

Transportation Advisory Committee Belmont Center Improvements



TAC Forum #3 – Review of Design Alternatives
Town of Belmont

December 9, 2010

Participants

Linda Nickens Belmont Traffic Advisory Committee

Glenn Clancy Belmont Town Engineer

Peter Briere Traffic Engineer, BSC Group

Marybeth Murphy Landscape Architect, BSC Group

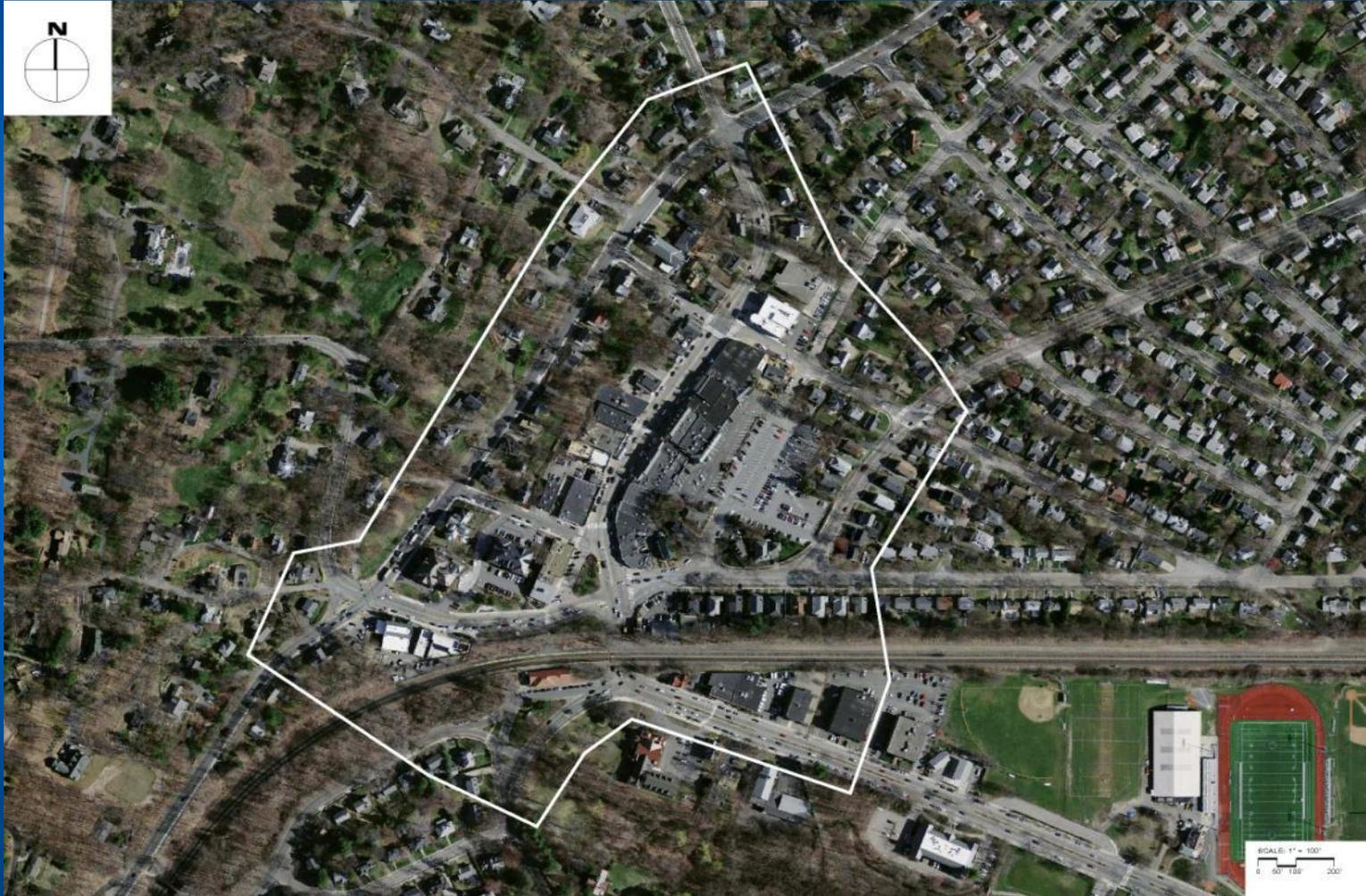
Charles Kalauskas Planner, BSC Group

Purpose of Project

1. Analyze alternatives
2. Determine preferred alternative relative to:
 - Roadway
 - Sidewalk
 - Parking
 - Landscape
3. Initiate design & construction

Study Area Context

Belmont Center



Process

Transportation Advisory Committee #3 (Thursday December 9, 2010)

- Describe Existing Conditions
- Describe Alternative Designs
- Evaluate Alternatives
- Select Preferred Alternative

Analysis Tools

With the Alternative Designs being reviewed, we will evaluate:

- Traffic Operations
- Parking Supply
- Bicycle Accommodation
- Pedestrian Access
- Streetscape Opportunities

Using the following Symbols:

- + Positive Impact
- o No Impact
- - Negative Impact

Analysis Tools

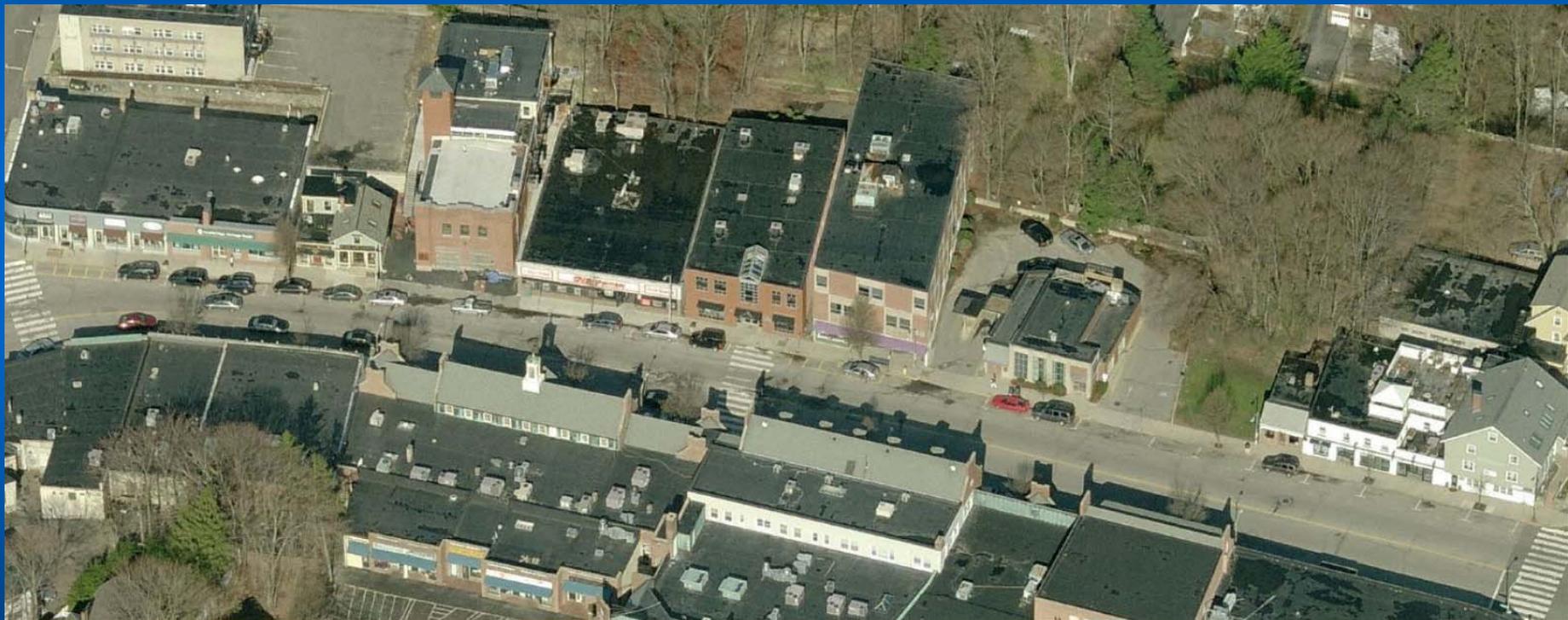
Sample Chart

Leonard/Concord/Channing	
Traffic Operations	0
Parking	0
Bicycles	+
Peds / X-walks	-
Streetscape	0

Review of Design Concepts

- North of Railroad Bridge
 - Leonard– Moore to Alexander
 - Concord– Leonard to Pleasant
 - Intersection at Leonard / Concord / Channing
 - Intersection at Alexander / Claflin
 - Intersection at Channing / Claflin
 - Intersection at Channing / Cross
- South of Railroad Bridge
 - Intersection at Concord / Common
 - Intersection at Common / Royal

Leonard St. – Moore St. to Alexander Ave. Bird's Eye

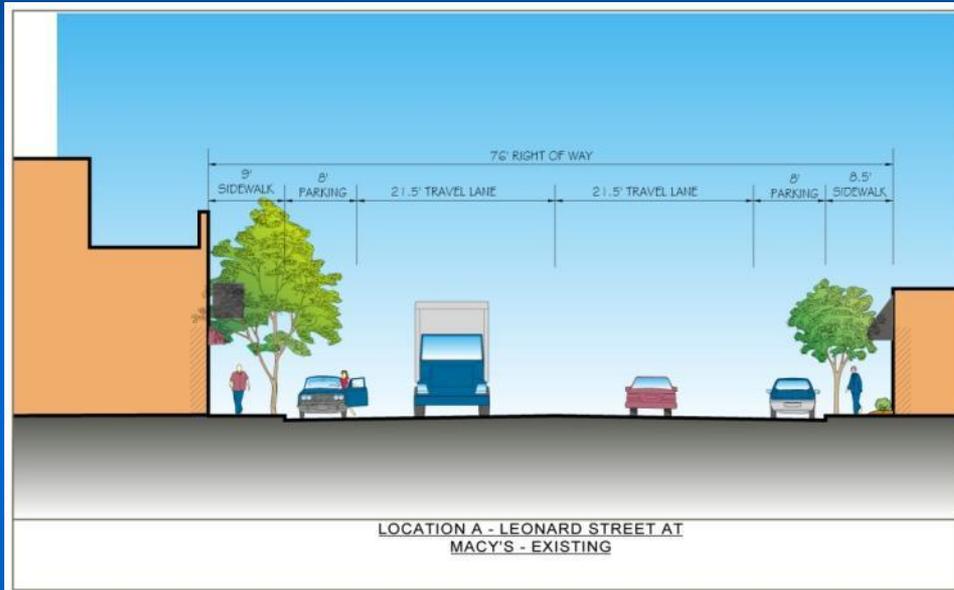


Leonard St. – Moore St. to Alexander Ave. Existing Conditions



Leonard St. – Moore St. to Alexander Ave.

Existing Cross Sections at Macy's, Bruegger's Bagel



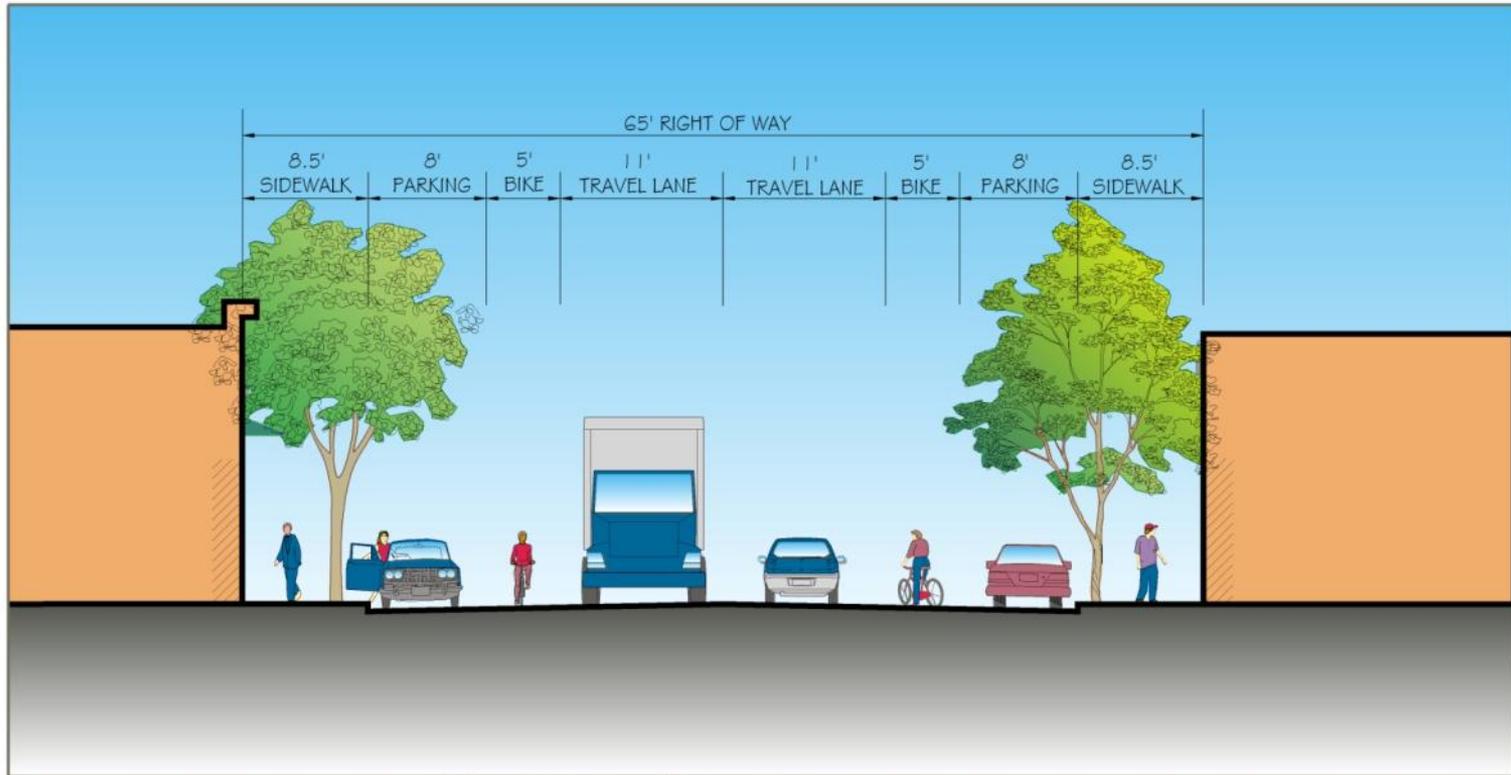
Leonard St. – Moore St. to Alexander Ave.

Proposed Conditions: Parallel Parking



Leonard St. – Moore St. to Alexander Ave.

