

MIT Kendall Square Initiative



Volume II: Technical Studies and Information (NoMa Project and SoMa Project)

Final Development Plan Submission

Cambridge Planning Board #302 and #303

November 5, 2015

Submitted by:

Massachusetts Institute of Technology (MIT)

TABLE OF CONTENTS

VOLUME II: Technical Studies and Information (NoMa Project and SoMa Project)

SECTION A: MIT Kendall Square - Transportation Impact Study: Planning Board Criteria

SECTION B: MIT Kendall Square Shadow Studies

NoMa Shadow Studies

SoMa Shadow Studies

SECTION C: MIT Kendall Square Wind Study

SECTION D: Recommendation from Retail Consultant

SECTION E: MIT Kendall Square Project LEED Scorecards

NoMa Building 1

SoMa Site and Buildings 2-6

SECTION F: MIT Kendall Square Acoustical Study

**SECTION A: MIT Kendall Square - Transportation Impact Study:
Planning Board Criteria**

CITY OF CAMBRIDGE

Planning Board Criteria Performance Summary

Special Permit Transportation Impact Study (TIS)

Planning Board Permit Number: _____

PROJECT NAME:

MIT Kendall Square

Address:

238 Main Street, Suite 200
Cambridge MA 02139

Owner/Developer Name:

Massachusetts Institute of Technology (MIT)

Contact Person:

Michael K. Owu

Contact Address:

238 Main Street, Suite 200
Cambridge, MA 02142

Contact Phone:

(617) 258-1012

SIZE:

ITE sq. ft.:

1,759,600

Land Use Type:

Mixed Use Development Office, Research & Development, Residential, Retail,
Museum, Academic Graduate Housing, and Daycare

PARKING:

Existing Parking Spaces*:

599

Use:

230 Commercial/369 Academic

New Parking Spaces**:

1,673

Use:

947 Commercial/569 Academic/157 residential

Net New Parking Spaces***

+1,074

*Existing parking spaces on TIS Building sites

**The total parking spaces of 1,673 include 200 relocated academic spaces and 485 replacement spaces of which 369 are academic spaces and 116 are commercial spaces

***Includes the 200 relocated academic spaces

Date of Parking Registration Approval: N/A

TRIP GENERATION*:

	Daily	AM Peak Hour	PM Peak Hour
Total Trips	18,812	1,795	2,187
Vehicle	5,858	643	708
Transit	7,508	761	893
Pedestrian	3,524	201	359
Bicycle	1,922	190	227

*Does not take into account existing site trip credits

MODE SPLIT (PERSON TRIPS):

RESEARCH & DEVELOPMENT/OFFICE (*RESIDENTIAL*) [*RETAIL*]{*ACADEMIC*}

Auto:

41% (32%) [31%] {27%}

Transit:

42% (30%) [30%] {41%}

Walk:

7% (25%) [29%] {15%}

Bike:

10% (10%) [8%] {14%}

Other:

0% (3%) [2%] {3%}

TRANSPORTATION CONSULTANT:

Company Name: Vanasse Hangen Brustlin, Inc.

Contact Name: Susan Sloan-Rossiter

Phone: 617.728.7777

Date of Building Permit Approval: _____anning Board Permit Number: _____

Planning Board Special Permit Criteria

Consistent with Section IV, “Guidelines for Presenting Information to the Planning Board” of the City of Cambridge “Transportation Impact Study Guidelines,” Sixth Revision dated November 28, 2011; this section presents a summary of potential impacts to the transportation network as a result of the proposed Project. Full Build conditions have been analyzed against the Planning Board Special Permit Criteria.

According to the guidelines, when one or more of the indicators is exceeded, it will be indicative of a potentially adverse impact on City’s transportation network; however, the Planning Board will consider mitigation efforts, their anticipated effectiveness, and other information that identifies a reduction in adverse traffic impacts.

Criterion A - Project Vehicle Trip Generation

Table A-1 presents the Project vehicle trip generation criterion. Project vehicle trip generation is based on ITE trip rates, adjusted for local mode split and vehicle occupancy rates as discussed previously.

Table A-1 Project Vehicle Trip Generation

Time Period	Criteria (trips)	Build	Exceeds Criteria?
Weekday Daily	2,000	5,858	Yes
Weekday AM Peak Hour	240	643	Yes
Weekday PM Peak Hour	240	708	Yes

The Project is expected to exceed the Planning Board criteria for daily, morning peak and evening peak Project vehicle trip generation under the Full Build program.

