



MassDOT Highway Construction Contract: 121393

Bridge Replacement and Related Work (Including Signals and Roundabout Construction) Br. L-10-010 (Steel) Route 2A (Marrett Road) over Interstate 95

MassDOT Board Meeting

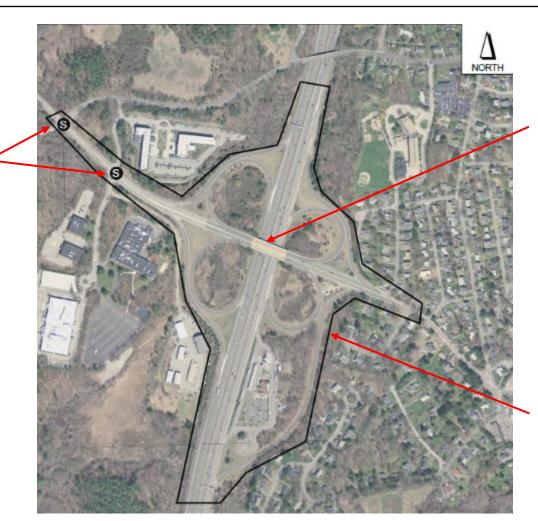
April 27, 2023



Project Location

Signalized Study

Intersection



BR. L-10-010 (B67) Route 2A (Marrett Road) over I-95

Project Location

April 2023



Project Purpose



Purpose and Need

The primary purpose of the project is:

- Replace the structurally deficient bridge carrying Route 2A (Marrett Road) over Interstate 95
- Improve interchange safety and reduce congestion
- Add ADA compliant accommodations for pedestrians
- Add accommodations for bicyclists
- Improve pavement condition





Purpose and Need (Continued)



Deteriorated Bridge Deck and Heavy Rust on Girders



Deteriorated Riding Surface, Rusting Bridge Rail, No Bicycle Accommodations and Settling Sidewalk



Purpose and Need (Continued)



Overgrown Sidewalk, Deteriorating Curb and Pavement



Sidewalks and Pedestrian Curb Ramps not ADA Compliant

April 2023



Construction Scope



Construction Scope

- Replacement of Bridge L-10-010 carrying Route 2A (Marrett Road) over Interstate 95
- Full depth pavement reconstruction of Route 2A
- Construction of two roundabouts, one at each ramp interchange
- Removal of two on-ramps eliminates vehicle weaving on I-95
- New pavement markings and crosswalks
- Construction of new shared-use path
- Installation of ADA compliant pedestrian ramps
- Installation of rectangular rapid flashing beacon (RRFB) for pedestrian crossing at MBTA bus stop near Wilson Road
- Traffic signal improvements at Forbes Road intersection
- Addition of streetlights at roundabouts and along Route 2A
- Upgrade water infrastructure
- Improvements to the quality of stormwater runoff with the installation of two infiltration basins, one at each roundabout, discharging to the Cambridge Reservoir



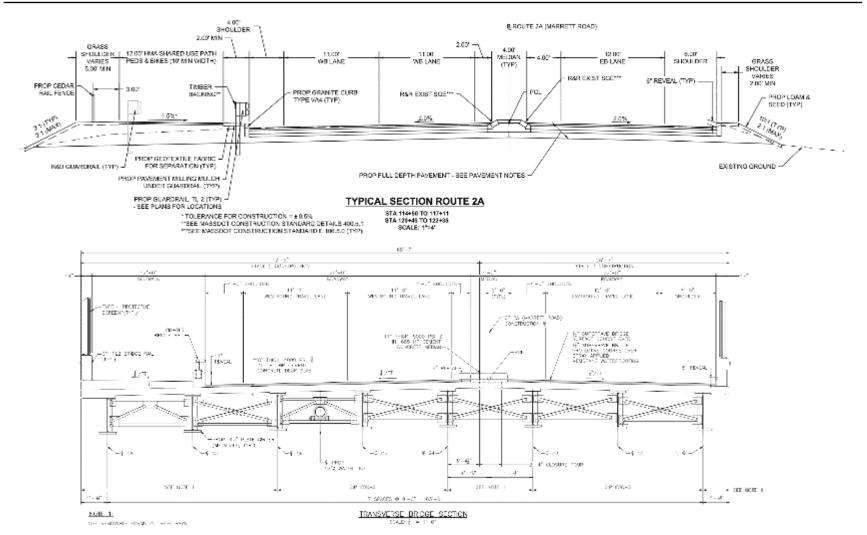
Construction Scope (Continued)



