



KENDALL SQUARE INITIATIVE



Planned Unit Development
Special Permit Application - SoMa
September 8, 2015

GENERAL DEVELOPMENT GOALS

Kendall Square PUD



PRE-ZONING PUBLIC ENGAGEMENT

**2008 -
2009**

- Exploratory and brainstorming meetings with City Councillors, City staff, Planning Board, Historical Commission and community members
- Set up website and feedback mechanisms

**2010 -
2012**

- More meetings with neighborhood and civic associations, Planning Board, City Council, City staff, Historical Commission
- Community-wide open houses
- MIT Faculty Taskforce on Community Engagement in 2030 Planning report
- Graduate Student Housing Working Group report

2013

- Community-wide meetings on East Campus Planning Study
- Multiple City Council & Planning Board hearings

2011-2012
K2 Study Process

**ZONING
APPROVED**

PRE-SPECIAL PERMIT PUBLIC ENGAGEMENT

2013 -
2014

- Continued community interaction including community-wide meetings on East Campus Planning Study
- Architect selection process with MIT designer committees
- Began shaping design schemes with guidance from MIT School of Architecture and Planning faculty

2015

Seven public meetings:

- MIT Student Center (May 6)
- Boston Marriott Cambridge (May 6)
- Jane's Walk (May 9)
- East Cambridge Planning Team (May 27)
- Planning Board Walking Tour (June 9)
- Cambridge Historical Commission (July 2 & August 6)

PUD
APPLICATION
FILING

PRINCIPLES OF ZONING & SPECIAL PERMIT APPLICATION

1

Activation -
Transform 6
surface
parking lots
into a mix of
active uses in
response to the
K2 vision





2

Preservation of Future Academic Capacity –
Continue MIT's innovation and impact

3

Housing – Increase housing, including affordable
and graduate student

4

Public Realm – Establish a public realm environment including the MIT Museum, accessible open spaces, and community-influenced retail to create a vibrant link between campus and community



5

Mobility Improvements – Create transit oriented development, utilize lower parking ratios, and prioritize the bicycle and pedestrian experience



6

Innovation – Provide space to bolster Kendall's innovation ecosystem



7

Workforce Development – Create approximately 3,800 new employment opportunities, including construction and apprentice, innovation, retail, office, and R&D



8

Sustainability – Set new standards with a comprehensive approach to sustainability that goes beyond individual buildings

9

Financial Commitments –

- **Required contributions of approximately:**
 - \$3.5 million to benefit community organizations
 - \$8.8 million to the Community Fund
 - \$4.6 million Incentive Zoning payment
- **Approximately \$10 million annually in real estate taxes**
- **Approximately \$20-30 million in investment for affordable housing**

10

Historic Preservation –
Preserve the historic Kendall,
Hammett, and Suffolk Buildings
(238, 264, and 292 Main Street)
through adaptive re-use



PROJECT OVERVIEW

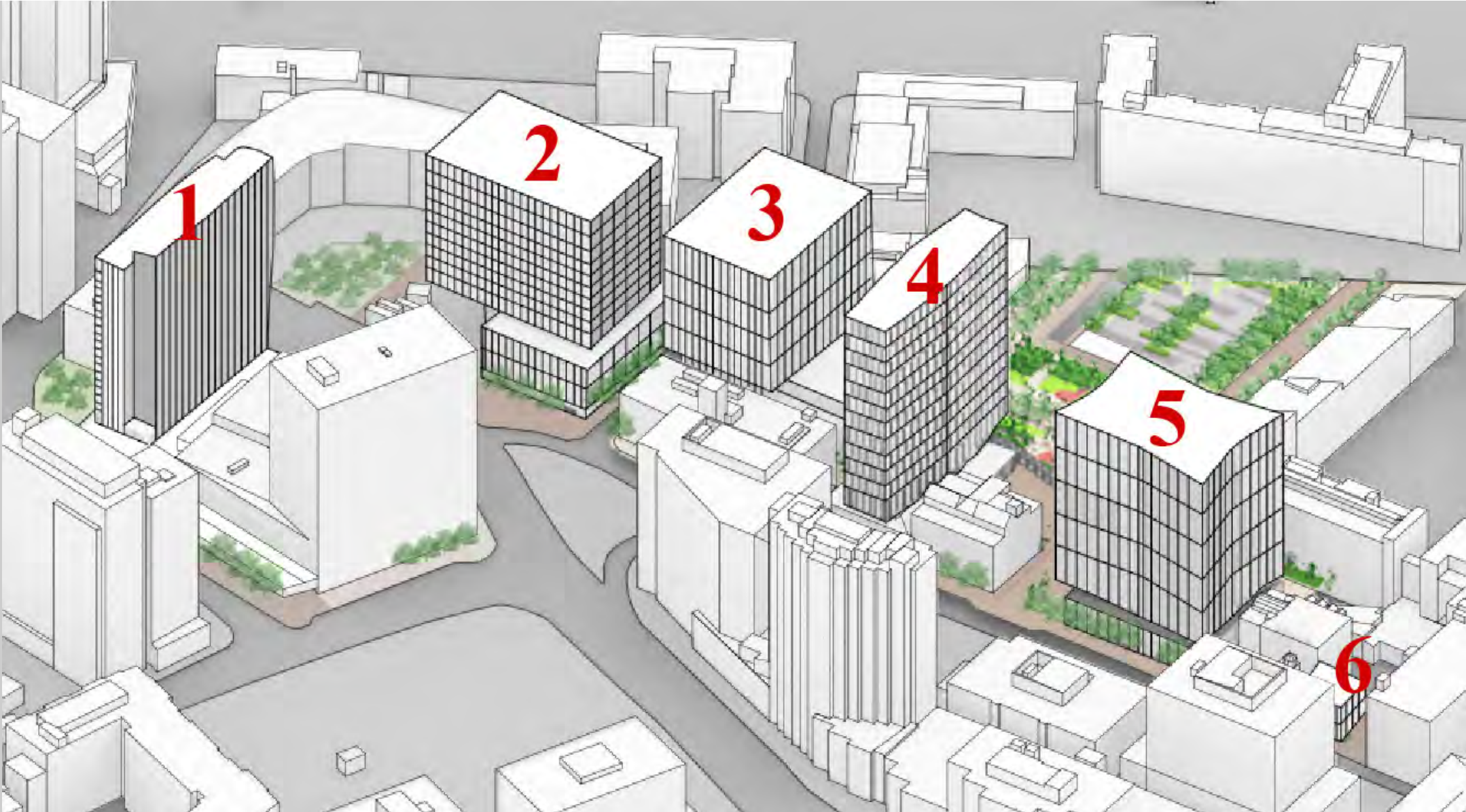
Existing Conditions





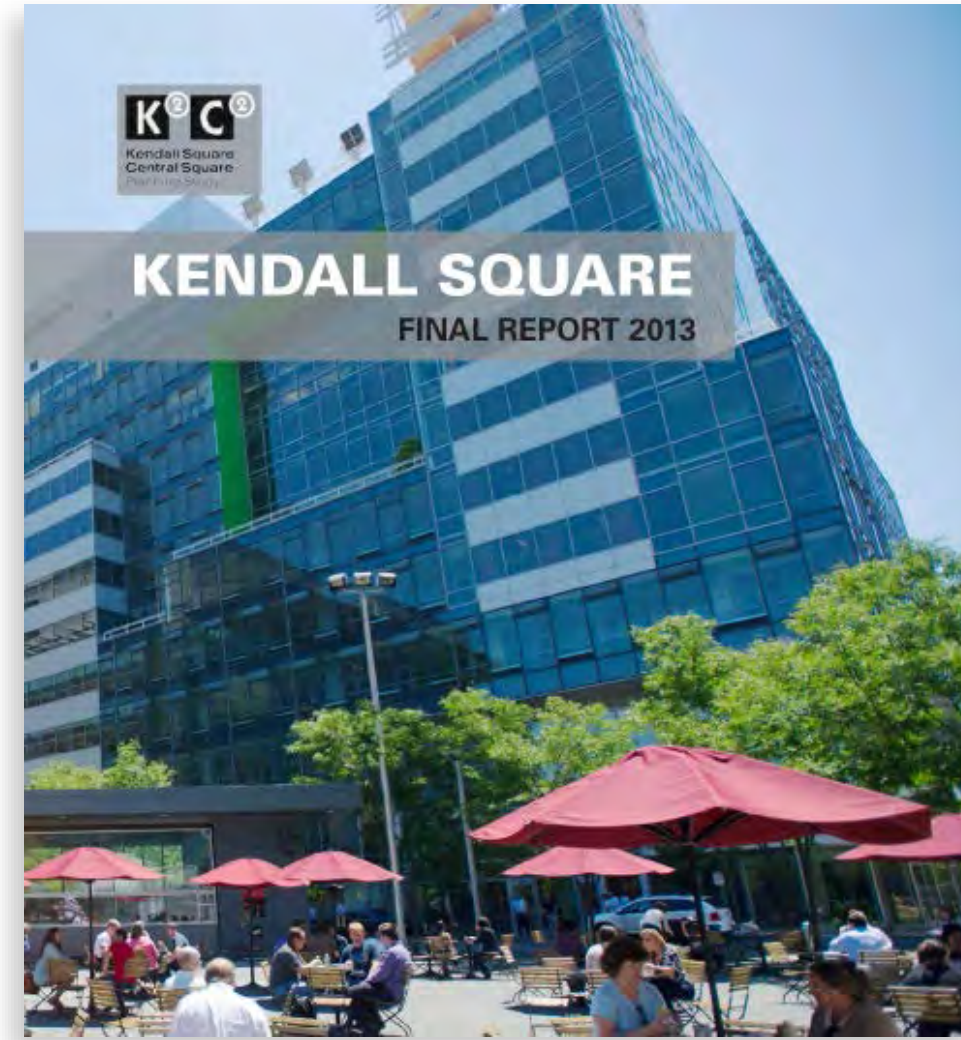
PROJECT OVERVIEW

Proposed Plan



ZONING AND PROPOSAL FOLLOW K2 STUDY FINAL REPORT AND DESIGN GUIDELINES

- Requires a mix of uses including:
 - Housing
 - Variety of retail
 - Open space
 - Innovation space
- Includes environmental, sustainability, transportation, and infrastructure improvements
- Design guidelines which consider:
 - Shadow and wind
 - Pedestrian experience
 - Massing
 - Ground floor activation
 - Setbacks



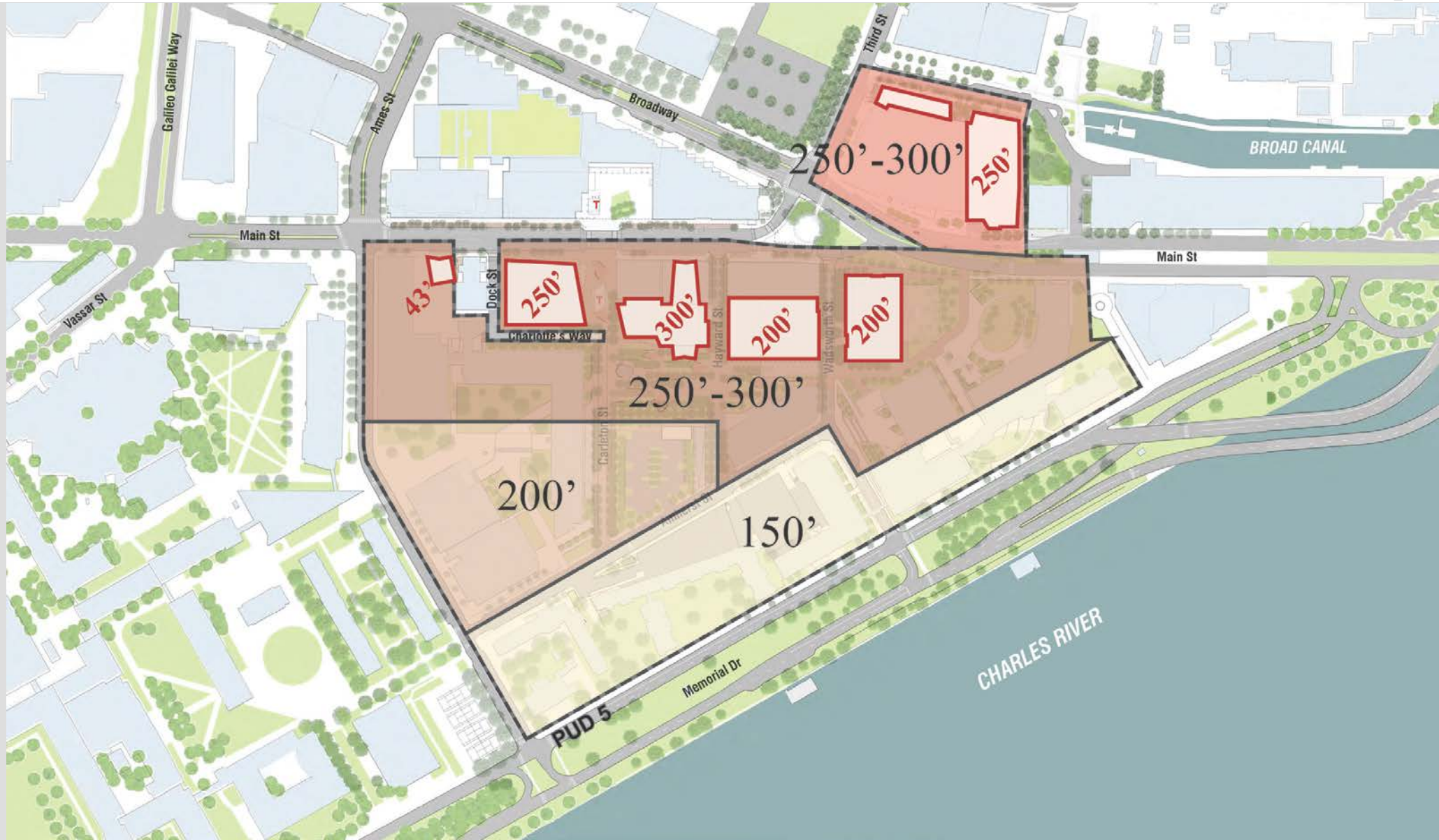
CONFORMANCE WITH ZONING

	Parameters	KSI Proposal
Total New SF	R&D max: 980,000 SF Residential min: 240,000 SF	R&D: 888,000 SF Residential: 285,000 SF
Density	FAR 3.9 across the district	FAR 3.35 across the district
Parking	Retail: 0.5/1,000 SF max Office: 0.9/1,000 SF max R&D: 0.8/1,000 SF max Housing: 0.5-0.75/unit	Complies with parking ratios
Open Space	15% of PUD	38% of PUD
Maximum Heights	150'-300'	Building 1: 250' Building 2: 200' Building 3: 200' Building 4: 300' Building 5: 250' Building 6: 43'