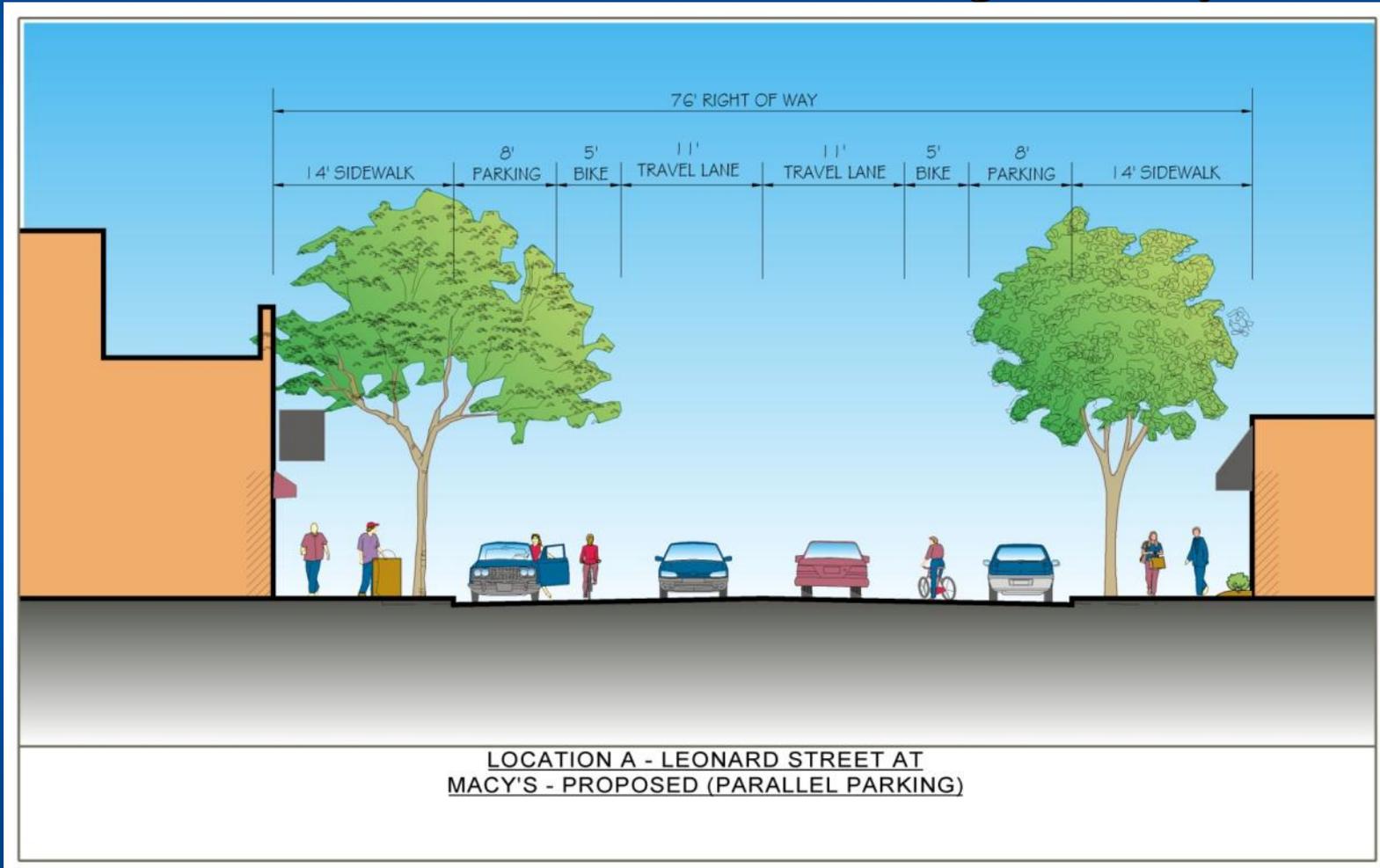
Cross Sections: Proposed at Bruegger's



LOCATION B - LEONARD STREET AT
BRUEGGER'S BAGEL - PROPOSED

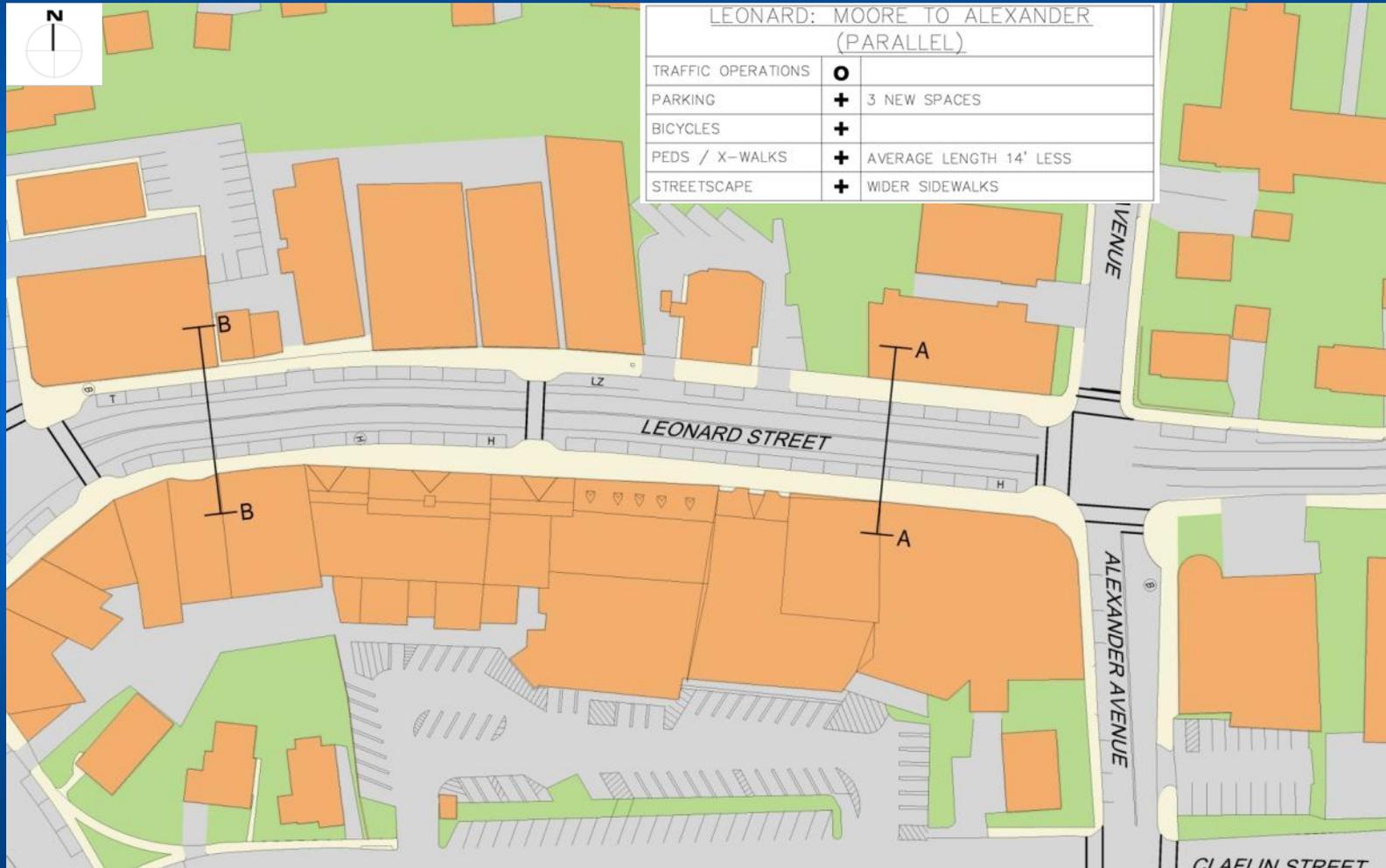
Leonard St. – Moore St. to Alexander Ave.

Cross Sections: Parallel Parking at Macy's



Leonard St. – Moore St. to Alexander Ave.

Proposed Conditions: Parallel Parking Analysis



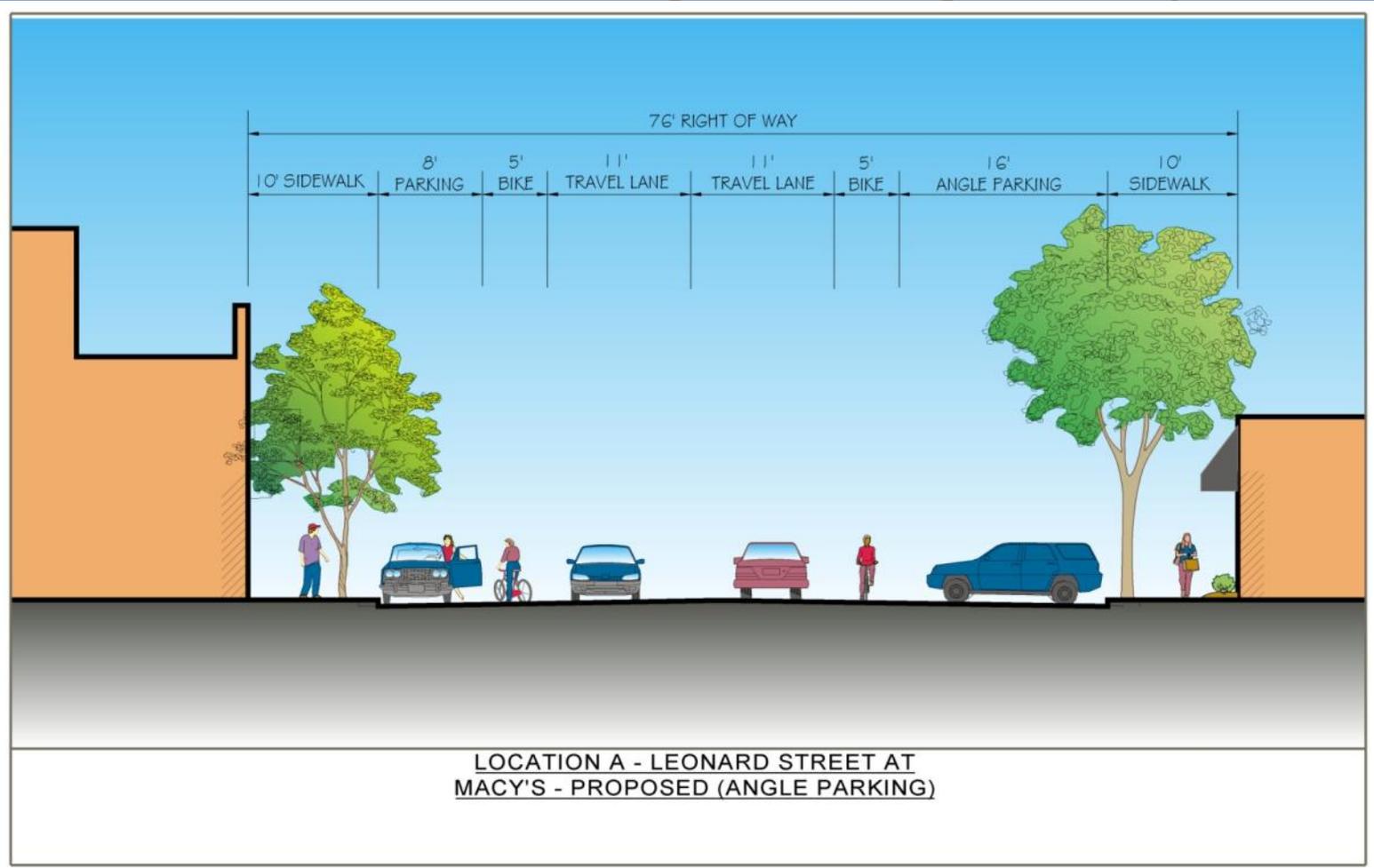
Leonard St. – Moore St. to Alexander Ave.

Proposed Conditions: Angle Parking



Leonard St. – Moore St. to Alexander Ave.

Cross Sections: Angle Parking at Macy's



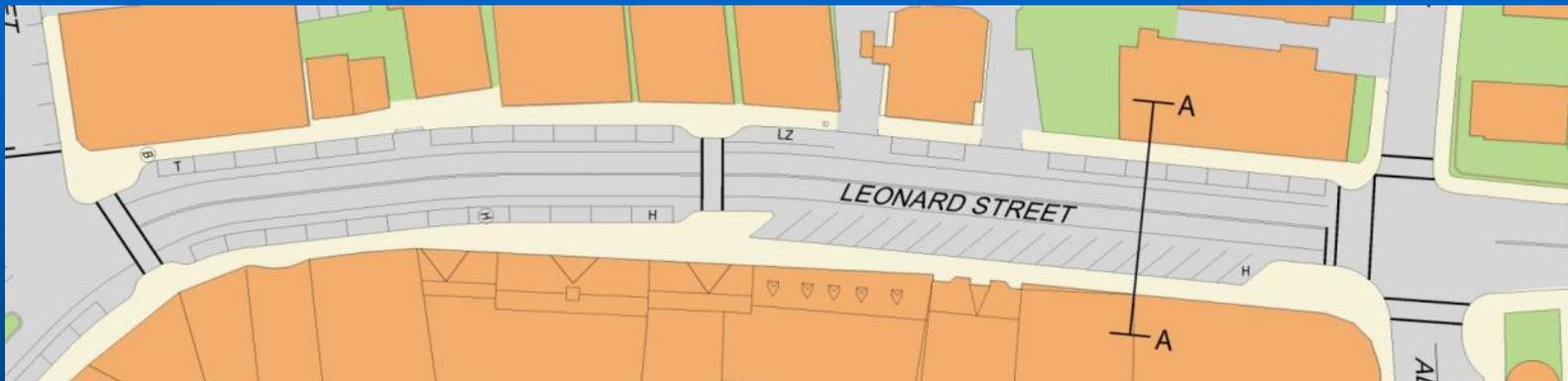
Leonard St. – Moore St. to Alexander Ave.

Proposed Conditions: Angle Parking Analysis



Leonard St. – Moore St. to Alexander Ave.

Summary/Discussion



Concord Ave. – Leonard St. to Pleasant St. Bird's Eye View

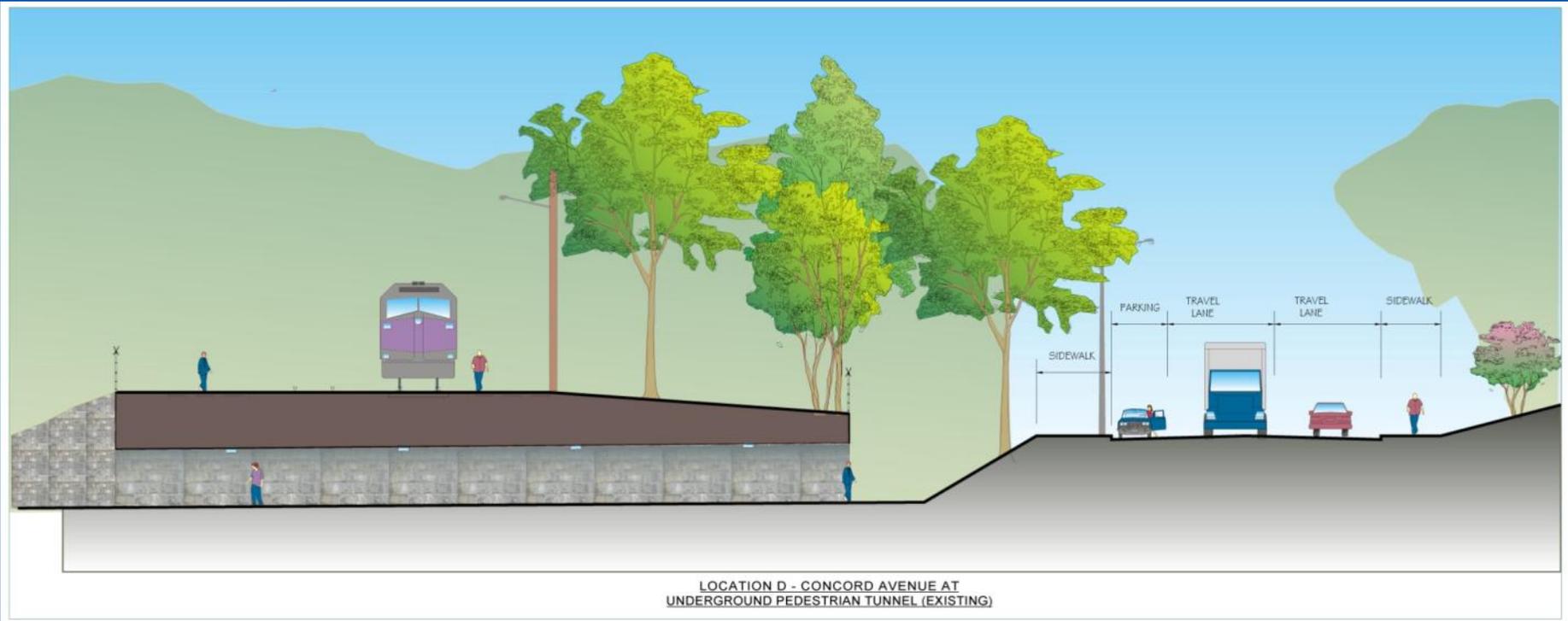


Concord Ave. – Leonard St. to Pleasant St.

