



MassDOT Project File No. 608229

**Intersection & Signal Improvements at Kelley's Corner
Town of Acton**

CPC & Joint Board Meeting

July 2022

Project Location

Project Limits

- The intersection of Massachusetts Avenue (Route 111) and Main Street (Route 27), as well as Community Lane, forms a triangle between Mass. Ave. and Main Street known as Kelley's Corner.
- **Mass. Ave. Project Limits:**
 - Just west of Charter Road to the limits of the Roche Bros. plaza area, prior to reaching Route 2.
- **Main Street Project Limits:**
 - Route 2 Eastbound off-ramp to approximately 400 ft beyond Beverly Road.

Total Project Length

1.172 Miles



Purpose and Need



Project Goals

- Improve Intersection Safety and Operations
- Reduce Congestion and Traffic Delays
- Address Pedestrian Safety and Accessibility
- Address Bicyclist Safety and Accommodations
- Promote Connectivity and Walkability
- Incorporate Streetscape Elements: Landscaping, Pedestrian Lighting, and Gathering Areas
- Sensitivity to Abutters, Existing Vegetation, and Historic Resources
- Drainage & Utility Improvements

Purpose and Need (cont'd)

Main St. (27) and Mass. Ave (111) Congestion & Delays



Mass. Ave. Eastbound



Main Street Northbound

Purpose and Need (cont'd)

Intersection Safety

Existing Issues Affecting Safety:

- Charter Road at Mass. Ave.
 - Sight Distance
 - Heavy Student/Pedestrian Traffic
- Community Lane at Mass. Ave.
 - Unsignalized Intersection
 - Geometry & Pavement Markings
 - Crash Rate Exceeds Statewide Average
- Mass. Ave. at Main Street
 - Crash Rate Exceeds Statewide Average



Charter Road at Mass. Ave.



Community Lane at Mass. Ave.

Purpose and Need (cont'd)

Deficient Pedestrian Accommodations & Accessibility

Pedestrian Safety:

- Inconsistent sidewalk coverage.
- Pedestrian routes don't meet ADA requirements.
- Pedestrian crossings are not compliant and lack:
 - Curb Ramps
 - Detectable Panels
 - Adequate Signing
- Features at Main St./Mass. Ave. are not ADA compliant:
 - Pedestrian Signals
 - Push Buttons
 - Signs
- Crossing timing requirements are not met for the pedestrian crossing phase at Main St./Mass. Ave.
- Additional obstacles, obstructions, and tripping hazards throughout the area.



Purpose and Need (cont'd)

Additional Issues

Bicycle Accommodations



- Existing bicycle accommodations do not meet complete street policies/guidelines.
 - No dedicated bicycle facilities
 - Pavement markings inconsistent
 - No safe intersection crossings
- Bicycle accommodations are required for:
 - Local/state complete streets policies
 - State/federal funding needed for the project

July 2022

Poor Access and Curb Cut Management



- Many driveways within high traffic volume areas.
 - Turning vehicles contribute to traffic congestion.
- Driveway widths:
 - Inconsistency leads to driver/pedestrian confusion.
 - Several are wider than necessary with no designated crossing areas, creating safety hazards for all modes of transportation.

Construction Scope



Proposed Improvements:

- Traffic Signal Improvements
 - Signalize Charter Road/Mass. Ave.
 - New signals and optimization at Main St./Mass. Ave.
 - Signalize Community Lane/Mass. Ave
- Capacity Improvements
 - Additional lanes where warranted:
 - At intersections
 - Pocket or center left-turn lanes on Main Street/Mass. Ave. roadways
- Accessible Pedestrian Sidewalks
 - Both sides of all roadways
 - Buffer separation where feasible
- Pedestrian Crosswalks and Safety
 - RRFBs at unsignalized crossings
 - Pedestrian signal equipment/timed crossings at signalized intersections
- 5' Bicycle Lanes
 - Both sides of all roadways
 - Intersection bicycle accommodations
- Street Trees, Landscaping, and Pedestrian Lighting