ZONING HEIGHTS

Kendall Square PUD 5





PROPOSED PROGRAM*

Uses:	Housing/ Dormitory	Retail/ Active Uses	Office/R&D	Academic	Other	TOTAL
North of Main Street						
Building 1	285,000	16,000	15,000	-	87,000	403,000
South of Main Street						
Building 2	-	18,000	298,000	-	-	316,000
Building 3	-	27,000	270,000	-	-	297,000
Building 4	330,000	28,000	-	9,000	-	367,000
Building 5	-	20,000	305,000	65,000	-	390,000
Building 6	-	6,000	-	-	-	6,000
TOTAL	615,000	115,000	888,000	74,000	87,000	1,779,000

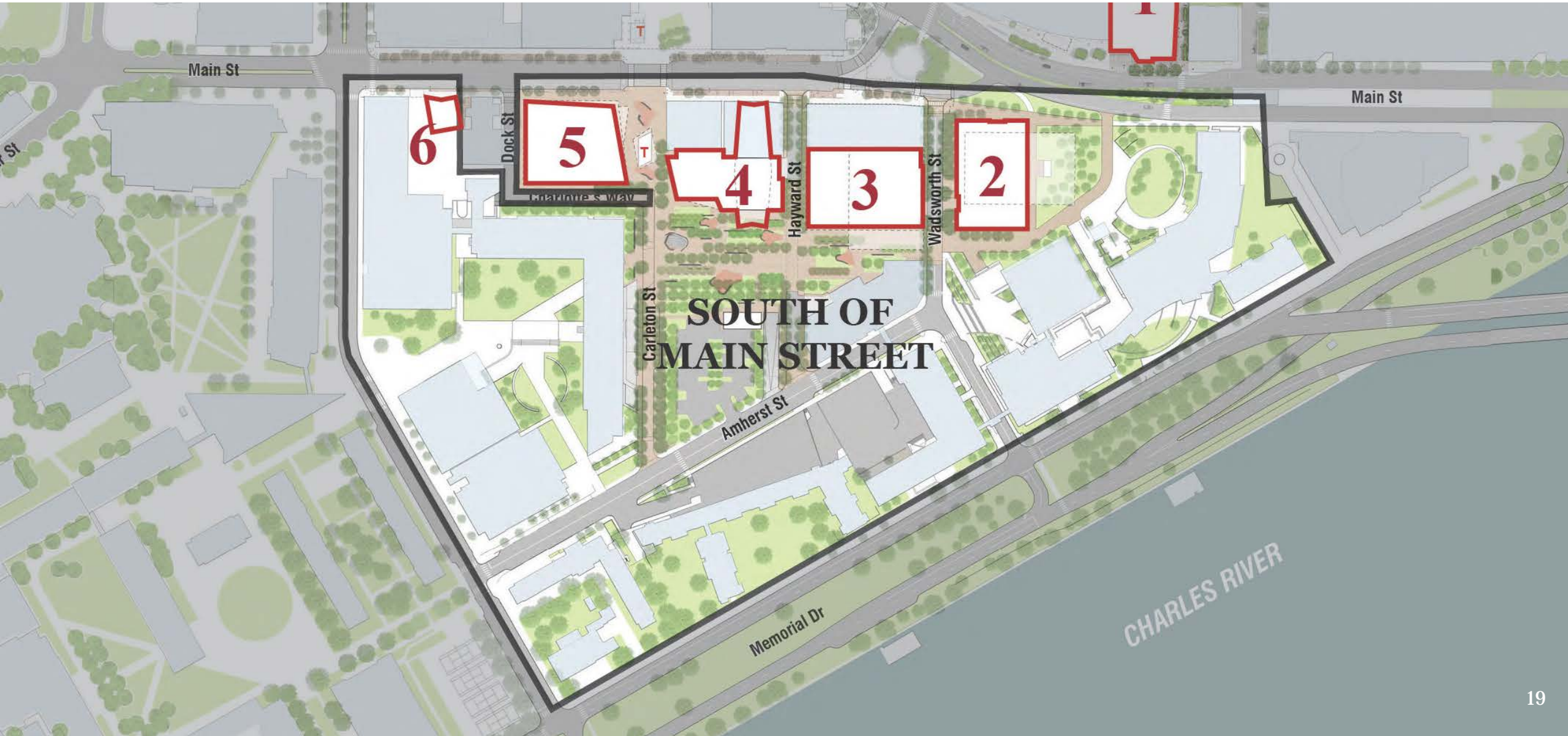
* Gross floor area without exemptions. Does not include academic space in existing buildings E38 & E39.



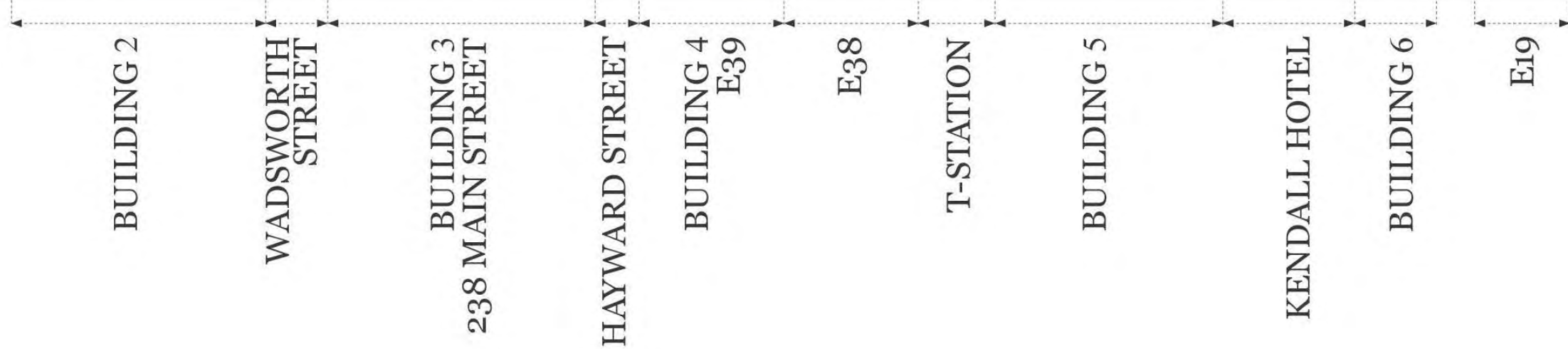
PLANNING AND DESIGN PRINCIPLES

- **Walkability**
- **Open Space**
- **Universal Access**
- **Ground Floor Activation**
- **Built Form and Architectural Intent**
- **Environmental Quality**

SOUTH OF MAIN STREET

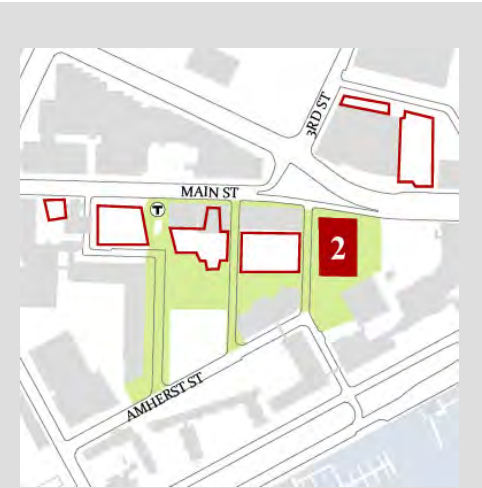


MAIN STREET ELEVATION





SOUTH OF MAIN STREET SITES



SITE 2

SITE 3

SITE 4

SITE 5

SITE 6

Architect:
Elkus|Manfredi

Architect:
Perkins+Will

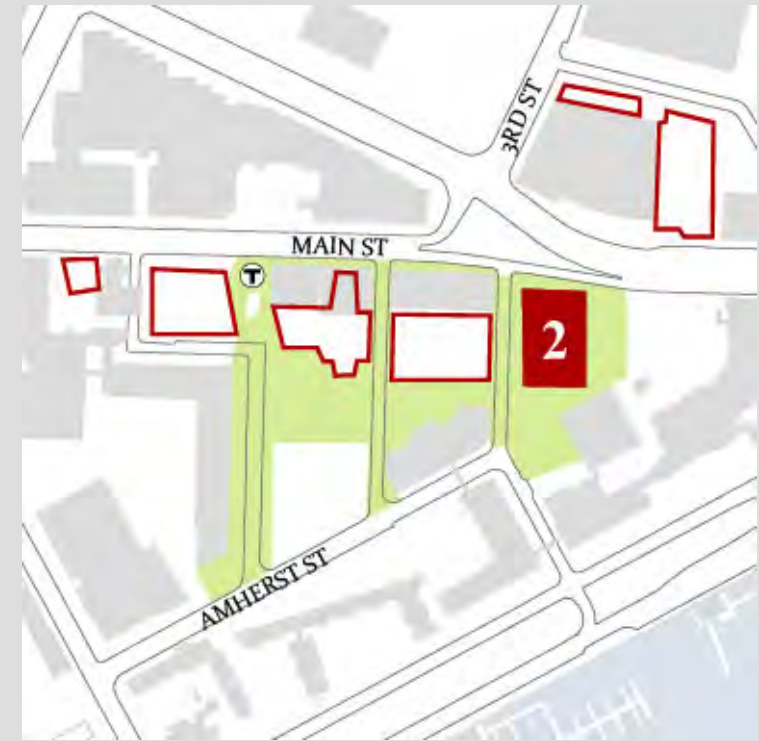
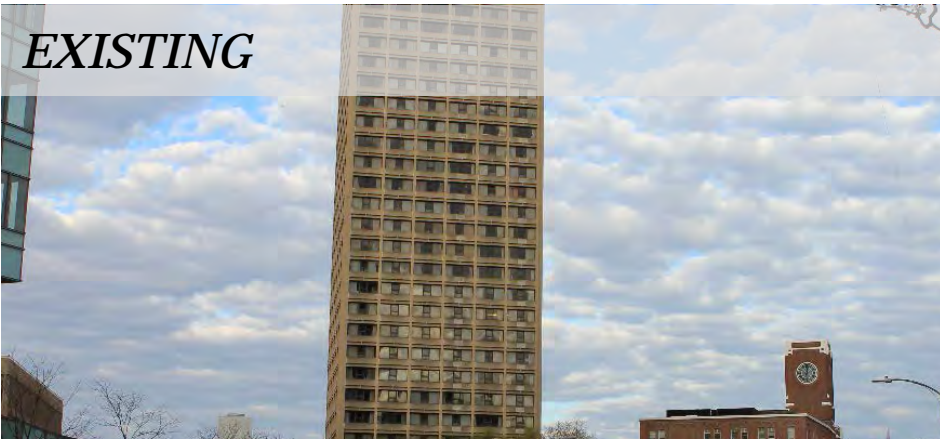
*Architect: NADAAA
and Perkins+Will*

