



MassDOT Project File No. 608374

**Roadway Reconstruction and Related Work (Including
Signals) on a Section of Memorial Avenue (Route 147)**

Town of West Springfield

MassDOT Board Meeting

September 2022

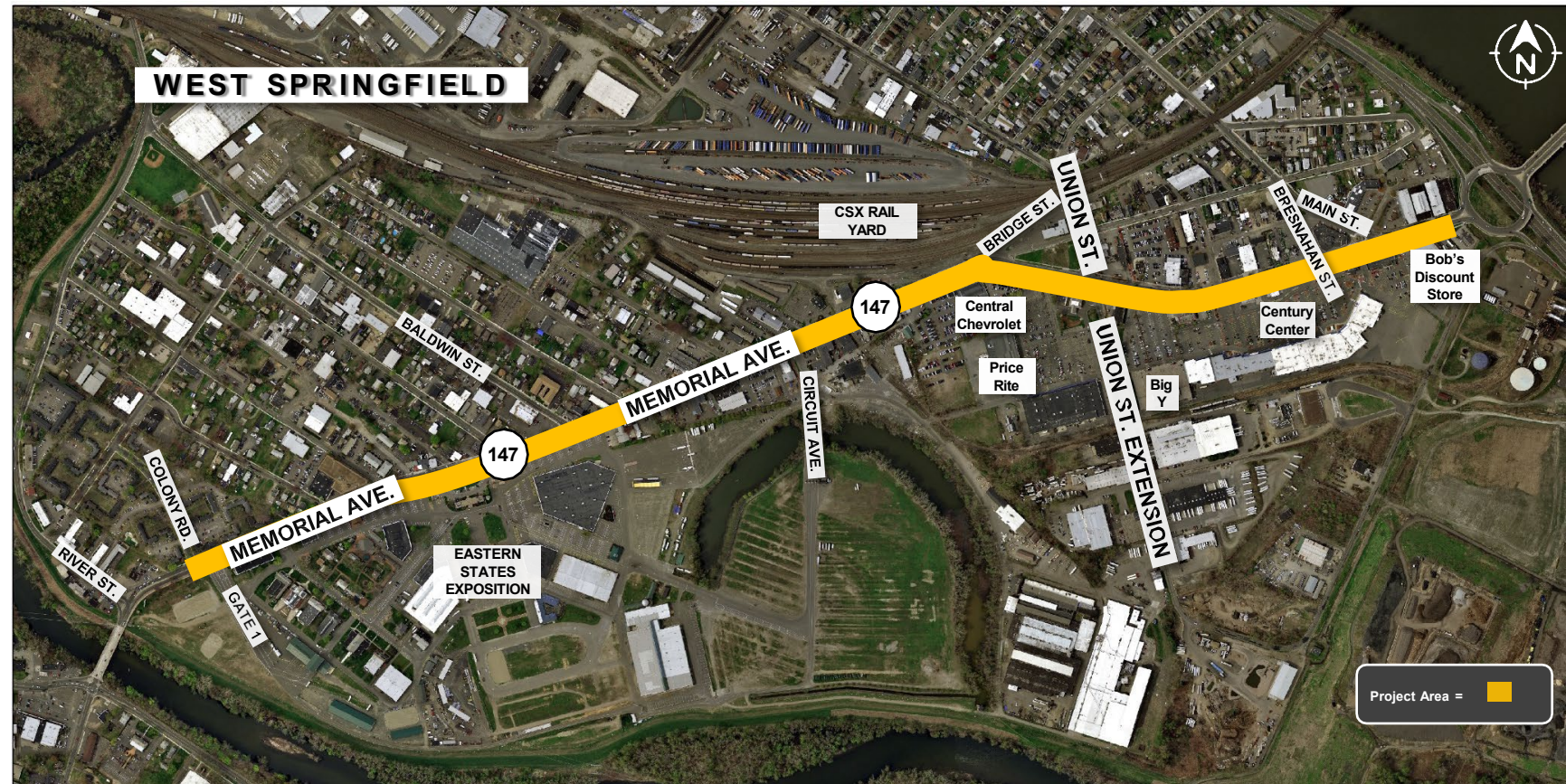
Project Location

Project Limits

- Memorial Avenue corridor from Colony Road/Big E Gate 1 intersection to terminus between the Main Street intersection and Route 5 rotary
- **Roadways affected:**
 - Baldwin Street
 - Bridge Street
 - Union Street
 - Bresnahan Street
 - Main Street
 - Minor work along side streets

