

South Massachusetts Avenue Corridor Safety Improvements



Stakeholder Meeting #3 | June 6, 2018

Agenda

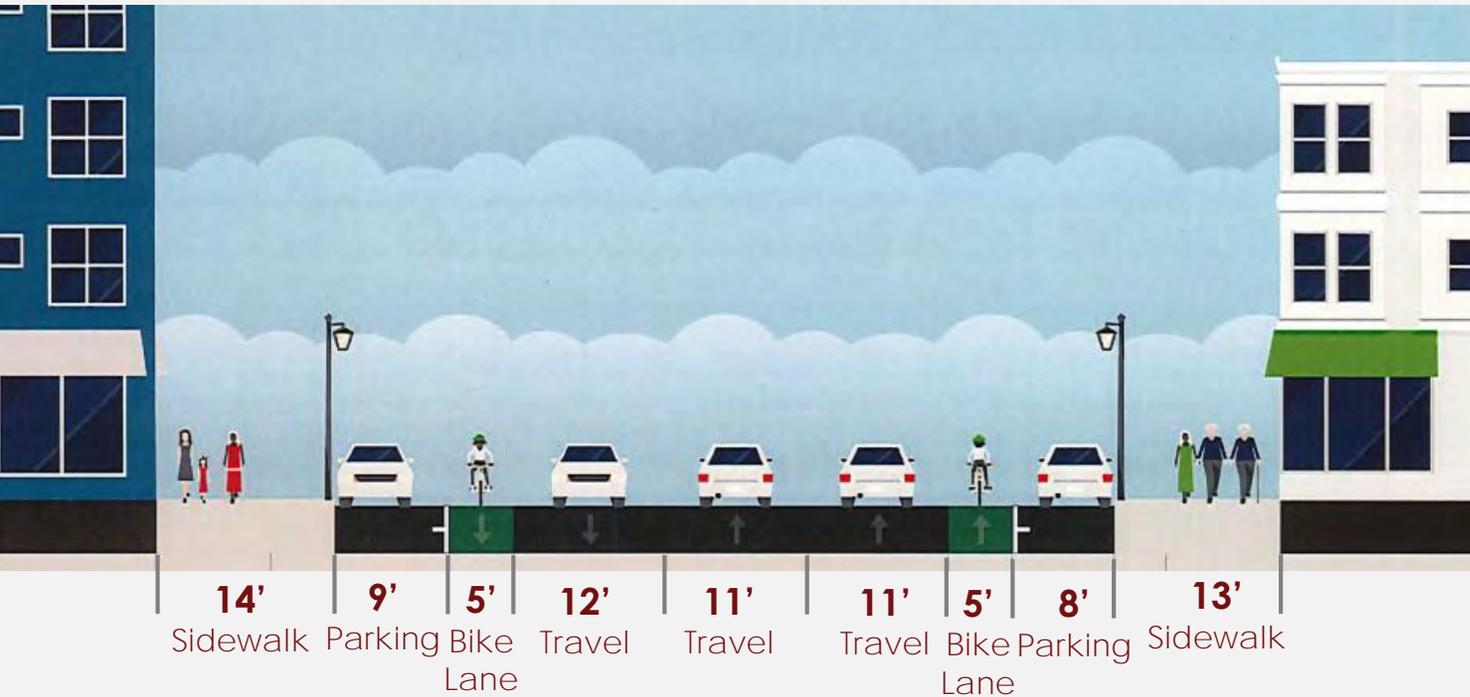
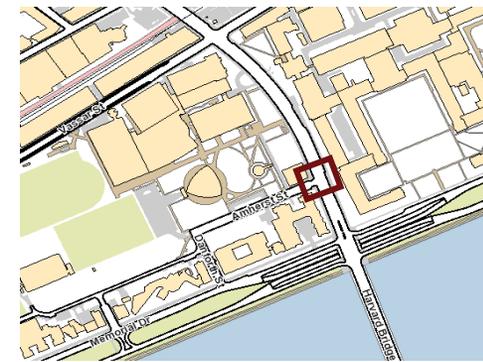
Massachusetts Avenue – Sidney Street to Memorial Drive

- Welcome & Introductions
- Brief Recap of Project Progress
- Conceptual Design
- Detailed discussion/feedback



Existing Conditions

Mass. Ave. Cross-Section (at Amherst Street)



- ✓ 88' wide
- ✓ On-street bike lane
- ✓ On-street vehicle parking
- ✓ Mix of meters and other parking
- ✓ Bus stops
- ✓ Curb extensions at multiple locations

Project Goals



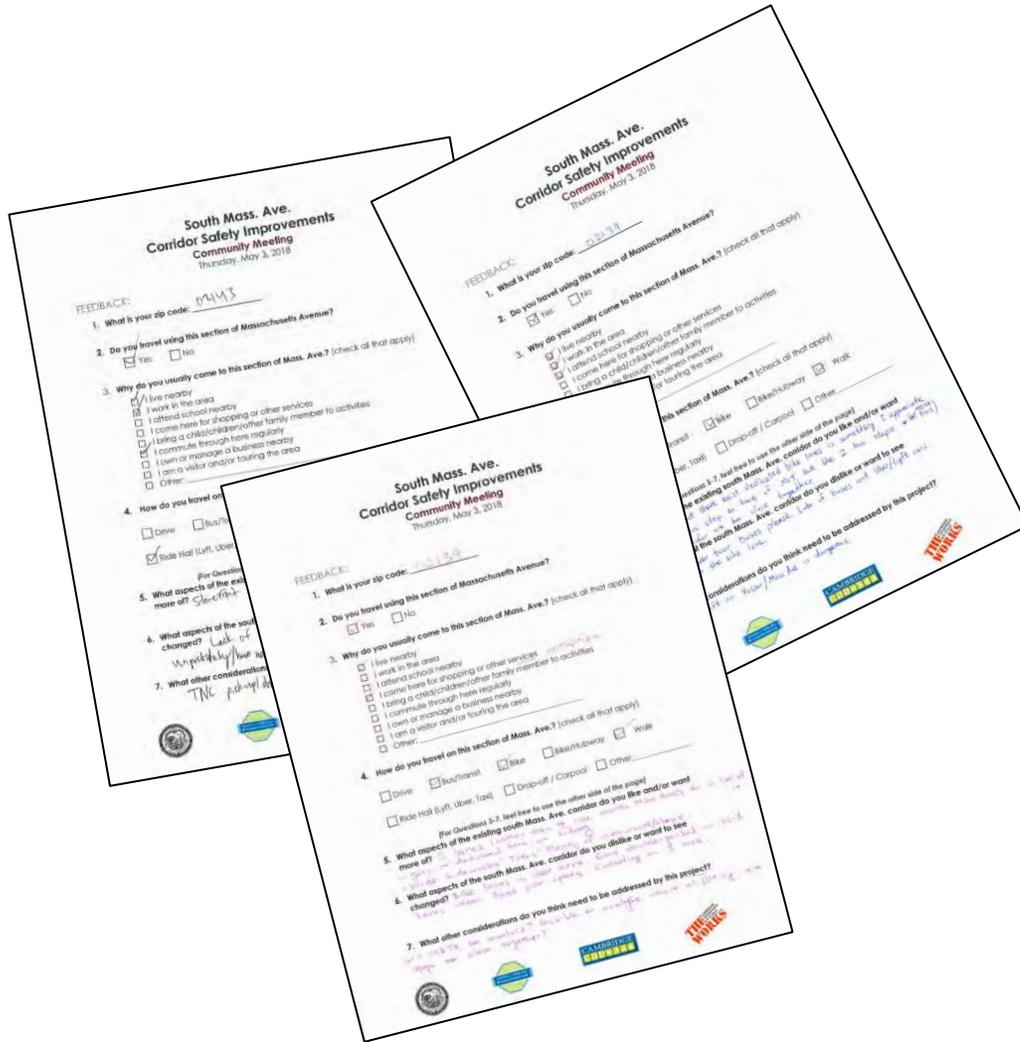
- ✓ Address safety issues and reduce crashes - Vision Zero
- ✓ Reduce transit delays
- ✓ Enable/encourage people of all ages and abilities to choose sustainable transportation

Public Process



- ✓ Advisory Committee Meetings
 - ✓ April 12, May 16, June 6
- ✓ Wikimap online
- ✓ Outreach to Businesses
- ✓ Individual Stakeholder meetings
- ✓ Transit/Ped/Bike Committees
 - ✓ Corridor walk; plan review
- ✓ Communitywide Meetings
 - ✓ May 3, June 19

Public Feedback



- ✓ Need for better operating conditions for bicyclists
- ✓ Need for additional crosswalks traversing Mass Ave
- ✓ Desire to improve transit operations
- ✓ Concerns about unpredictable ridesharing, tour bus, food truck, commercial loading & pick-up/drop-off activity
- ✓ Improvements needed at rail crossing

Community Feedback

What we have heard!