Architect:
Weiss/Manfredi

Architect:
nARCHITECTS



SITE 2



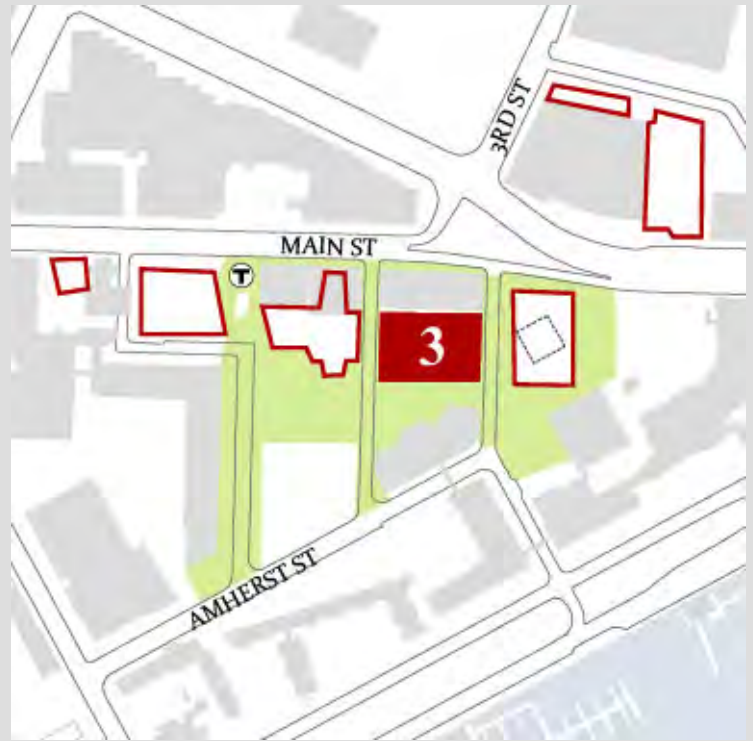
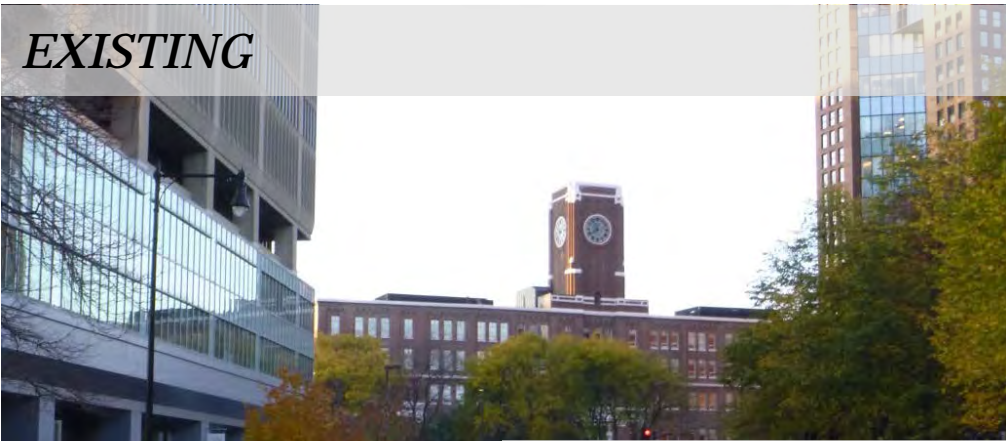
USE: Retail and R&D

SF: 316,000

HEIGHT: 200'

ARCHITECT: Elkus|Manfredi

SITE 3 – 238 MAIN STREET



USE: Retail and R&D

SF: 297,000

HEIGHT: 200'

ARCHITECT: Perkins+Will

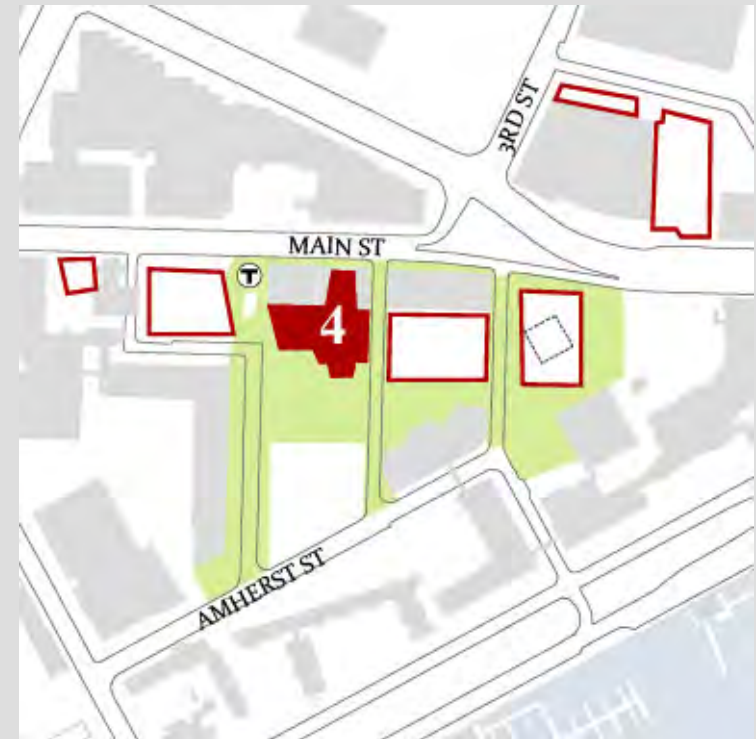


SITE 4

EXISTING



PROPOSED



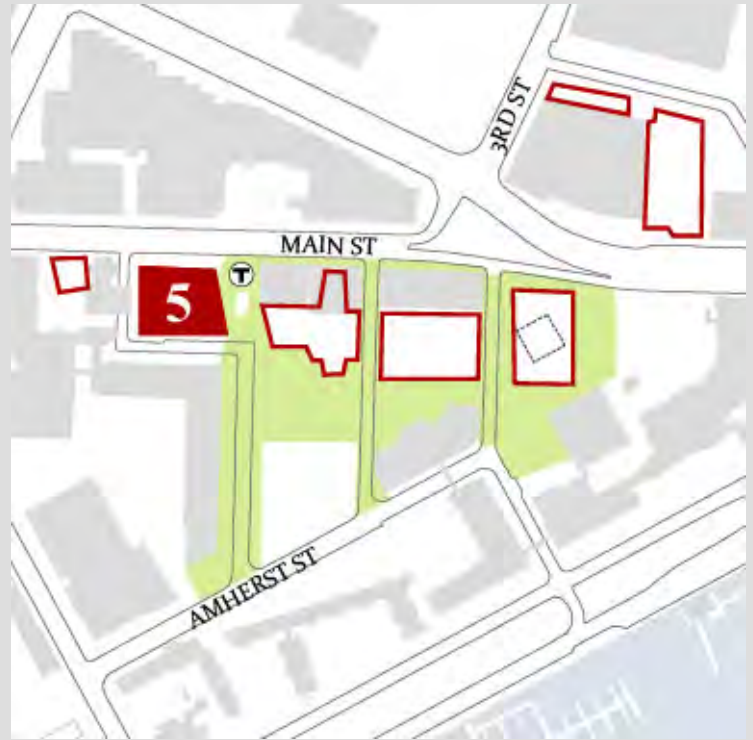
USE: Retail, Grad Housing

SF: 367,000

HEIGHT: 300'

ARCHITECT: NADAAA and Perkins+Will

SITE 5 – 314 MAIN STREET



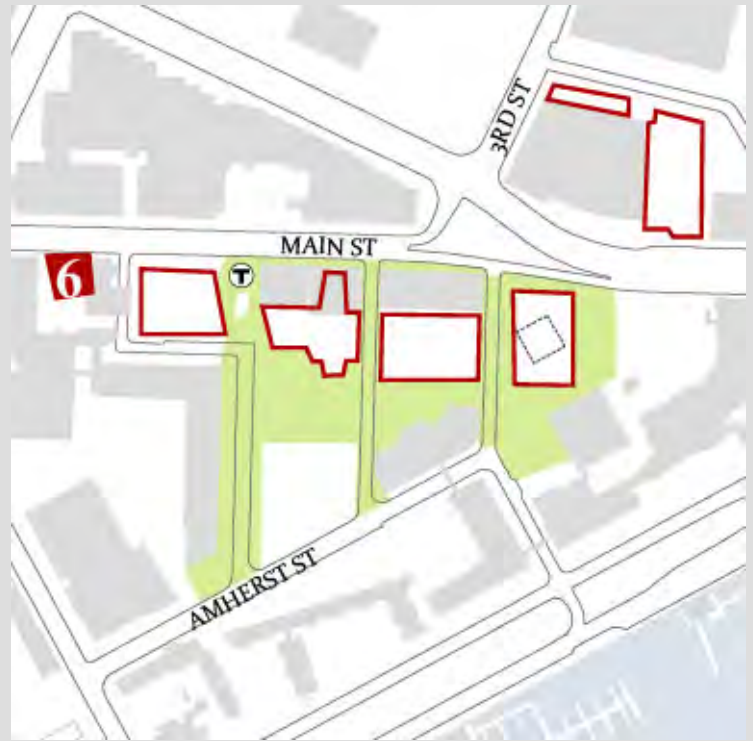
USE: Retail and Office

SF: 390,000

HEIGHT: 250'

ARCHITECT: Weiss/
Manfredi

SITE 6



USE: Retail and Office

SF: 6,000

HEIGHT: 43'

ARCHITECT: nArchitects

PEDESTRIAN EXPERIENCE

- Activate the streetscape with uses that engage pedestrians
- Provide wide sidewalks, diverse and useful street furniture, and opportunities for sidewalk dining and interaction
- Reduce environmental impacts of shadow and wind to maximize comfort and use



View From Main Street Looking East

PEDESTRIAN EXPERIENCE

Shadows

- Net new shadow is reduced by shadow from existing buildings
- Building 3 is set back from Main Street which minimizes shadow on Main Street
- Orientation of building 4 is north-south which minimizes shadow on Main Street