Criterion B - Vehicular LOS

The criteria for a Project's impact to traffic operations at signalized intersections are summarized in Table B-1 below. These criteria are evaluated for each signalized study-area intersection and presented in Table B-2.

Table B-1 Criterion: Vehicular Level of Service

Existing	With Project
VLOS A	VLOS C
VLOS B, C	VLOS D
VLOS D	VLOS D or 7% roadway volume increase
VLOS E	7% roadway volume increase
VLOS F	5% roadway volume increase

Table B-2 Vehicular Level of Service

Intersection	AM Peak Hour				PM Peak Hour			
	Existing Condition	Build Condition	Traffic Increase	Exceeds Criteria?	Existing Condition	Build Condition	Traffic Increase	Exceeds Criteria?
O'Brien Highway at Third Street	F	F	3.0%	No	F	F	2.9%	No
Cambridge Street at Third Street	D	D	5.9%	No	F	F	5.1%	Yes
Cambridge Street at First Street	E	E	3.7%	No	F	F	3.1%	No
O'Brien Highway at Cambridge Street/ East Street	C	C	1.4%	No	B	B	1.5%	No
O'Brien Highway at Land Boulevard/ Gilmore Bridge	E	E	2.5%	No	F	F	2.9%	No
Binney Street / Galileo Galilei Way / Fulkerson Street	C	C	0.3%	No	D	C	3.8%	No
Binney Street at Third Street	D	D	7.5%	Yes	D	D	7.5%	Yes
Binney Street at First Street	C	C	3.1%	No	C	C	3.7%	No
Land Boulevard at Binney Street	B	C	3.5%	No	C	C	4.2%	No
Hampshire Street at Cardinal Medeiros Avenue	C	D	3.1%	Yes	C	C	2.7%	No
Broadway at Portland Street	C	D	2.8%	Yes	D	D	2.9%	No
Broadway at Hampshire Street	D	E	5.4%	Yes	D	D	5.6%	No
Broadway at Galileo Galilei Way	F	F	3.4%	No	E	E	5.4%	No
Broadway at Ames Street	E	E	9.4%	Yes	D	D	11.7%	Yes
Third Street at Broadway	C	E	15.2%	Yes	D	D	7.9%	Yes
Vassar Street at Main Street	C	C	9.2%	No	C	C	10.2%	No
Main Street at Ames Street	C	C	44.9%	Yes	C	D	37.9%	Yes
Memorial Drive WB at Wadsworth Street	B	B	10.2%	No	B	B	5.1%	No
Memorial Drive EB at Wadsworth Street	A	A	4.9%	No	A	A	5.2%	No

Criterion C – Traffic on Residential Streets

This criterion considers the magnitude of Project vehicle trip generation during any peak hour that may reasonably be expected to arrive and/or depart by traveling on a residential street. The criteria, based on a Project-induced traffic volume increase on any two-block residential street segment in the study area, are summarized in Table C-1.

15 of the 23 roadway segments in the study area identified as street segments which have more than 1/3 of residential frontage, and are therefore evaluated against the traffic volume criteria. The results are presented in Table C-2.

Table C-1 Criterion: Traffic on Residential Streets

Parameter 1: Amount of Residential ¹	Parameter 2: Current peak Hour Street Volume (two-way vehicles)		
	< 150 VPH	150 – 400 VPH	> 400 VPH
1/2 or more	20 VPH ²	30 VPH ²	40 VPH ²
> 1/3 but < 1/2	30 VPH ²	45 VPH ²	60 VPH ²
1/3 or less	No Max.	No Max.	No Max.

¹ Amount of residential for a two block segment as determined by first floor frontage

² Additional Project vehicle trip generation in vehicles per lane, both directions
Vph vehicles per hour