- Delivery operations should have places to load/unload so they don't use the bike lanes
- Prevent motorists from using bike lanes to load/unload
- Relocate MIT tour buses loading/unloading
- Bicyclists should be further separated from vehicles
- There are long vehicle queues, lots of traffic at Vassar Street
- Minimize conflicts, including bus/bike conflicts and bike/ped conflicts at 77 Mass Ave.
- Install more crosswalks between Sidney St and Landsdowne St



Transportation/Traffic Analysis

- Corridor-wide transportation analysis to determine where:
 - **Bus** lanes can be added
 - **Crosswalk** can be added
 - **Vehicle** lanes can be repurposed
 - **Signal** operations can be modified
 - Manage traffic
 - Mitigate conflicts
 - **Bicycle** lanes can be separated
 - **Bicycle** buffers can be added
 - **Parking/curbside activities** can be modified for better operations
 - Loading Zones
 - Pick-up/Drop-off activities
 - Accessible spaces



NEXT STEPS

Draft Design – Before and After

South Mass. Ave. Corridor



Before

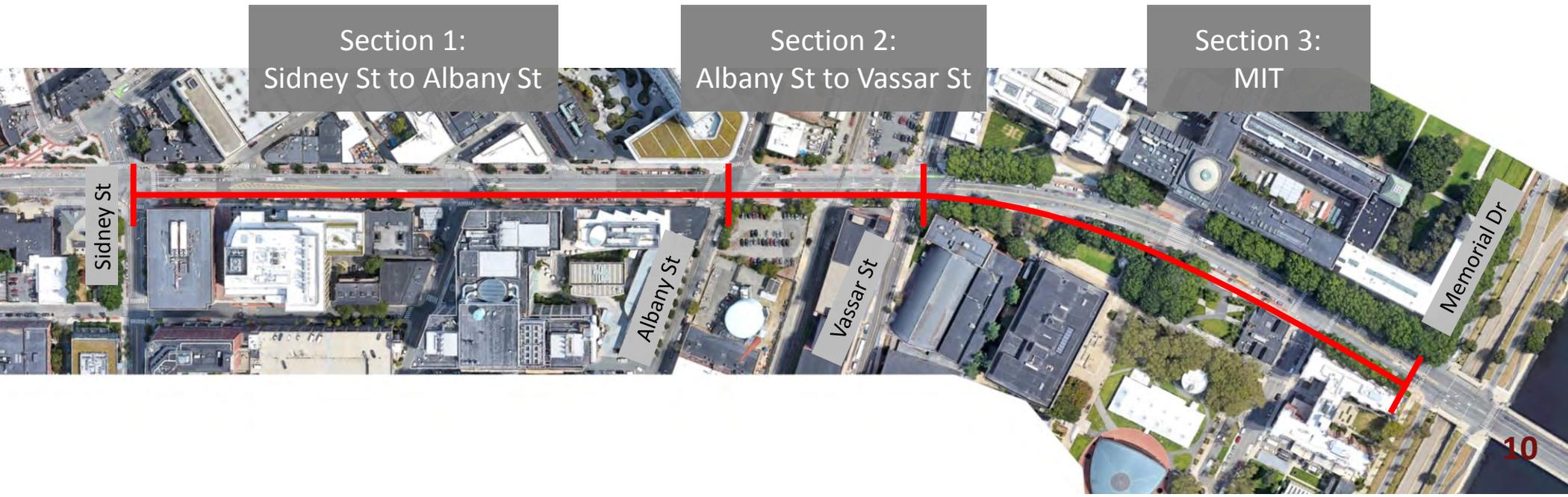


After

Transportation/Traffic Analysis

Three Main Sections

The corridor has been divided into 3 sections for clarity

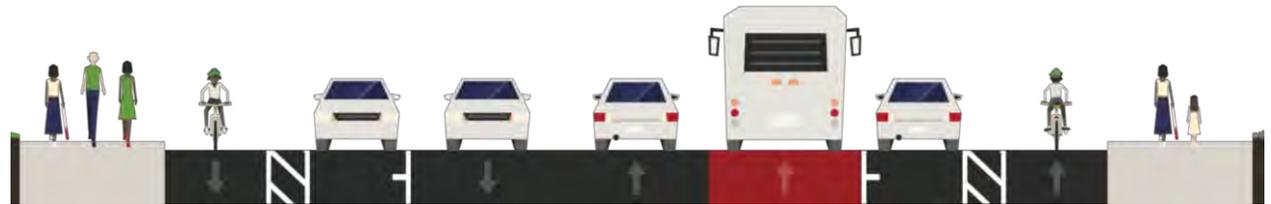


Transportation/Traffic Analysis

Cross Sections

- The three general cross sections (intersections vary)