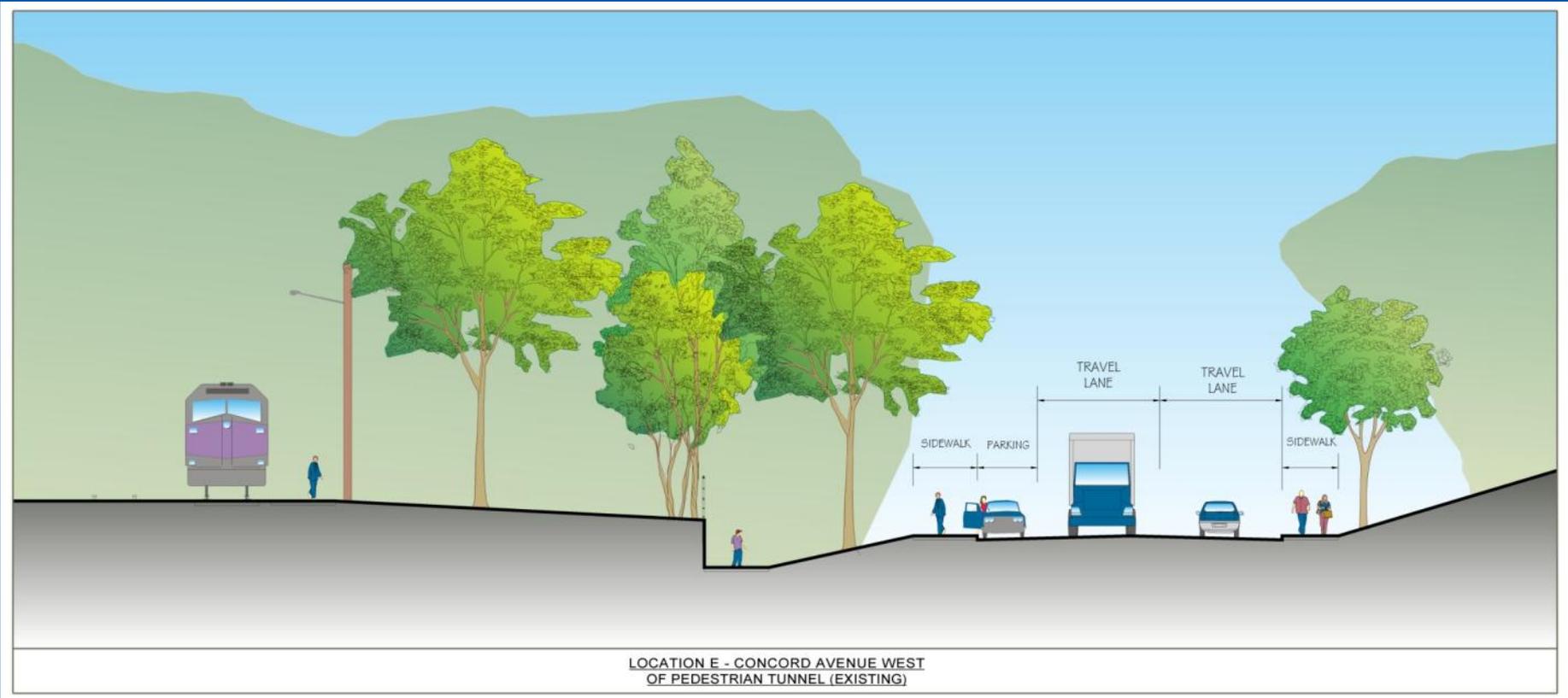
Existing Conditions



Concord Ave. – Leonard St. to Pleasant St. Existing Cross Sections at Pedestrian Path



Concord Ave. – Leonard St. to Pleasant St. Existing Cross Sections West of Pedestrian Path

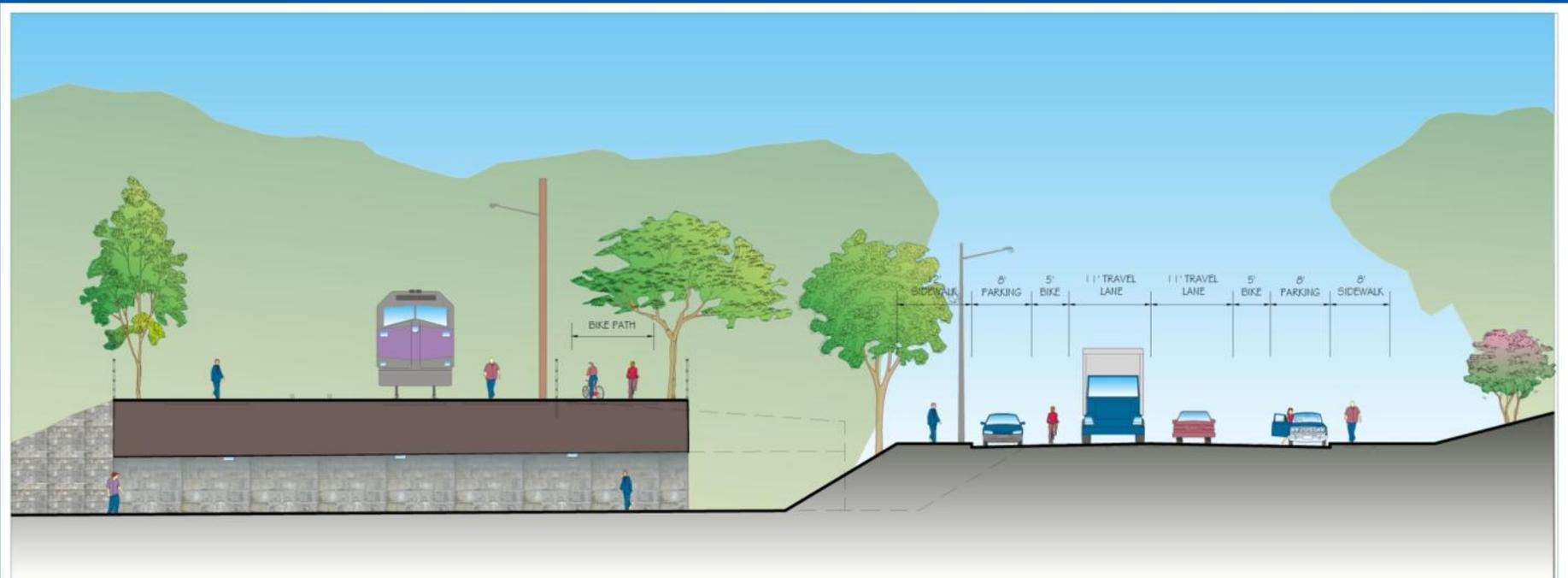


Concord Ave. – Leonard St. to Pleasant St.

Proposed Conditions: Widened with Parking

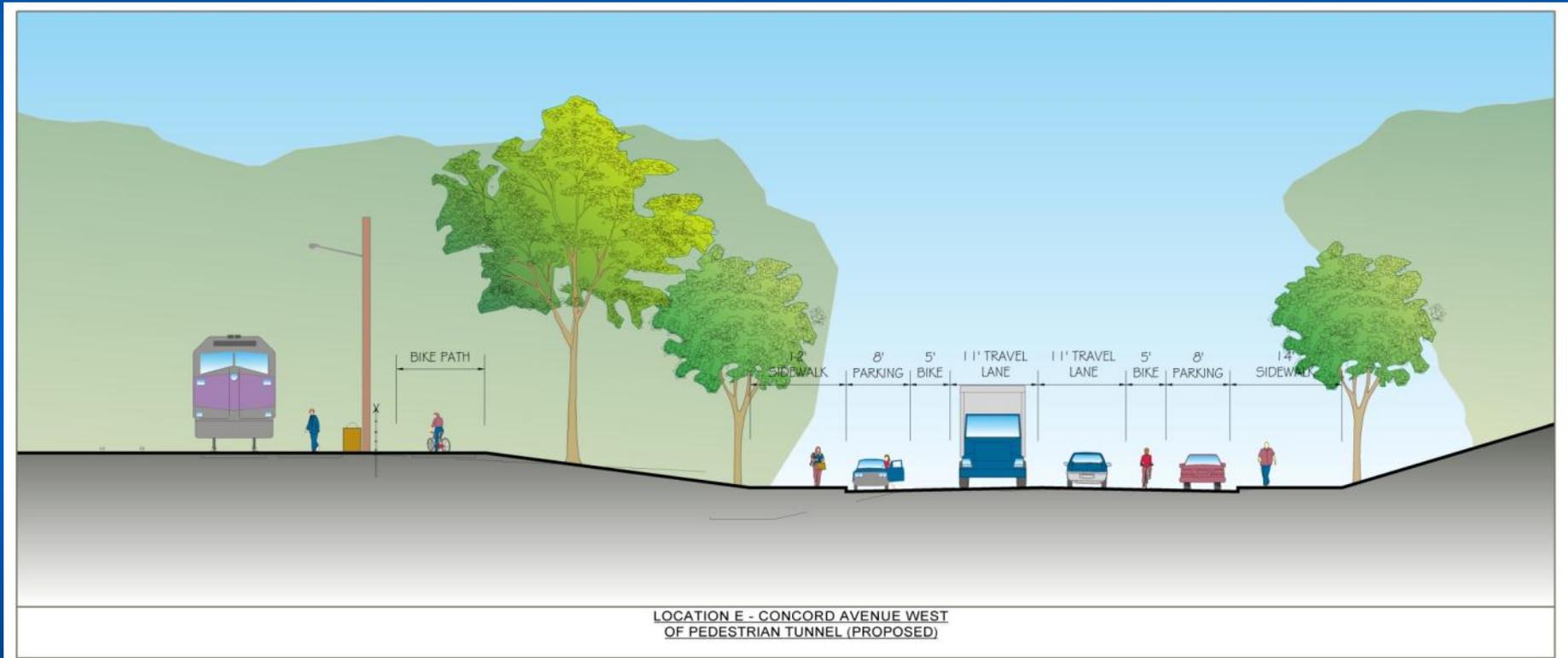


Concord Ave. – Leonard St. to Pleasant St. Cross Sections at Pedestrian Path



LOCATION D - CONCORD AVENUE AT
UNDERGROUND PEDESTRIAN TUNNEL (PROPOSED)

Concord Ave. – Leonard St. to Pleasant St. Cross Sections West of Pedestrian Path



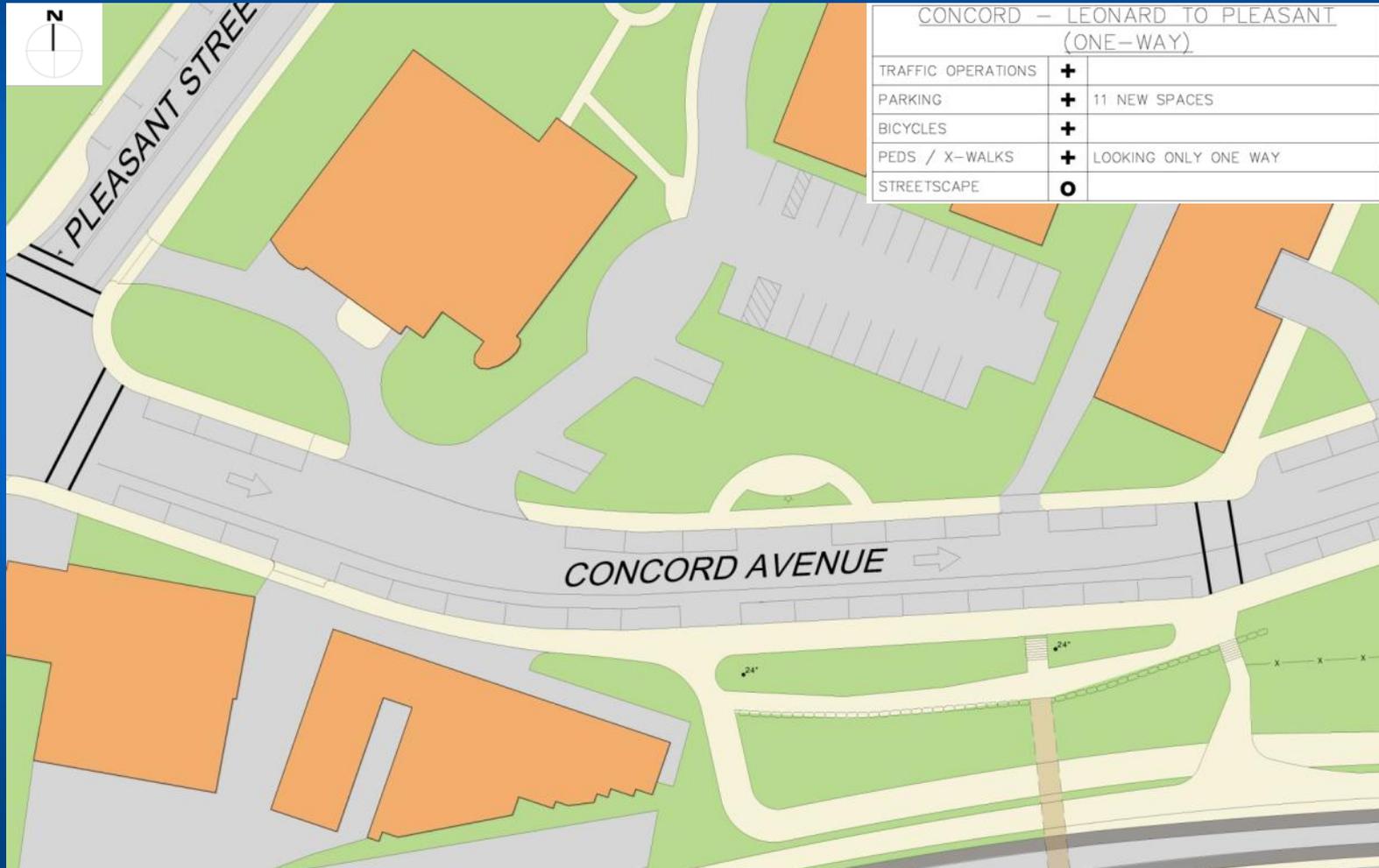
Concord Ave. – Leonard St. to Pleasant St.

Proposed Conditions: Widened with Parking Analysis



Concord Ave. – Leonard St. to Pleasant St.

Proposed Conditions: One-Way Travel

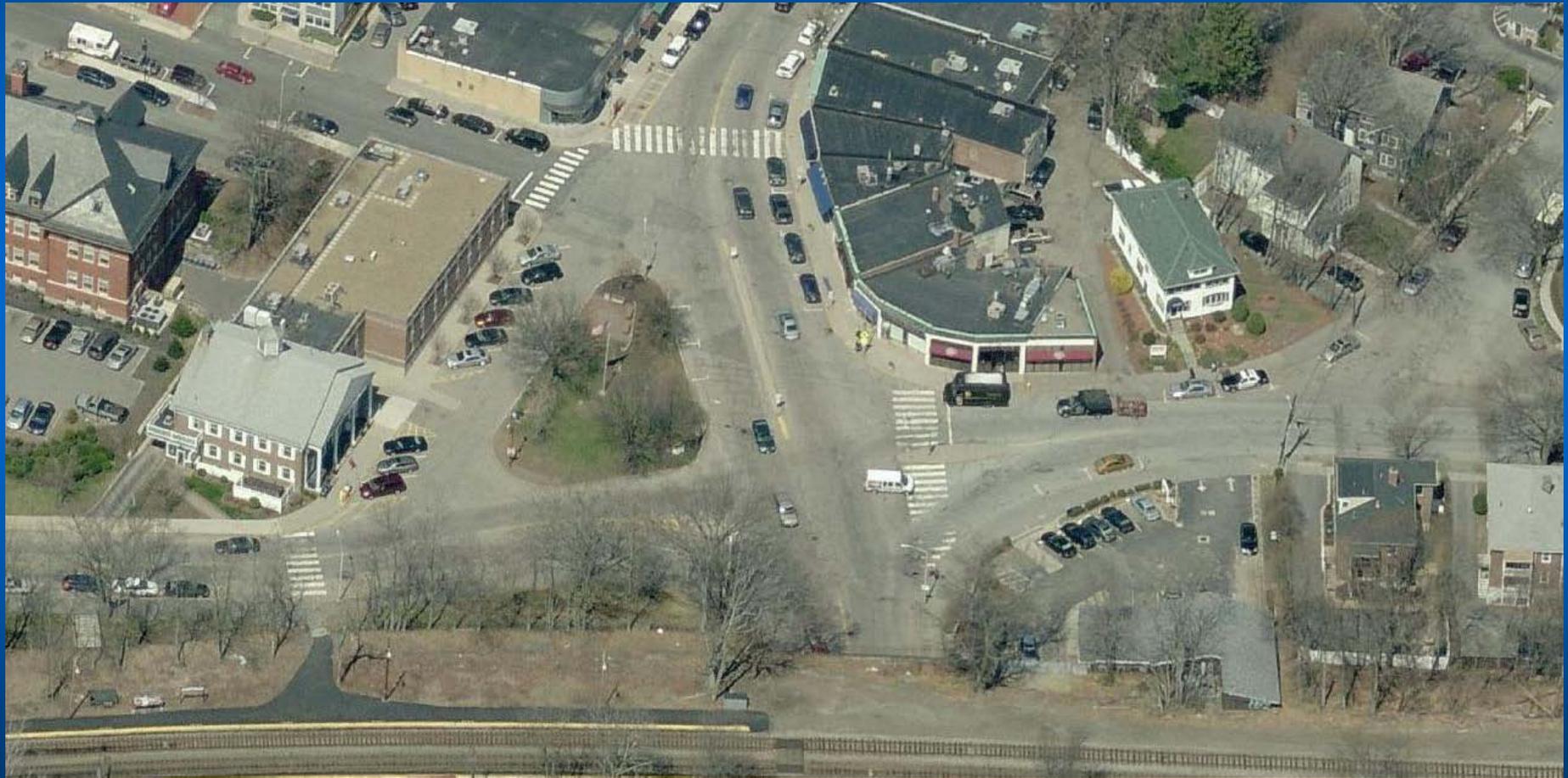


Concord Ave. – Leonard St. to Pleasant St.

