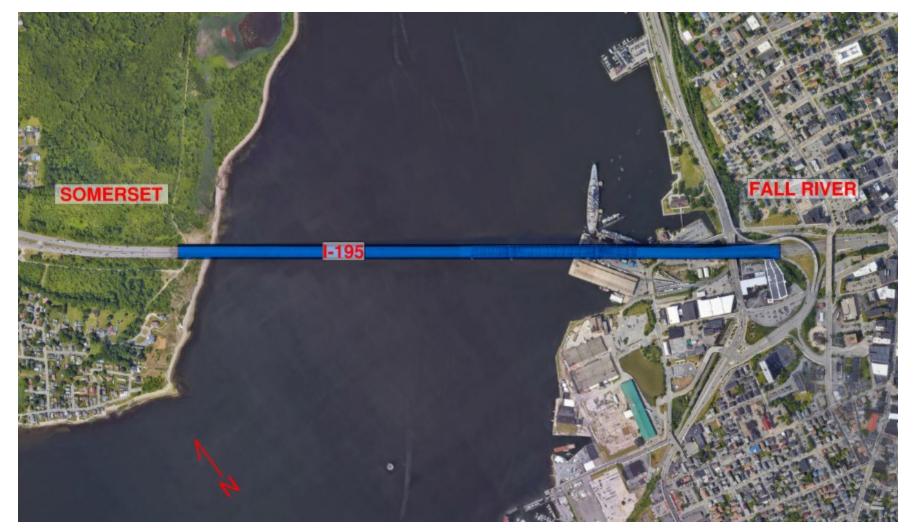


#### MassDOT Highway Construction Contract: 121047 Electrical Upgrades and Safety Improvements, F-02-058+S-16-008, I-195 Over the Taunton River (Braga Bridge)

Board of Directors April 27, 2023

## Project Location





### Overview



- Full Aesthetic Bridge Lighting Installation. Truss Section, inboard and outboard flood lighting. New supporting electrical, control equipment and wiring.
- Full replacement of Highway Lighting Assemblies and anchor/haunch replacement. Barrier handhole repairs.
- Full replacement of existing electrical system and load center. Installation of new load center maintenance access platform with ship ladder and lighting.
- Replacement of Navigation and Aviation Lighting systems, including electrical.
- Installation of a temporary electrical service to support construction.
- Overhead sign MUTCD compliant replacement with supporting haunch and barrier reconstruction.
- Requesting MassDOT Board approval of \$16.8M contract with Coviello Electric.
- Construction will take approx. 3 years to complete.

## **Purpose and Need**



- Existing highway lighting installation is past its useful life. Light pole anchorages set in 1986 Deck Replacement Contract. Grouted bases expedite anchorage corrosion and cross section reduction.
- Aviation beacons are only intermittingly functional, despise maintenance troubleshooting.
- Electrical wiring is 35+ years old and nearing end of expected useful life, and barrier hand holes are currently only protected by improvised covers.
- One overhead sign structure has already been removed due to signs of eventual failure. The other sign was also set in the 1986 Deck Replacement Contract.
- Current condition for Load Center access is unsafe and hazardous, this work will rectify this. Internal components show advanced wear and housing have progressive corrosion.
- Navigation lighting is past its useful life.
- Aesthetic lighting was at the request of local government and city officials.

# Purpose and Need (cont'd)





Load Center condition, location and access

4/27/2023

## Purpose and Need (cont'd)





#### Aesthetic Lighting (Render)

## **Construction Scope**



- Reconstruction of all light pole haunch anchorages.
- Reconstruction of barriers and haunches supporting overhead signs.
- New complete light standards, remove and dispose of existing.
- Removal and replacement of all existing wiring. Repair and replace all barrier handhole frames and covers.
- Temporary electrical service installation, replacement of existing load center, construction of new access platform.
- Replacement of existing navigation and aviation lighting and associated controls.
- Construction of access platform or other means to safety install new aesthetic lighting fixtures, wiring, control and power boxes underdeck and outboard of truss section.
- Fabrication and installation of aesthetic lighting support arms and bracketry. Fastening to bridge truss members utilizing rivet locations.

## **Traffic Impacts**



- Lane closures will take the EB and WB right lane and shoulders.
- Work under this contract shall be conducted between the hours of 9:00 PM and 4:00 AM unless otherwise authorized by the District 5.

## Procurement



- Project was advertised December 31, 2022
- Engineers Estimate was \$11,223,398
- Bid Opening was March 7, 2023
- Three (3) bids were received:
  - Coviello Electric
  - J.F. White Contracting
  - Dagle Electric

**\$16,844,346** \$17,825,755 \$24,444,442

## **Overall Project Budget**



Line Item	Budget
Bid Amount	\$16,844,346.00
Contingencies	\$ 2,526,651.90
<b>Construction Engineering</b>	\$ 480,000.00
Total	\$19,850,997.90

## **Request of the Board**



 Staff request that the MassDOT Board authorize the Secretary of the Massachusetts Department of Transportation, or her designee, to award and execute MassDOT Construction Contract 121047: Electrical Upgrades and Safety Improvements, F-02-058+S-16-008, I-195 Over the Taunton River (Braga Bridge) with Coviello Electric in the amount of \$16,844,346.00.