Total Project Length

1.5 Miles



Purpose and Need



Project Goals

- Improve intersection safety and operations
- Provide safe and continuous pedestrian, bicycle, and ADA accommodations
- Calm traffic along corridor
- Improve transit facilities
- Maintain access to all businesses and abutters
- Integrate the neighborhoods through the construction of safe and improved facilities
- Reconstruct the pavement; Improve drainage and sewer systems

Purpose and Need (cont'd)

Lattitude (Restaurant) & Big E Entrance

Existing Issues Affecting Safety:

- Excessive crosswalk length
- Wide lanes encourage high speeds
- Lack of bicycle accommodations
- Pedestrian fatality on March 23, 2012



Purpose and Need (cont'd)

Bridge Street Intersection

Existing Issues Affecting Safety:

- Memorial Avenue curve requires realignment
- Wide lanes encourage higher speeds
- Rollover fatality occurred on September 23, 2021
- Sidewalks in poor condition
- Lack of bicycle accommodations



Purpose and Need (cont'd)

Union Street Intersection



Existing Issues Affecting Safety:

- Outdated equipment and the overall operation of intersection
- Faded striping
- Non-ADA compliant ramps
- Lack of bicycle accommodations



Existing Issues Affecting Safety:

- Sidewalks in poor condition
- Lack of ADA pedestrian curb ramps
- Lack of bicycle accommodations
- Unsafe transit stop
 - No turnout or shelter

Purpose and Need (cont'd)

Main Street Intersection

Existing Issues Affecting Safety:

- Wide lanes encourage higher speeds
- Pedestrian fatality occurred nearby on October 28, 2019
- Excessive crosswalk length
- Lack of bicycle accommodations



Purpose and Need (cont'd)



Table 1: Intersection Crash Rate Summary

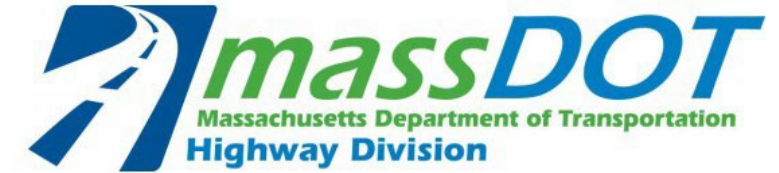
Intersection	Crash Rate	Statewide Crash Rate ^a	District 2 Crash Rate ^a
Memorial Avenue / Bridge Street ^b	1.20	0.58	0.70
Memorial Avenue / Price Rite Driveway ^b	0.30	0.58	0.70
Memorial Avenue / Union Street ^c	1.28	0.77	0.82

^a Average Crash Rates, per million entering vehicles, based on crash information queried on February 9, 2016 – source MassDOT

^b Unsignalized

^c Signalized

Construction Scope



Proposed Improvements:

- Overall Improvements
 - Reconstruct remaining 4-lane section with new medians (flush and raised)
 - Continuous cement concrete sidewalks & new ADA ramps
 - Updated transit facilities
 - Reconstruct CSX railroad crossing with gates
 - Drainage, sewer, and water improvements
- Gate 1 & Circuit Avenue
 - Three-lane section (from four lanes)
 - 8' wide two-way separated bike lane
 - Signalized "HAWK" crosswalk
- Latitude & Big E Entrance
 - Signalized RRFB crosswalk
- Memorial Avenue
 - Provide 5' shoulders/buffered bike lanes along both sides
 - Realign curve at Bridge Street
 - Reconstruct pavement
- Bridge Street
 - Reconfigure intersection
- Bresnahan St & Main Street/Century Way
 - Reconfigure the intersections
- Baldwin Street, Union Street & Bresnahan Street
 - Reconstruct signalized intersections