Figure E - 2

View From Broadway Looking South

PEDESTRIAN EXPERIENCE

Shadows

June 21

CURRENT CONDITION



9 AM SHADOWS, JUNE 21ST



12 PM SHADOWS, JUNE 21ST



3 PM SHADOWS, JUNE 21ST

NET NEW SHADOWS



9 AM SHADOWS, JUNE 21ST



12 PM SHADOWS, JUNE 21ST



3 PM SHADOWS, JUNE 21ST

9 AM

12 PM

3 PM

PEDESTRIAN EXPERIENCE

Shadows

September 21

CURRENT CONDITION



9 AM SHADOWS, SEPTEMBER 21ST



12 PM SHADOWS, SEPTEMBER 21ST



3 PM SHADOWS, SEPTEMBER 21ST

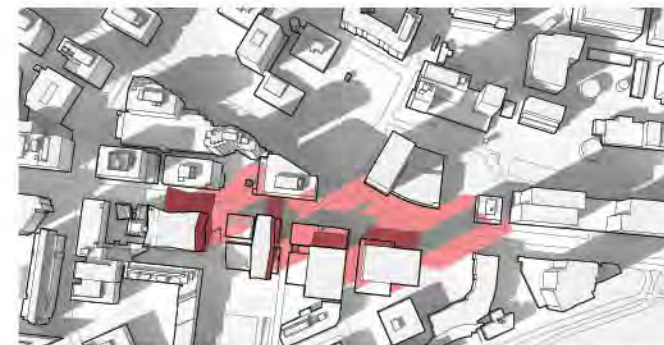
NET NEW SHADOWS



9 AM SHADOWS, SEPTEMBER 21ST



12 PM SHADOWS, SEPTEMBER 21ST



3 PM SHADOWS, SEPTEMBER 21ST

9 AM

12 PM

3 PM

PEDESTRIAN EXPERIENCE

Shadows

December 21

CURRENT CONDITION



NET NEW SHADOWS



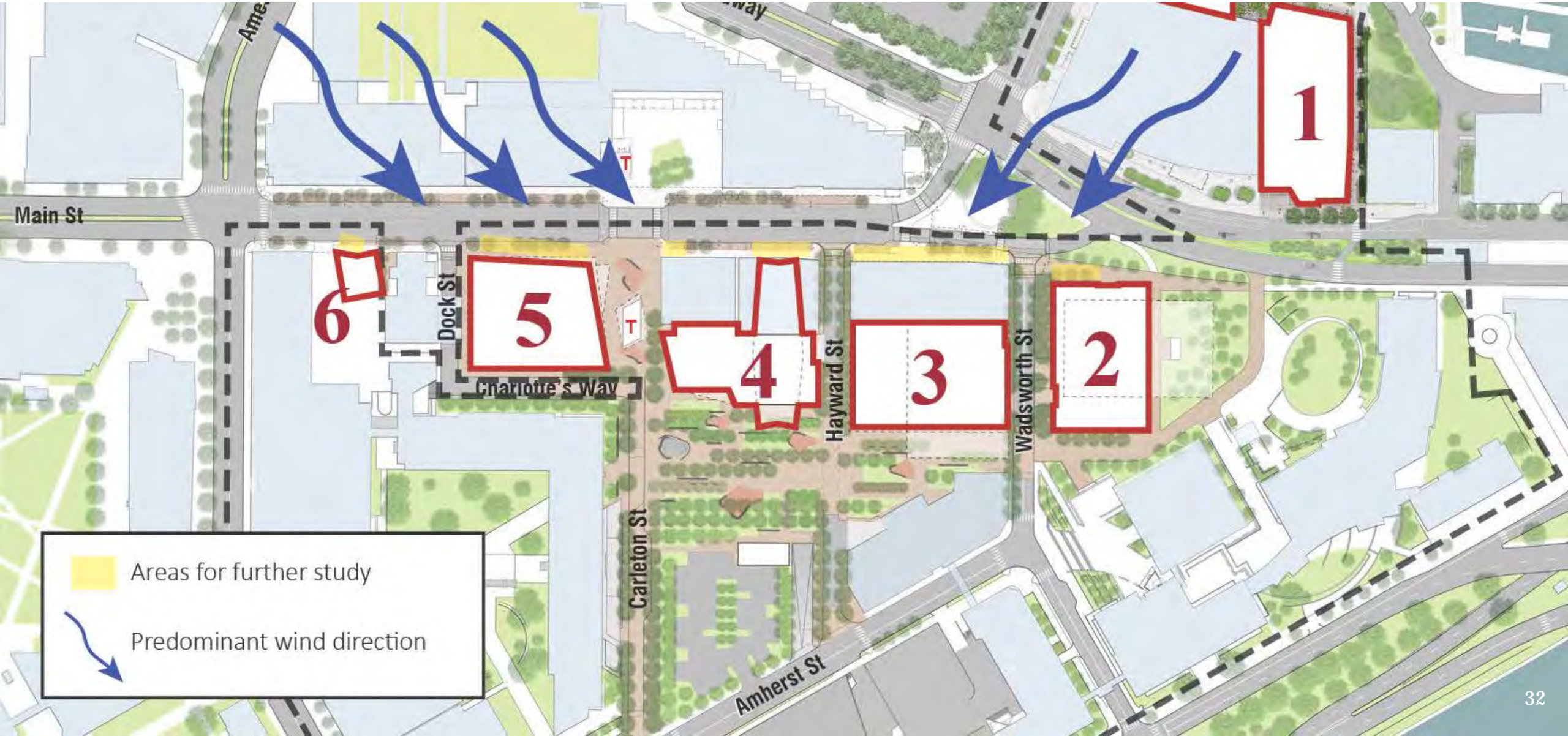
9 AM

12 PM

3 PM

CREATING PEDESTRIAN EXPERIENCE

Wind

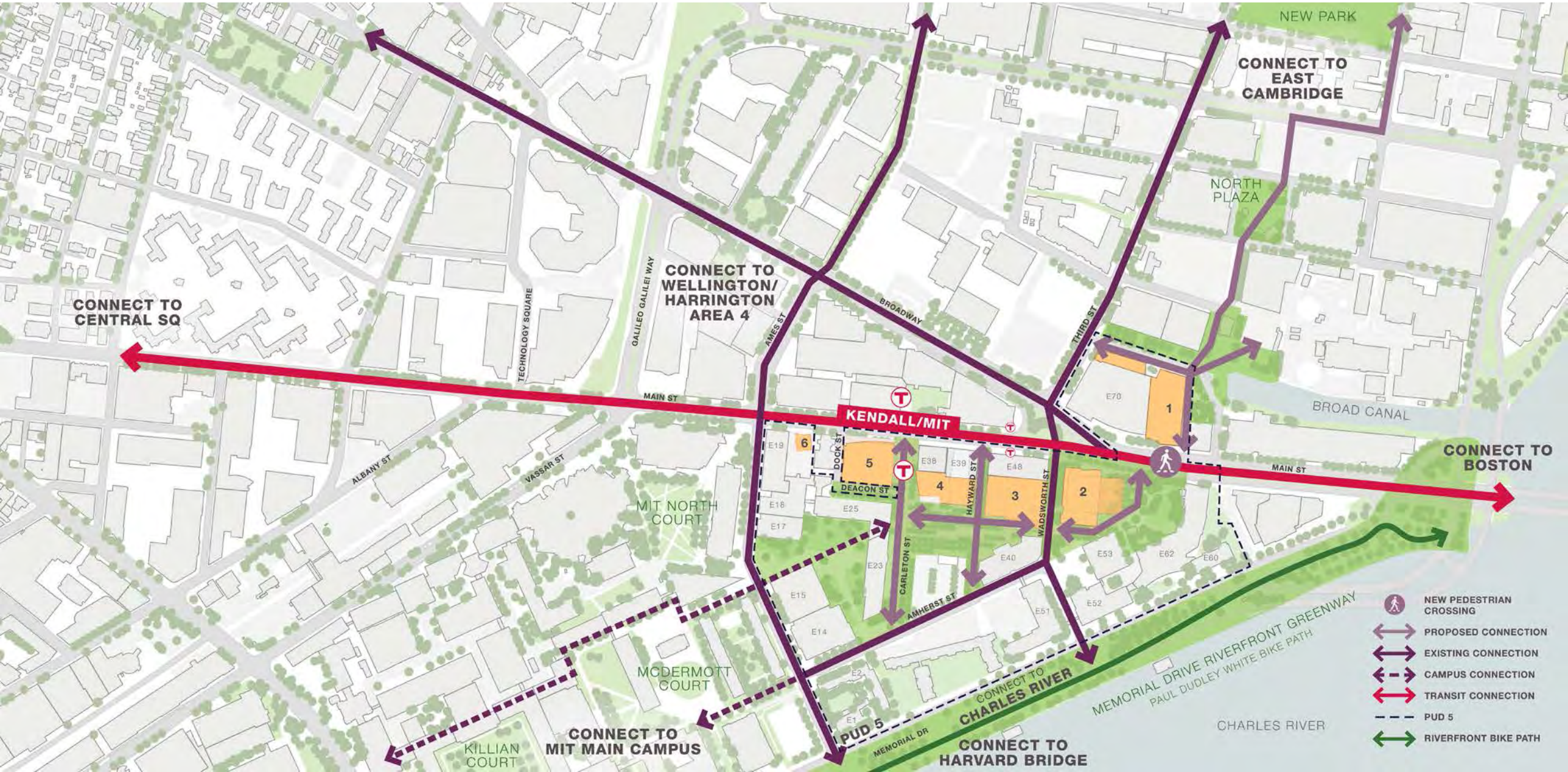


Areas for further study

Predominant wind direction



PROPOSED OPEN SPACE CONNECTIONS



OPEN SPACE





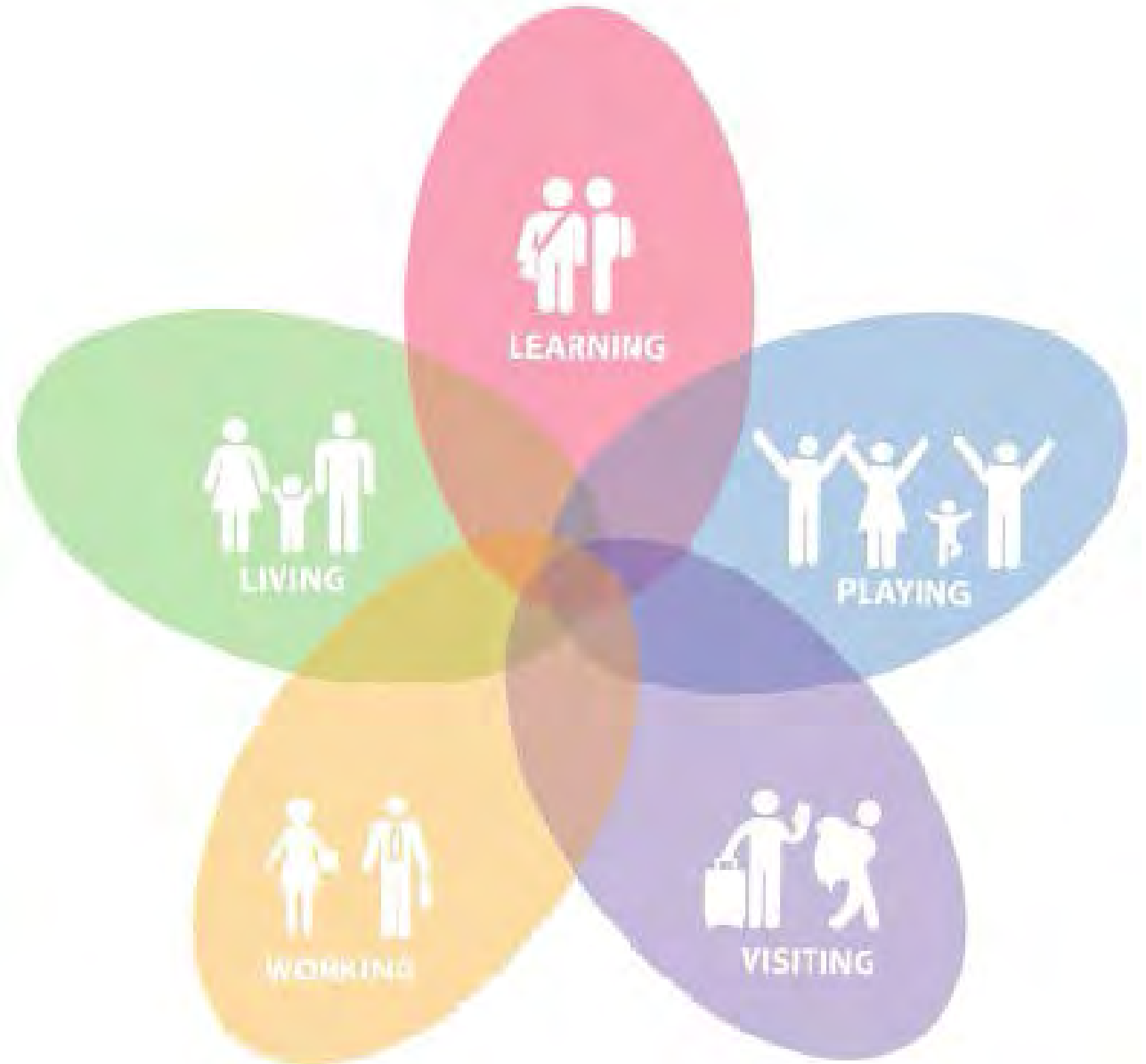
OPEN SPACE



OPEN SPACE POTENTIAL PROGRAMMING

MIT is hiring a new
**Director of Open Space
Programming**

who will spearhead the effort to create lively, welcoming, open spaces with a range of programming for the community.



OPEN SPACE POTENTIAL PROGRAMMING

Flexible Open Space

- Shade
- Variety of seating
- Respite
- Games (tables, ping pong, bocce, etc.)
- Café/dining
- Urban gardens
- Storm water gardens
- Interactive features and artwork

Events

- MIT Press author conversations
- Museum event @ night
- MIT Admissions briefings
- Maker Faire
- Performances
- Science + technology fairs/expo
- International symposia
- Ability to convene up to several hundred