Section 1:
Sidney St to Albany St

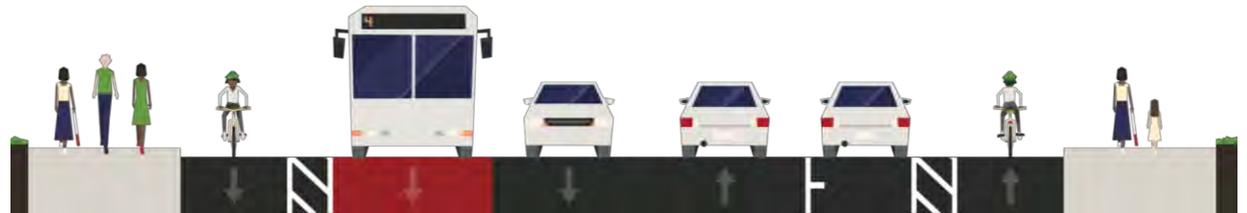


Section 2:
Albany St to Vassar St



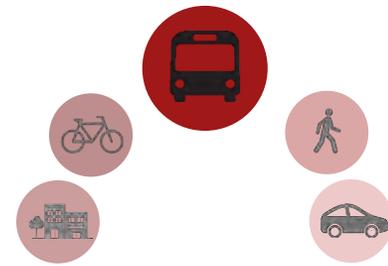
Most Complicated

Section 3:
MIT

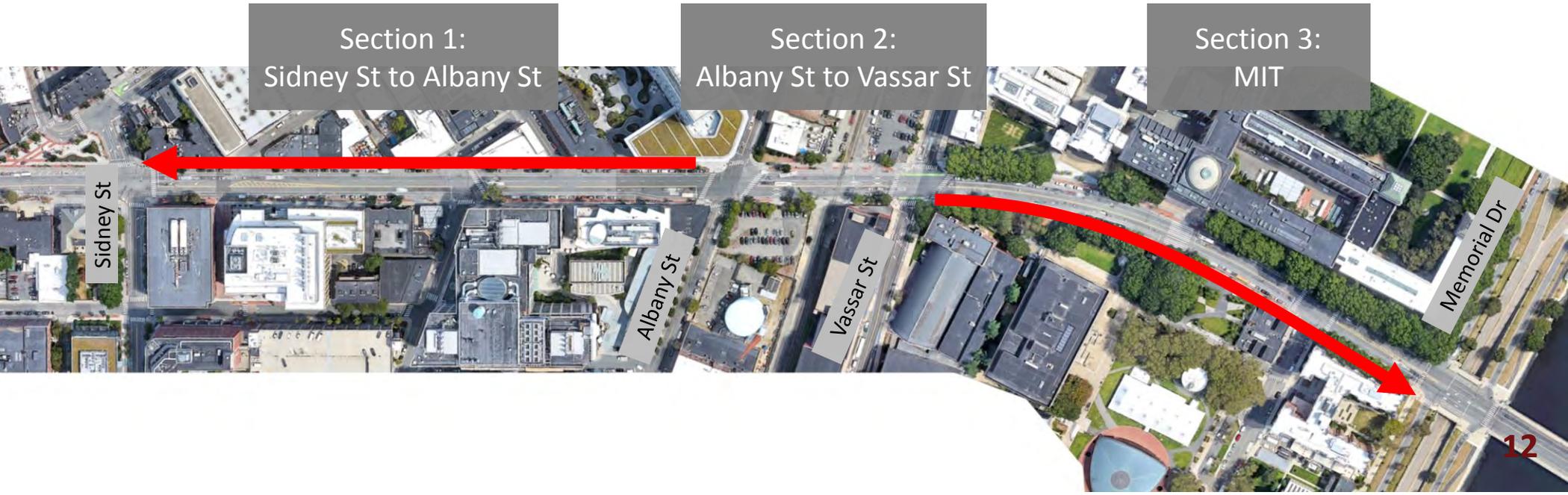


Transportation/Traffic Analysis

Bus Facilities

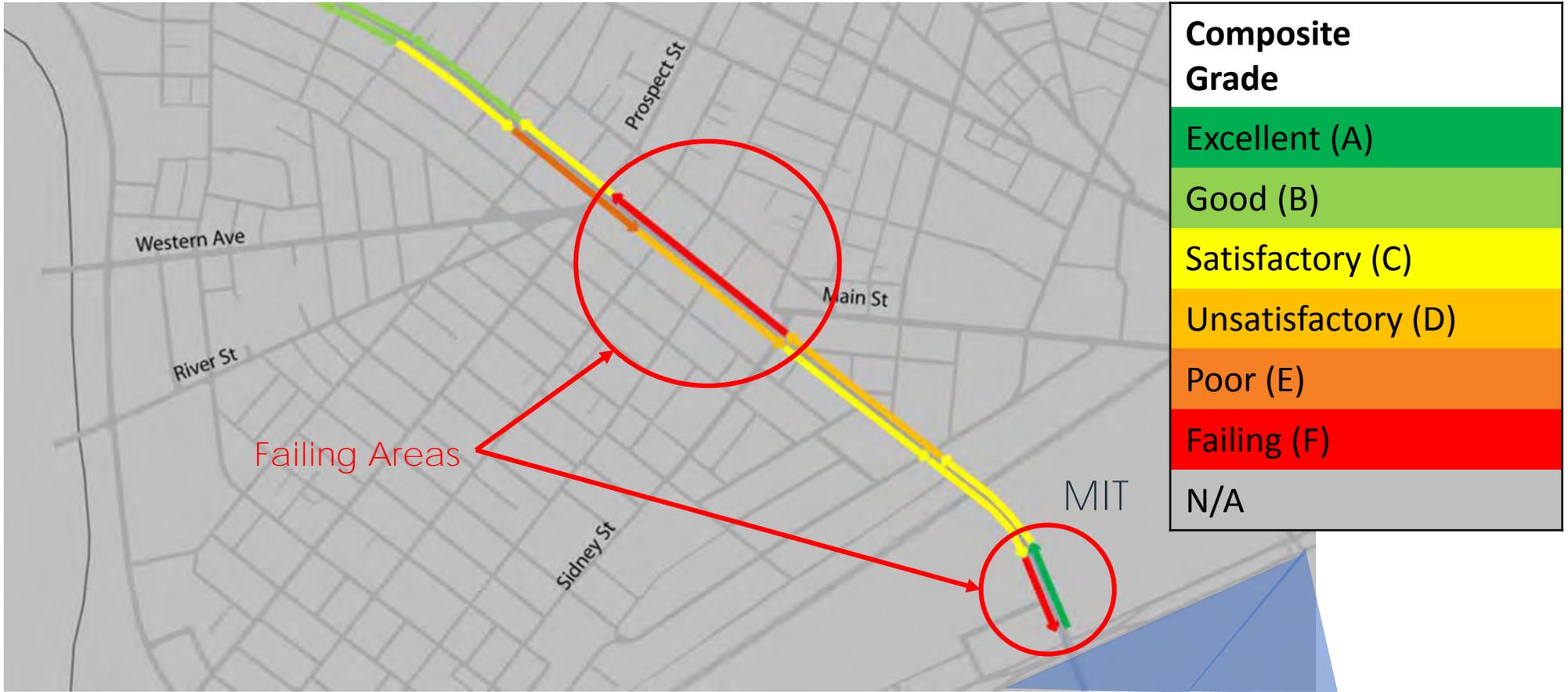


Bus lanes proposed for two sections, to address the key areas of delay



Transit Service

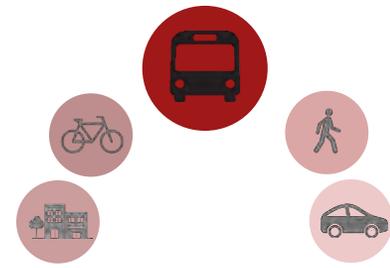
MBTA Bus Route 1: PM Peak



Method: Automatic Passenger Counter (APC) Data (MBTA)