Construction Scope (cont'd)

Latitude / Big E Gate:

- Three-lane section
- Two 11' lanes
- Center left-turn lane
- Variable width shoulders
- Two sidewalks
- 8' two-way separated bike lane
- Landscape buffers where feasible
- Maintain on-street parking for local businesses
- Bus turnouts
- RRFB signalized crosswalks

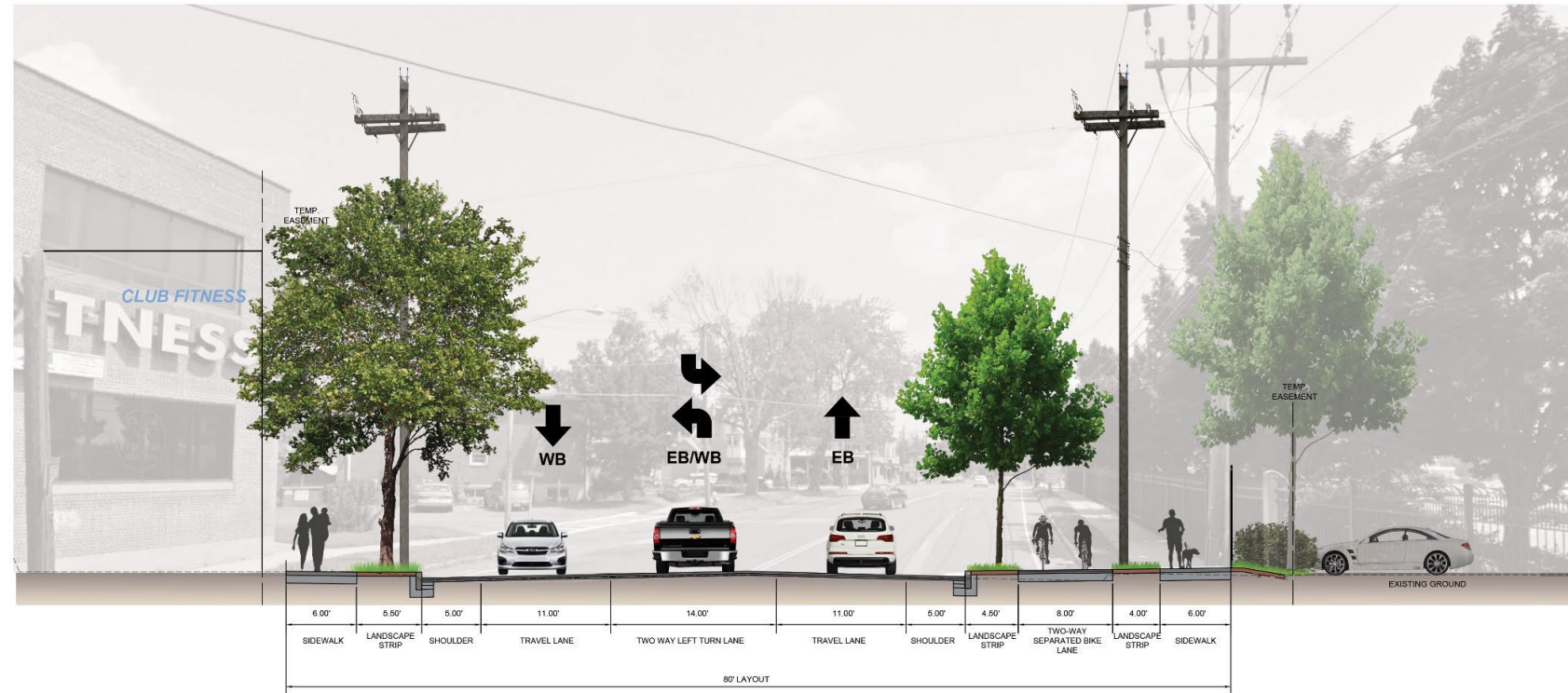


Construction Scope (cont'd)