Play

- Environmental interaction
- Engagement for all ages and all users

Food Trucks

Bike Infrastructure

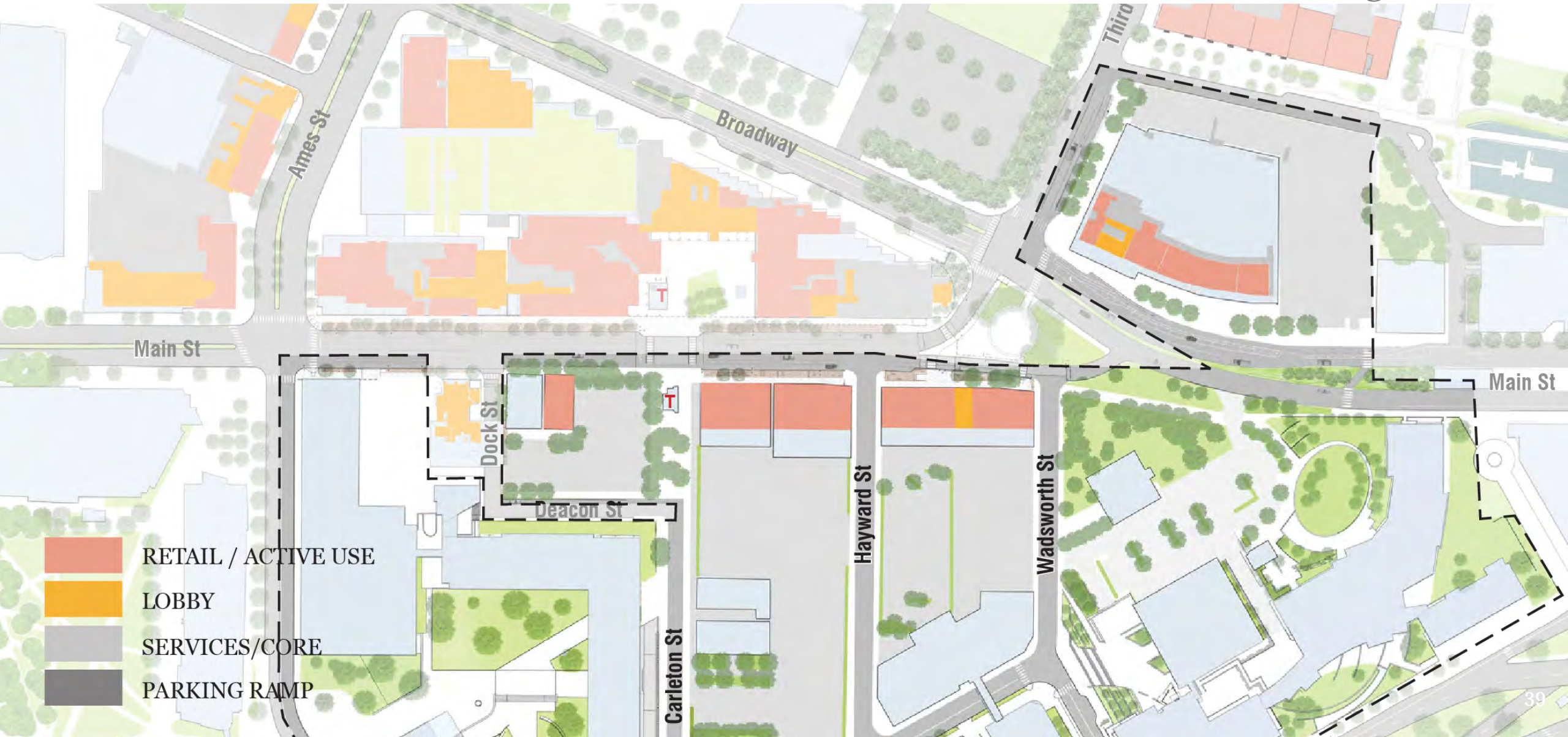
OPEN SPACE POTENTIAL PROGRAMMING





RETAIL

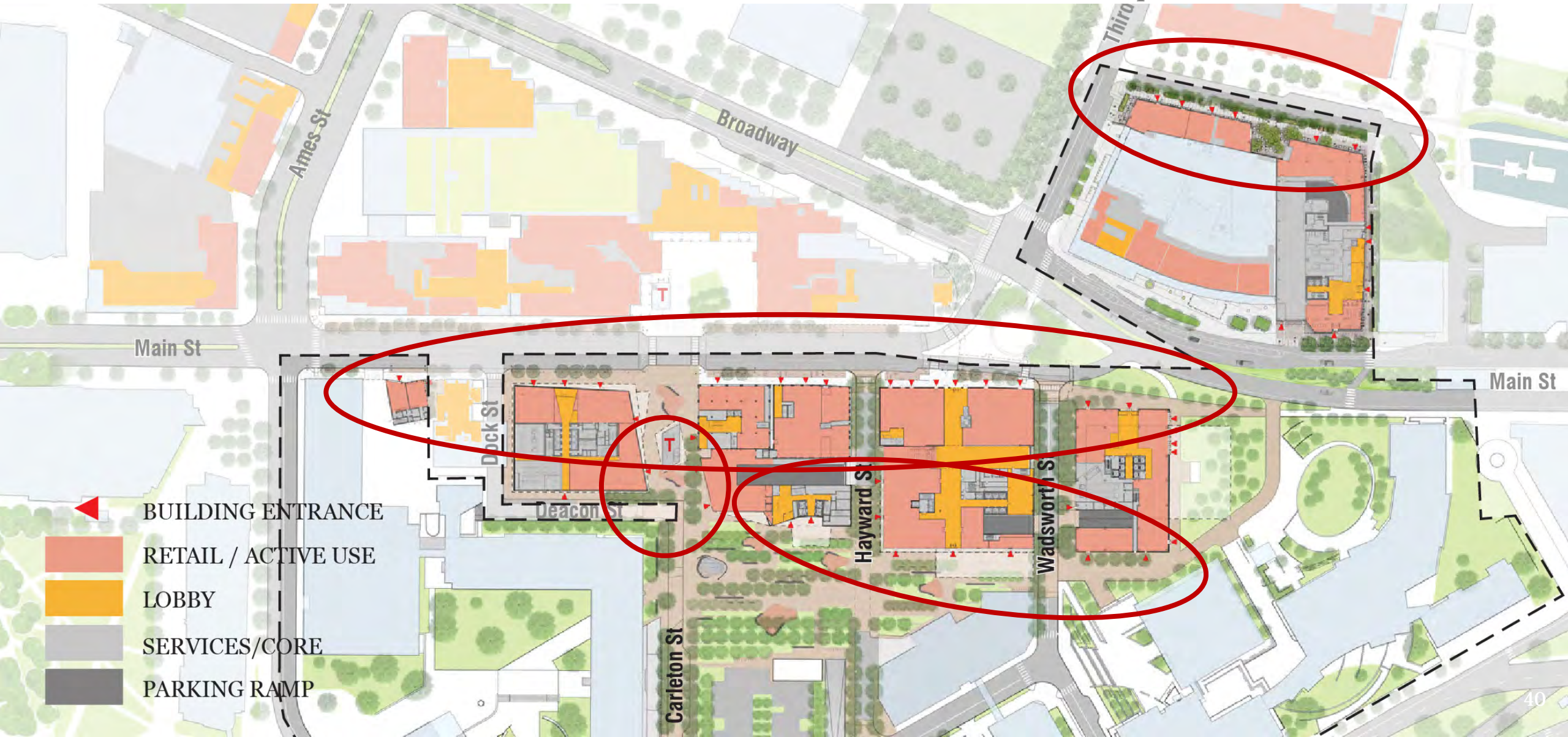
Existing Conditions



-  RETAIL / ACTIVE USE
-  LOBBY
-  SERVICES/CORE
-  PARKING RAMP

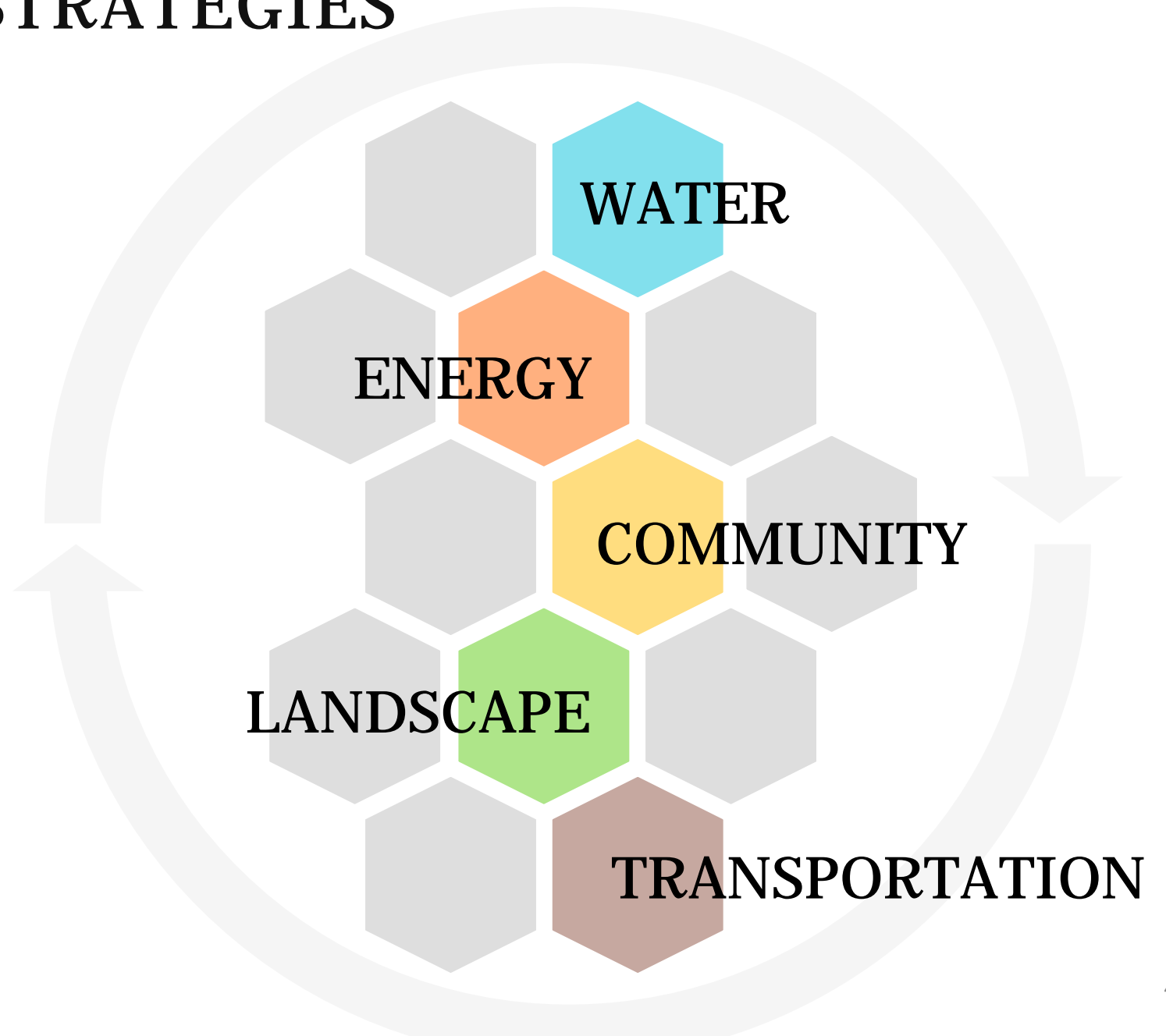
RETAIL AND ACTIVE USE

Proposed Plan and Retail Zones

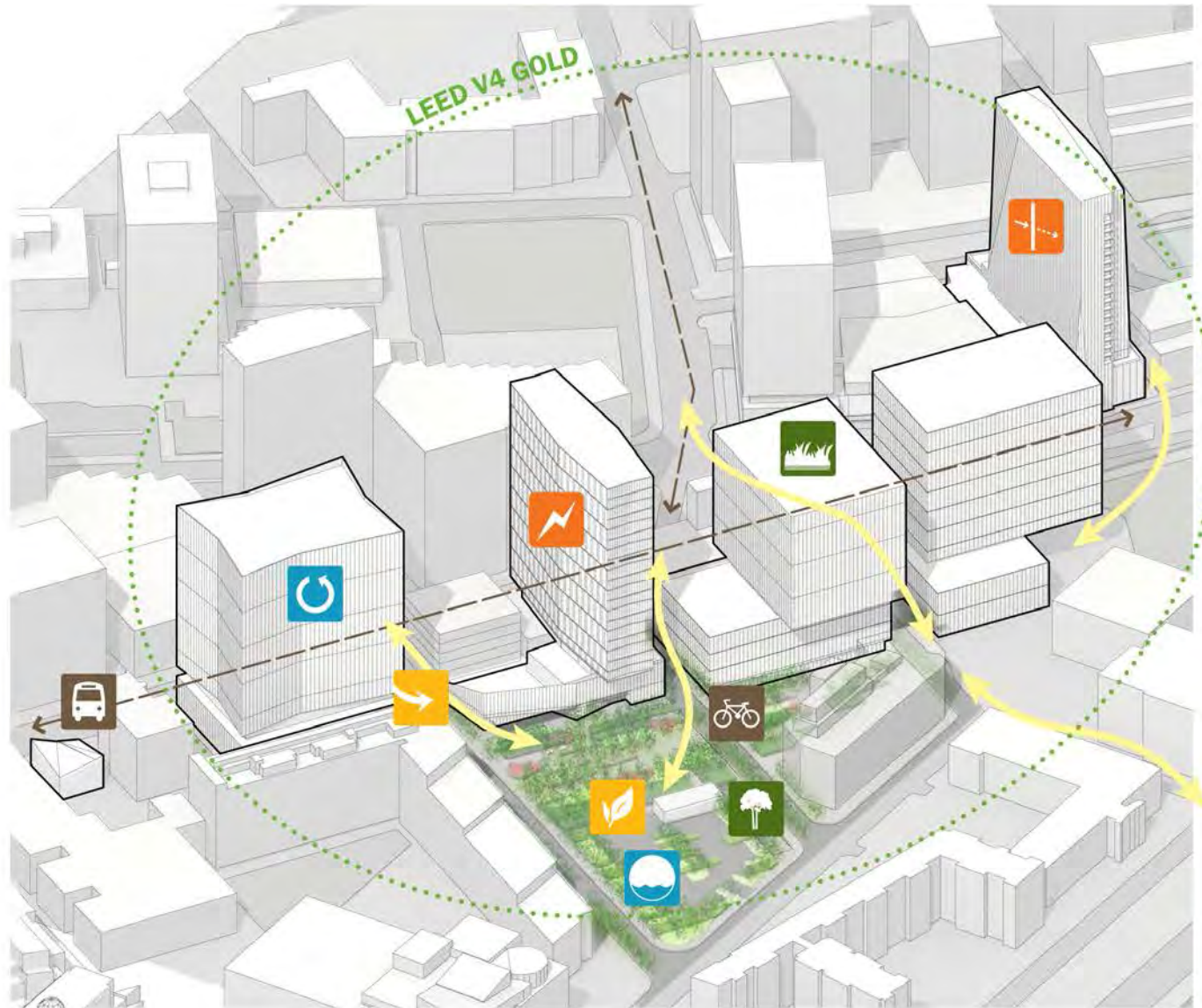












SUSTAINABILITY STRATEGIES

MIT is committed to setting new standards in sustainability, with a comprehensive approach that goes beyond individual buildings.