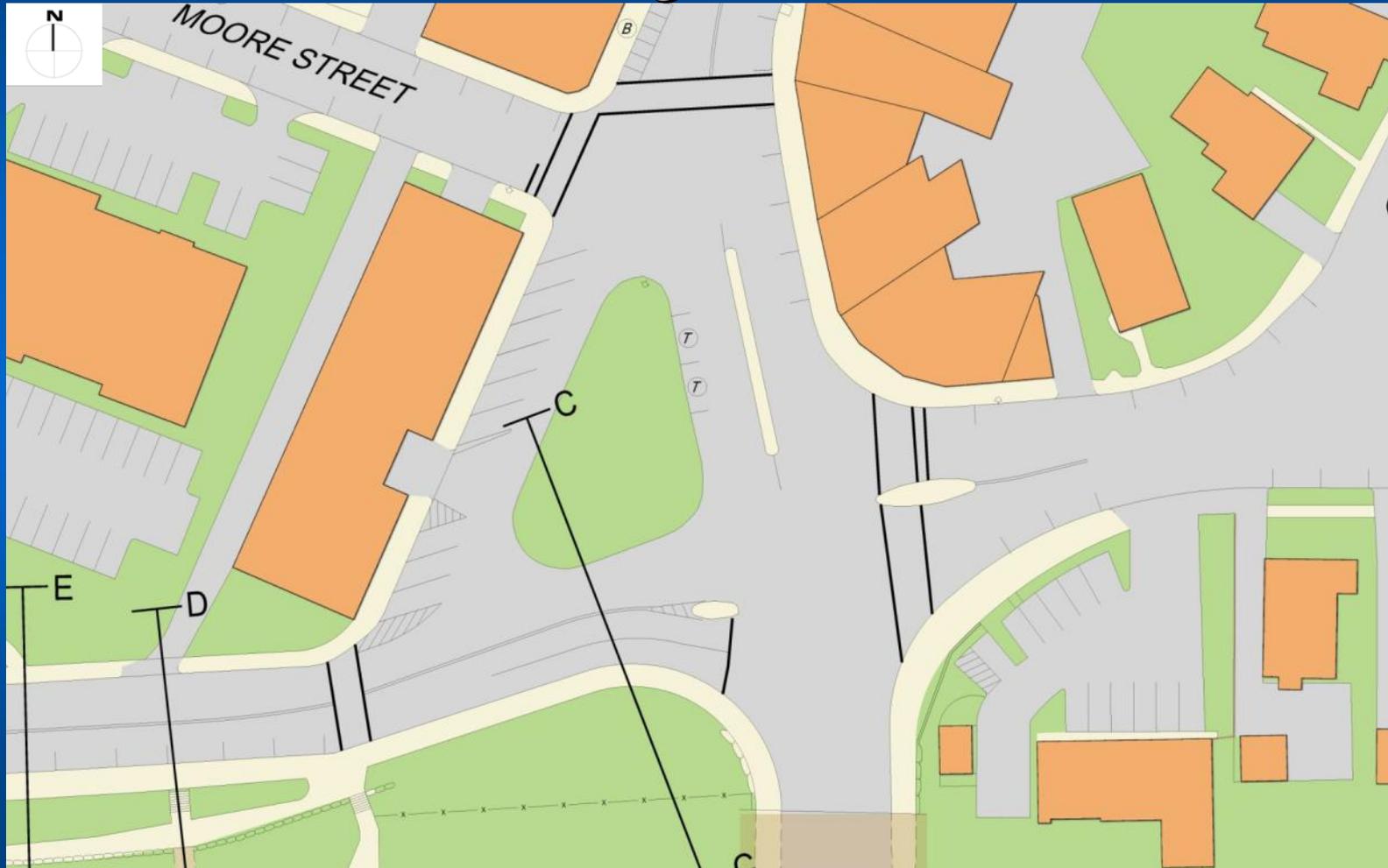
Summary/Discussion



Leonard St. / Concord Ave. / Channing Rd. Bird's Eye

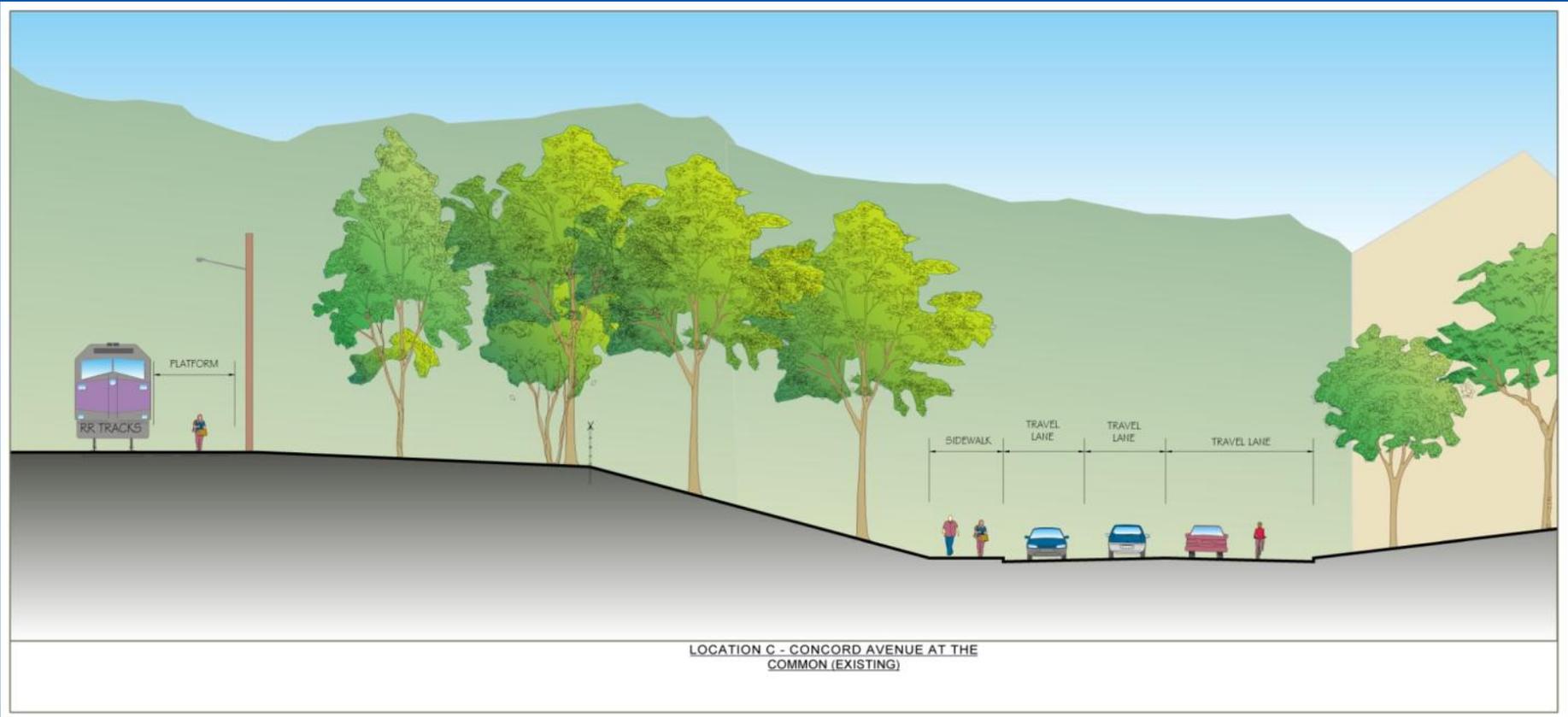


Leonard St. / Concord Ave. / Channing Rd. Existing Conditions



Leonard St. / Concord Ave. / Channing Rd.

Existing Cross Section: at Railroad Embankment

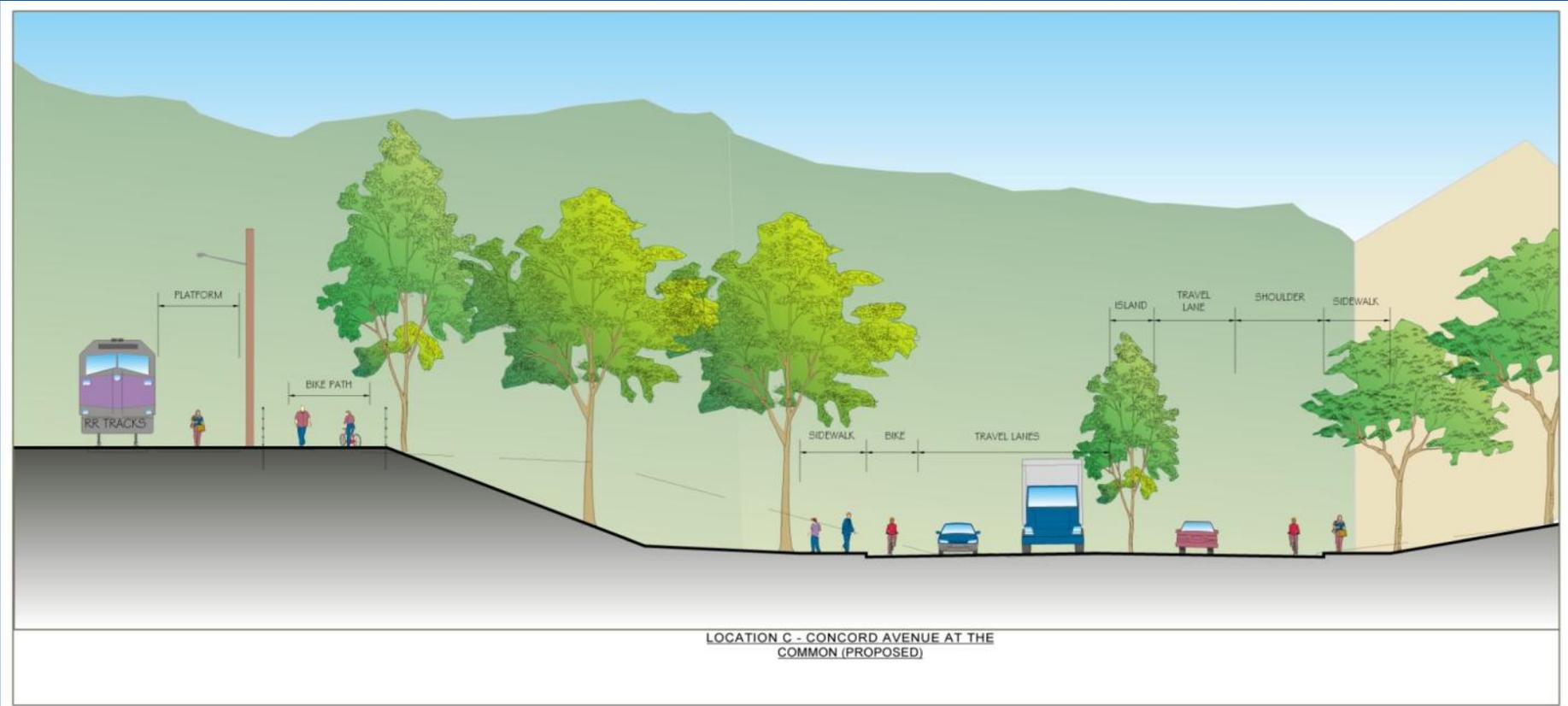


Leonard St. / Concord Ave. / Channing Rd. Proposed Conditions: Enhanced Intersection



Leonard St. / Concord Ave. / Channing Rd.

Cross Section: at Railroad Embankment



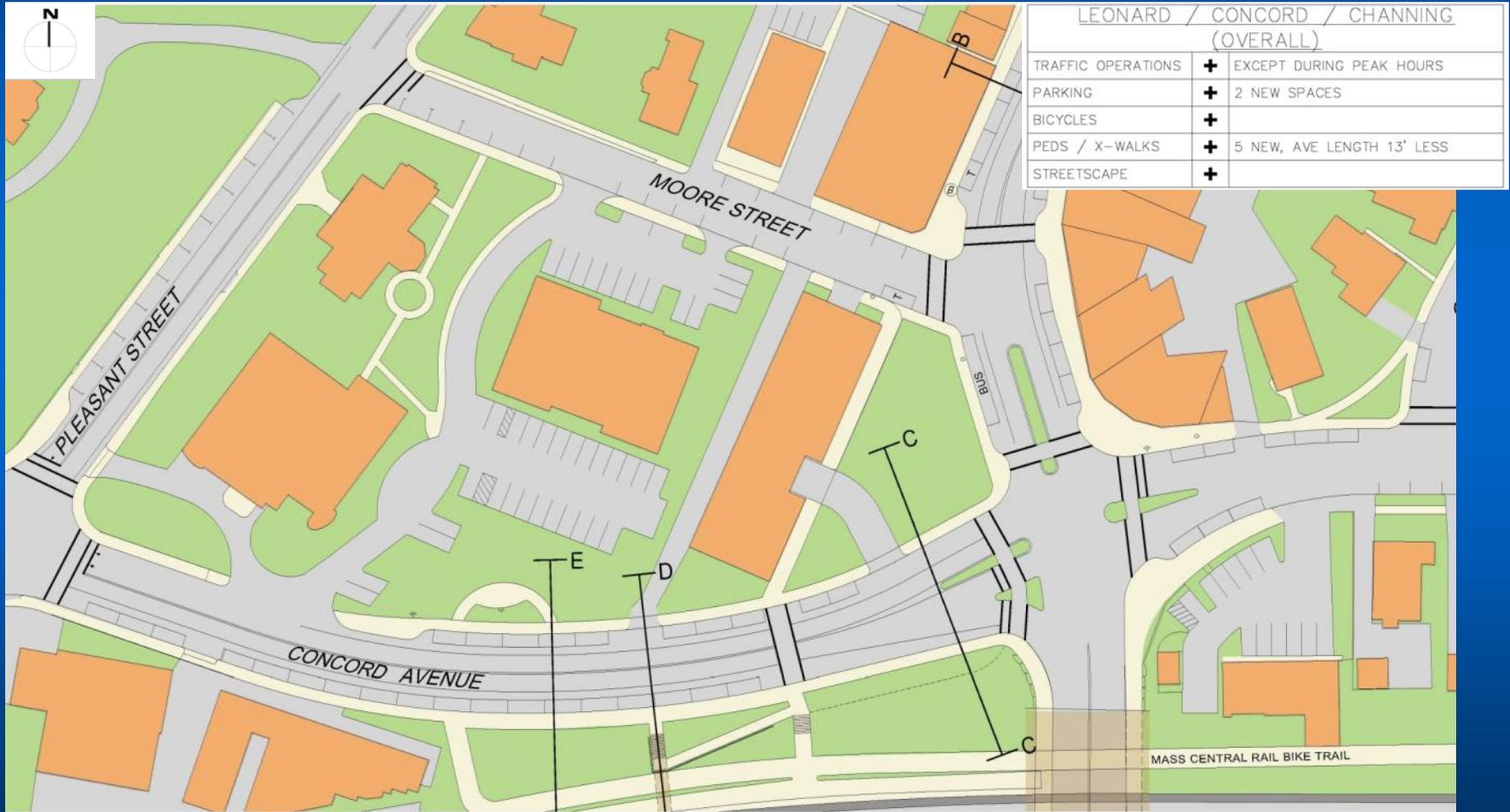
Leonard St. / Concord Ave. / Channing Rd.

Proposed Conditions: Enhanced Intersection Analysis



Leonard St. / Concord Ave. / Channing Rd.

Proposed Conditions: Enhanced Intersection Overall



Leonard St. / Concord Ave. / Channing Rd. Proposed Conditions: Roundabout



Leonard St. / Concord Ave. / Channing Rd. Comparison with Blanchard/Washington/Grove

Total Volumes Entering Roundabout		
	<u>AM Peak Hour</u>	<u>PM Peak Hour</u>
Blanchard/Washington/Grove	1764	2179
Concord/Leonard/Channing	2918	2653
Change	+65%	+22%

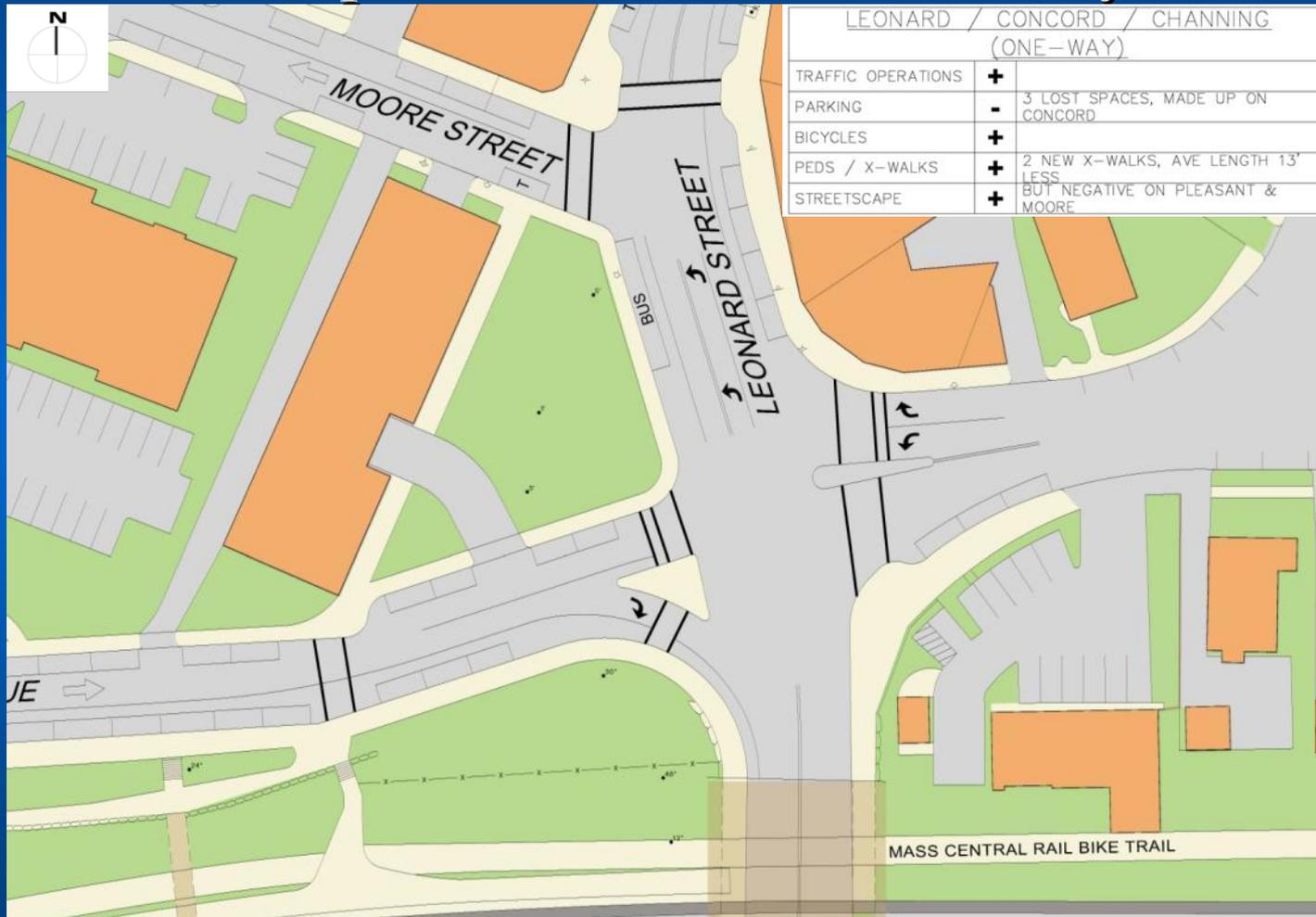
Leonard St. / Concord Ave. / Channing Rd.

