



Presentation to the Board

*Bridge Bundle, Replacement of
Bridges at Interstate 495 /Route
28 Interchange and over MBTA,
in Andover & Lawrence*

July 19, 2023

Andover Lawrence | MassDOT #606522-121394



Overview

- Replacement of six structurally deficient bridges carrying I-495 northbound and southbound over Route 28 and the MBTA Railroad.
- Widening of I-495 to provide greater acceleration and deceleration lanes with wider shoulders.
- Integrate with future projects, including the ability to provide additional capacity on I-495
- Buffered bike lanes and sidewalks on Route 28 under I-495.





**Project
Purpose**

Purpose and Goals

Purpose

- To replace six (6) bridges, designed and constructed for a 75-year service life
- To improve public safety on I-495 and promote mobility for pedestrians and cyclists.

Project Goals

- Address structural deficiencies by replacing six bridges with new bridges meeting current design loading requirements with reduced maintenance requirements.
- Address traffic safety by increasing acceleration and deceleration lanes on I-495
- Integrate with future projects, including the ability to provide additional capacity on I-495.
- Improve accommodations for pedestrians and bicycles on Route 28.

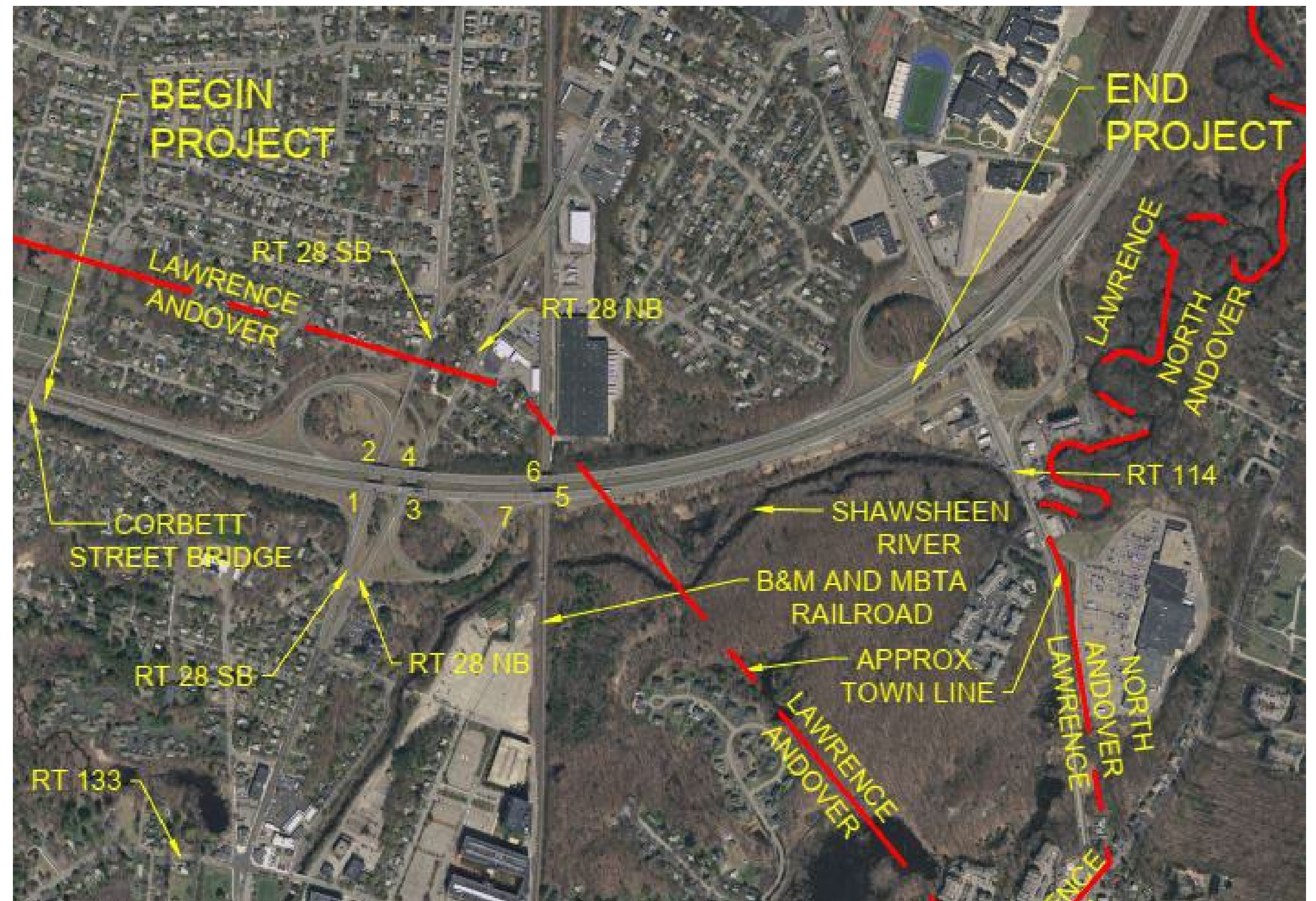


Construction Scope

Bridge Demolition/Construction

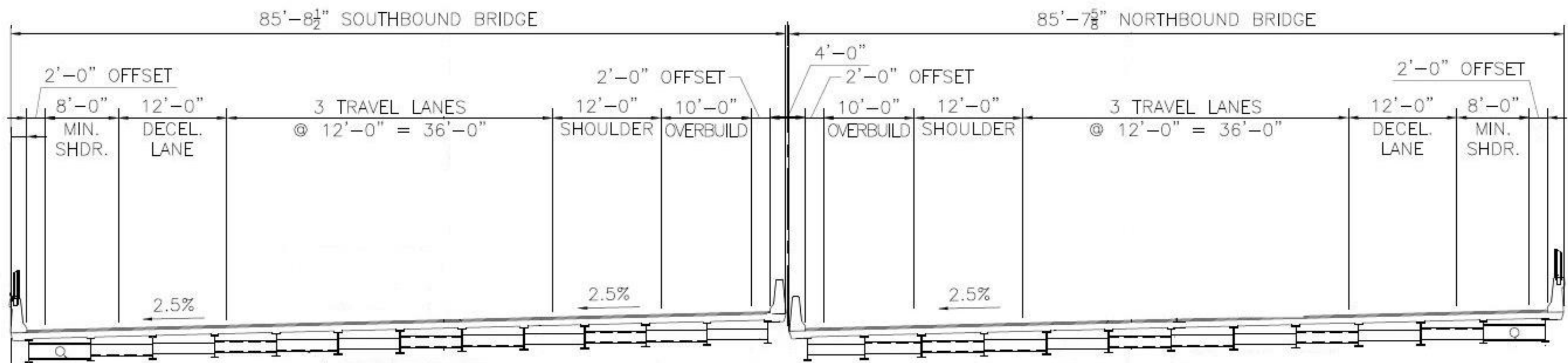
Full Bridge Replacements

- Bridge A-09-036 – I-495 over Route 28 southbound
- Bridge A-09-041 – I-495 over Route 28 northbound
- Bridge A-09-037 – I-495 over MBTA



