



# MXD INFILL DEVELOPMENT CONCEPT PLAN

REVISIONS

CAMBRIDGE, MASSACHUSETTS  
ISSUED NOVEMBER, 2016

SASAKI

**SUBMITTED TO**

**Cambridge Community Development Department**  
City Hall Annex  
344 Broadway  
Cambridge, MA 02139

**The Cambridge Redevelopment Authority**  
255 Main Street, 4th Floor  
Cambridge, MA 02142

**APPLICANT**

**Boston Properties Limited Partnership**  
800 Boylston Street, Suite 1900  
Boston, MA

**PREPARED BY**

SASAKI / VHB In association with: BOSTON PROPERTIES

# NOVEMBER 2016

**THE CONSULTANT TEAM**

**Sasaki**  
**VHB**

Master Plan  
Permitting

Pickard Chilton  
Solomon Cordwell Buenz  
Perkins + Will  
Sasaki  
VHB  
The Green Engineer  
RWDI  
Haley & Aldrich

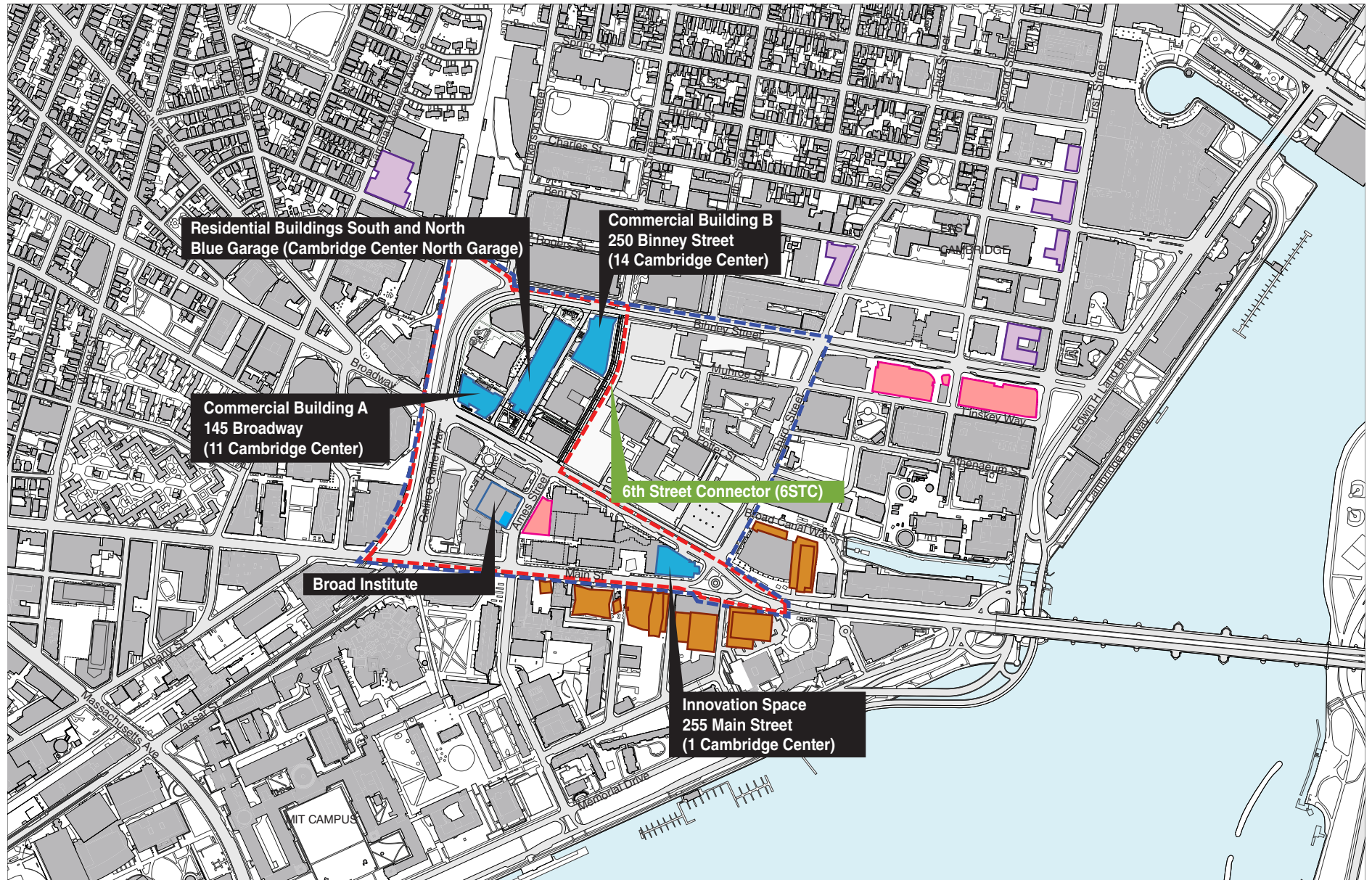
Commercial Building A - 145 Broadway  
Residential Buildings North and South (Blue Garage)  
Commercial Building B - 250 Binney Street  
District / Project Landscape Architects  
Traffic Engineering / Civil Engineering  
Sustainability  
Environmental Science  
Geotech

