



**Massachusetts Bay
Transportation Authority**

**MBTA Contract No. H62PS02
Saugus Drawbridge Replacement**

Final Design and Construction Phase Services

May 7, 2018



OVERVIEW

- Today's board action will provide for final design, bid phase and consultant construction phase services for the Saugus Drawbridge Replacement Project over the Saugus River in Saugus, MA.

Existing Bridge





Construction Project Overview

The project is a full replacement of the existing bridge. The proposed bridge will be 530 feet long and carry two railroad tracks over the Saugus River. The draw span will be a rolling lift “Scherzer style” bascule span. The approach spans will be through-girder spans with reinforced concrete ballasted decks.



Existing Drawbridge Span



Example “Scherzer” Rolling Lift Bascule



Project Benefits

- The new bridge will replace the existing bridge in its entirety.
- Useful life of the replacement structure will be 75 years and will bring the asset to a state of good repair.
- The new alignment and profile, off-line from the existing bridge, will minimize day to day impacts to rail passenger service during construction and will allow for construction of a new rolling lift bascule span.
- A rolling lift style bascule provides an economical choice for a movable span when construction is unaffected by the existing bridge or rail operations. This type of movable bridge is the preferred type for small to medium span rail bridges.



Background

- The existing bridge has been in service for over 100 years and although some repairs have been made, the condition of the structure is deteriorating. It is important to advance the final design to prevent costly repairs and possible service interruptions.
- Under an earlier contract, Hardesty & Hanover completed preliminary design services and a Type Study Report for Saugus Drawbridge and recommended the replacement of the structure.
- The scope of services for this follow-on contract is to advance one of the options developed by Hardesty & Hanover through final design and to provide bid phase and construction phase services.



Background (continued)

- The Lynn Gear Works Project is proposing a to convert the existing flag stop River Works Station into a fully public commuter rail station just to the East of the Saugus Draw Bridge to service a transit oriented development.
- It is critical to advance the Saugus Drawbridge design (with its new alignment and profile) to properly coordinate with and allow for the planning and design of the proposed station upgrade to proceed.
- To maintain continuity in professional technical services, avoid substantial duplication costs, and avoid an unacceptable delay, the MBTA seeks to contract with Hardesty & Hanover to provide the final design and construction phase services.
- Hardesty & Hanover holds unique knowledge and project specific experience and brings considerable value to the Project. The negotiated cost is fair and reasonable and award of the contract to Hardesty & Hanover is in the best interest of the MBTA.



Scope of Services

This contract for Final Design, Bid Phase and Construction Phase Services includes:

- Complete design services including architectural, civil, site, track, structural, mechanical, electrical, communication and signal design
 - Construction cost and schedule estimates
 - Environmental permitting
 - Bid advertising documents, response to bidder questions
 - Review, response and resolution of contractor submittals and RFIs
 - Attendance at weekly project job meetings and special meetings
 - Periodic site visits and associated reporting
 - Review of authorized changes to the plans and specifications
 - Semi-final and final inspections and preparation of punch-lists
 - Preparation of final documentation for project closeout
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Request of the Fiscal and Management Control Board

Staff request that the Fiscal and Management Control Board authorize the MBTA General Manager and CEO, or his designee, to execute **MBTA Contract No.H62PS02: Final Design, Bid Phase and Construction Phase Services for the Saugus Drawbridge Replacement Project**, with **Hardesty & Hanover, LLC** for an amount not to exceed **\$6,990,487**.