Proposed Conditions: Roundabout Analysis



Leonard St. / Concord Ave. / Channing Rd.

Proposed Conditions: One-Way Pair



Leonard St. / Concord Ave. / Channing Rd.

Proposed Conditions: One-Way Pair



LEONARD / CONCORD / CHANNING (ONE-WAY PAIR)	
TRAFFIC OPERATIONS	○ + ON LEONARD, - ON MOORE, PLEASANT
PARKING	+ 6 NEW SPACES
BICYCLES	+
PEDS / X-WALKS	+
STREETSCAPE	+

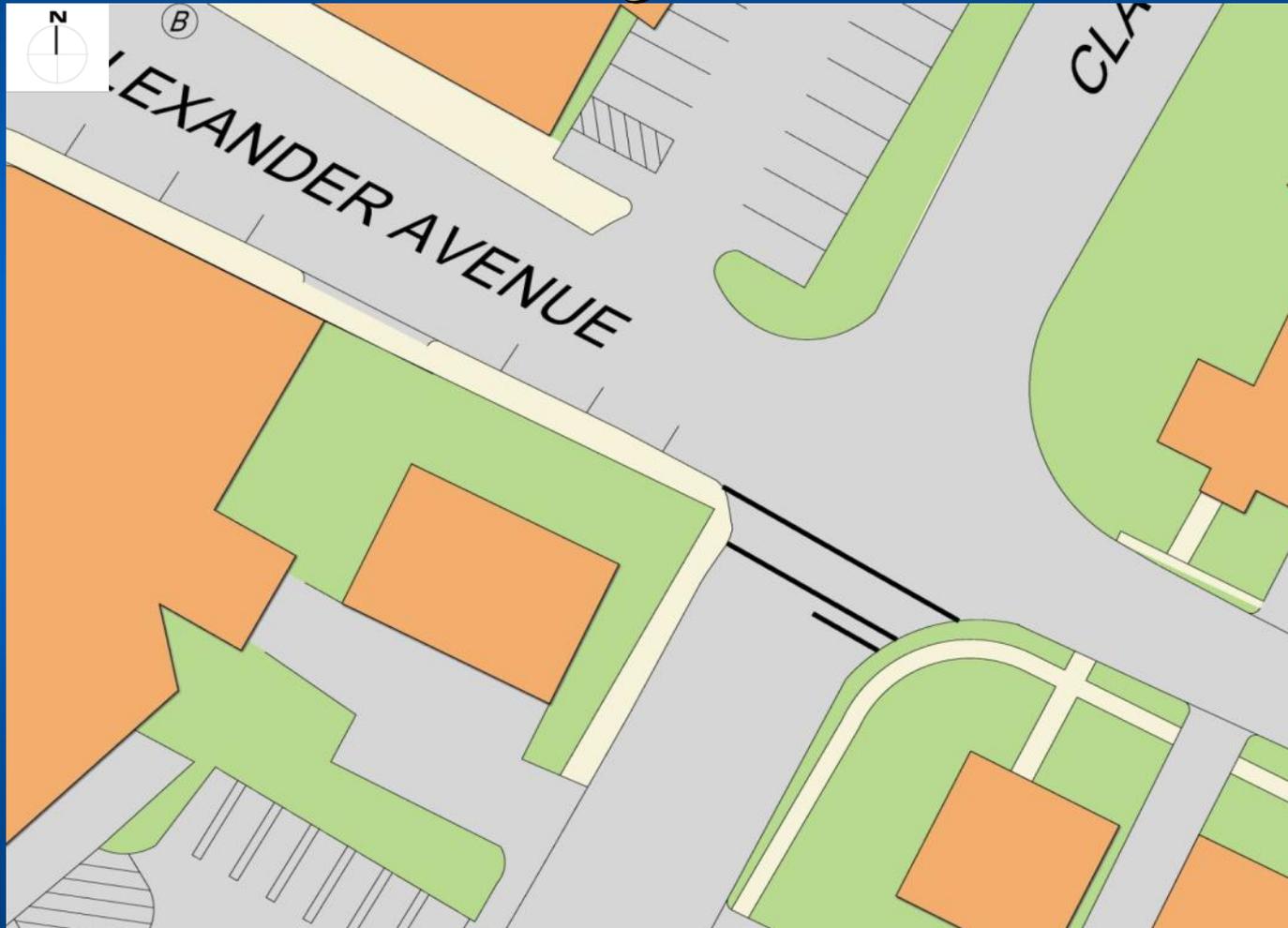
Alexander Avenue / Claflin Street

Bird's Eye



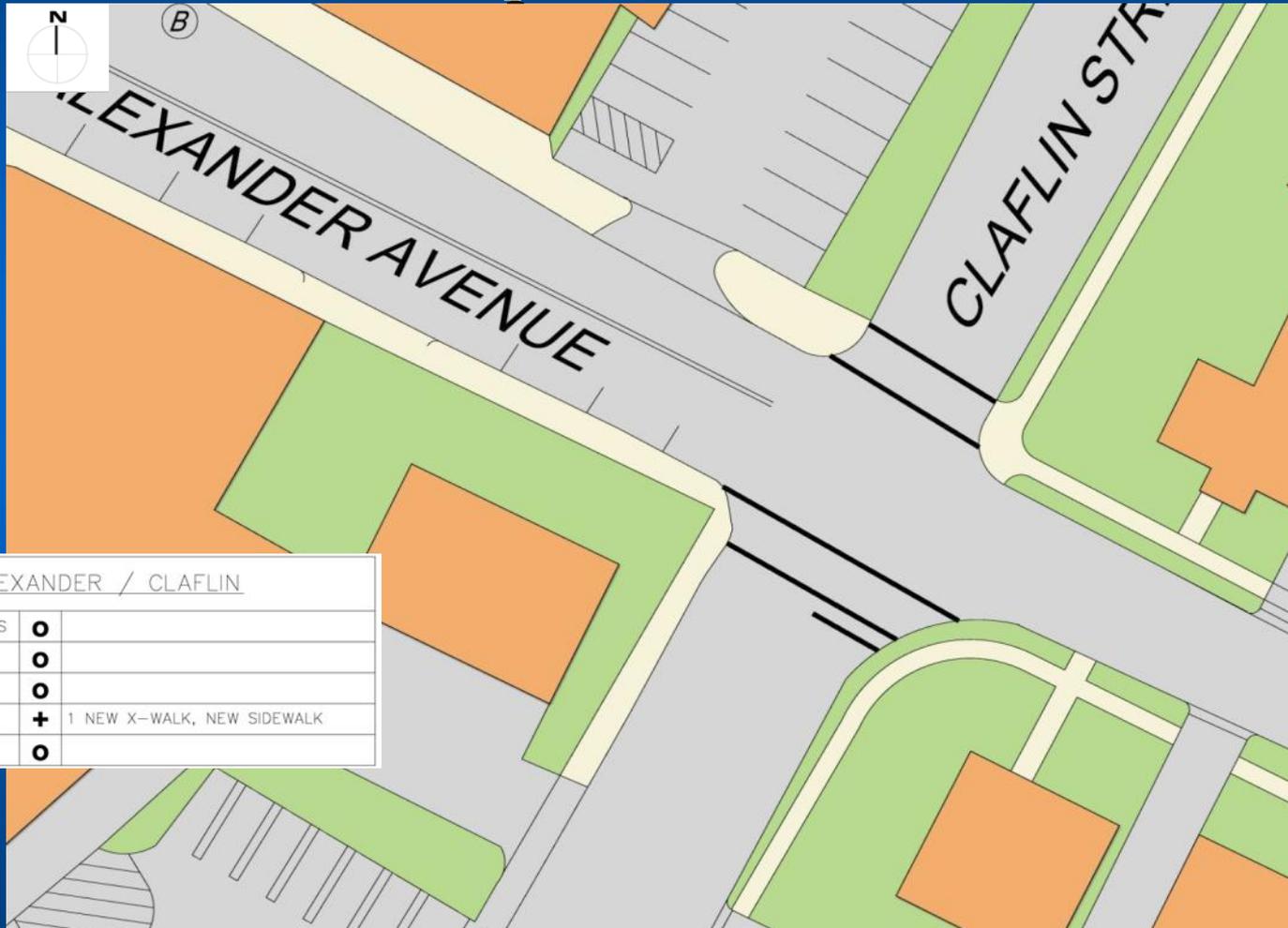
Alexander Avenue / Claflin Street

Existing Conditions



Alexander Avenue / Claflin Street

Proposed Conditions



ALEXANDER / CLAFLIN	
TRAFFIC OPERATIONS	○
PARKING	○
BICYCLES	○
PEDS / X-WALKS	+ 1 NEW X-WALK, NEW SIDEWALK
STREETScape	○

Channing Road / Claflin Street

Bird's Eye



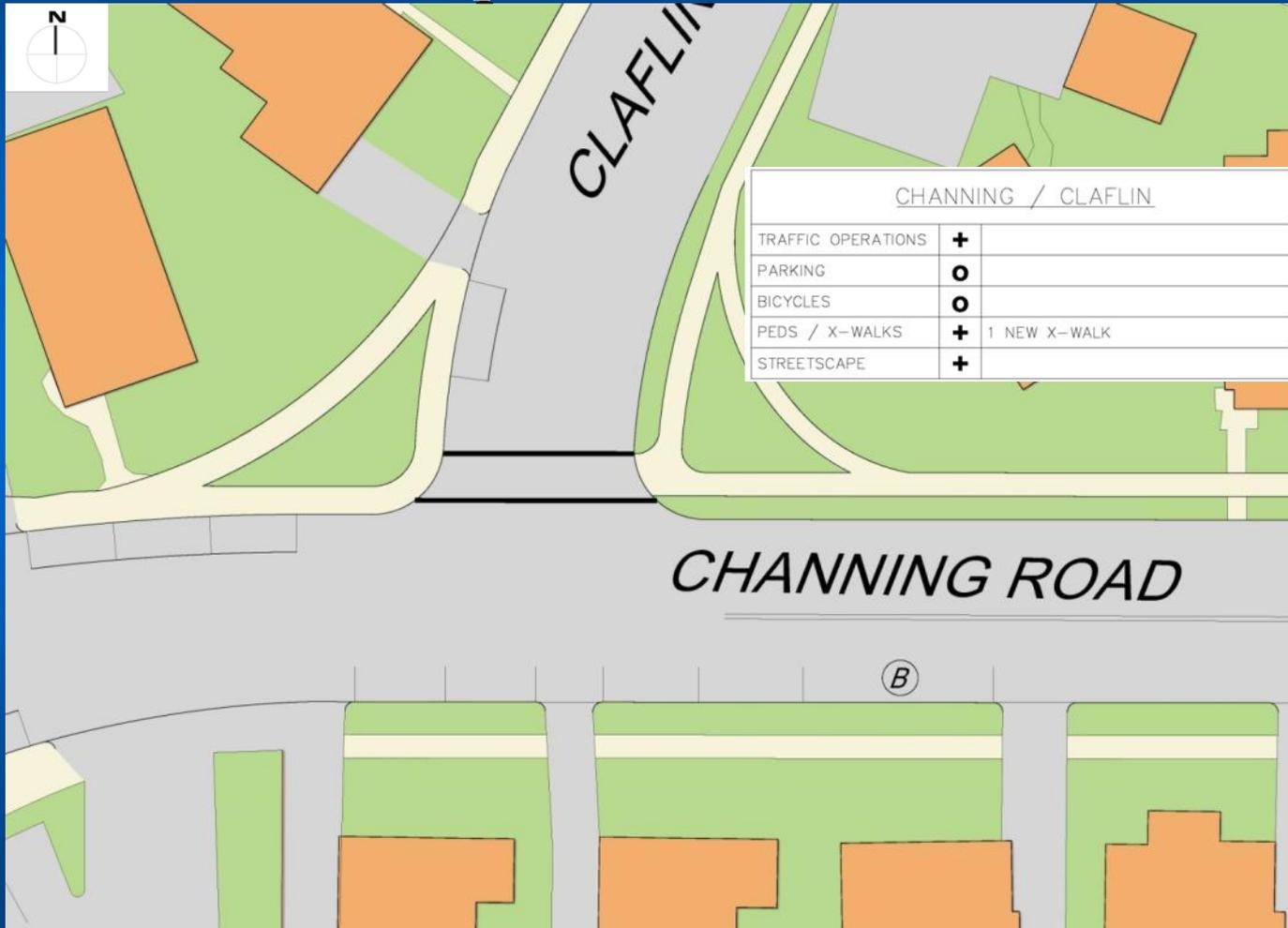
Channing Road / Claflin Street

Existing Conditions



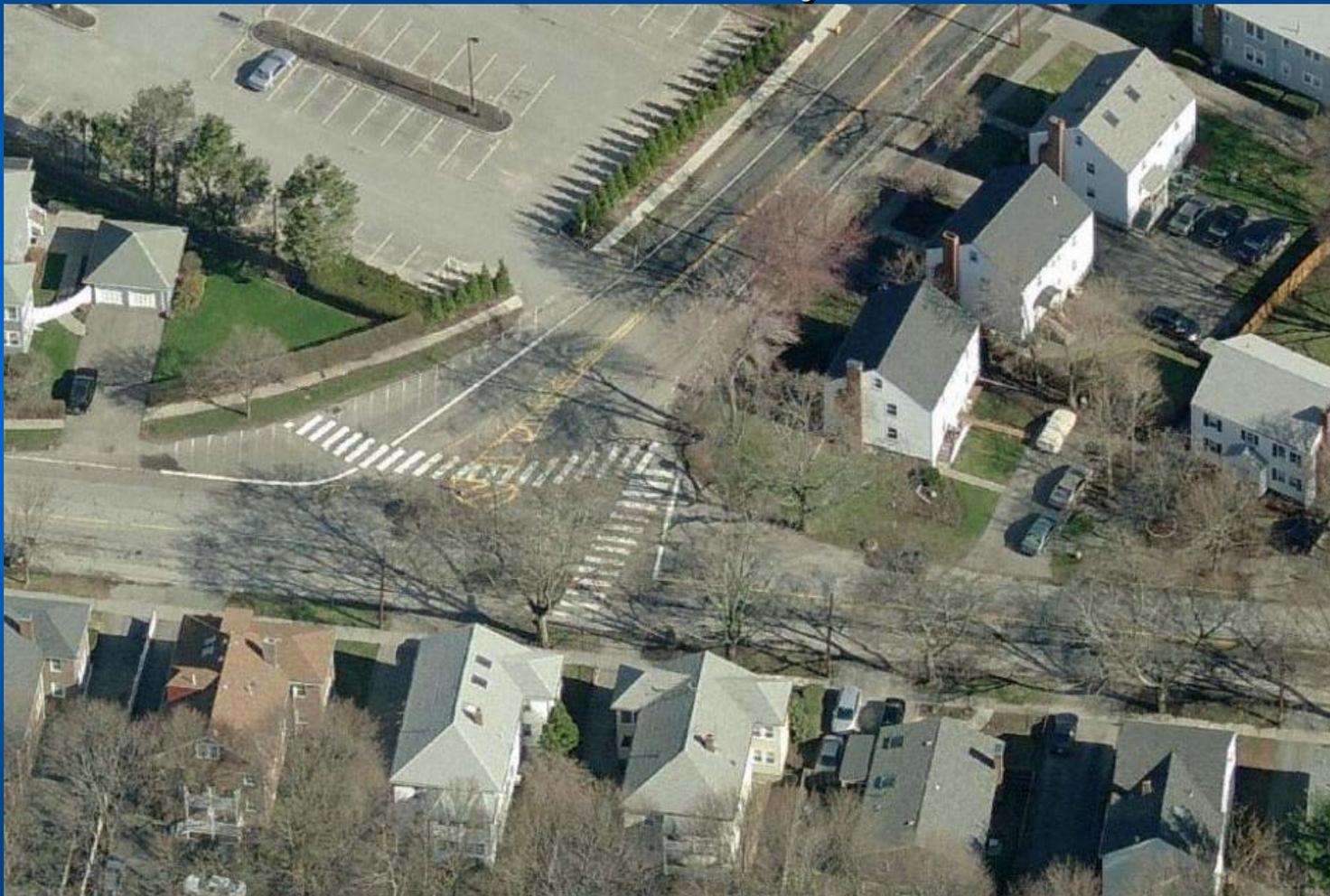
Channing Road / Claflin Street

Proposed Conditions



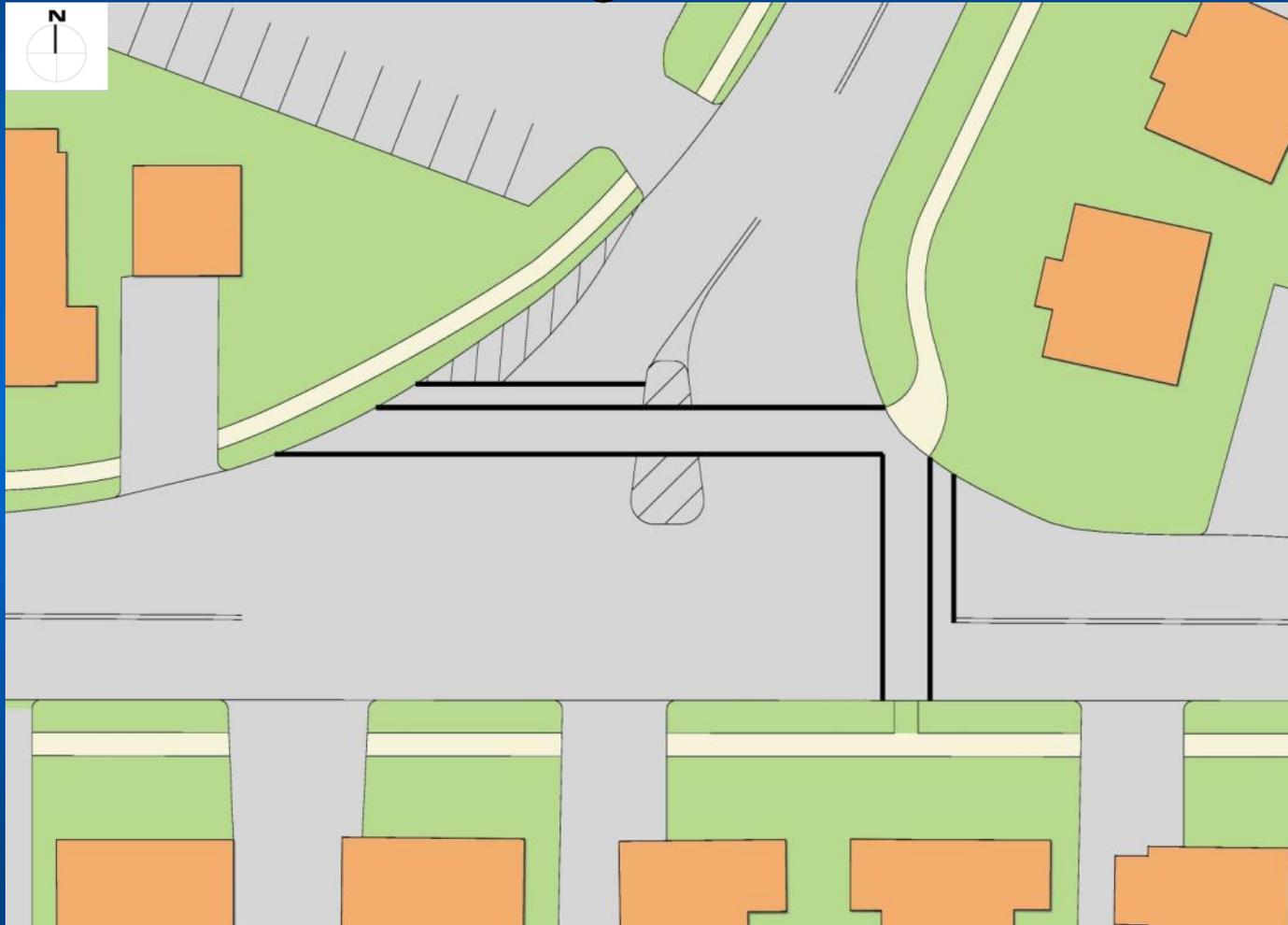
Channing Road / Cross Street

Bird's Eye



Channing Road / Cross Street

Existing Conditions