# **1. PROPOSED DEVELOPMENT PLAN REVISIONS**

# 1.2 EXISTING SITE CONDITIONS

SITE CONTEXT PLAN

FIGURE 1.2



- Permitted Under Construction
- Proposed Permitted
- Proposed MIT Noma/Soma
- MXD Boundary
- KSURP Boundary
- Proposed Building Sites

# 1.2 EXISTING SITE CONDITIONS

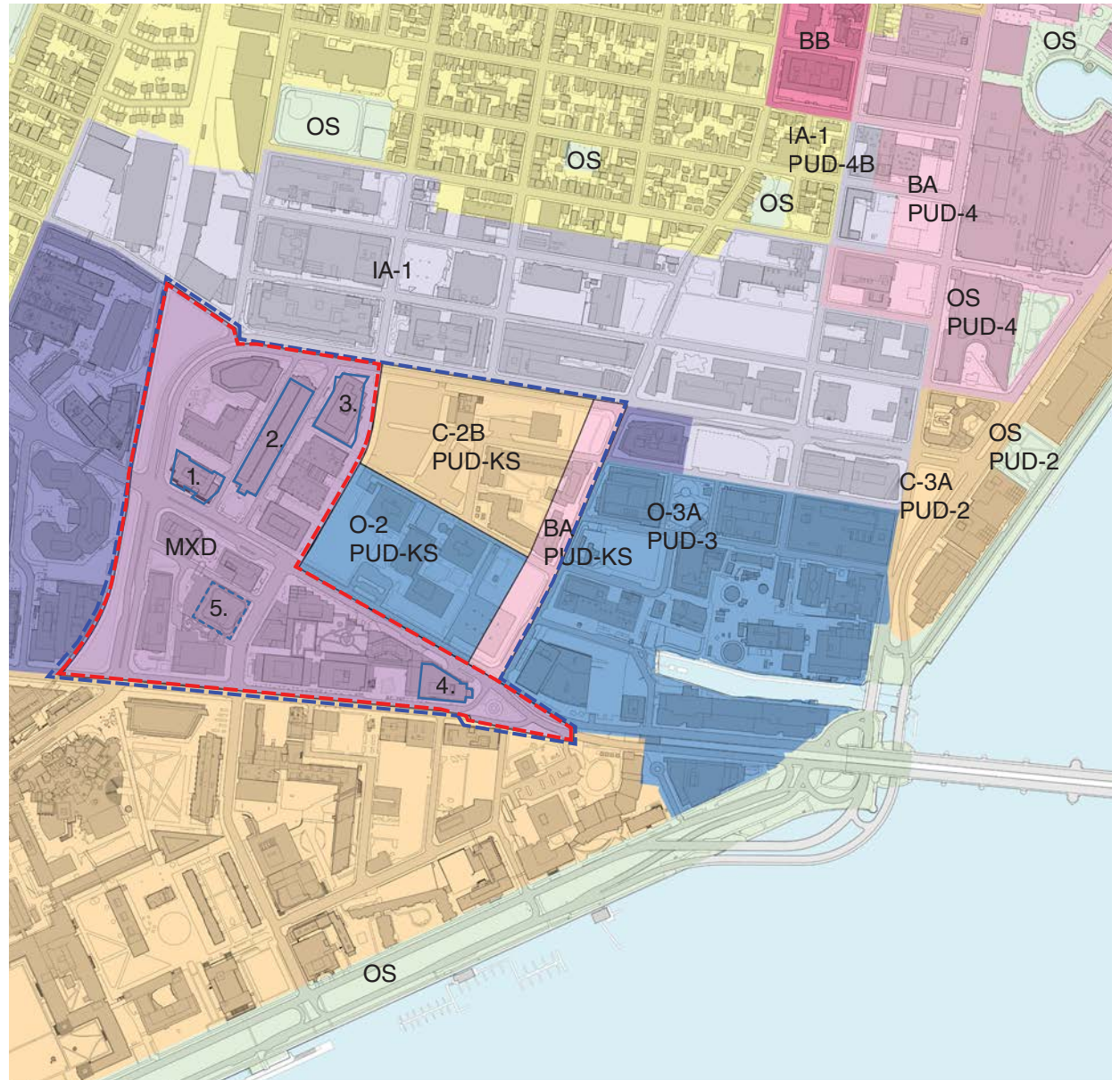
## EXISTING ZONING

FIGURE 1.4

Figure 1.4 presents the existing zoning map and Figure 1.5 presents the existing land use diagram. Refer to Table 1-1 for a summary of the existing development on these parcels.

Figure 1.6A shows the specific parcels within the Kendall Center areas that are the subject of the Project.

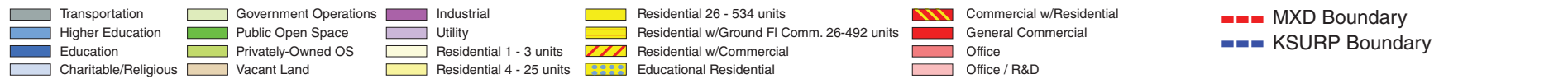
1. 145 Broadway (formerly referred to as 11 Cambridge Center);
2. Blue Garage (formerly referred to as Cambridge Center North Garage) fronting Broadway and Binney Street;
3. 250 Binney Street (formerly referred to as 14 Cambridge Center); and
4. 255 Main Street (formerly referred to as 1 Cambridge Center).
5. Completed in 2014, the approximately 246,000 square feet Broad Institute building located at 75 Ames Street was the subject of Plan Amendment No. 8. Project Change Description.



- MXD Boundary
- KSURP Boundary
- Proposed Building Sites



Source: Base Map Adapted from CDD GIS Map: prepared by Brendan Monroe on August 26, 2015.



# EXISTING LAND USE

FIGURE 1.6A



Source: Base Map Adapted from CDD GIS Map: prepared by Brendan Monroe on August 26, 2015.

- Commercial w/Residential
- General Commercial
- Office
- Office / R&D

- Residential 26 - 534 units
- Government Operations
- Industrial
- Transportation

Open Space/Park

- MXD Boundary
- KSURP Boundary
- Tract/Lot Boundary

V Tract/Lot Number

# PROPOSED LAND USE

FIGURE 1.6B



Source: Base Map Adapted from CDD GIS Map: prepared by Brendan Monroe on August 26, 2015.