Table C-2 Traffic on Residential Streets

Roadway	Reviewed Segment	Amount of Residential	AM Peak Hour			PM Peak Hour		
			Existing 2015	Project Trips	Exceeds Criteria?	Existing 2015	Project Trips	Exceeds Criteria?
Portland Street	Main St to Washington St	>1/3 but <1/2	655	0	No	733	0	No
	Washington St to Harvard St	>1/3 but <1/2	653	0	No	733	0	No
	Harvard St to Broadway	1/3 or less	653	0	No	733	0	No
	Broadway to Hampshire St	1/3 or less	650	0	No	727	0	No
	Hampshire St to Binney St	>1/3 but <1/2	730	0	No	830	0	No
Broadway	Windsor St to Dickinson St	1/2 or more	828	42	Yes	921	46	Yes
	Dickinson St to Clark St	1/2 or more	828	42	Yes	921	46	Yes
Hampshire Street	Medeiros Ave to Webster Ave	1/3 or less	653	40	No	762	41	No
	Webster Ave to Clark St	>1/3 but <1/2	653	40	No	762	41	No
Memorial Drive	Ames St to Wadsworth St	1/2 or more	2343	68	Yes	3002	131	Yes
Third Street	Rodgers St to Bent St	1/3 or less	769	82	No	893	90	No
	Bent St to Charles St	>1/3 but <1/2	769	82	Yes	893	90	Yes
	Charles St to Hurley St	1/2 or more	769	82	Yes	893	90	Yes
	Hurley St to Spring St	1/2 or more	769	82	Yes	893	90	Yes
	Spring St to Thorndike St	1/3 or less	769	82	No	893	90	No
	Thorndike St to Otis St	1/2 or more	769	82	Yes	893	90	Yes
Cambridge Street	Third St to Sciarappa St	1/3 or less	612	0	No	649	0	No
	Sciarappa St to 5th St	1/3 to 1/2	612	0	No	649	0	No
O'Brien Highway	Land Blvd to Leighton St	1/2 or more	2405	36	No	2095	41	Yes
	Leighton St to East St/Cambridge St	1/2 or more	2388	36	No	2233	41	Yes
Amherst Street	Ames St to Carleton St	1/3 or less	255	287	No	349	391	No
	Carleton St to Hayward St	>1/3 but <1/2	246	287	Yes	314	391	Yes
	Hayward St to Wadsworth St	1/3 or less	236	97	No	268	128	No

*volume interpolated from nearest data available in study area

Criterion D – Lane Queue

The criteria for a project's impact to queues at signalized intersections are summarized in Table D-1 below. These criteria are evaluated for each lane group at study-area signalized intersections and presented in Table D-2.

Table D-1 Criterion: Vehicular Queues at Signalized Intersections

Existing	With Project
Under 15 vehicles	Under 15 vehicles, or 15+ vehicles with an increase of 6 vehicles
15 or more vehicles	Increase of 6 vehicles

Table D-2 Length of Vehicle Queues at Signalized Intersections

Intersection	Movement	AM Peak Hour			PM Peak Hour		
		Existing	Build	Exceeds	Existing	Build	Exceeds
				Criteria?			Criteria?
O'Brien Highway at Third Street	NB L/R	1	1	No	5	5	No
	SEB T/R	~24	~25	No	~17	~18	No
	NWB L/T	0	0	No	~13	~13	No
Cambridge Street at Third Street	EB L/T/R	7	7	No	~13	~13	No
	WB L/T/R	5	5	No	~14	~14	No
	NB L/T/R	3	3	No	7	8	No
	SB L	1	1	No	0	0	No
	SB T/R	14	16	No	3	4	No
Cambridge Street at First Street	EB T/R	7	7	No	~9	~9	No
	WB L	~5	~6	No	2	3	No
	W T	4	4	No	3	3	No
	NB L	1	1	No	3	3	No
	NB R	2	2	No	~13	~14	No
O'Brien Highway at Cambridge Street/East Street	EB L	2	2	No	1	1	No
	EB T	13	13	No	1	1	No
	EB R	3	3	No	0	0	No
	WB L	5	5	No	2	2	No
	WB T/R	3	3	No	9	9	No
	NB L/T	0	0	No	5	5	No
	NB R	0	0	No	0	0	No
O'Brien Highway at Land Boulevard	SB L/T/R	1	1	No	1	1	No
	SEB L	4	4	No	~14	~15	No
	SEB T	11	11	No	6	6	No
	SEB R	6	6	No	9	9	No
	NWB L	~9	~12	No	6	7	No
	NWB T	8	9	No	9	9	No
	NWB R	3	3	No	7	7	No
	NEB L	4	4	No	~14	~12	No
	NEB T	6	6	No	~21	~21	No
	NEB R	0	0	No	10	10	No
Binney Street at Galileo Galilei Way/Fulkerson Street	SWB L/T/R	~22	~23	No	~13	~14	No
	EB T	3	2	No	8	8	No
	WB T/R	3	5	No	5	5	No
	SB R	6	6	No	6	6	No
	SEB L	4	4	No	7	7	No
Binney Street at Third Street	SEB R	1	1	No	0	0	No
	EB L	1	2	No	7	8	No
	EB T/R	3	3	No	6	6	No
	WB L	4	~6	No	2	2	No
	WB T/R	6	6	No	3	3	No