SUSTAINABILITY STRATEGIES



-  HIGH PERFORMANCE BUILDING ENVELOPES
-  ADVANCED ENERGY SYSTEMS
-  GREEN AMENITIES
-  CONNECTIVITY
-  MULTIMODAL TRANSIT
-  BICYCLE NETWORK
-  STREET TREES
-  GREEN ROOF
-  WATER REUSE
-  DISTRICT STORMWATER MANAGEMENT

INFRASTRUCTURE

- Ongoing discussions with City Departments
- Assessed existing sanitary, stormwater and water systems
- Municipal systems adequate for demand
- Conceptual plans for distribution and tie-in in PUD filings
- Reconstructing Hayward Street and Carleton Street



TRANSPORTATION

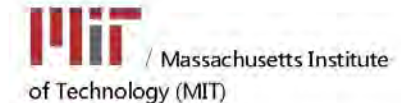
- Comprehensive TIS, including robust transit analysis, submitted June 22nd and certified July 21st
- Draft PTDM plan submitted August 25th
- Ongoing discussions with city staff on transportation improvements and PTDM measures

Transportation Impact Study

MIT Kendall Square

Cambridge, Massachusetts

PREPARED FOR



PREPARED BY



99 High Street
Boston, MA 02110
617.728.7777

June 22, 2015

Refiled July 17, 2015

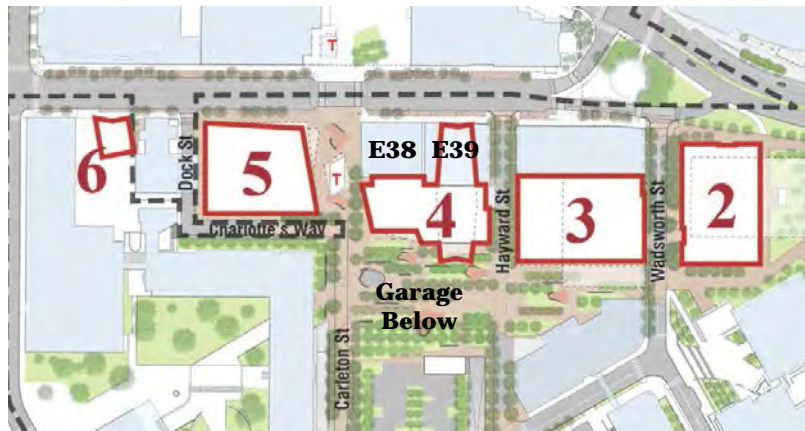
TRANSPORTATION

- Majority of parking and loading below grade in two garages
 - 809 net new parking spaces
 - 685 replacement spaces
- Significant bicycle amenities
 - Over 650 bike parking spaces
 - Bike fix-it stations, Hubway stations
- Pedestrian improvements throughout the district
- Proposed improvements to the MBTA headhouse



PRELIMINARY PHASING

1. Below-grade garage
2. Buildings 5, 4, E38 & E39
3. Building 3
4. Building 2
5. Building 6



- *Open space and public realm improvements will be delivered with each building*
- *Housing (at Site 1) required before full R&D build-out*
- *Final schedule will be determined by Institutional priorities and market needs*
- *Complete build-out anticipated over next 7-10 years*



NEXT STEPS

- Article 19 process - consistency with Urban Design Objectives
- Review of traffic impact and mitigation
- Infrastructure and utilities
- Detailed review of open space/active space plans
- Public hearings on Final Development Plan



MIT: IMPLEMENTING A COMMUNITY VISION FOR ALL

Open Space Looking East



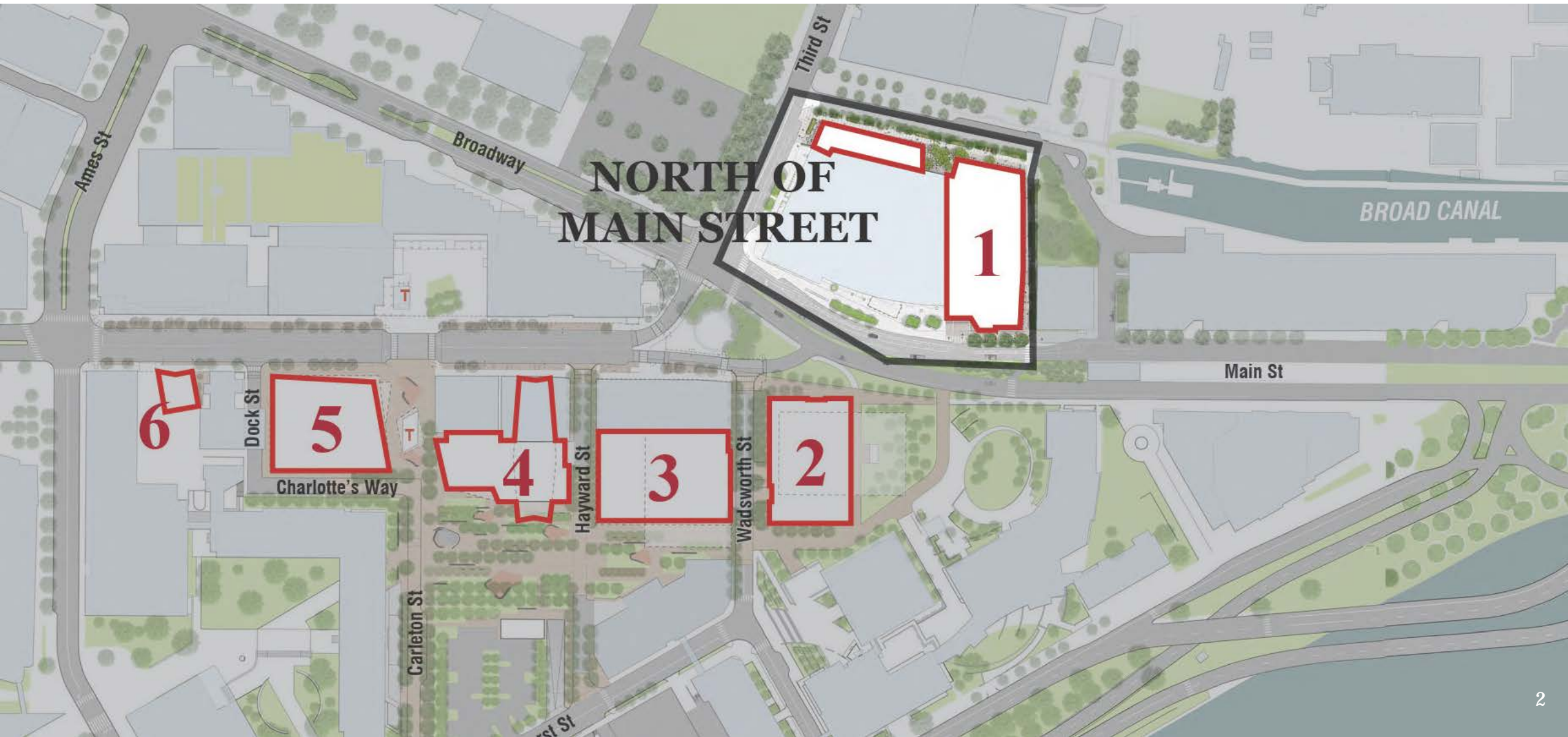


KENDALL SQUARE INITIATIVE



Planned Unit Development
Special Permit Application - NoMa
September 8, 2015

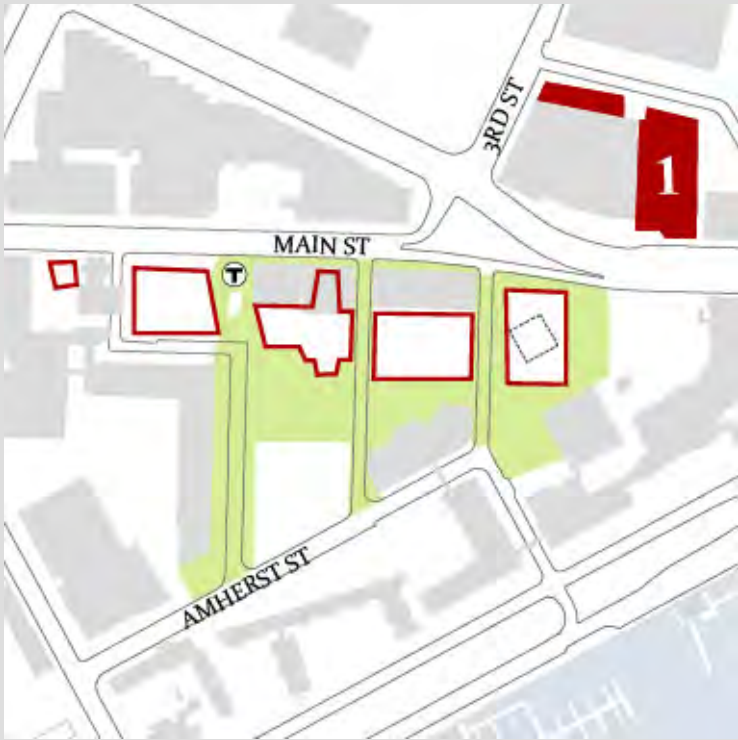
NORTH OF MAIN STREET



SITE 1 PROJECT OVERVIEW



SITE 1



USE: Retail and Residential

SF: 403,000

HEIGHT: 250'

ARCHITECT: Elkus|Manfredi



CONFORMANCE WITH ZONING

	Parameters	KSI Proposal
Total New SF	R&D max: 980,000 SF Residential min: 240,000 SF 18% Affordable	R&D: 888,000 SF Residential: 285,000 SF 18% Affordable
Density	FAR 3.9 across the district	FAR 3.35 across the district
Maximum Heights	150'-300'	Building 1: 250' Building 2: 200' Building 3: 200' Building 4: 300' Building 5: 250' Building 6: 43'
Open Space	15% of PUD	38% of PUD
Parking	Retail: 0.5/1,000 SF max Office: 0.9/1,000 SF max R&D: 0.8/1,000 SF max Housing: 0.5-0.75/unit	Housing: 0.52/unit



PROPOSED PROGRAM*

Uses:	Housing/ Dormitory	Retail/ Active Uses	Office/R&D	Academic	Other	TOTAL
North of Main Street						
Building 1	285,000	16,000	15,000	-	87,000	403,000
South of Main Street						
Building 2	-	18,000	298,000	-	-	316,000
Building 3	-	27,000	270,000	-	-	297,000
Building 4	330,000	28,000	-	9,000	-	367,000
Building 5	-	20,000	305,000	65,000	-	390,000
Building 6	-	6,000	-	-	-	6,000
TOTAL	615,000	115,000	888,000	74,000	87,000	1,779,000

**Gross floor area without exemptions*

HOUSING

- Approximately 240 market-rate units
- 18% Affordable (approximately 50 units)



View From Main Street Looking West

PEDESTRIAN EXPERIENCE

- Activate the streetscape with uses that engage pedestrians
- Provide wide sidewalks, diverse and useful street furniture, and opportunities for sidewalk dining and interaction
- Reduce environmental impacts of shadow and wind to maximize comfort and use



View from Third Street

PEDESTRIAN EXPERIENCE

Shadows

- Net new shadow is reduced by shadow from existing buildings
- Morning shadow falls on One Broadway
- New shadow will occur on the Broad Canal in later afternoon hours
- A 250' tall tower is proposed, having less impact than the allowable 300' tower



View from Canal

PEDESTRIAN EXPERIENCE

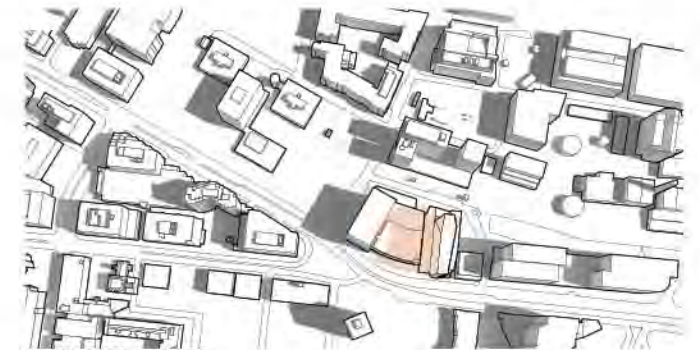
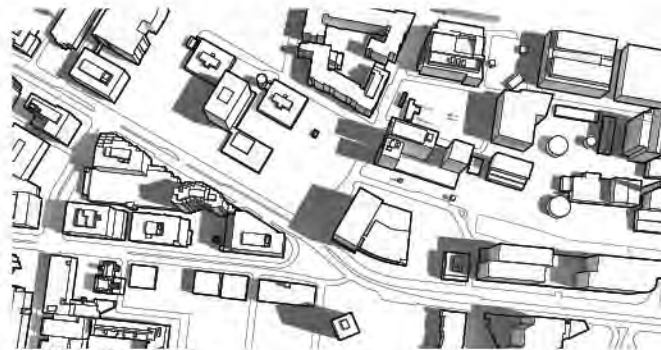
Shadows