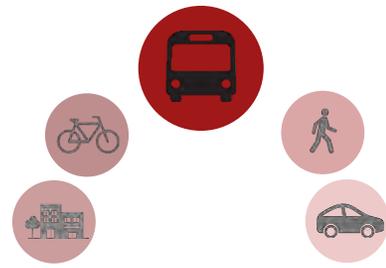
Transportation/Traffic Analysis

Bus Facility Details



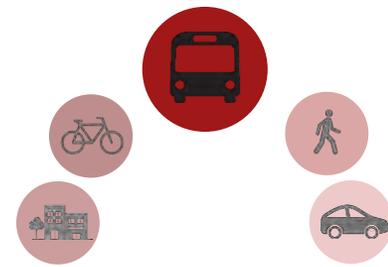
Transportation/Traffic Analysis

Bus Facility Details

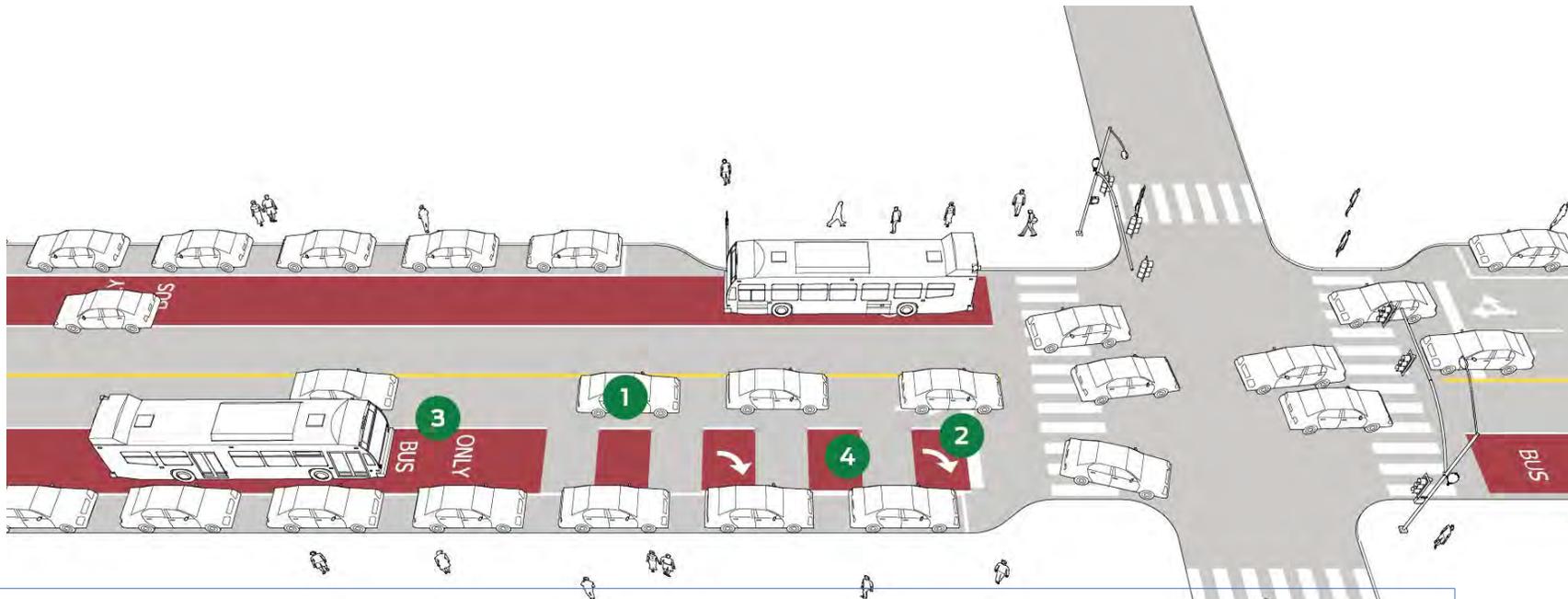


Transportation/Traffic Analysis

Bus Facility Details

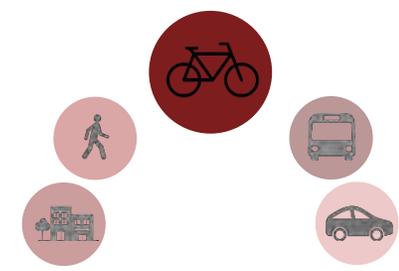


Bus lanes at intersections: Right turning motorists may use bus lane



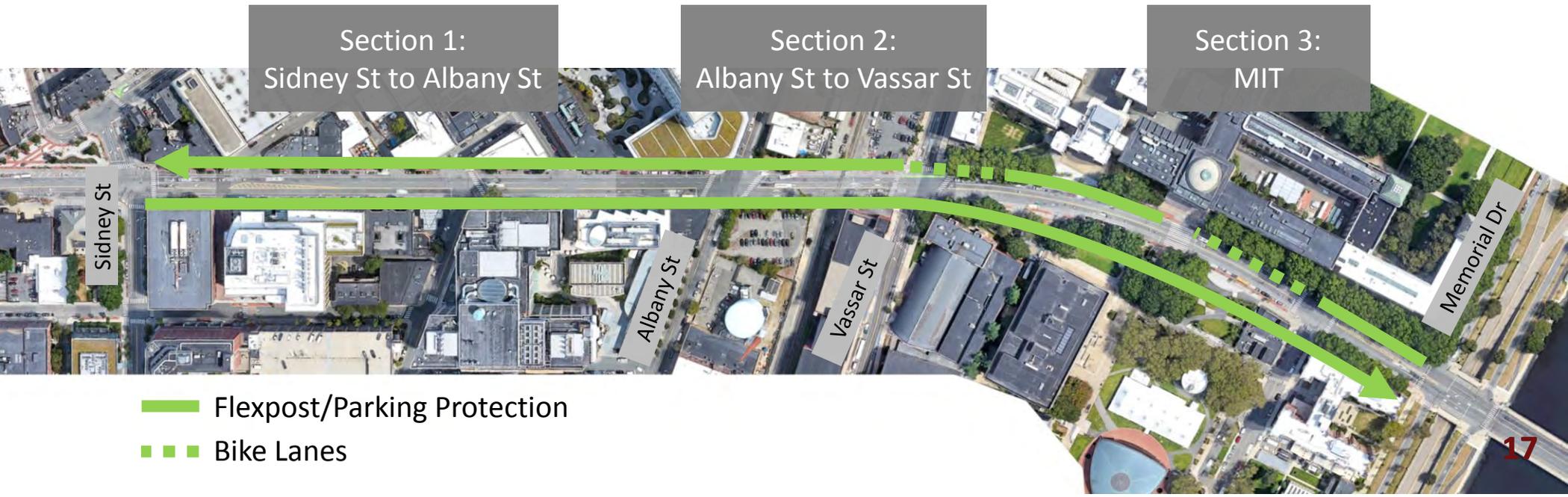
NB: graphic for illustrative purposes only

Transportation/Traffic Analysis



Bicycle Facilities

For most of the corridor, separated bike lanes can be created using on-street parking and flex posts



Bicycle Facilities

Separated Bike Lane – Parking Protected



Bicycle Facilities

Bike Lane with Curbside Parking

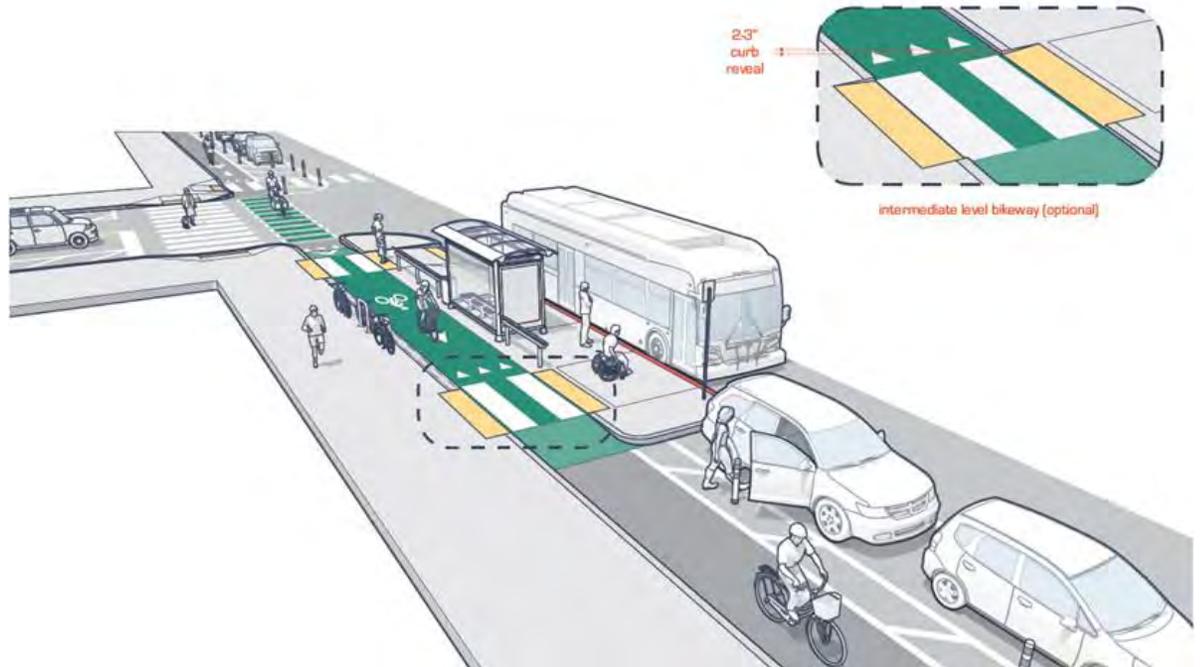


Curbside parking/Accessible Parking

Bus Stop Options



Bus stop at curb



Floating bus stop – under consideration for later implementation

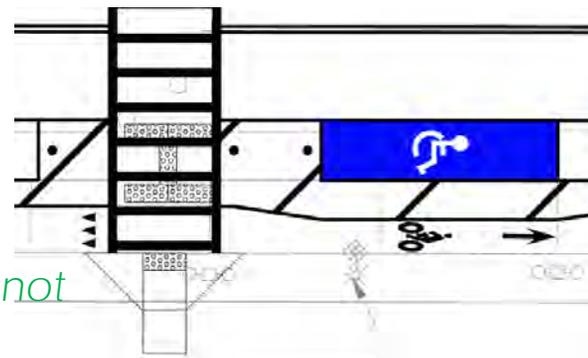
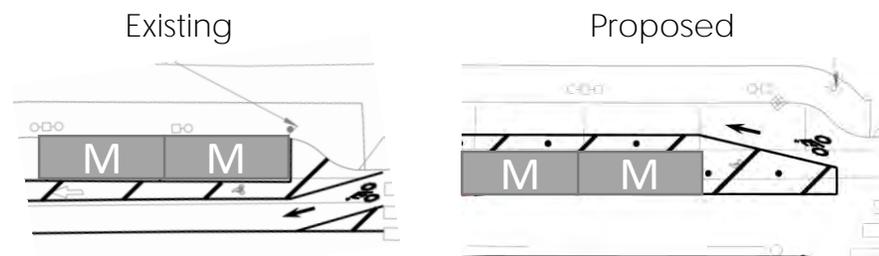
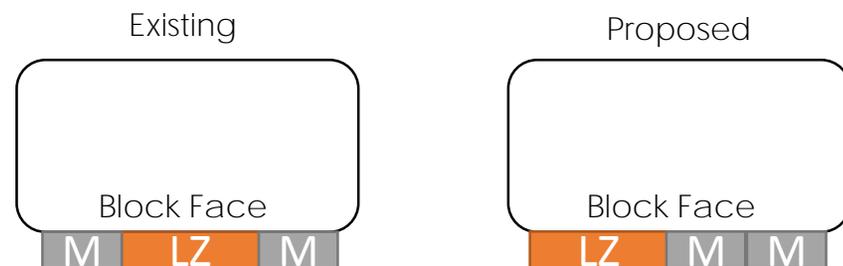
Pedestrian Facilities

- No changes to sidewalks
- New Crosswalk with Rapid Flash Beacon
- Signal modifications to reduce conflicts



Vehicle Parking Analysis

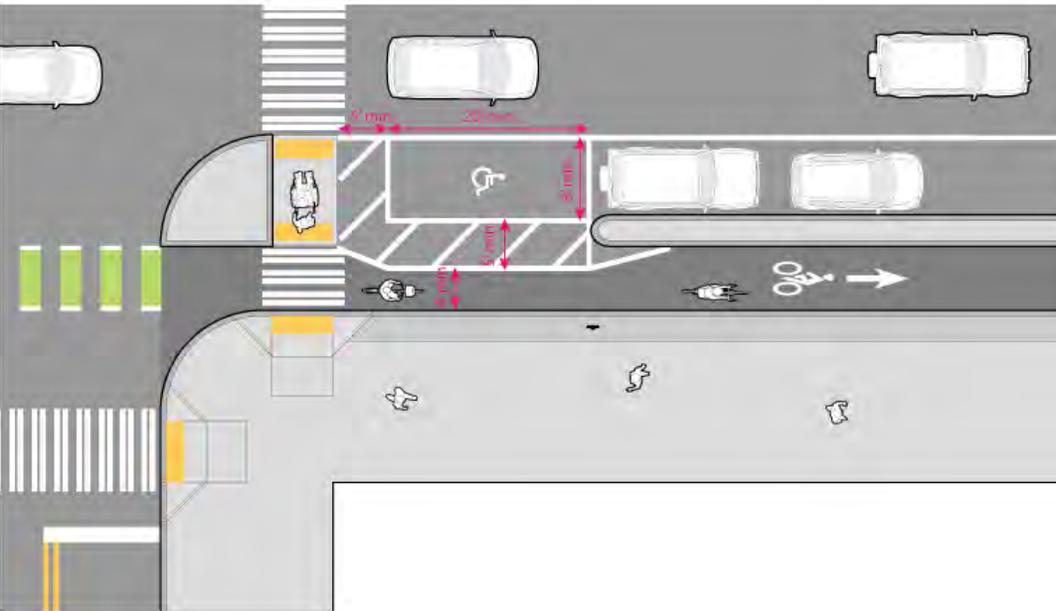
- Re-configuring parking that works better for loading (loading zones will be moved to the beginnings or ends of the block faces)
- Floating parking spots will be implemented, where possible
- Special consideration will be made for ADA spaces