Memorial Ave

(Looking East at Norman St)

- Three-lane section
- Two-way separated bike lane and sidewalks
- Landscape strip
 - Separates curb and sidewalk on north side
 - Located between curb and two-way separated bike lane



Construction Scope (cont'd)

Bridge St / Union St:

- Typical 4-lane section
- Four 11' travel lanes
- Left-turn lanes at intersection
- Two 5' buffered bike lanes
- Two sidewalks
- Landscape buffers
- Raised and flush medians
- Bus turnouts
- Signal reconstruction at Union St
- Two-stage bike boxes

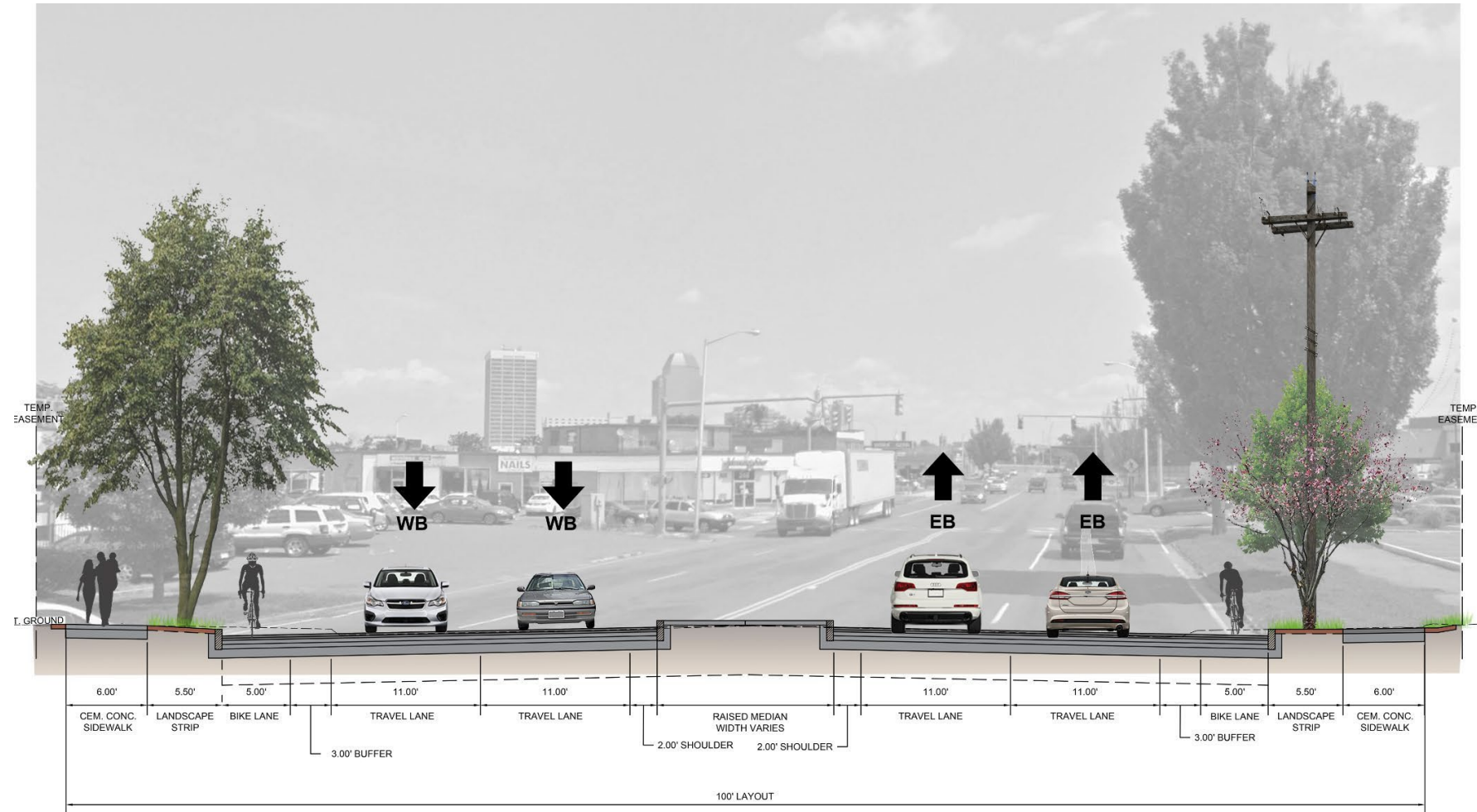


Construction Scope (cont'd)

Memorial Ave

(Looking East at Bresnahan St)

- Four lane section
- Raised median
- Buffered bike lanes
- Landscape strip between curb and sidewalk



Construction Scope (cont'd)

Memorial Ave / Bresnahan St / Main St:

- **Memorial Ave**
 - Four 11' through/through right lanes
 - Left turn lanes at intersection
 - Two 5' buffered bike lanes
 - Two sidewalks
 - Landscape buffers
 - Medians
 - Bus turnouts
 - Signal reconstruction at Bresnahan St
 - Two-stage bike boxes
- **Bresnahan St**
 - Reopen to NB traffic from Memorial Ave
 - Sidewalks connect neighborhoods
 - Parking for businesses on easterly side
- **Main St**
 - Remove cut through NB access from Memorial Ave to Bresnahan St
 - Allow access to Century Way from WB
 - Additional Parking
 - Green space (pocket park) at intersection with Bresnahan



Construction Impacts



- Off-peak hours
 - Paving and roadway reconstruction
 - Drainage and utility work
 - Lane closures and/or alternating traffic may be needed