Procurement



- Project was advertised June 4, 2022
- Engineer's Estimate was \$15,122,128.00
- Bid Opening was July 6, 2022
- Five (5) bids were received:
 - MIG Corporation \$18,577,540.50
 - Newport Construction Corp. \$18,587,027.05
 - J Tropeano Inc. \$19,423,367.66
 - MDR Construction Co. Inc. \$19,483,050.75
 - ET&L Corp. \$19,861,899.00

Overall Project Budget



Line Item	Budget
Bid Amount	\$18,577,540.50
Contingencies	\$ 1,857,754.05
Construction Engineering	\$ 928,877.03
Total	\$ 21,364,171.58

- \$15,908,465.5 cost for this construction contract is funded with 80% Federal Highway Funds and 20% State funds.
- \$21,600.00 cost is funded with 100% State Funds
- \$984,245.00 cost is funded by the Town of Acton (Non-Participating)
- \$2,243,530.00 cost is funded by the Acton Water District (Non-Participating)
- Programmed Cost in 2022 TIP: \$15,311,125.00

Overall 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 118477: Intersection & Signal Improvements at Kelley's Corner with MIG Corporation in the amount of \$18,577,540.50.

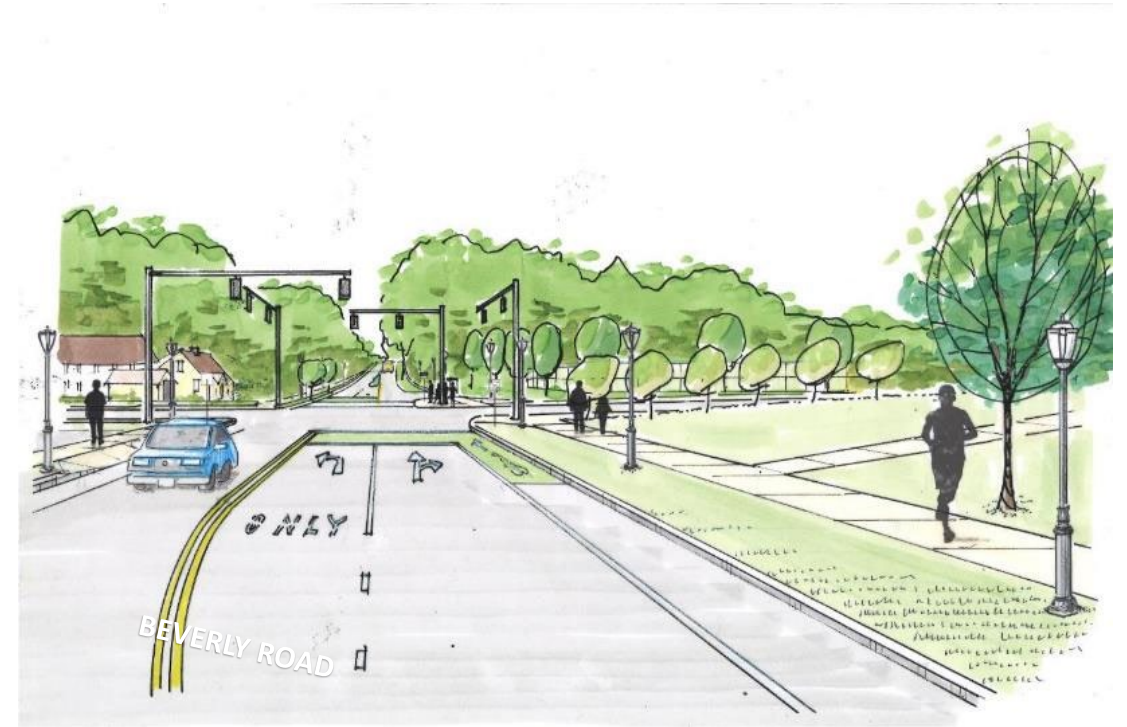
Appendix Slides



- Graphics to show intersection improvements, if questions

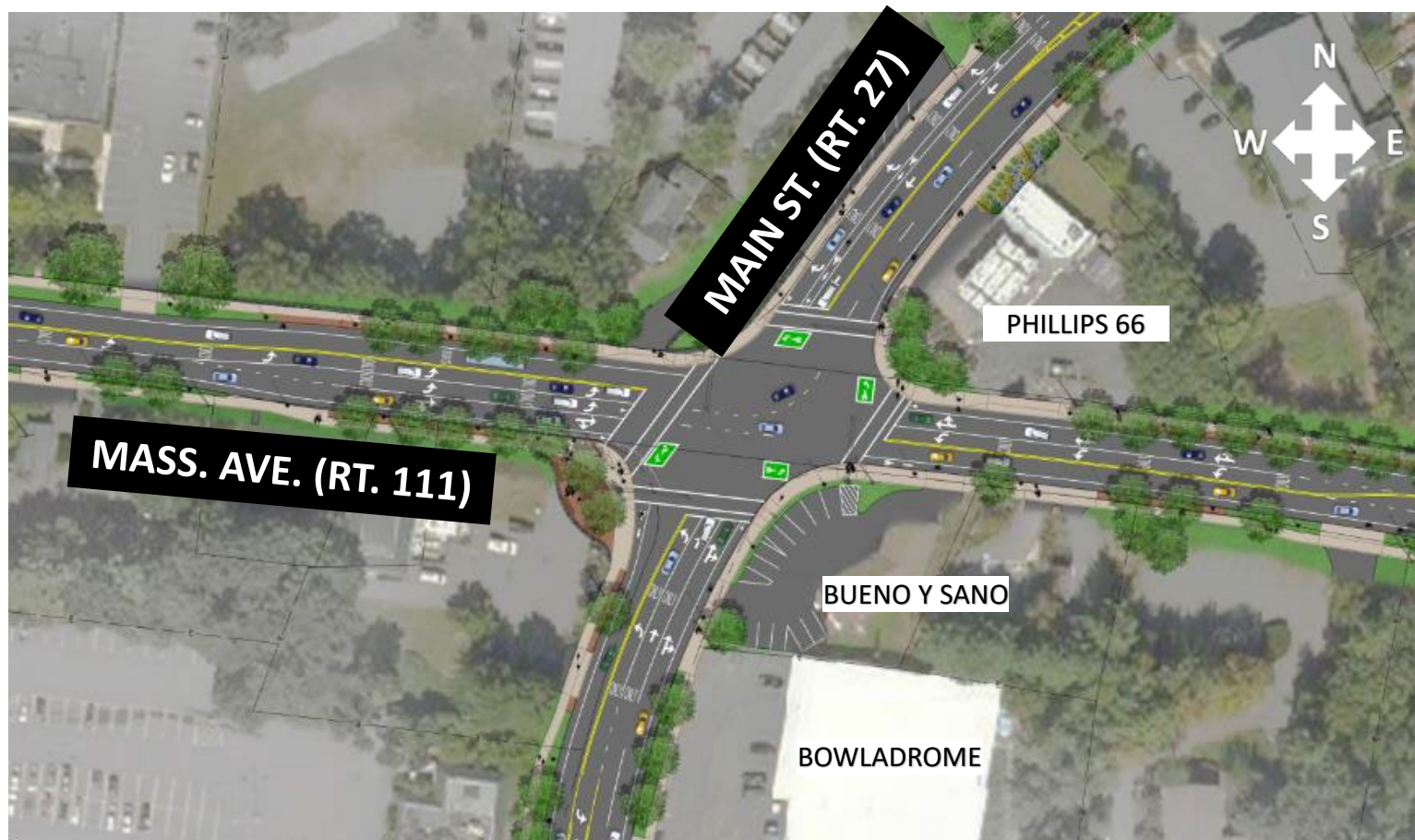
Construction Scope (cont'd)

Mass. Ave. (Rt. 111) at Charter Road



Construction Scope (cont'd)

Main Street (Rt. 27) at Mass. Ave. (Rt. 111)



Construction Scope (cont'd)

Mass. Ave (Rt. 111) at Community Lane



Construction Scope (cont'd)