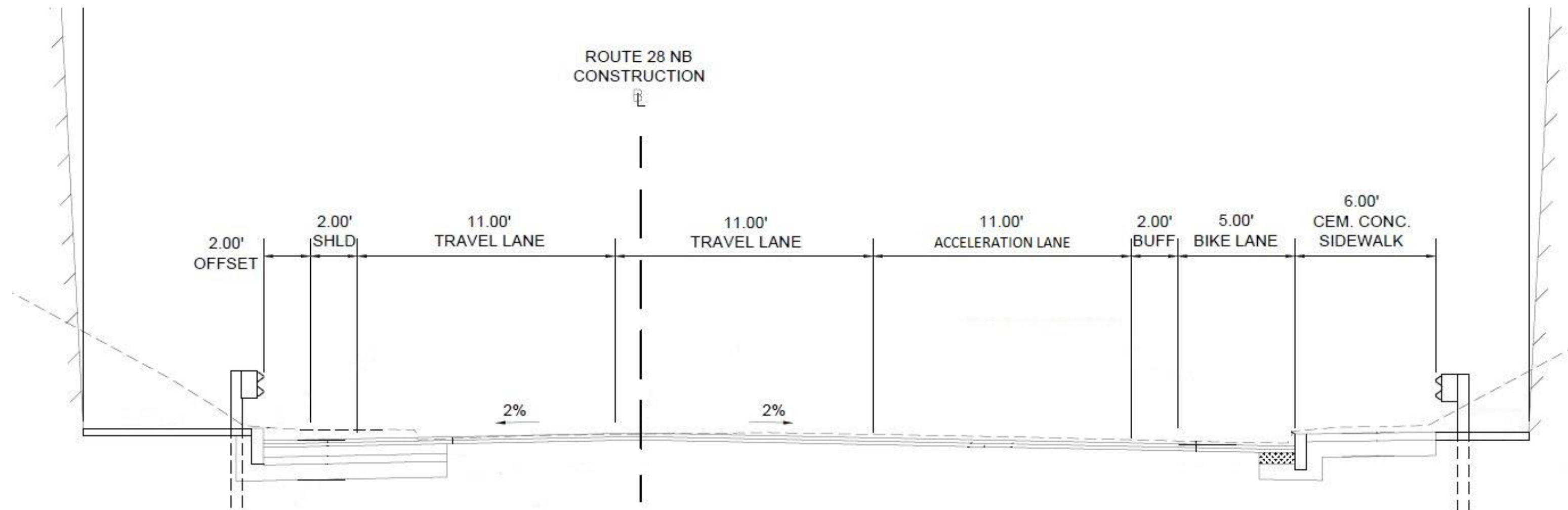
Proposed I-495 Cross Section

- Three 12-foot travel lanes in each direction
- 12-foot left (inside) shoulders with 10 foot overbuild for the ability to provide additional capacity on I-495.
- 12-foot acceleration/deceleration lanes in each direction



Proposed Route 28 Cross Section

- Two 11-foot travel lanes in each direction
- 2-foot left (inside) shoulders
- 5-foot bike lanes with 2-foot buffers in each direction
- 6-foot sidewalks on outside barrels



Other Project Elements

MBTA/CSX

- Coordination with Keolis (Commuter Rail) and CSX will be required

Utilities

- NGRID 23 KV Distribution Line in median roadway to be relocated

City of Lawrence

- Incorporation of emergency standpipe apparatus to Bridge A-09-041 at the request of Lawrence Fire Department

Town of Andover

- Coordination with Town for the protection of utilities within project limits



Traffic Impacts

- Traffic will be maintained throughout construction
- Three lanes in each direction on I-495 except within specified time windows
- Three lanes in each direction on Route 28 except short term closures
- Work zone speed limit reduction (from 55MPH to 45 MPH) on I-495

Mitigation Measures

- Public briefings in advance of major traffic shifts (meetings, Project Website updates, email/social media blasts)
- Deployment of Real Time Traffic Management Smart work zone



Public Process

Public Outreach

Virtual Design Public Hearing was held on Wednesday, November 17, 2021

Continued Public Involvement

- General public
- Local municipalities
- Adjacent property owners
- Elected officials

Communication Methods

- Broadcast and print media
- Variable message signs
- Project webpage
- Mobile media
- MassDOT and Commonwealth websites
- Social media
- GovDelivery
- Fliers, fact sheets, newsletters, e-mail, presentations, briefings, meetings, and signs