NB: graphic for illustrative purposes only, does not represent exact dimensions

Accessible Parking Option

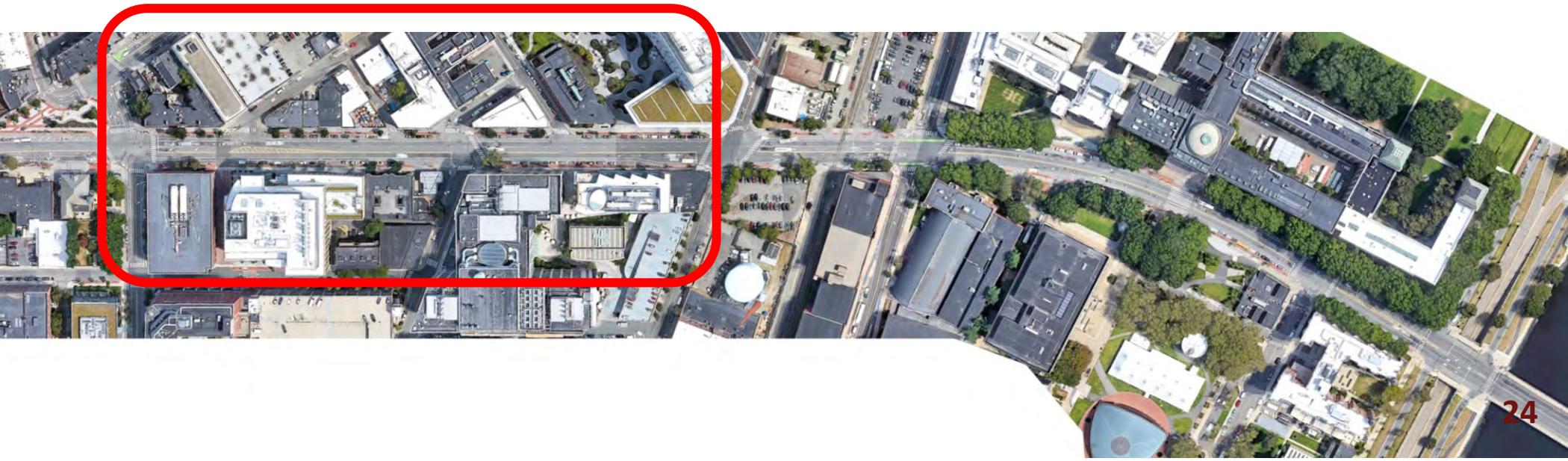
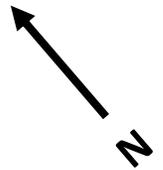
- Under evaluation for appropriate location(s)
- MassDOT and other guidelines
- Implemented in several cities



Transportation/Traffic Analysis

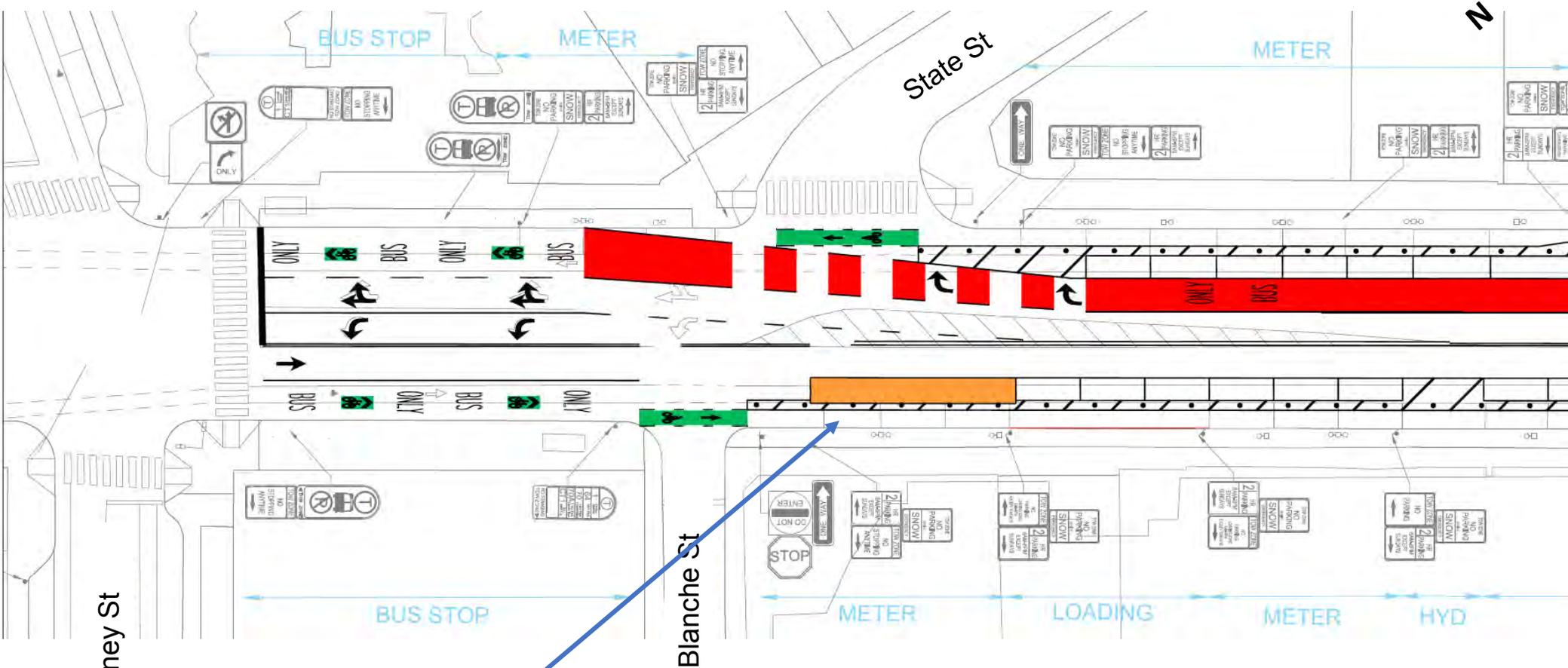
Three Main Sections

- Overall, in sections 1 & 3, lane removed without significant impacts
- There may be impacts to motor vehicles, with longer queues and possibly longer travel times, in Section 2
- **NB**: These plans are conceptual/draft ONLY and subject to change
- NB: Plans show existing conditions as background layer



Transportation/Traffic Analysis

Section 1: Sidney St to Albany St (A)



Sidney St

Blanche St

State St

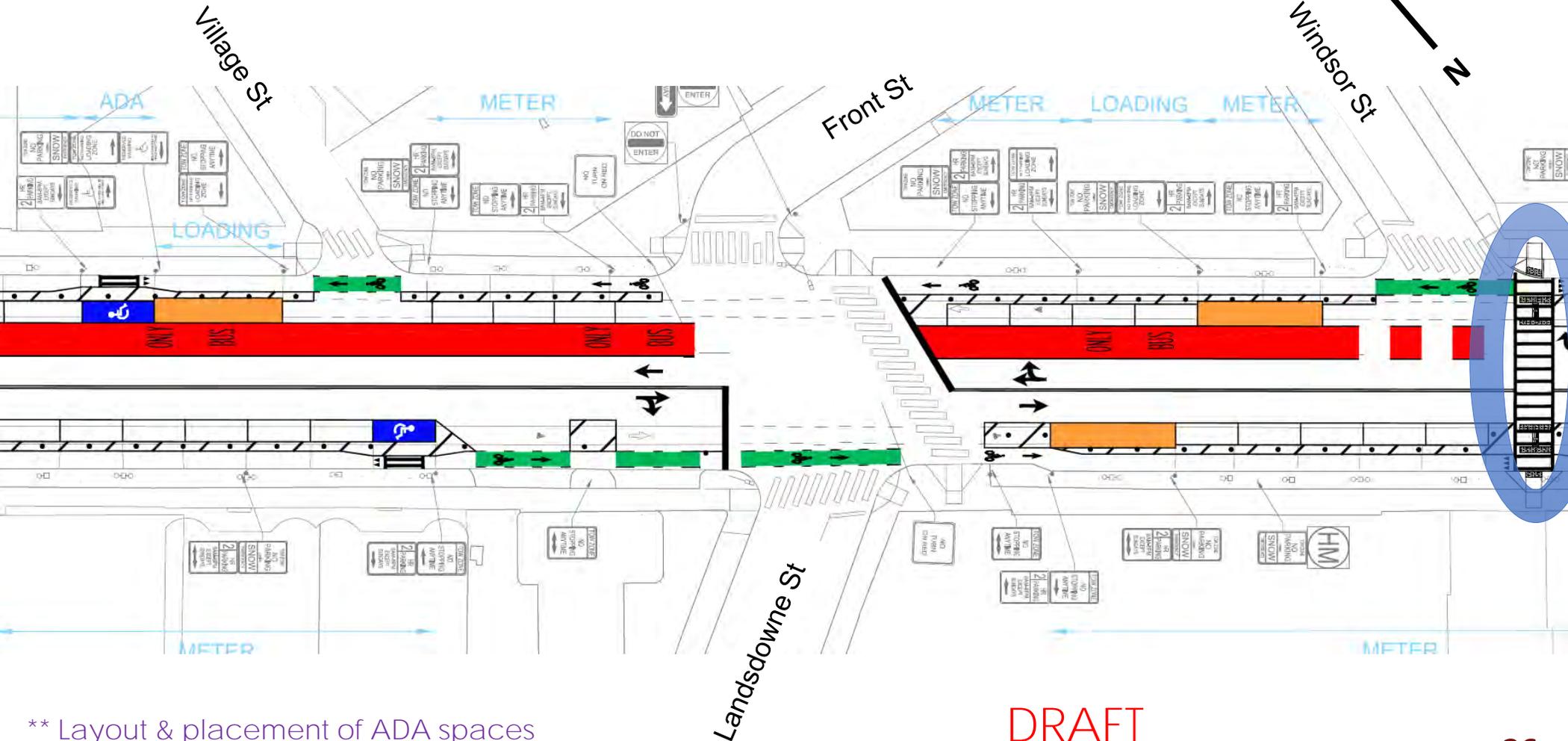
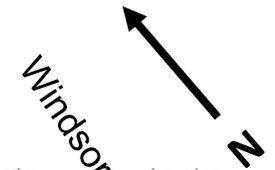
Orange = loading