Intersection	Movement	AM Peak Hour			PM Peak Hour		
		Existing	Build	Exceeds	Existing	Build	Exceeds
				Criteria?			Criteria?
Binney Street at First Street	NB L/T	3	3	No	9	11	No
	NB R	1	1	No	3	4	No
	SB L/T/R	13	~16	No	8	8	No
	EB L	3	2	No	9	7	No
	EB T/R	2	1	No	3	2	No
	WB L/T/R	4	4	No	1	2	No
	NB L/T/R	0	0	No	1	1	No
	SB L/T	5	6	No	6	8	No
Land Boulevard at Binney Street	SB R	N/A	5	No	N/A	2	No
	EB L/R	3	2	No	5	2	No
	NEB L	7	6	No	6	7	No
	NEB T	1	2	No	3	7	No
	SWB T	7	17	Yes	11	15	No
	SWB R	5	10	No	3	3	No
Hampshire Street at Cardinal Medeiros Avenue	NB L	0	0	No	1	1	No
	NB T/R	2	2	No	2	2	No
	SB L	0	0	No	0	0	No
	SB T/R	5	5	No	5	5	No
	SEB L/T/R	11	~12	No	6	7	No
	NWB L/T/R	6	6	No	11	11	No
Broadway at Portland Street	EB L/T/R	13	~15	No	10	10	No
	WB L/T/R	7	7	No	10	~11	No
	NB L	1	1	No	1	1	No
	NB T/R	7	7	No	8	8	No
	SB L	1	1	No	0	0	No
	SB T/R	2	2	No	2	2	No
Broadway at Hampshire Street	EB L/T	13	~14	No	9	10	No
	EB R	3	3	No	0	0	No
	WB L	~5	~6	No	0	0	No
	WB T	2	2	No	3	3	No
	WB R	0	0	No	1	2	No
	NB L	0	0	No	2	2	No
	NB T/R	1	1	No	2	2	No
	SB L	5	~8	No	~8	~8	No
Broadway at Galileo Galilei Way	SB T/R	1	1	No	0	0	No
	EB L	4	4	No	3	3	No
	EB T	~17	~18	No	8	~9	No
	EB R	2	3	No	1	1	No
	WB L	2	2	No	~6	~6	No
	WB T/R	5	5	No	6	7	No
	NB L	2	2	No	3	3	No

Intersection	Movement	AM Peak Hour			PM Peak Hour		
		Existing	Build	Exceeds	Existing	Build	Exceeds
				Criteria?			Criteria?
Broadway at Ames Street	NB T/R	4	4	No	8	9	No
	SB L	2	2	No	1	2	No
	SB T	11	11	No	7	7	No
	SB R	~5	~5	No	~5	~5	No
	EB T	~20	~20	No	~15	~15	No
	EB R	2	3	No	1	1	No
	WB L	4	3	No	2	1	No
	WB T	9	8	No	8	7	No
	NB L	2	2	No	2	2	No
	NB R	0	0	No	2	4	No
Third Street at Broadway	EB L	6	6	No	6	7	No
	EB T	5	4	No	3	4	No
	WB T	12	~21	Yes	9	9	No
	WB R	6	8	No	3	3	No
	SB L	2	6	No	~11	~12	No
	SB R	3	2	No	1	2	No
Vassar Street at Main Street	EB L	4	4	No	4	5	No
	EB T/R	5	8	No	5	6	No
	WB L	1	1	No	1	1	No
	WB T/R	5	6	No	2	5	No
	NB L/T/R	5	5	No	5	6	No
	SB L	1	2	No	1	1	No
	SB T	9	9	No	4	4	No
	SB R	6	6	No	2	2	No
Main Street at Ames Street	EB L	1	1	No	0	0	No
	EB T/R	5	9	No	6	6	No
	WB L	0	2	No	0	1	No
	WB T/R	1	1	No	1	1	No
	NB L	1	2	No	1	~7	No
	NB T/R	2	3	No	3	7	No
	SB L/T/R	3	6	No	2	3	No
	SB R	5	4	No	2	2	No
Memorial Drive at Wadsworth Street	EB L	0	0	No	0	0	No
	EBT	0	0	No	0	0	No
	WB T/R	9	11	No	13	14	No
	NB L	0	0	No	0	0	No
	NB T	5	6	No	3	3	No
	SB R	0	0	No	1	2	No