Design-Builder's Role

Public Involvement

- Public Participation (Outreach) Plan
- Coordination meetings with MassDOT, FHWA, State Police, Local Municipalities and their Emergency Services departments, local elected officials, the community, utility owners, state and local commissions
- Provide content for MassDOT Project Website

Public Information Meetings

- One meeting after MassDOT acceptance of 75% Highway Design
- 30 days prior to commencement of any construction activities
- 30 days prior to completion of major milestones and traffic phase changes
- 7 days prior to short duration closures
- 14 days prior to long term partial or complete closures



Environmental/ Permitting

Environmental Considerations

- National Environmental Policy Act (NEPA) – Federal Highway Administration/MassDOT — Programmatic Categorical Exclusion approved by MassDOT on December 5, 2022.
- Project does not impact any wetland resources and is exempt from permitting under the Wetlands Protection Act.
- There are no known reportable soil contaminants within project limits however, contingency items will cover testing, handling, and disposal of contaminated materials should they be uncovered during construction.

Environmental Considerations

Design-Builder's Responsibilities

- Obtain all required Environmental Approvals/Clearances not already obtained by MassDOT and any Amendments based on design changes
- Preparation of all documentation required to satisfy any conditions in the NPDES Construction General Permit as it relates to their scope of work



Procurement

Schedule of Events

EVENT	DATE
Request for Letters of Interest	8/27/2022
Letters of Interest Due	10/11/2022
RFQ Close Date for Questions	11/3/2022
Statements of Qualifications Due	11/17/2022
Design-Builders Short-Listed	12/22/2022
Draft RFP Issued to Short-Listed Design-Builders	1/11/2023
Final RFP Issued to Short-Listed Design-Builders	2/15/2023
Technical & Price Proposals Due	5/18/2023
Oral Presentations	6/1/2023
Public Price Proposal Opening Date	6/28/2023
Anticipated Award Date	TBD
Anticipated Notice to Proceed	8/28/2023

Best Value Calculation

PRICE OPENING/BEST VALUE DETERMINATION

WEDNESDAY – JUNE 28, 2023



Best Value is lowest price per quality score point

Federal Aid No. NHP(BR-ON)-003S(623)X
Bridge Bundle, Replacement of Bridges at I-495/Route 28 Interchange and
over the MBTA Railroad
Design-Build

PROJECT VALUE: \$139,000,000.00

ANDOVER-LAWRENCE 606522-121394	Design-Builders			STEP
	J F WHITE CONTRACTING CO	SPS NEW ENGLAND INC	THE MIDDLESEX CORP	
TECHNICAL SCORE	87.82	88.97	90.48	1 Pre-Entered by MassDOT
PRICE PROPOSAL	\$124,913,100.00	\$109,236,100.00	\$98,080,330.00	2 Transferred from Bid Express
OVERALL VALUE RATING = PRICE PROPOSAL / TECHNICAL SCORE	1,422,376.452	1,227,785.770	1,084,000.111	3 Calculated by MassDOT (step 2 / step 1)
			↑	Apparent Winning Design-Builder

Overall Project Budget

LINE ITEM	BUDGET
Bid Amount	\$98,080,330.00
Contingencies	\$ 9,816,958.00
Construction Engineering	\$ 4,904,016.50
Traffic Police	\$ 7,623,958.00
Railroad Flaggers	\$ 990,600.00
Trainees	\$ 4,000.00
Specialty Services	\$ 200,000.00
Total	\$121,619,862.50

Request of the Board

Staff request that the MassDOT Board authorize the Secretary of the Massachusetts Department of Transportation, or his designee, to award and execute MassDOT Construction Contract 121394: Bridge Bundle, Replacements at I-495 over Route 28 and MBTA Design-Build Project with The Middlesex Corporation for an amount not to exceed \$98,080,330.00.



Thank You

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July 19, 2023

MassDOT # 606522-121394