Main Street (Rt. 27) at Community Lane



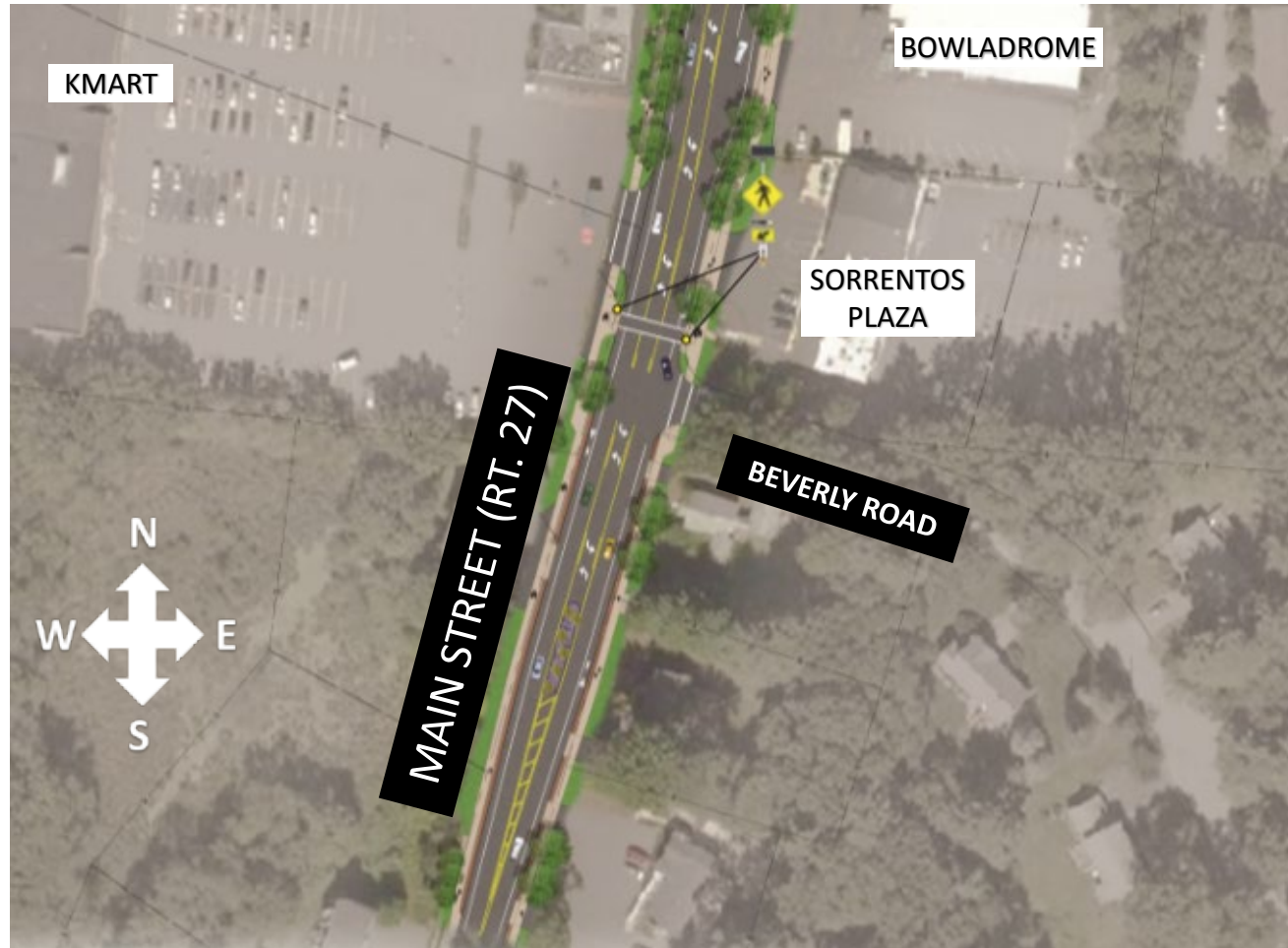
Construction Scope (cont'd)

Main Street (Rt. 27) to Rt. 2 Ramp



Construction Scope (cont'd)

Main Street (Rt. 27) at Beverly Road



Construction Scope (cont'd)

Proposed Improvements: RRFBs and Two-Stage Left Turn Bike Boxes