DRAFT

Transportation/Traffic Analysis

Section 1: Sidney St to Albany St (B)

DRAFT



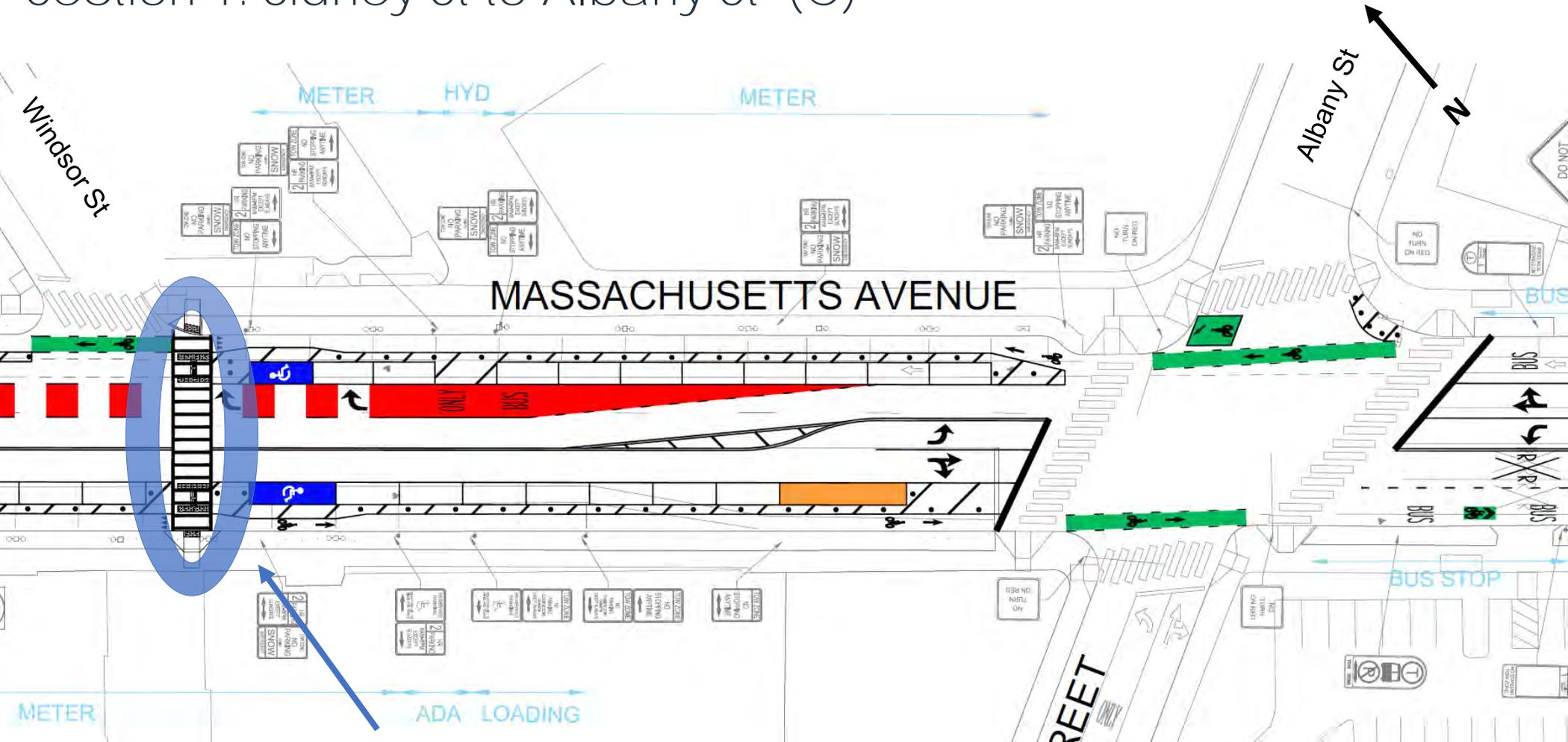
** Layout & placement of ADA spaces still under design **

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Transportation/Traffic Analysis

DRAFT

Section 1: Sidney St to Albany St (C)



New crosswalk with Rapid Flash Beacon

DRAFT

Design Analysis

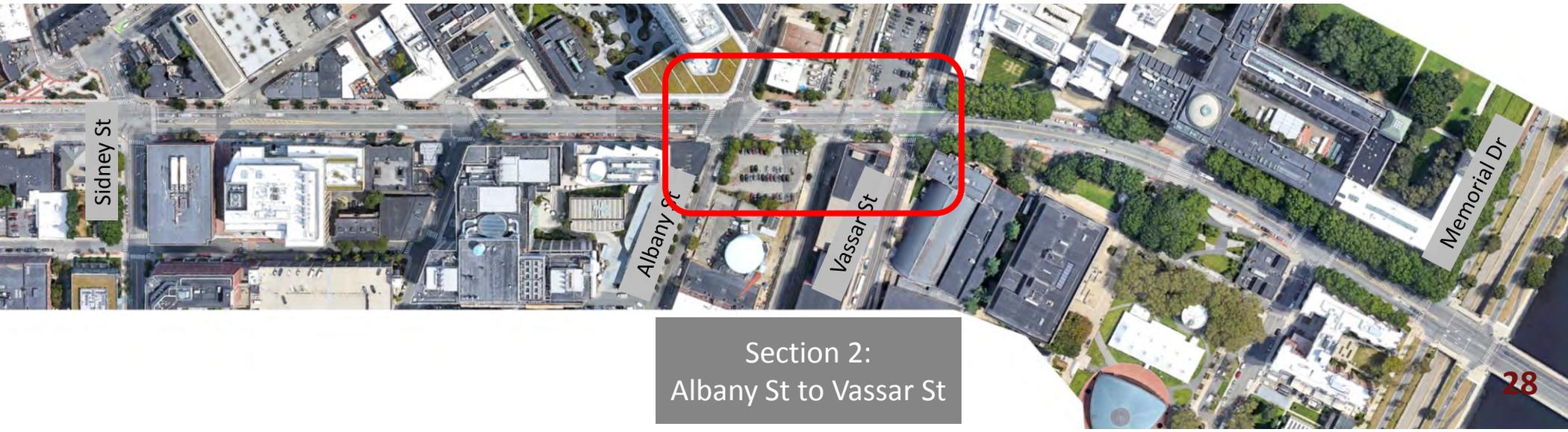
Alternatives Analyzed at Vassar Street:

Alternative 1: 3-lane cross section

- more turning conflicts for people walking or bicycling
- traffic better in off peak, worse in peak, including buses

Alternative 2: 4-lane Cross Section

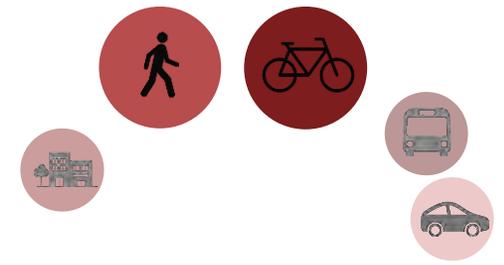
- Key conflicts controlled for people walking, bicycling
- AM peak performs better, PM is worse