Criterion E – Pedestrian and Bicycle Facilities

Criteria 1: Pedestrian Delay

Pedestrian delay is a measure of the pedestrian crossing delay on a crosswalk during the peak hour as determined by the pedestrian level of service analysis in the HCM 2000.

Table E-1 presents the indicators for this criterion. Tables E-2 present the evaluation of PLOS criteria for each crosswalk at study area intersections under existing and full-build conditions.

Table E- 1 Criterion: Pedestrian Level-of-Service Indicators

Existing	With Project
PLOS A	PLOS A
PLOS B	PLOS B
PLOS C	PLOS C
PLOS D	PLOS D or increase of 3 seconds
PLOS E, F	PLOS D

Table E-2 Signalized Intersection Pedestrian Level-of-Service Summary

Intersection	Crosswalk	AM Peak Hour			PM Peak Hour		
		Existing 2015	Build 2015	Exceeds Criteria?	Existing 2015	Build 2015	Exceeds Criteria?
O'Brien Highway at Third Street	East	D	D	No	D	D	No
	West	D	D	No	D	D	No
	South	D	D	No	D	D	No
Cambridge Street at Third Street	East	B	B	No	B	B	No
	West	B	B	No	B	B	No
	North	B	B	No	B	B	No
	South	B	B	No	B	B	No
Cambridge Street at First Street	East	D	D	No	D	D	No
	West	D	D	No	D	D	No
	South	D	D	No	D	D	No
O'Brien Highway at Cambridge Street/East Street	East	D	D	No	D	D	No
	West	D	D	No	D	D	No
	North	D	D	No	D	D	No
	South	C	C	No	C	C	No
O'Brien Highway at Land Boulevard	West	E	E	No	E	E	No
	North	E	E	No	E	E	No
	South	E	E	No	E	E	No

Intersection	Crosswalk	AM Peak Hour			PM Peak Hour		
		Existing 2015	Build 2015	Exceeds Criteria?	Existing 2015	Build 2015	Exceeds Criteria?
Binney Street at Galileo Galilei Way/Fulkerson Street	East	C	D	Yes	C	D	Yes
	West	C	D	Yes	C	D	Yes
	North	B	D	Yes	B	D	Yes
	South	C	D	Yes	C	D	Yes
Binney Street at Third Street	East	D	D	No	D	D	No
	West	D	D	No	D	D	No
	North	C	D	Yes	C	D	Yes
	South	C	D	Yes	C	D	Yes
Binney Street at First Street	East	E	E	No	E	E	No
	West	E	E	No	E	E	No
	North	B	E	Yes	B	E	Yes
	South	A	E	Yes	A	E	Yes
Land Boulevard at Binney Street	West	E	E	No	E	E	No
	North	E	E	No	E	E	No
	South	E	E	No	E	E	No
Hampshire Street at Cardinal Medeiros Avenue	East	B	B	No	B	B	No
	West	B	B	No	B	B	No
	North	B	B	No	B	B	No
	South	B	B	No	B	B	No
Broadway at Portland Street	East	B	B	No	B	B	No
	West	B	B	No	B	B	No
	North	B	B	No	B	B	No
	South	B	B	No	B	B	No
Broadway at Hampshire Street	East	D	D	No	D	D	No
	West	D	D	No	D	D	No
	North	C	C	No	C	C	No
	South	C	C	No	C	C	No
Broadway at Galileo Galilei Way	East	D	D	No	D	D	No
	West	D	D	No	D	D	No
	North	D	D	No	D	D	No
	South	D	D	No	D	D	No
Broadway at Ames Street	East	D	D	No	D	D	No
	West	D	D	No	D	D	No
	South	C	C	No	C	C	No
Third Street at Broadway	East	D	D	No	D	D	No
	West	D	D	No	D	D	No
	North	C	C	No	C	C	No
		-	C	No	-	C	No