- Regular construction hours
 - Roadside work
- Night work will be allowed
 - Prohibited within 500' of residential dwellings, except for specific water main work detailed on the plans as required to be performed at night
- Work hour restrictions will limit impacts to businesses and abutters
- Driveway and pedestrian access will be maintained
- Pavement Reclamation - 12 Mobilizations/Demobilizations Anticipated

Procurement



- Project was advertised June 4, 2022
- Engineer's estimate was \$19,833,755.00
- Bid opening was July 19, 2022
- Three (3) bids were received:
 - **Ludlow Construction Co. Inc.** **\$27,002,392.00**
 - Baltazar Contractor Inc. \$27,899,211.00
 - Northern Construction Services LLC \$32,889,489.00

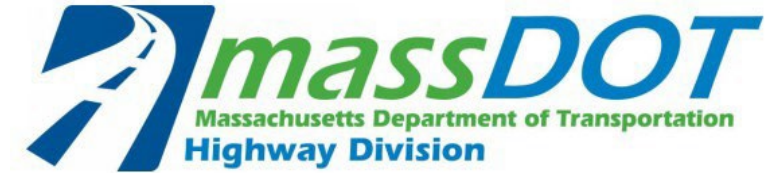
Overall Project Budget



Line Item	Budget
Bid Amount	\$27,002,392.00
Contingencies	\$ 2,346,524.20
Others (e.g. traffic police, RR flaggers)	\$ 1,004,000.00
Total	\$30,351,916.20

- \$26,799,616.20 cost for this construction contract is funded with combination of Federal and State funds (with approx. 80%-20% split).
Programmed in the FY22 through FY27 TIP
- \$3,552,300.00 funded by the Town of West Springfield (Non-Participating Work)

Proposed Board Vote



- To authorize the Secretary of the Massachusetts Department of Transportation, or his designee, to award and execute MassDOT Construction Contract 118481: Roadway Reconstruction and Related Work (Including Signals) on a Section of Memorial Avenue (Route 147) with Ludlow Construction Co. Inc., in a form approved by the General Counsel, in the amount of \$27,002,392.00.