Section 2:
Albany St to Vassar St

Design Analysis

Implications & Opportunities

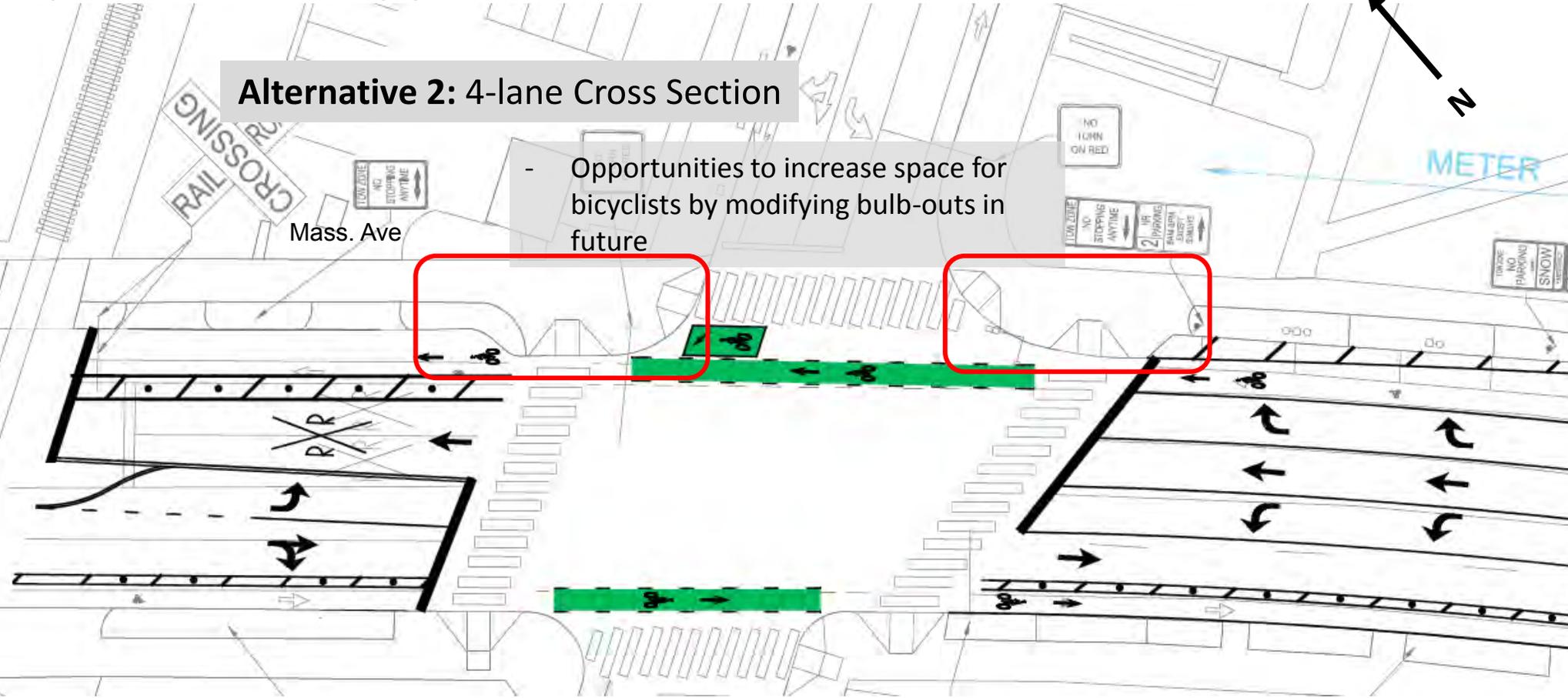


Alternative 2: 4-lane Cross Section

- Opportunities to increase space for bicyclists by modifying bulb-outs in future

Mass. Ave

METER



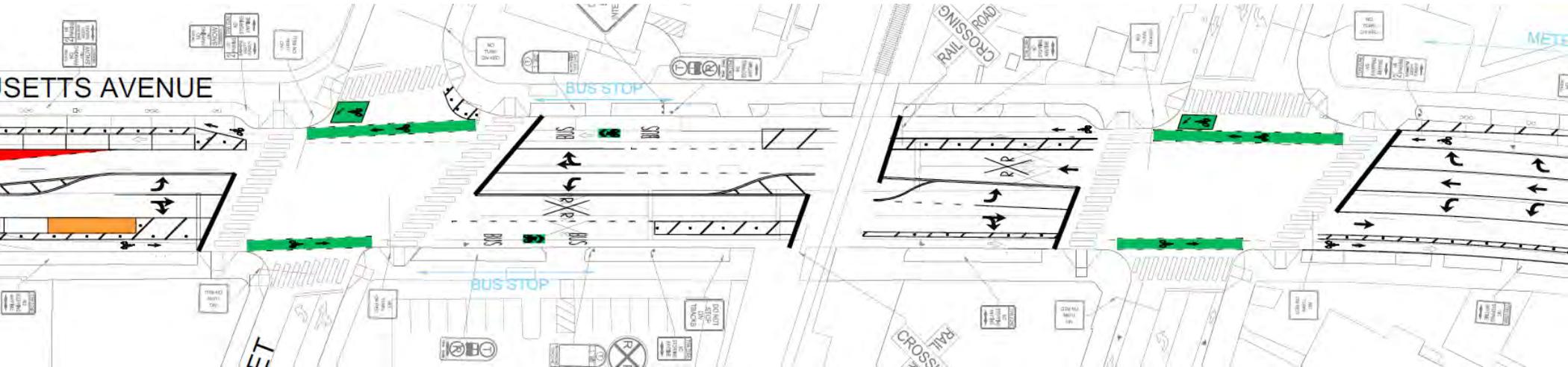
- Will require additional traffic signal equipment;
- Bike signals to be added

Vassar St

Transportation/Traffic Analysis

Section 2: Albany St & Vassar St

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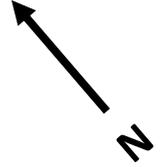


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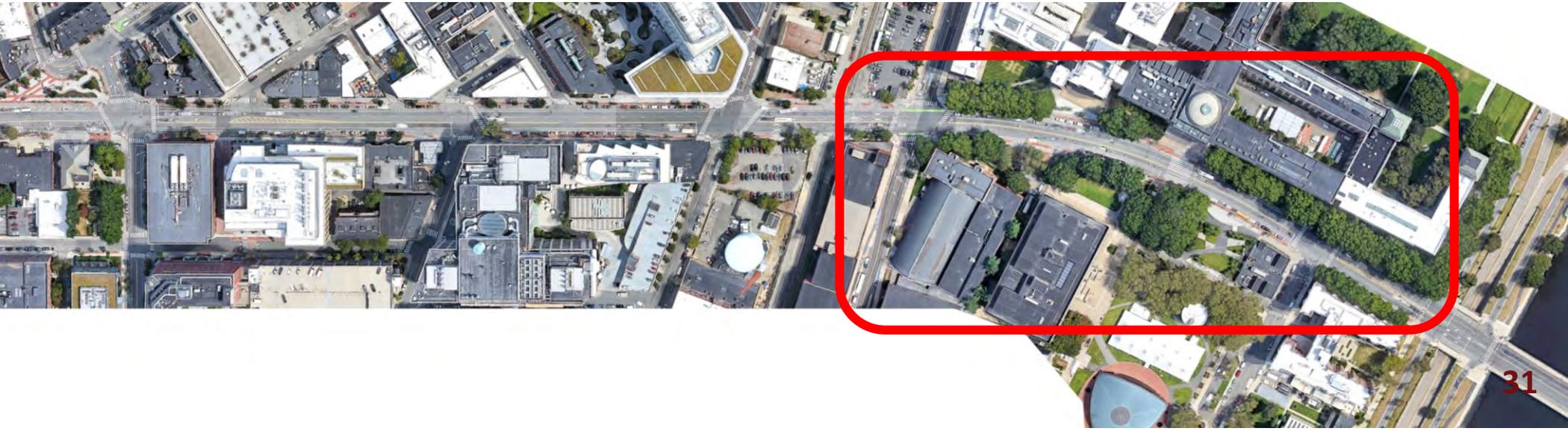
Transportation/Traffic Analysis