Intersection	Crosswalk	AM Peak Hour			PM Peak Hour		
		Existing 2015	Build 2015	Exceeds Criteria?	Existing 2015	Build 2015	Exceeds Criteria?
Vassar Street at Main Street	East	C	C	No	C	C	No
	West	C	C	No	C	C	No
	North	C	C	No	B	B	No
	South	C	C	No	B	B	No
Main Street at Ames Street	East	D	D	No	D	D	No
	West	D	D	No	D	D	No
	North	C	C	No	C	C	No
	South	C	C	No	C	C	No
Memorial Drive at Wadsworth Street	East	D	D	No	D	D	No
	North	D	D	No	D	D	No

Criteria 2 & 3: Safe Pedestrian and Bicycle Facilities

The Project site is well connected to existing pedestrian facilities along the surrounding streets providing access to the proposed development. As previously described, sidewalks are provided on all adjacent roadways and crosswalks are provided to accommodate pedestrian crossings. The Project proposes to close Hayward Street to provide a large pedestrian plaza through the site as well as create other pedestrian and bicycle connections through the site centering on a new park behind Building 4.

The study area is served by several bicycle facilities with bike lanes provided on several major corridors connecting through and beyond the area. Main Street, adjacent to the Project site, is currently under construction and under the new design will add a bike lane to the north side of the street as well as maintain the one on the south side. Within the study area there are some existing bicycle accommodation deficiencies including no bicycle lanes along Wadsworth Street or Amherst Street. The Proponent will work with the City to understand the infrastructure needs to accommodate current and future bicycle volumes.

South of the site, along the Charles River, is the Charles River Basin Pathway. Improvements to the pathway are planned for the near future including a 10-foot wide, two-way, paved multi-use path and adjacent to that will be a 6-foot, unpaved pathway. As discussed under the Bicycle Analysis the Charles River Basin Pedestrian and Bicycle Study provided recommendations to better connect this important pathway to the Kendall Square area. Within this section, the proponent discusses the importance of improving these connections and is willing to discuss with the City of Cambridge and DCR on how these connections can be improved.

Table E-4 summarizes the presence of pedestrian and bicycle facilities for all streets adjacent to the Project site.

Table E-3 Pedestrian and Bicycle Facilities

Adjacent Street	Link (between)	Sidewalks or Walkways Present?	Exceeds Criteria?	Bicycle Facilities or Right of Ways Present?	Exceeds Criteria?
Main Street	Ames St to Wadsworth St (north side)	Yes	No	Under Construction*	No
	Ames St to Wadsworth St (south side)	Yes	No	Yes	No
	Wadsworth St to Longfellow Br (south side)	Yes	No	Yes	No
	Third St to Broad Canal Way (north side)	Yes	No	Yes	No
Wadsworth Street	Main St to Amherst St (west side)	Yes	No	No	Yes
	Main St to Amherst St (east side)	Yes	No	No	Yes
	Amherst St to Memorial Dr (west side)	Yes	No	No	Yes
	Amherst St to Memorial Dr (east side)	Yes	No	No	Yes
Third Street	Broad Canal Way to Broadway (west side)	Yes	No	Yes	No
	Broad Canal Way to Broadway (east side)	Yes	No	Yes	No
Amherst Street	Ames St to Carleton St (north side)	Yes	No	No	Yes
	Ames St to Carleton St (south side)	Yes	No	No	Yes
	Carleton St to Hayward St (north side)	Yes	No	No	Yes
	Carleton St to Hayward St (south side)	Yes	No	No	Yes
	Hayward St to Wadsworth St (north side)	Yes	No	No	Yes
	Hayward St to Wadsworth St (south side)	Yes	No	No	Yes
Hayward Street**	Main St to Amherst St (west side)	Yes	No	No	Yes**
	Main St to Amherst St (east side)	Yes	No	No	Yes**
Carleton Street	Dock St/Deacon St to Amherst St (west side)	Yes	No	No	Yes
	Dock St/Deacon St to Amherst St (east side)	Yes	No	No	Yes

*Main Street is currently under construction and the new roadway design will provide a new bike lane on the north side of the street as well as maintain the bike lane on the south side of the street.

**As part of the MIT Kendall Square Project, Hayward Street will be turned into a pedestrian connection through the site and will no longer provide vehicular access from Amherst Street to Main Street under Build Conditions.