- |                          |                            |                       |                    |                  |
|--------------------------|----------------------------|-----------------------|--------------------|------------------|
| Commercial w/Residential | Residential 26 - 534 units | Proposed Lot Boundary | MXD Boundary       | Tract/Lot Number |
| General Commercial       | Government Operations      | Open Space/Park       | KSURP Boundary     |                  |
| Office                   | Industrial                 |                       | Tract/Lot Boundary |                  |
| Office / R&D             | Transportation             |                       |                    |                  |



# **3. OPEN SPACE PLAN**

## **REVISIONS**

# 3.1 EXISTING OPEN SPACE - PARCEL 2 TRACTS

PARCEL 2 TRACT (EXISTING LOT BOUNDARIES)



--- Tract/Lot Boundary  
█ Open Space/Park

Ⓧ Tract/Lot Number

PARCEL 2 TRACT (RECONFIGURED LOTS TRACT II + TRACT IV)



--- Tract/Lot Boundary  
█ Open Space/Park

Ⓥ Tract/Lot Number

# 3.2 PROPOSED OPEN SPACE

## REQUIRED OPEN SPACE CALCULATIONS: TRACT I , TRACT II, TRACT IV

### COMMERCIAL BUILDING A (PHASE 1)

Tract II - 145 Broadway	
<b>GFA Allocation</b>	
Infill GFA	312,610.20
Innovation Space Transfer GFA	62,522.04
Existing GFA	78,636.00
<b>TOTAL ALLOCATED GFA</b>	<b>453,768.24</b>
Planned Office GFA	443,731.00
Planned Retail/Active Use GFA	10,037.00
<b>TOTAL GFA</b>	<b>453,768.00</b>
<b>Lot Open Space - New Infill GFA + Existing GFA</b>	
Office Infill GFA - Lot Open Space (8:100)	29,207.62
Retail Infill GFA - Lot Open Space (10:100)	1,003.70
Existing GFA - Lot Open Space (8:100)	6,290.88
<b>TOTAL LOT OPEN SPACE REQUIREMENT</b>	<b>36,502.20</b>
PHASE 1	
Track II -145 Broadway Open Space	8,263.00
<b>Enhanced Open Space</b>	
Track VII - EW connector Enhanced OS	6,908.00
6th Street Connector (inside lot)	19,569.00
6th Street Connector (outside lot)	19,790.00
<b>TOTAL LOT OPEN SPACE PROVIDED</b>	<b>54,530.00</b>
<b>TOTAL OPEN SPACE OVER REQ. FOR PHASE 1</b>	<b>18,027.80</b>

**REQUIRED** 36,502 ±SF  
**PROVIDED** 54,530 ±SF

### RESIDENTIAL BUILDING SOUTH (PHASE 2)

Tract IV -Blue Garage - Residential South	
<b>GFA Allocation</b>	
Infill GFA	350,000.00
Innovation Space Transfer GFA	-
Existing GFA	-
<b>TOTAL ALLOCATED GFA</b>	<b>350,000.00</b>
Planned Rental GFA	266,000.00
Planned Home Ownership GFA	84,000.00
Planned Retail/Active Use GFA	-
<b>TOTAL GFA</b>	<b>350,000.00</b>
<b>Lot Open Space - New Infill GFA + Existing GFA</b>	
Office Infill GFA - Lot Open Space (8:100)	28,000.00
Retail Infill GFA - Lot Open Space (10:100)	-
Existing GFA - Lot Open Space (8:100)	-
<b>TOTAL LOT OPEN SPACE REQUIREMENT</b>	<b>28,000.00</b>
*PHASE 2	
Track IV -Blue Garage	4,625.00
<b>Enhanced Open Space</b>	
Track III -Broadway Park	11,485.00
Track III -EW connector Enhanced OS	6,606.00
Track V -EW connector Enhanced OS	6,491.00
Track III - Enhanced OS	2,863.00
<b>Rooftop Open Space</b>	
Track IV -Blue Garage (Residential Amenity Space)	9,700.00
<b>TOTAL LOT OPEN SPACE PROVIDED ON GRADE</b>	<b>32,070.00</b>
<b>TOTAL OPEN SPACE OVER REQ.FOR PHASE 2</b>	<b>4,070.00</b>
<b>TOTAL OPEN SPACE PROVIDED INC (Roof Top Amenity)</b>	<b>41,770.00</b>
<b>TOTAL OPEN OVER REQ. INC (Roof Top Amenity)</b>	<b>13,770.00</b>