Three Main Sections

Other Design Details



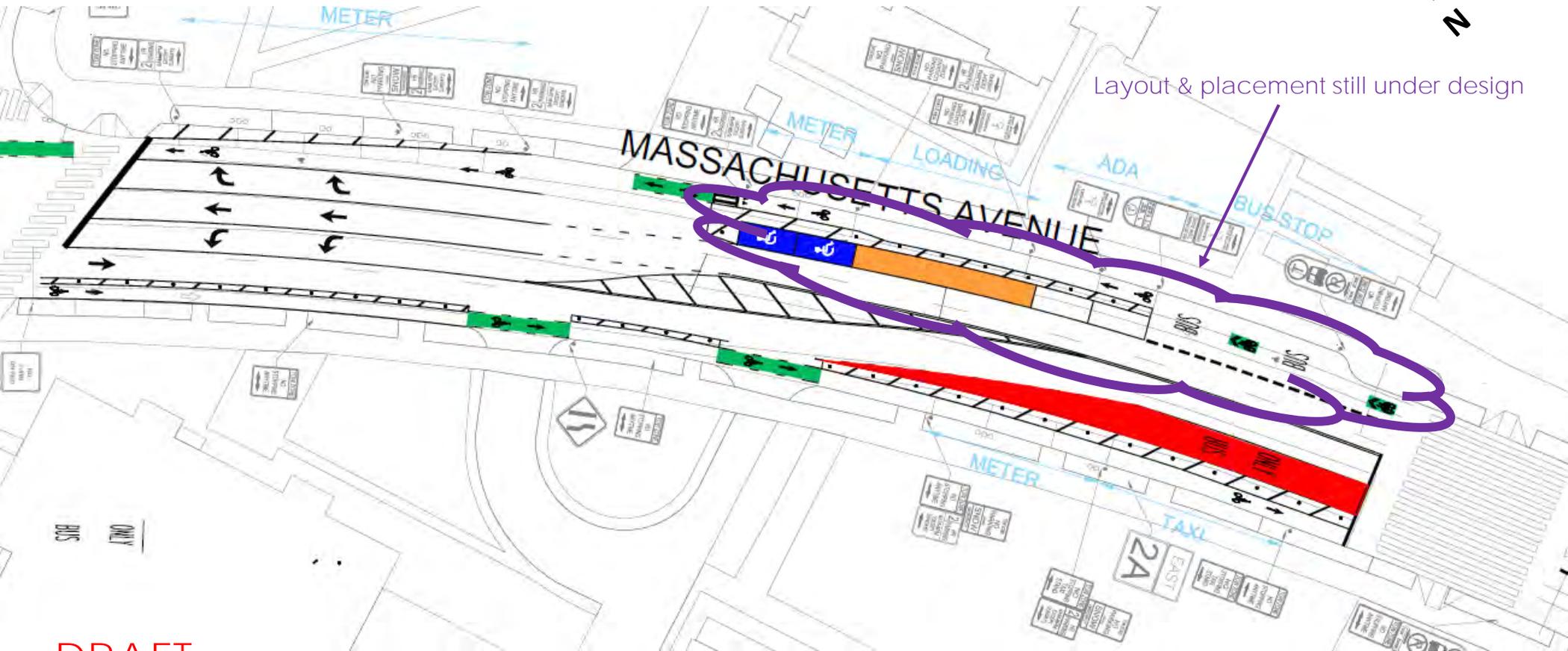
MIT



Transportation/Traffic Analysis

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Section 3: MIT (A)



Layout & placement still under design

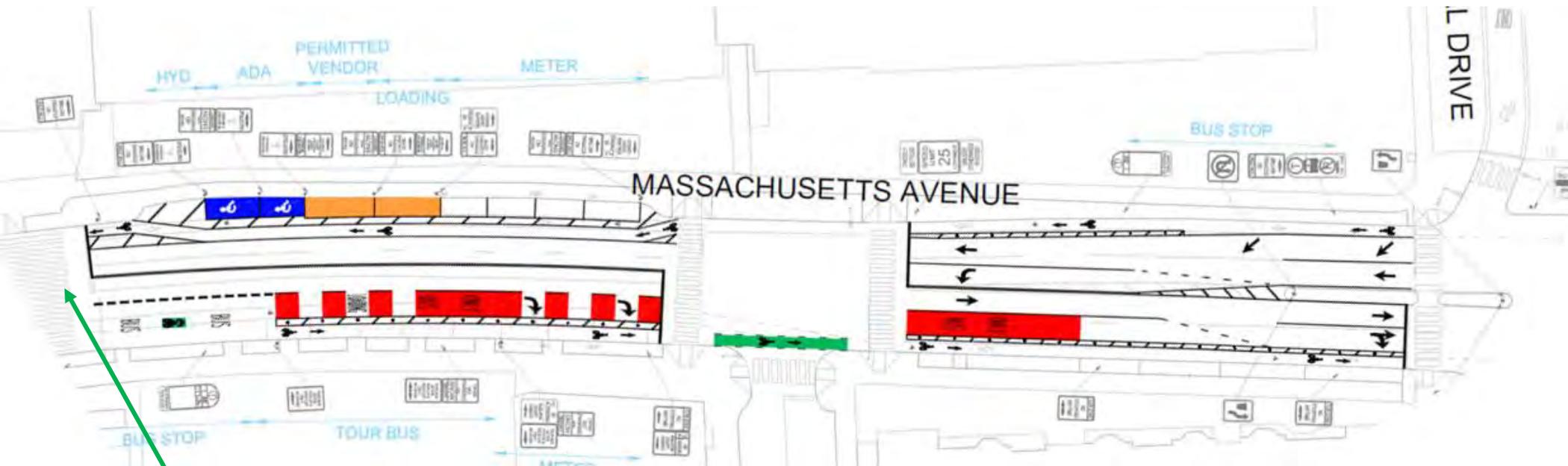
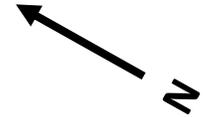
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Transportation/Traffic Analysis

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Section 3: MIT (B)



Amherst St

Memorial Dr

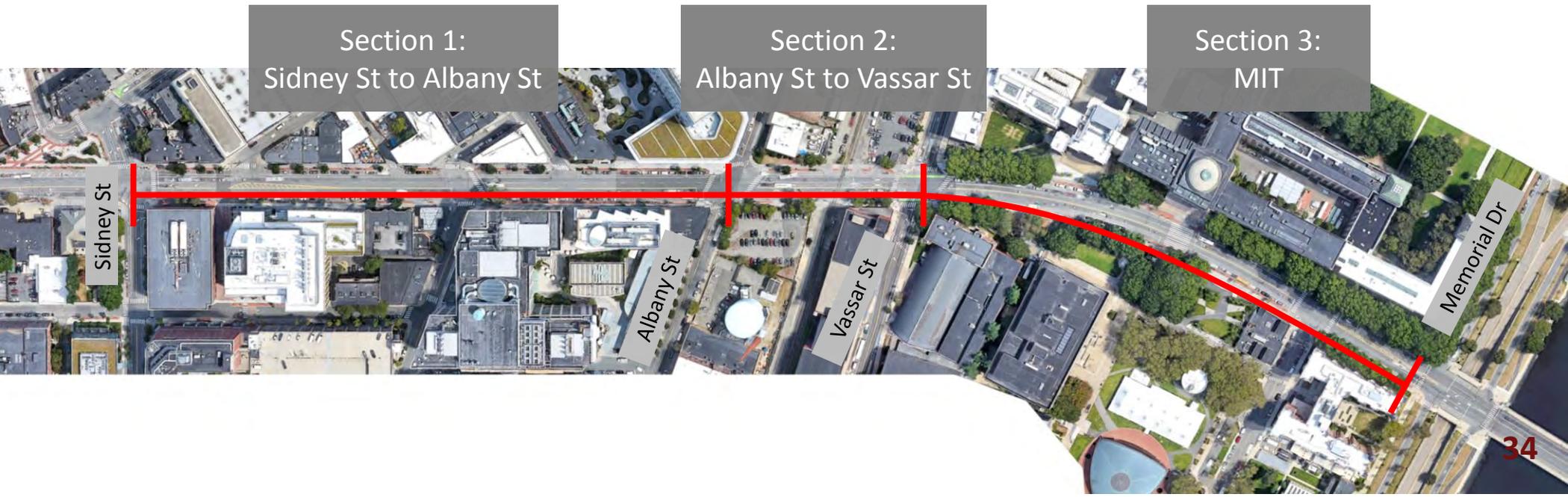
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Bike signal at 77 Mass Ave

Transportation/Traffic Analysis

Conclusion

- Bicycle and transit improvements are identified for the corridor
- Additional crosswalk at Windsor Street
- Intersections managed with turn lanes and signal control
- There are some notable parking modifications
- Still some design details to flesh out, especially given your input!

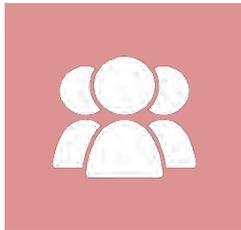


NEXT STEPS

Schedule



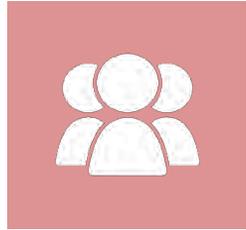
Bicycle,
pedestrian,
traffic
counts
April



Public
Meeting #1
May 3



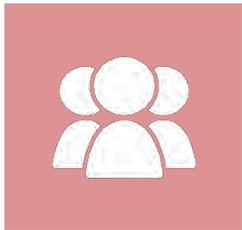
Refine design
May - August



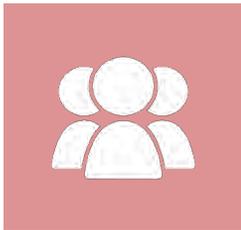
Public Meeting
#2/Open House
June 19



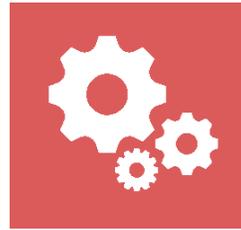
Parking study
Week of April
30



Advisory
Committee
Meeting #1
April 11



Advisory
Committee
Meetings #2-3
May, June/July



Implementation
Late Summer
2018

Evaluation