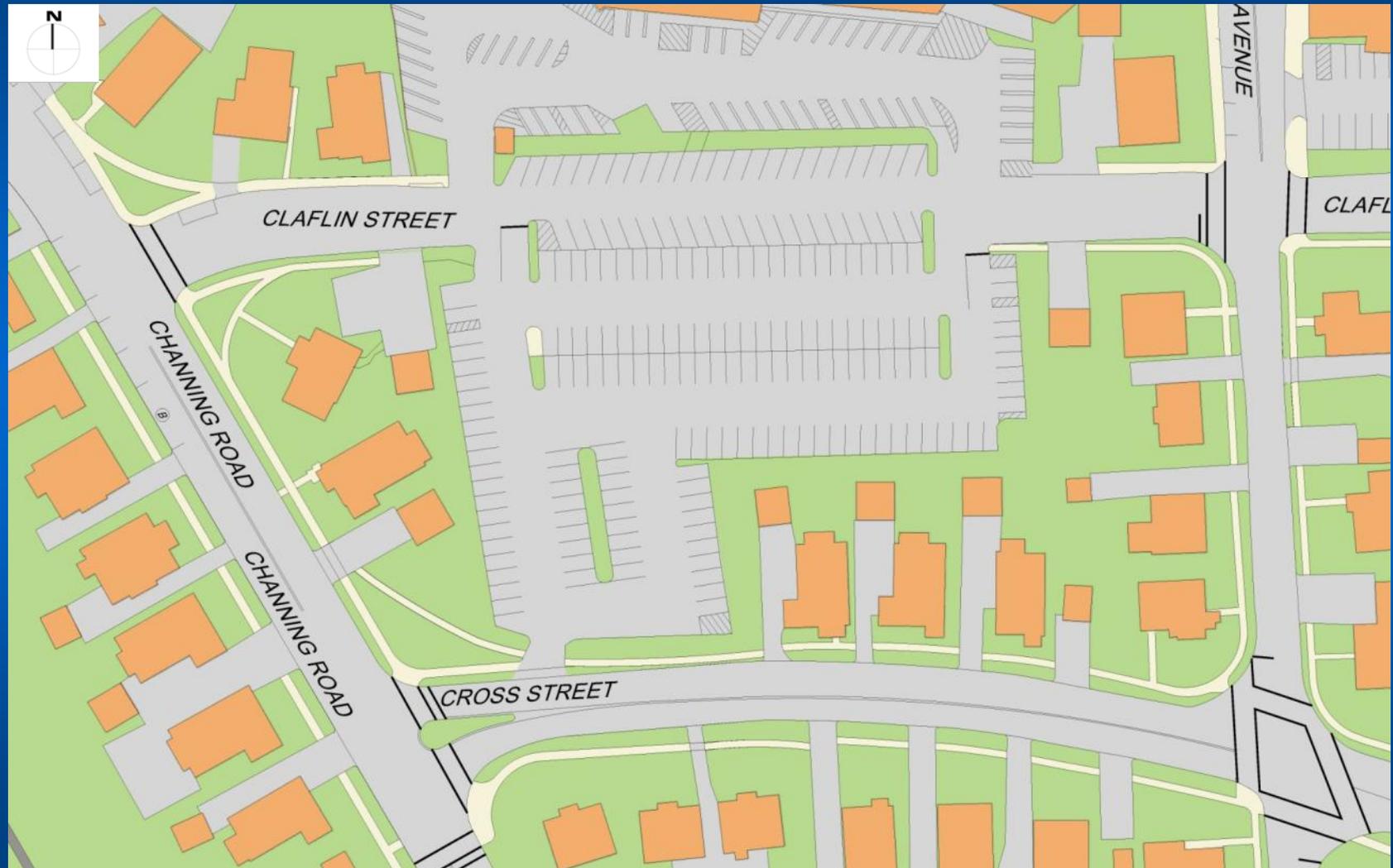


Channing Road / Cross Street

Proposed Conditions



Alexander/Claflin, Channing/Claflin, & Channing/Cross Intersections

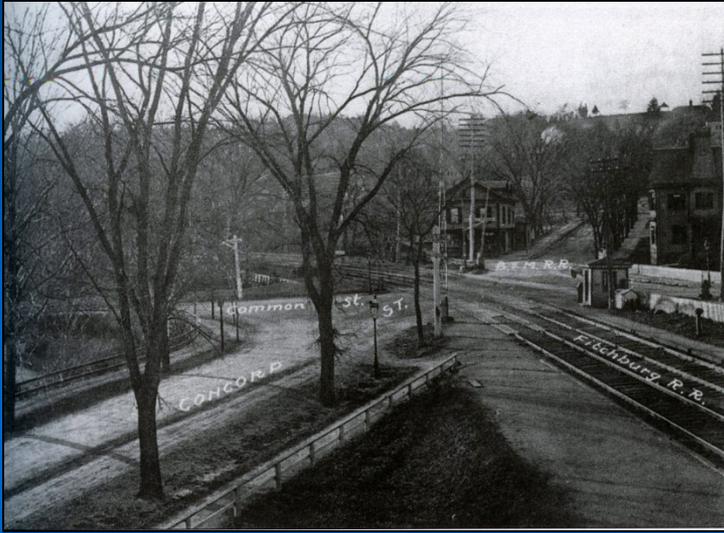


Belmont Center Historic Streetscape



Image Courtesy of the Belmont Historical Society

Belmont Center Historic Streetscape



Images Courtesy of the Belmont Historical Society

Belmont Center Existing Streetscape



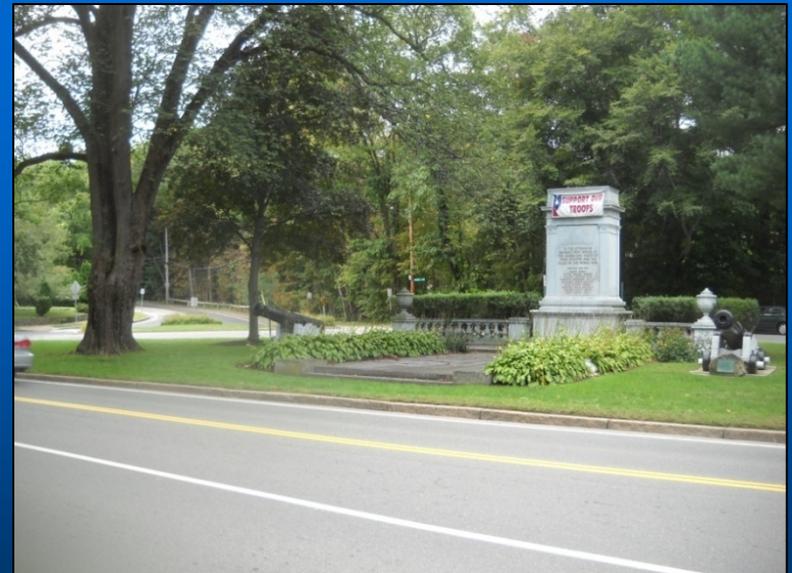
Belmont Center Existing Streetscape



Belmont Center Existing Streetscape



Belmont Center Existing Streetscape



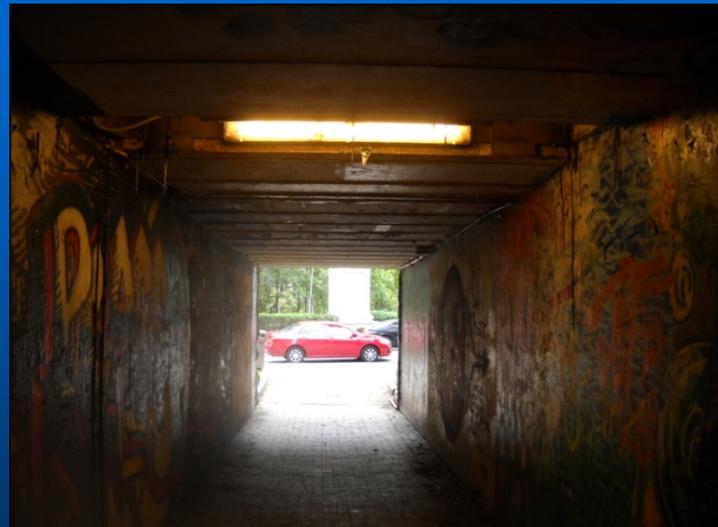
Belmont Center Existing Streetscape



Belmont Center Existing Streetscape



Belmont Center Existing Streetscape



Belmont Center Existing Streetscape



Streetscape Concepts



Streetscape Concepts



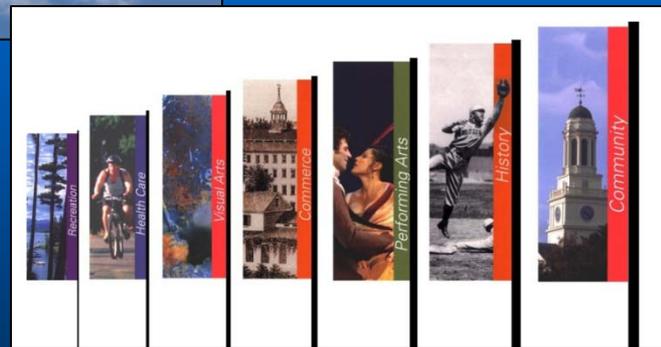
Streetscape Concepts



Streetscape Lighting



Streetscape Banners & Hanging Baskets



Streetscape Furnishings



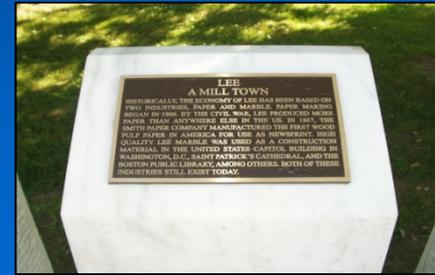
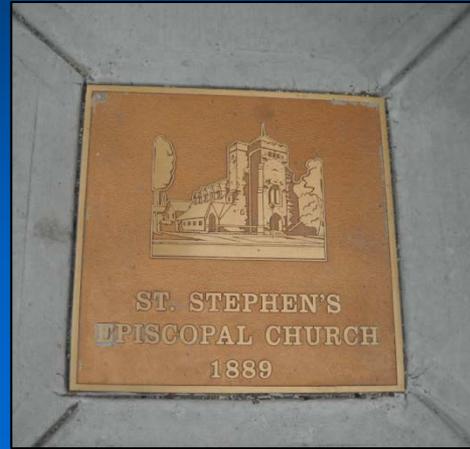
Streetscape - Bollards