June 21

CURRENT CONDITION

NET NEW SHADOWS

9 AM



12 PM



3 PM



PEDESTRIAN EXPERIENCE

Shadows

September 21

9 AM

CURRENT CONDITION



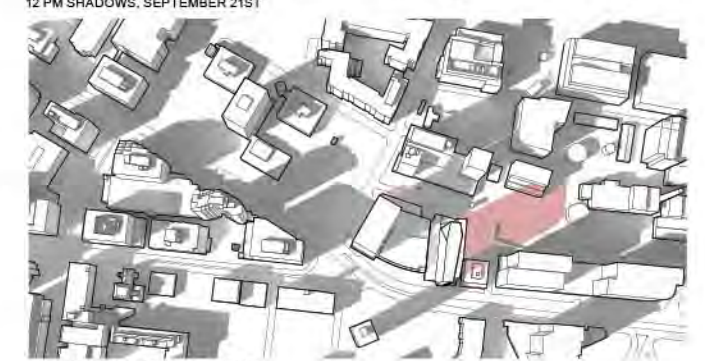
NET NEW SHADOWS



12 PM



3 PM



PEDESTRIAN EXPERIENCE

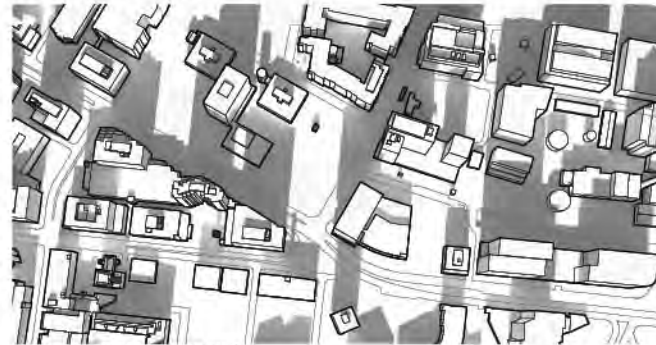
Shadows

December 21

CURRENT CONDITION



9 AM SHADOWS, DECEMBER 21ST



12 PM SHADOWS, DECEMBER 21ST

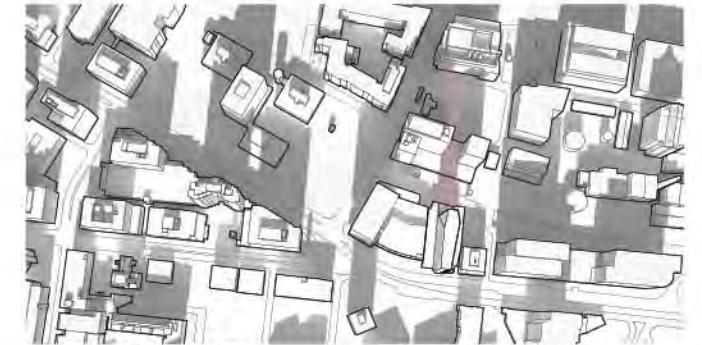


3 PM SHADOWS, DECEMBER 21ST

NET NEW SHADOWS



9 AM SHADOWS, DECEMBER 21ST



12 PM SHADOWS, DECEMBER 21ST



3 PM SHADOWS, DECEMBER 21ST

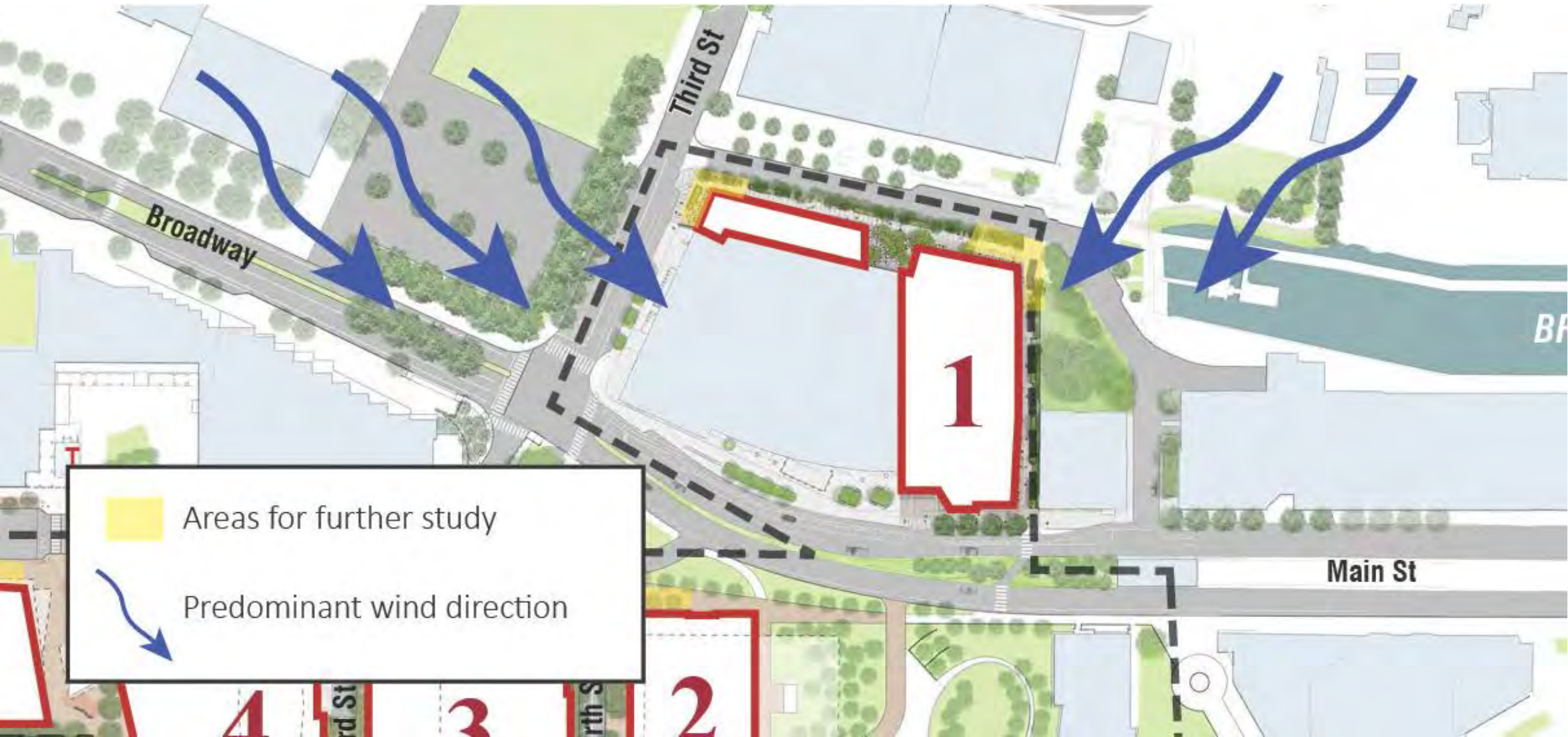
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PEDESTRIAN EXPERIENCE

