
- Construction of new bridge railing in conformance with current standards.
- Installation of guardrail on the roadway approaches tapered to the bridge and attached to the proposed bridge end posts.
- Widening of bridge sidewalks and approach sidewalks as necessary to comply with ADA requirements.
- New pavement markings.

Bicycle and Pedestrian Accommodation –

- Main Street/Route 133 is classified as a two-way, two-lane Urban Minor Arterial. This roadway is not part of the National Highway System and therefore the project is exempt from the Federal Highway Administration's (FHWA) 13 Controlling Criteria but is not exempt from the Pedestrian and Bicycle Accommodation Criteria per Engineering Directives E-12-005 and E-14-006.
- The 2017 Average Daily Traffic was 20,000 vehicles with 11% truck traffic.
- The eastbound lane has a posted speed limit of 30 miles per hour and the westbound lane has a posted speed limit of 25 miles per hour.
- The lane widths at the bridge will be reduced from 12.0' to 11.0' in order to widen the sidewalks from 5.0' to 5.5' (inclusive of the curb) to meet ADA requirements and provide compliant pedestrian accommodation. Sidewalks at the approaches were also widened, as necessary, to meet ADA requirements and provide compliant pedestrian accommodation.

- Engineering Directive E-14-006 states that 5.0’ is the minimum width to be provided for bicycle accommodation. Currently, existing conditions do not meet this requirement as bicycle accommodation is only provided within the shoulders, and both shoulders at the bridge and typically at the approaches are about 4.0’ wide. Although the proposed section will increase the shoulder width from 4.0’ to 4.5’, the shoulders will still fall short of the recommended minimum width. Thorough investigation has determined that increasing the out-to-out widths of the bridge and approach sections to meet bicycle accommodation requirements would be unfeasible due to existing conditions, cost, and impact to adjacent properties.
- A Design Exception Report (DER) was submitted in December 2019, addressing Bicycle and Pedestrian Accommodations.

Hydraulics –

- The proposed footprint bridge superstructure is designed to maintain the existing hydraulic conditions, with the proposed beam low chord to match the existing.
- Existing substructure abutments are to be reused and rehabilitated to keep the same hydraulic opening.
- Raising the vertical alignment to provide greater distance above the Essex River and thusly minimize the impacts of storm surges was thoroughly investigated. Raising the vertical profile was determined to be unfeasible primarily due to significant impacts to the immediately adjacent properties, driveways, and access.

Environmental –

- A Categorical Exclusion (CE) Checklist with attachments was submitted as part of the Early Environmental Coordination package for the 25% design in November 2019.
- The Massachusetts Historic Commission, the Essex Historical Commission, the State Historic Preservation Officer (SHPO), and the MassDOT Cultural Resources Unit (CRU) have been notified of this project.
- The project is not within a navigable waterway under the jurisdiction of the U.S. Coast Guard per STURAA approval based on the Essex Harbormaster’s Navigability Survey and USCG approval.
- The Essex River is not a Wild and Scenic River. This section of Essex River is listed as a Category 4A water body and is considered an impaired stream. Threatened or endangered species are not mapped as being in the work area per NHSEP mapping.
- This project is a bridge project and is exempt from Massachusetts Environmental Policy Act (MEPA) review.
- A Water Quality Data Form has been completed and submitted to MassDOT.
- The project will be constructed within the wetland buffer zone and the Riverfront Area. It is currently anticipated that a USACE Section 404 Pre-Construction Notification (PCN) permit will be submitted for the project because of work in tidal waters. Permitting under Section 401 of the Clean Water Act is currently considered not to be required since the project will not trigger any of the thresholds noted in 314 CMR 9.04.
- According to MassGIS data mapping, no land is considered Section 4(f) or Article 97 land.
- There are no known oil or hazardous material releases within the project limits.

Traffic Management –

- Full closure of the bridge is anticipated for complete demolition and replacement of the Essex River Bridge superstructure.
- In order to accommodate traffic during the full closure, a temporary bypass roadway and bridge is proposed to the south of the bridge.
- Vehicles with more than 4 axles typically require larger turning radii and would encroach into the opposite lane when utilizing the bypass roadway and bridge. The existing posted detour route will be utilized for these vehicles.
- Large vehicles that are permitted by weight to cross the temporary bypass bridge may do so with encroachment managed by either traffic detail or police escort.

Right of Way –

- The current design plans indicate that there are 9 permanent easements and 9 temporary easements required.
- Right-of-way takings includes easements for utility work, construction of the temporary bypass roadway and bridge, grading, and restoration.
- The property owners impacted by this project will be contacted by DOT ROW officials. They will present the proposed impacts to each owner and discuss the methods with which they may acquire the needed rights for the project.

Utility Relocation –

- Currently, the existing utilities are attached to both the north and south exterior beams of the bridge. Temporary relocation of these utilities is necessary for the demolition of the existing Essex River Bridge superstructure.
- Temporary relocation of these utilities will be to the north sidewalk of the temporary bypass bridge, to minimize the lateral movement of the facilities.
- The utilities will be relocated back to the new bridge and to their original locations upon final completion of the superstructure replacement.
- Verizon will relocate their existing lines to the existing utility poles on the north side of the bridge permanently. The existing ducts located on the bridge will be replaced in kind and left empty for future use.
- Primary 34 kV overhead wires located along the north side of the bridge are proposed to be de-energized for safe demolition and construction of the northern most beams.
- Temporary OH lines will be constructed to the south of the temporary bypass roadway while the existing (de-energized) lines will remain in place.
- Temporary, short term outages of the secondary power lines will be necessary during certain construction activities.

Project Cost –

The estimated cost of the proposed superstructure construction for the Main Street/Route 133 Essex River Bridge over the Essex River is approximately $6,000,000.

Construction Duration –

With Notice to Proceed, construction is anticipated to span over two full construction seasons. The estimated length of time required for the temporary bypass roadway and bridge is approximately 2 years.

Project Status –
The plans on display tonight are at the 25% Design Stage. Comments received this evening will be considered in determining the final design. The design of this project is anticipated to be completed and advertised by late spring/summer 2021.

INSERT PROJECT QUESTIONS AND ANSWERS HERE

THE COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

FEDERAL AID PROJECT

Essex, MA
Main Street/Route 133 Over Essex River
Project File No. 608596

This sheet is provided for your comments. Your input is solicited and appreciated. Please return your sheet, with comments, to:

Patricia A. Leavenworth, P.E., Chief Engineer
MassDOT – Highway Division
10 Park Plaza, Boston, MA 02116-3973
Attn: Bridge Project Management Section

The final date for receipt of written statements and exhibits for inclusion into the official hearing transcript will be ten (10) days after the Public Hearing Webinar.

PLEASE TYPE OR PRINT LEGIBLY.

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Please Place Appropriate Postage Here

Patricia A. Leavenworth, P.E.
Chief Engineer
MassDOT – Highway Division
10 Park Plaza
Boston, MA 02116-3973

RE: Public Hearing Webinar
Main Street/Route 133 Over Essex River Superstructure Replacement Project
ESSEX
Project File No. 608596
Bridge Project Management Section