Project Plan



Construction Scope (Continued)





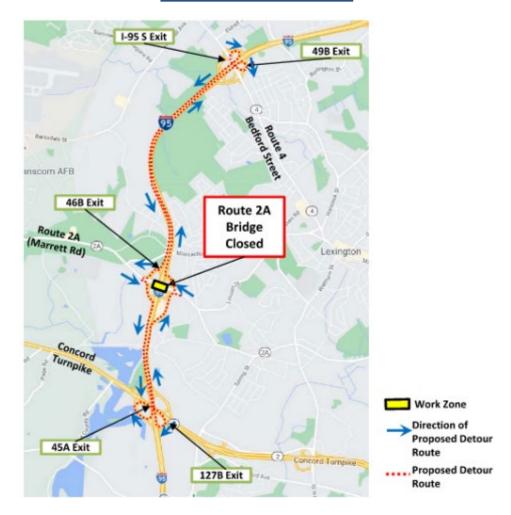
Construction Duration and Traffic Impacts

- Traffic impacts will be minimized when possible
- Staged Construction maintain two-way traffic and avoid lane closures on Route 2A
- Short-Term closures for bridge demolition/reconstruction on Route 2A and I-95 – limited to nighttime operations (11 pm to 5 am)
- I-95 Lexington Service Plaza exit ramp closure to be implemented during nighttime I-95 closure only
- Detour Routes proposed for short-term closures
- Pedestrian/bicyclist impacts will be minimized when possible
- Construction Duration is estimated to be approximately 54 months.



Construction Duration and Traffic Impacts (Continued)

Route 2A Detour Route

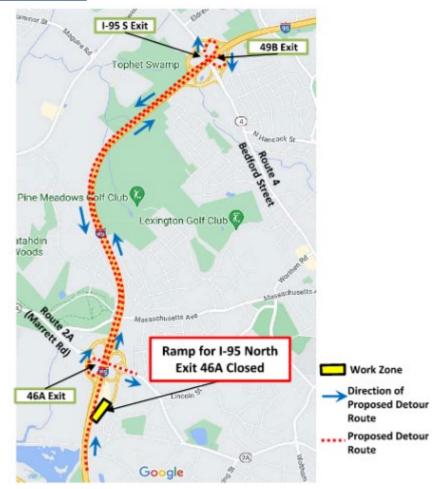




Construction Duration and Traffic Impacts (Continued)

I-95 Ramp Detour Routes







Public Process



Public Outreach and Engagement (Current Design Team)

- July 29, 2020: Coordination Meeting with McDonald's Rest Area Development Manager
- October 14, 2021: Design Public Hearing
- March 30, 2022: Coordination Meeting with Cambridge Water Department
- October 18, 2022: Project Overview with State Representative , 15th Middlesex District



Procurement



Construction Procurement

- Project was advertised on February 11, 2023
- Engineers Estimate was \$24,653,000.00
- Bid Opening was on March 14, 2023
- Five (5) Bids were received:

MAS Building & Bridge, Inc.	\$26,119,931.00
MIG Corporation	\$26,737,757.00
ET & L Corporation	\$29,485,400.00
SPS New England, Inc.	\$30,293,880.80
JF White Contracting Co.	\$32,628,288.00

April 2023



Overall Project Budget

Line Item	Budget
Bid Amount	\$26,119,931.00
Contingencies (10%)	\$2,611,993.10
5% Construction Engineering	\$1,305,996.55
Traffic Police	\$469,000.00
Total	\$30,506,919.65

- 80% Federal Funding, 20% State Funding
- Programmed Cost in the 2023 TIP: \$28.8M



Request of the MassDOT Board

Staff request that the MassDOT Board of Directors authorize the Secretary of the Massachusetts Department of Transportation, or her designee, to award and execute MassDOT Construction Contract 121393: Bridge Replacement and Related Work (Including Signals and Roundabout Construction) Br. L-10-010 (Steel) Route 2A (Marrett Road) over Interstate 95 with MAS Building & Bridge, Inc. in the amount of \$26,119,931.00.