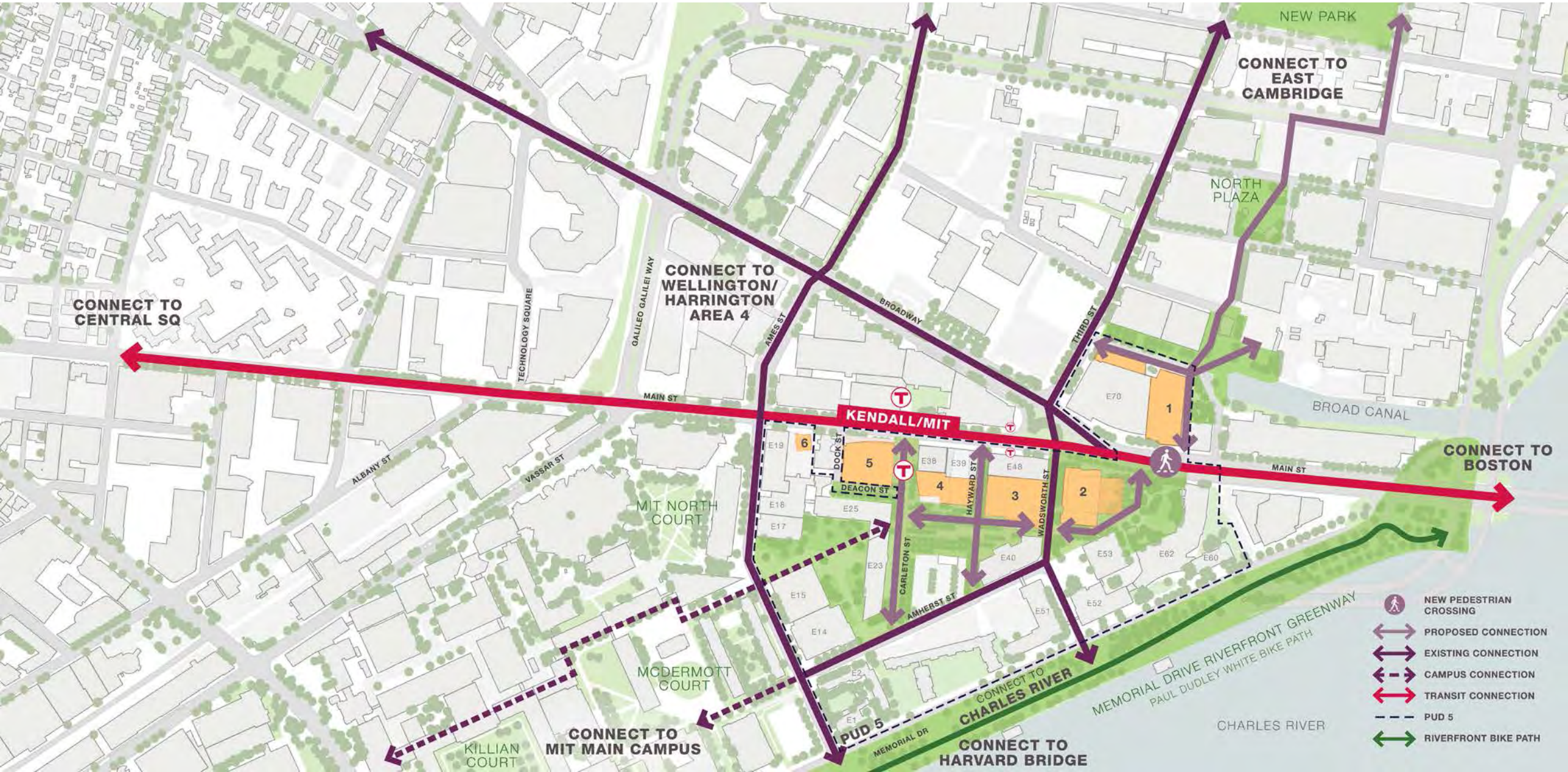
Wind



 Areas for further study

 Predominant wind direction

PROPOSED OPEN SPACE CONNECTIONS



CONNECT TO CENTRAL SQ

CONNECT TO WELLINGTON/HARRINGTON AREA 4

CONNECT TO EAST CAMBRIDGE

KENDALL/MIT

CONNECT TO BOSTON

CONNECT TO MIT MAIN CAMPUS

CONNECT TO HARVARD BRIDGE

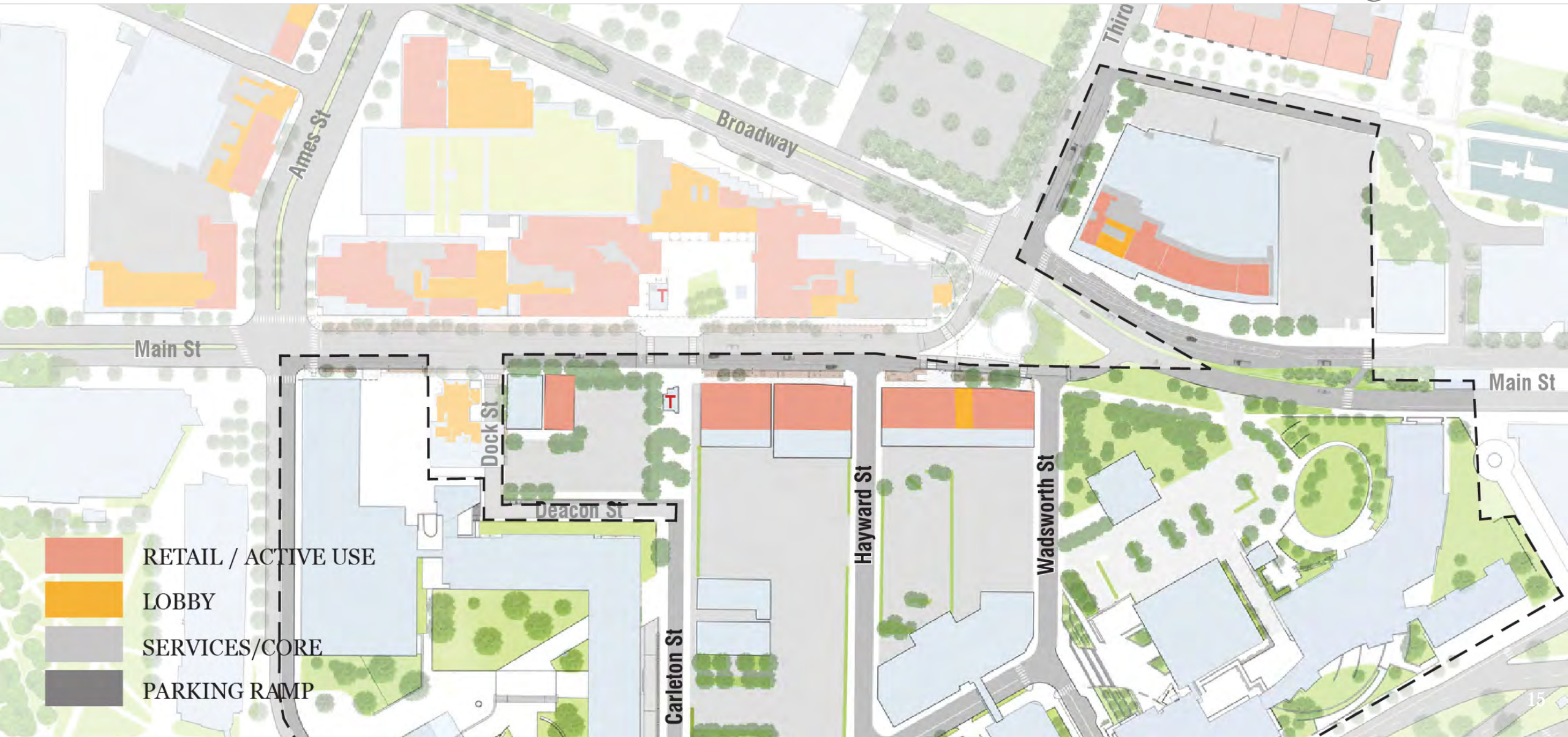
CONNECT TO CHARLES RIVER

- NEW PEDESTRIAN CROSSING
- PROPOSED CONNECTION
- EXISTING CONNECTION
- CAMPUS CONNECTION
- TRANSIT CONNECTION
- PUD 5
- RIVERFRONT BIKE PATH



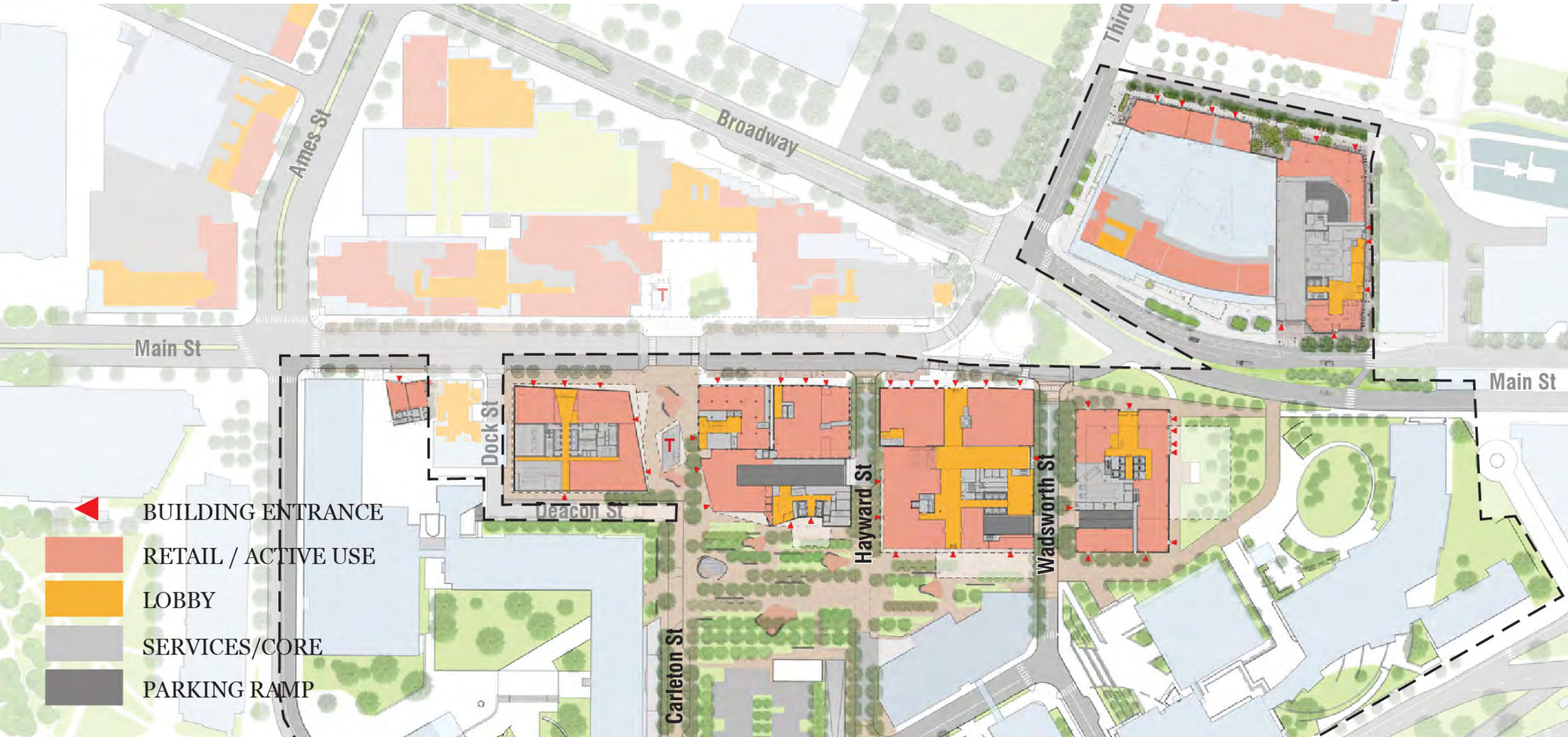
RETAIL

Existing Conditions



RETAIL AND ACTIVE USE

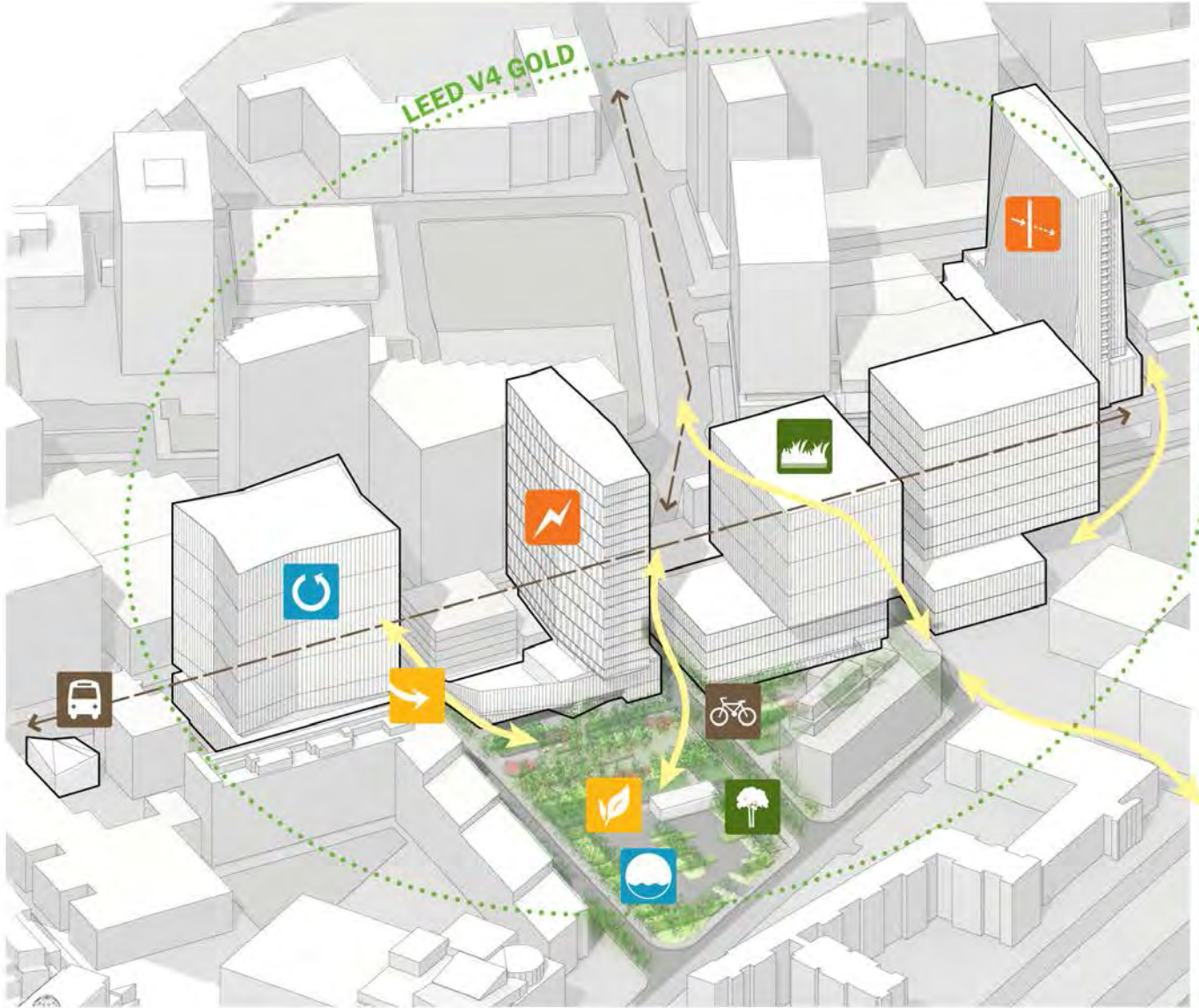
Proposed Plan












-  BUILDING ENTRANCE
-  RETAIL / ACTIVE USE
-  LOBBY
-  SERVICES/CORE
-  PARKING RAMP



SUSTAINABILITY

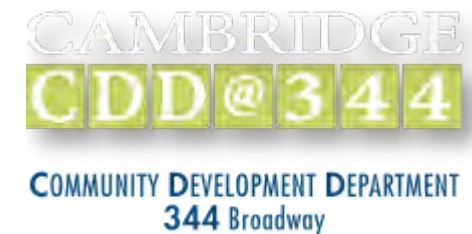


-  HIGH PERFORMANCE BUILDING ENVELOPES
-  ADVANCED ENERGY SYSTEMS
-  GREEN AMENITIES
-  CONNECTIVITY
-  MULTIMODAL TRANSIT
-  BICYCLE NETWORK
-  STREET TREES
-  GREEN ROOF
-  WATER REUSE
-  DISTRICT STORMWATER MANAGEMENT



INFRASTRUCTURE

- Ongoing discussions with City Departments
- Assessed existing sanitary, stormwater and water systems
- Municipal systems adequate for demand
- Conceptual plans for distribution and tie-in in PUD filings
- Coordinating design of new Main Street cross-walk



TRANSPORTATION

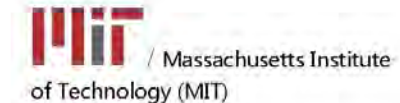
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Transportation Impact Study

MIT Kendall Square

Cambridge, Massachusetts

PREPARED FOR



PREPARED BY



99 High Street
Boston, MA 02110
617.728.7777

June 22, 2015

Refiled July 17, 2015

TRANSPORTATION

- Elimination of 114 surface parking spaces
 - 65 net new parking spaces
 - 0.52 spaces/unit proposed (179 spaces)
- Significant bicycle amenities
 - 323 long-term bike parking space in garages
 - 43 short-term surface bike parking space
 - Bike fix-it station, Hubway station
- Pedestrian improvements throughout the district



SCHEDULE AND PHASING

- Intention to move forward with Site 1 construction as soon as possible
- Construction of housing required before final commercial development can occur per zoning
- Will include all public realm, retail, and landscape improvements delivered with the housing



NEXT STEPS

- Article 19 process - consistency with Urban Design Objectives
- Review of traffic impact and mitigation
- Infrastructure and utilities
- Detailed review of open space/active space plans
- Public hearings on Final Development Plan

EXECUTING A COMMUNITY VISION

Broad Canal Way Looking West