Streetscape - Planters



Streetscape Enhancements



Streetscape Paving

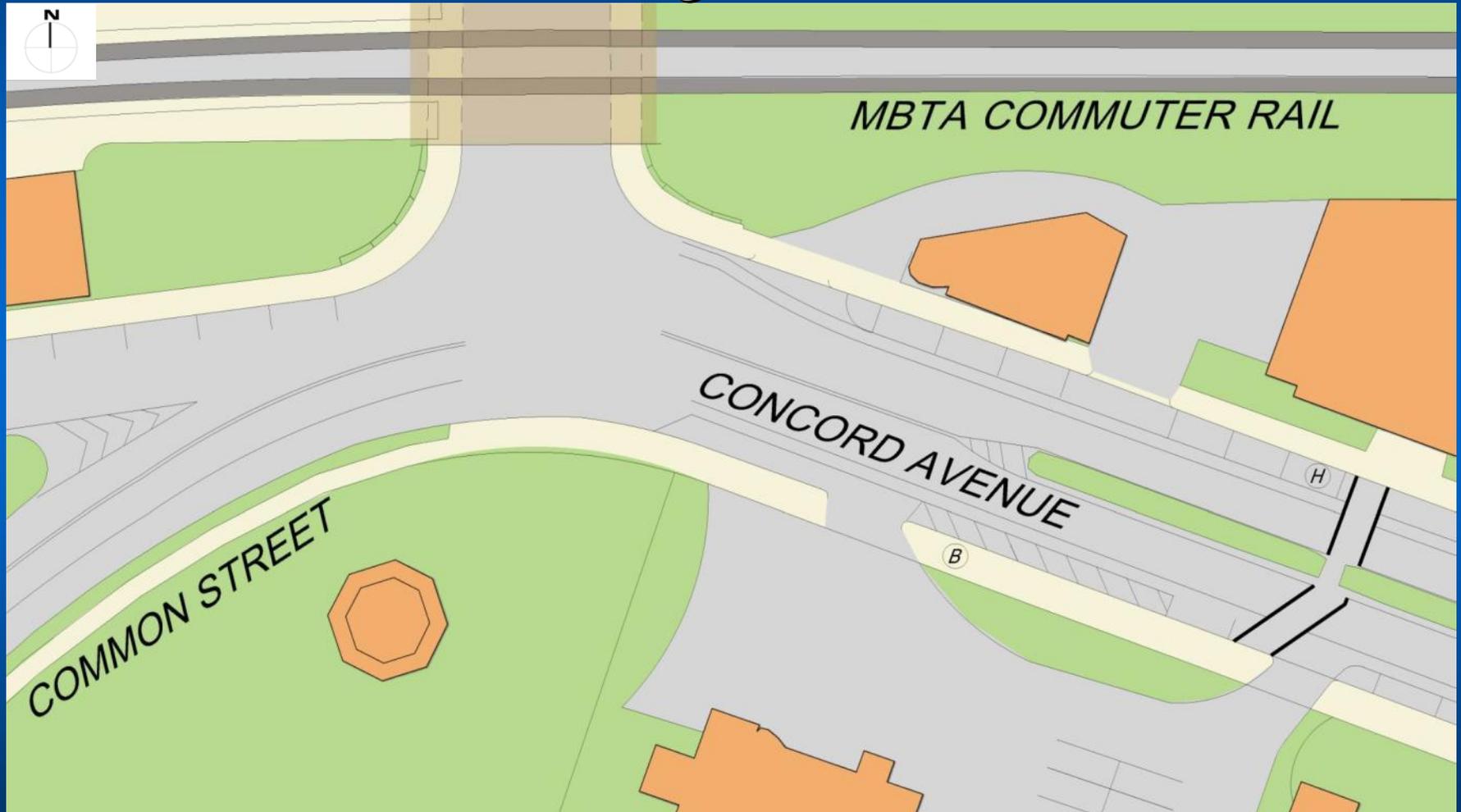


Concord Avenue / Common Street Bird's Eye



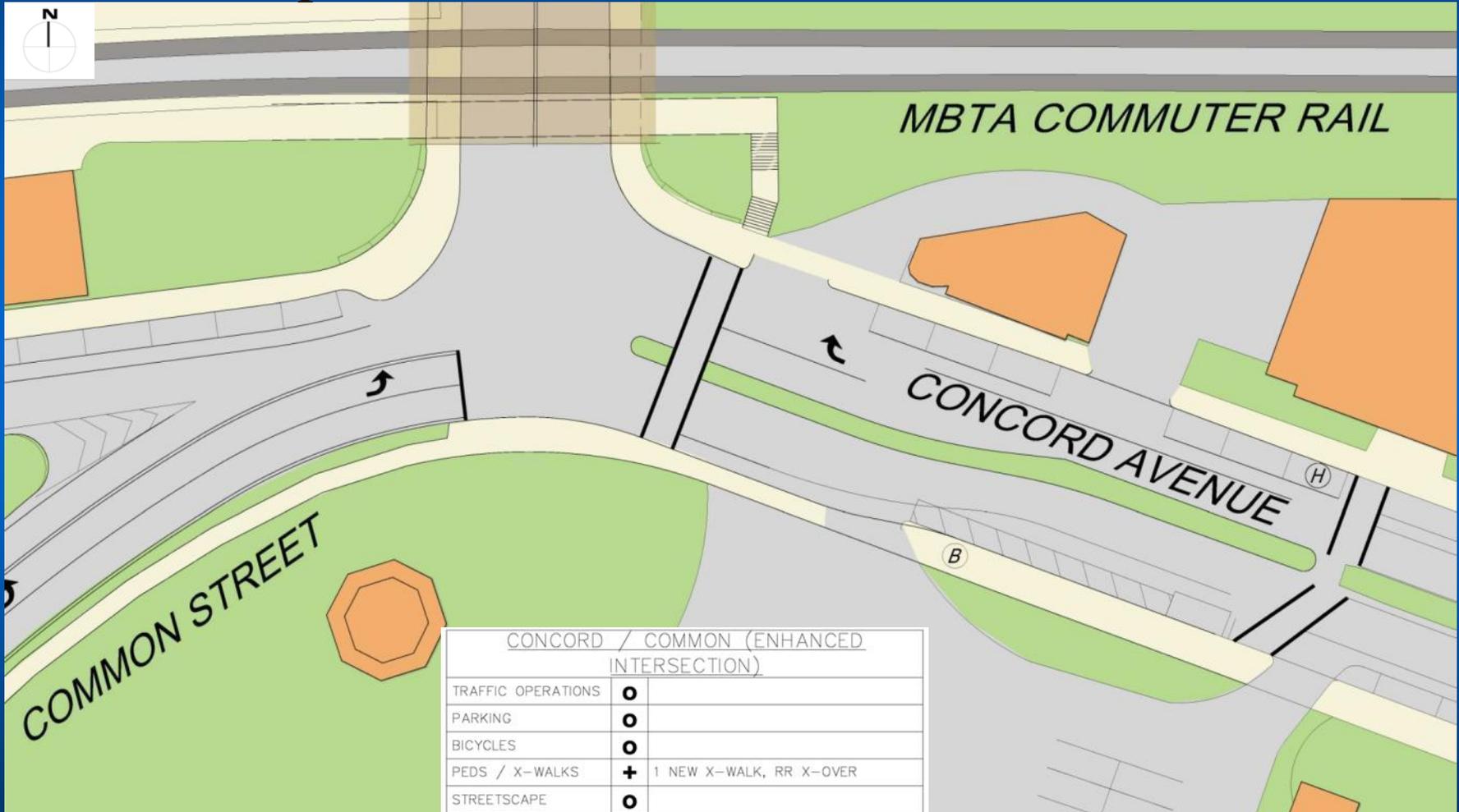
Concord Avenue / Common Street

Existing Conditions



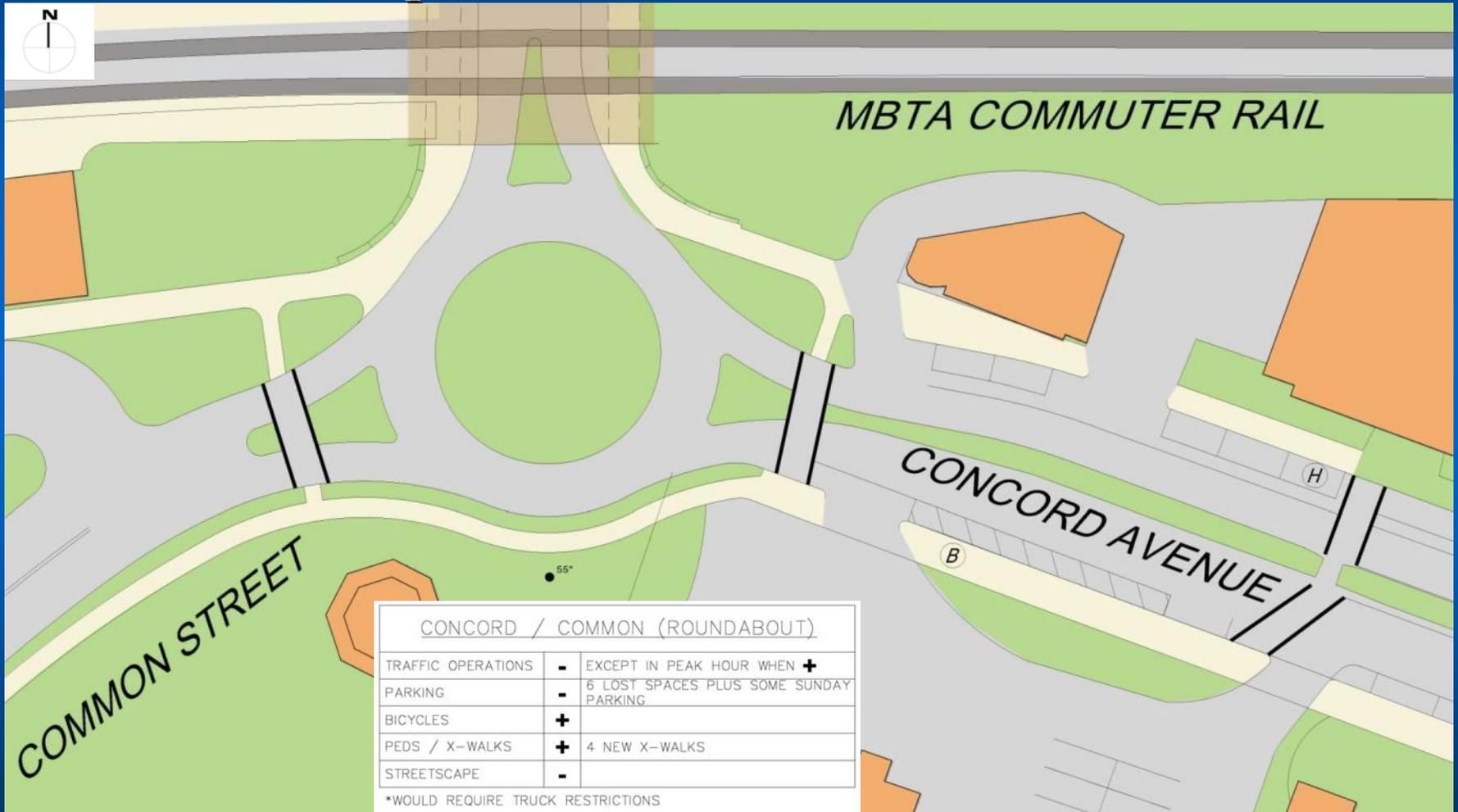
Concord Avenue / Common Street

Proposed Conditions: Enhanced Intersection

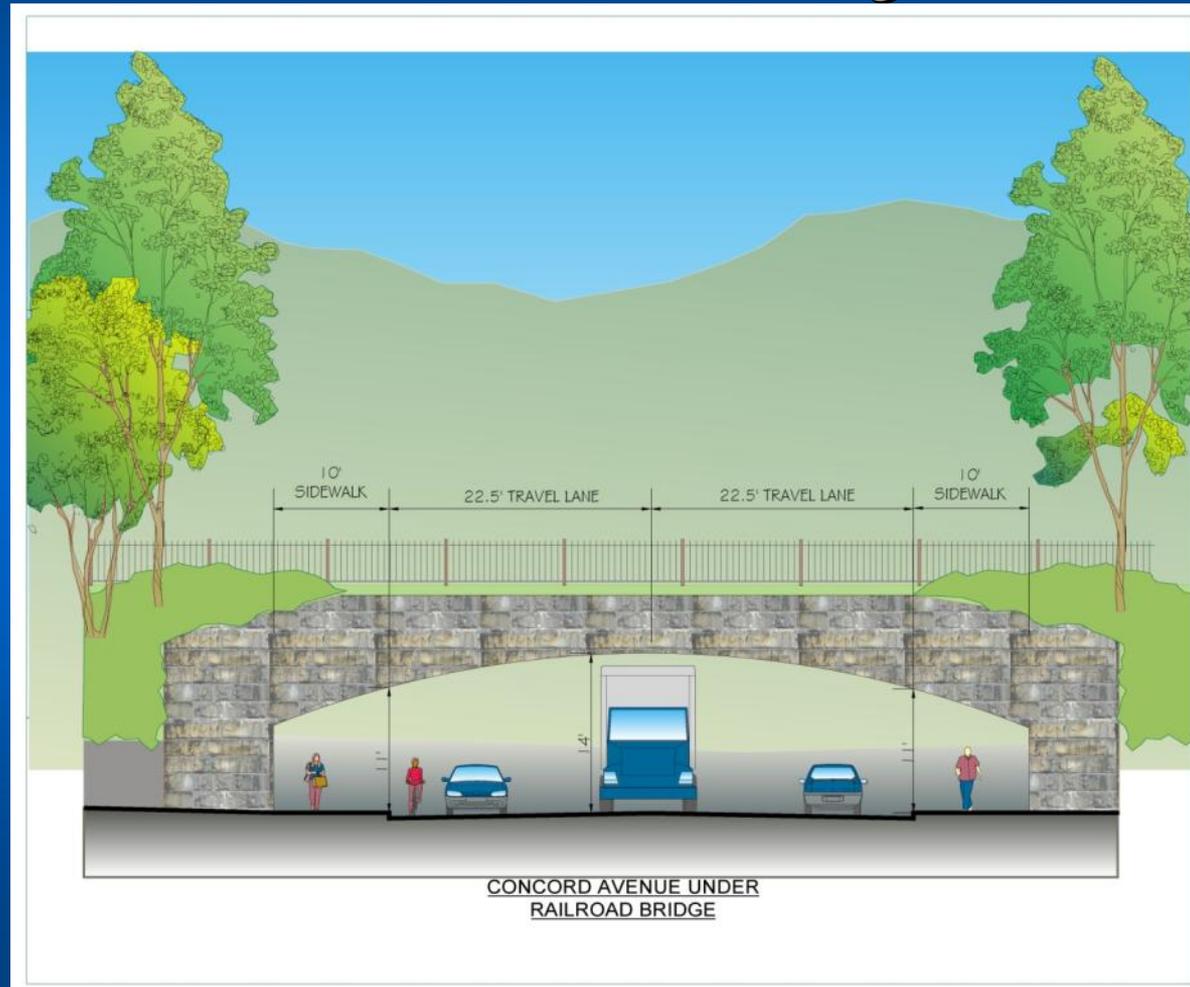


Concord Avenue / Common Street

Proposed Conditions: Roundabout

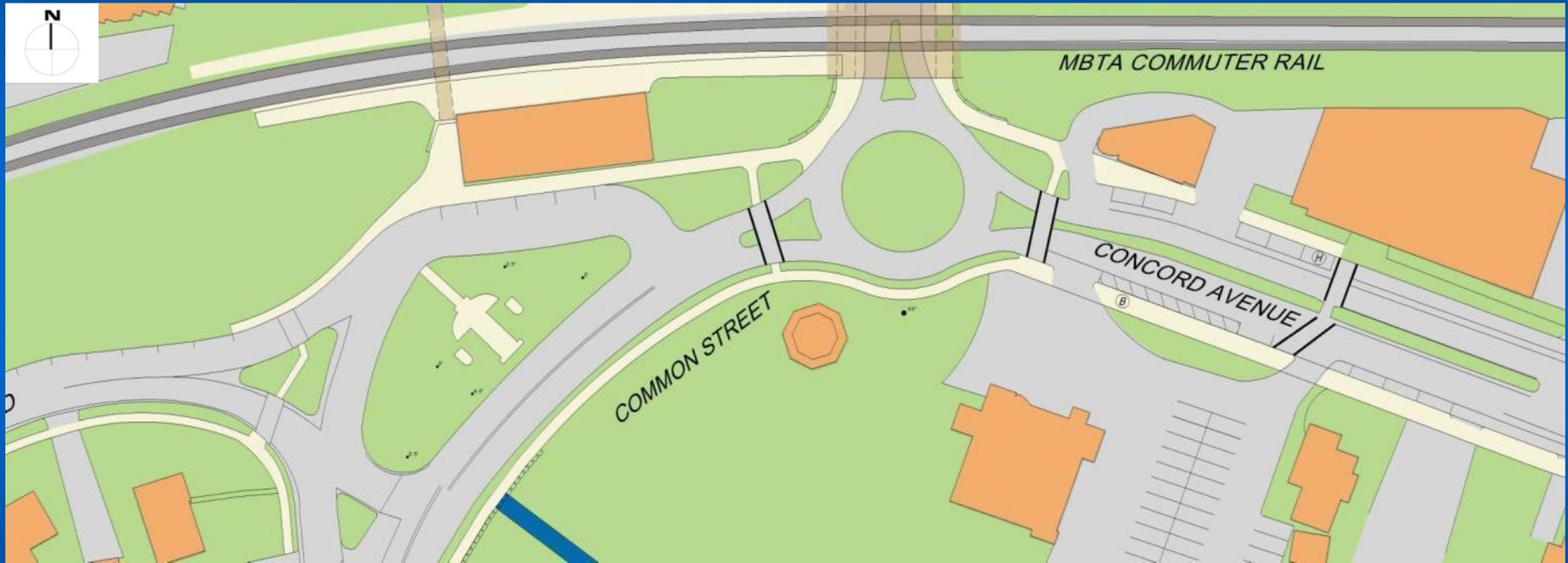


Concord Avenue / Common Street Cross Section: Bridge



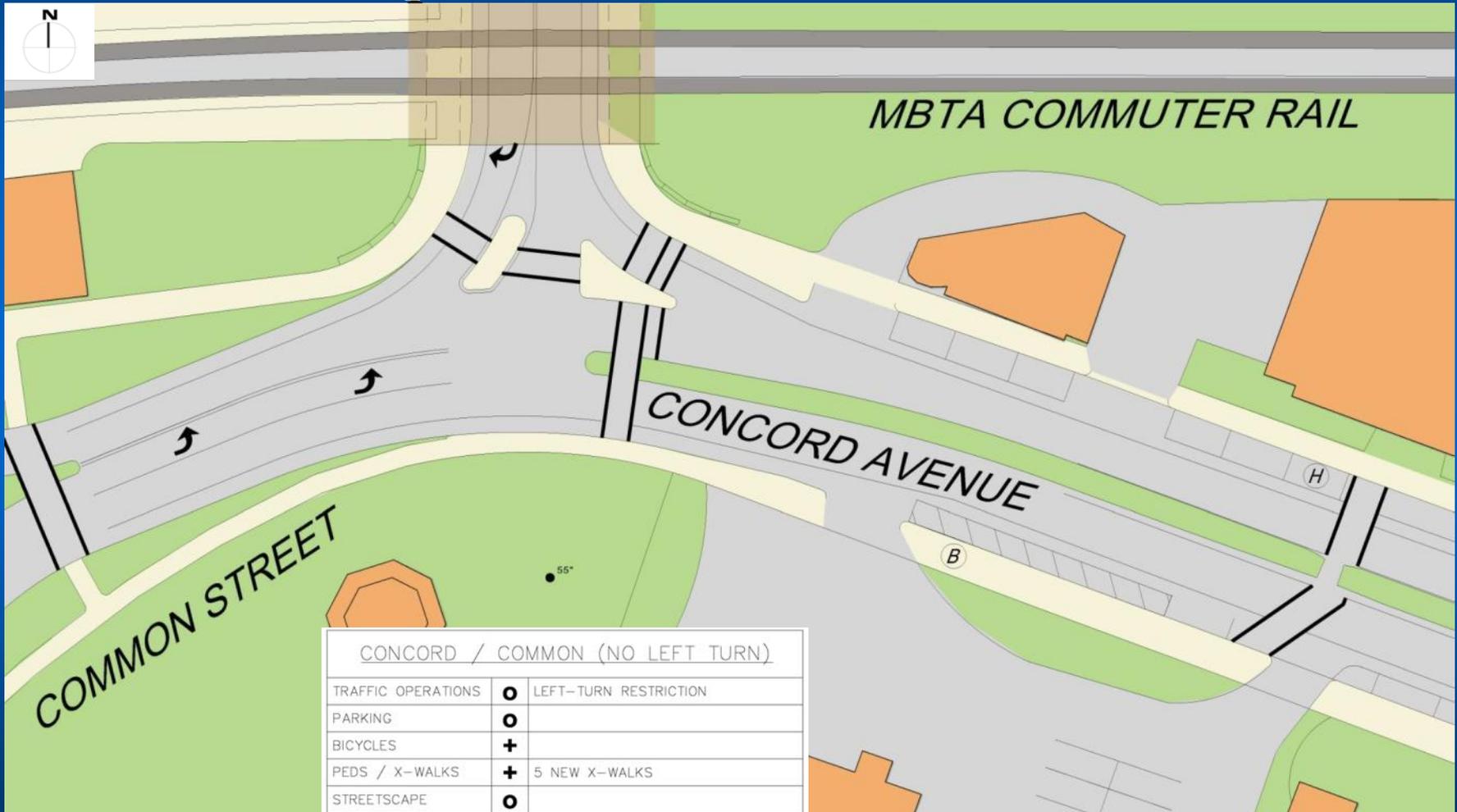
Concord Avenue / Common Street

Proposed Conditions: Roundabout - Overall



Concord Avenue / Common Street

Proposed Conditions: No Left Turn



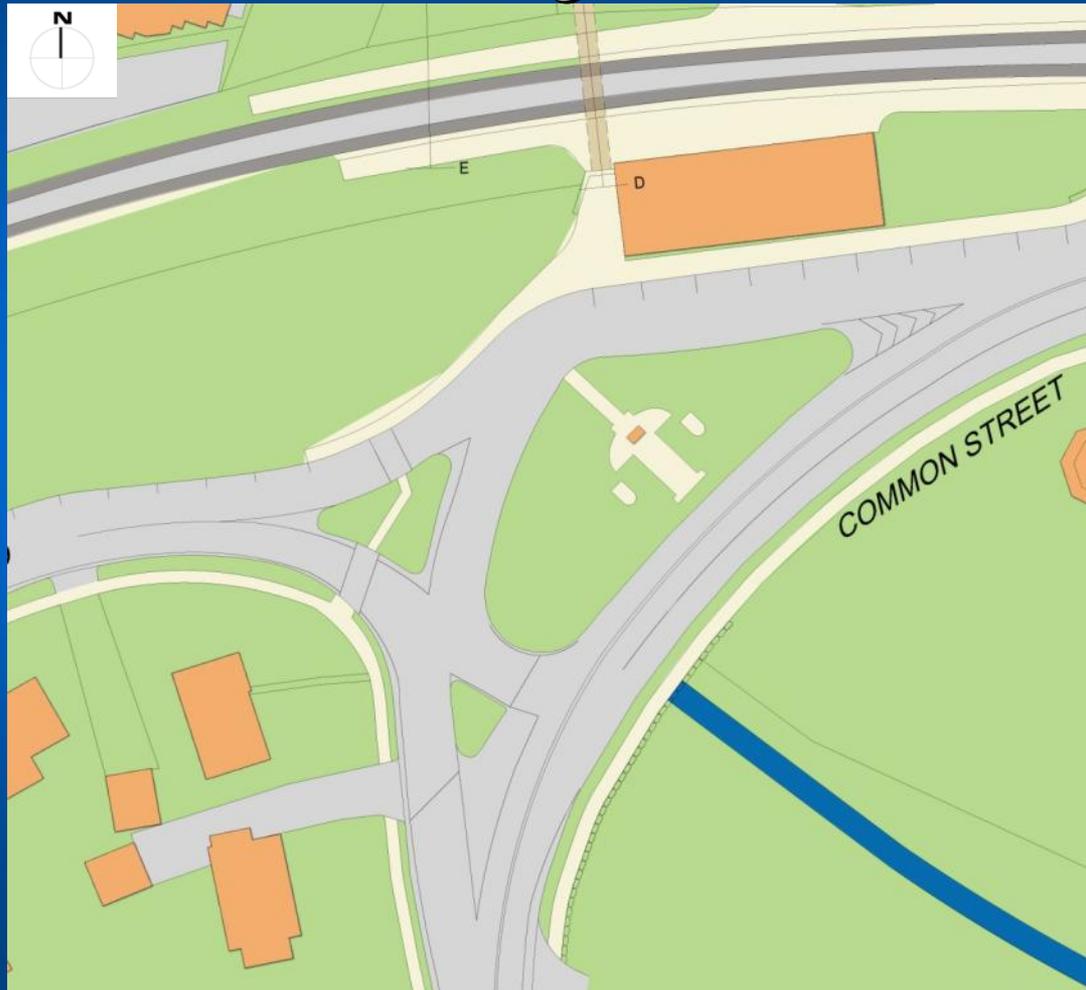
Common Street / Royal Road

Bird's Eye



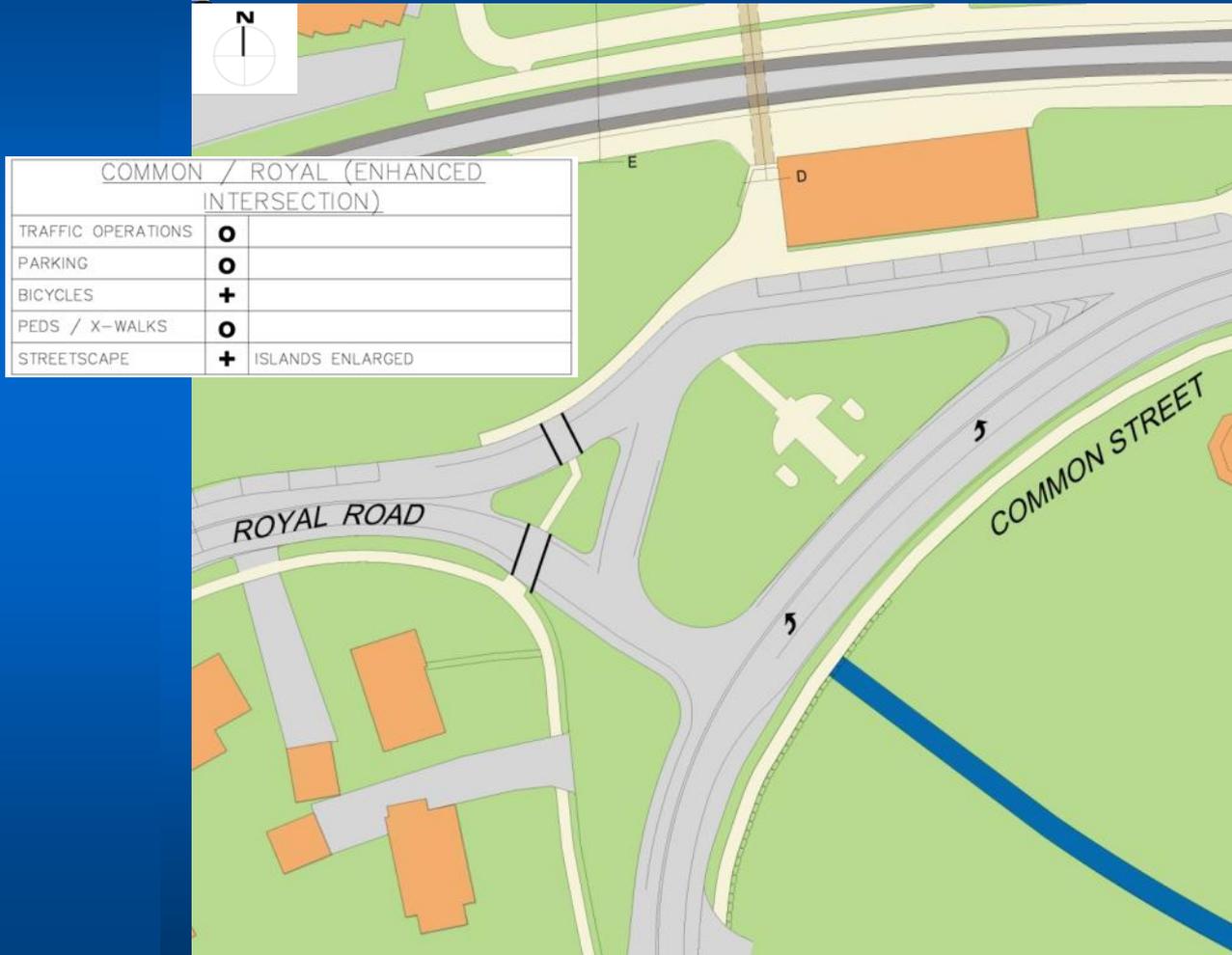
Common Street / Royal Road

Existing Conditions



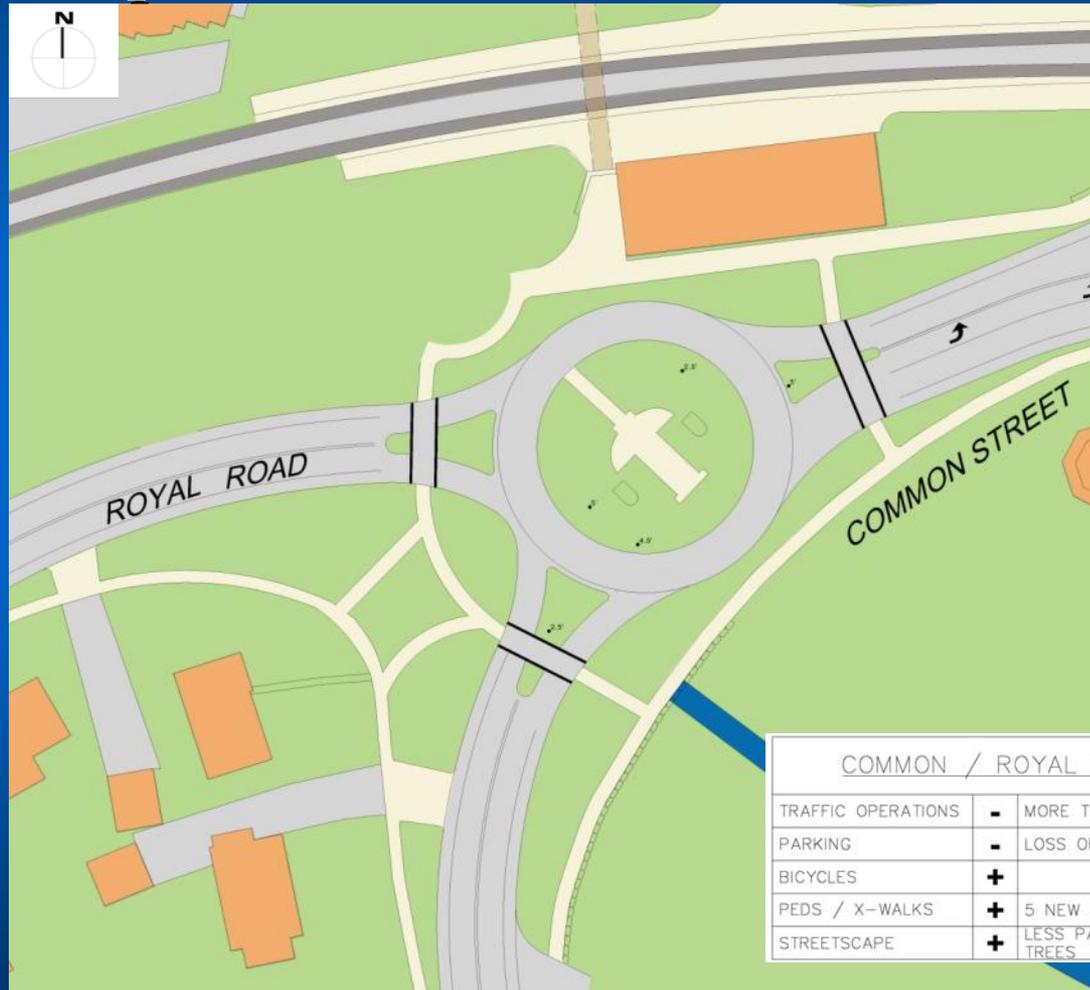
Common Street / Royal Road

Proposed Conditions: Enhanced Intersection



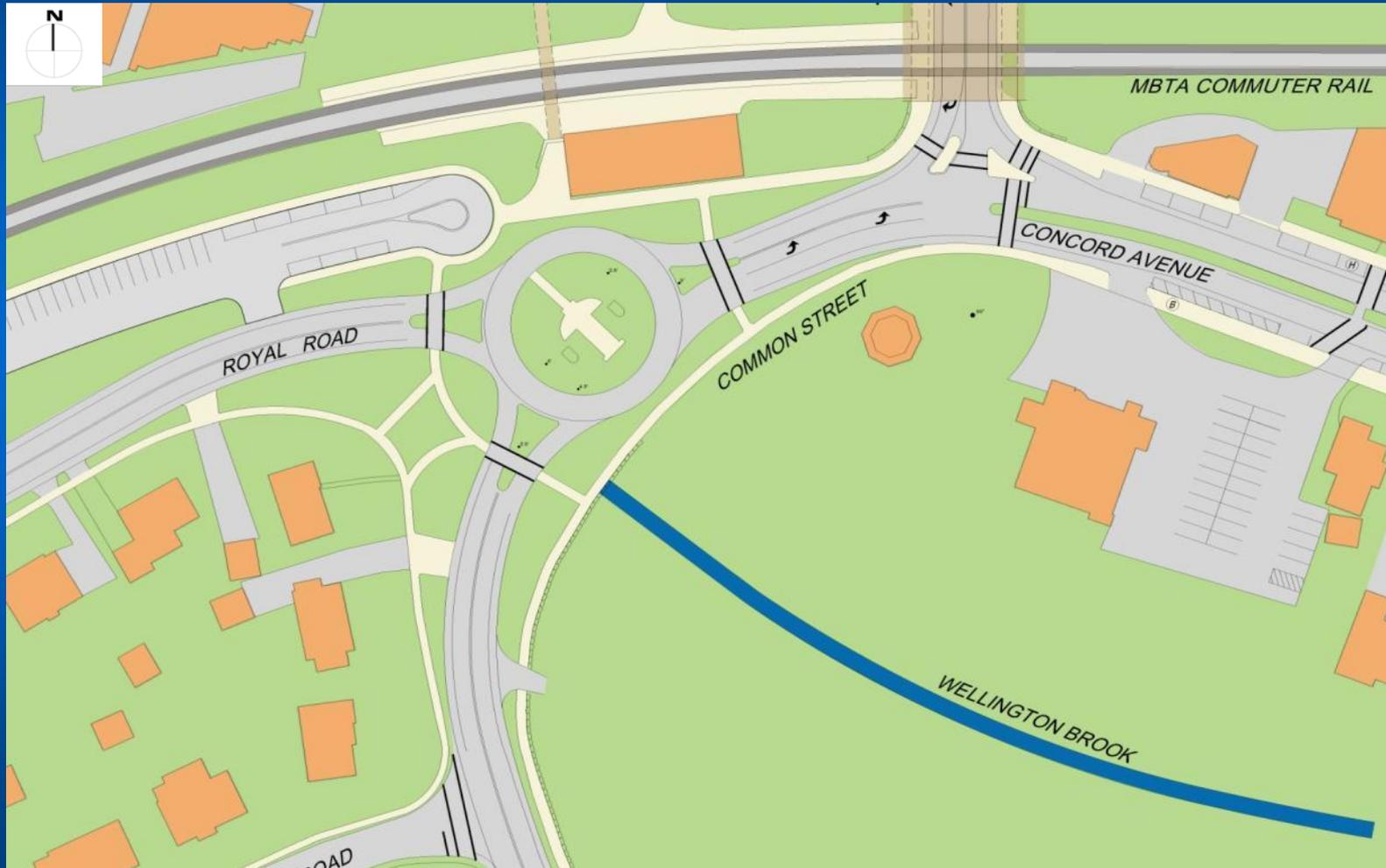
Common Street / Royal Road

Proposed Conditions: Roundabout



Common Street / Royal Road

Proposed Conditions: Roundabout – Overall



Discussion