**REQUIRED** 28,000 ±SF  
**PROVIDED** 32,070 ±SF  
*\*(Including Roof Top Amenity space)* **\*41,770 ±SF**

# 3.2 PROPOSED OPEN SPACE

PARCEL 2 TRACT (RECONFIGURED TRACT II + TRACT IV)



# 3.2 PROPOSED OPEN SPACE

## REQUIRED OPEN SPACE CALCULATIONS: TRACT I , TRACT II, TRACT IV

### COMMERCIAL BUILDING B (PHASE 2)

Tract I - 250 Binnney Street	
<b>GFA Allocation</b>	
Infill GFA	213,389.80
Innovation Space Transfer GFA	42,677.96
Existing GFA	62,576.00
<b>TOTAL ALLOCATED GFA</b>	<b>318,643.76</b>
Planned Office GFA	310,614.76
Planned Retail/Active Use GFA	8,029.00
<b>TOTAL GFA</b>	<b>318,643.76</b>
<b>Lot Open Space - New Infill GFA + Existing GFA</b>	
Office Infill GFA - Lot Open Space (8:100)	19,843.10
Retail Infill GFA - Lot Open Space (10:100)	802.90
Existing GFA - Lot Open Space (8:100)	5,006.08
<b>TOTAL LOT OPEN SPACE REQUIREMENT</b>	<b>25,652.08</b>
<b>*PHASE 2</b>	
Track I -Open Space	16,548.00
<b>Enhanced Open Space</b>	
Track V - Enhanced Open Space	2,575.00
Track VI - Enhanced Open Space	6,535.00

<b>TOTAL OPEN SPACE PROVIDED</b>	<b>25,658.00</b>
<b>TOTAL OPEN SPACE OVER REQ. FOR PHASE 2</b>	<b>5.92</b>

**REQUIRED** 25,652 ±SF  
**PROVIDED** 25,658 ±SF

### RESIDENTIAL BUILDING NORTH (PHASE 3)

Tract IV -Blue Garge - Residential North	
<b>GFA Allocation</b>	
Infill GFA	70,000.00
Innovation Space Transfer GFA	-
Existing GFA	-
<b>TOTAL ALLOCATED GFA</b>	<b>70,000.00</b>
Planned Rental GFA	68,700.00
Planned Home Ownership GFA	-
Planned Retail/Active Use GFA	1,300.00
<b>TOTAL GFA</b>	<b>70,000.00</b>
<b>Lot Open Space - New Infill GFA + Existing GFA</b>	
Office Infill GFA - Lot Open Space (8:100)	5,600.00
Retail Infill GFA - Lot Open Space (10:100)	130.00
Existing GFA - Lot Open Space (8:100)	-
<b>TOTAL LOT OPEN SPACE REQUIREMENT</b>	<b>5,730.00</b>
<b>PHASE 3</b>	
Track IV -Blue Garage	4,647.00
<b>Enhanced Open Space</b>	
Track II -Binney Park	7,898.00
<b>Rooftop Open Space</b>	
Track IV -Blue Garage (Residential Amenity Space)	4,700.00
Track IV -Blue Garage (PV Area)	19,400.00

<b>TOTAL LOT OPEN SPACE PROVIDED</b>	<b>12,545.00</b>
<b>TOTAL OPEN SPACE OVER REQ. FOR PHASE 3</b>	<b>6,815.00</b>

<b>TOTAL OPEN SPACE PROVIDED INC (Roof Top Amenity)</b>	<b>17,245.00</b>
<b>TOTAL OPEN OVER REQ. INC (Roof Top Amenity)</b>	<b>11,515.00</b>

**REQUIRED** 5,730 ±SF  
**PROVIDED** 12,545 ±SF  
*\*(Including Roof Top Amenity space)* **\*17,245 ±SF**

# 3.2 PROPOSED OPEN SPACE

PARCEL 2 TRACT (RECONFIGURED TRACT II + TRACT IV)



# 3.2.1 PUBLIC PROGRAMMING

## MXD DISTRICT PUBLIC PROGRAMMING

The redesign of Broadway Park and Binney Park create new open space programming opportunities in the MXD District. Broadway Park is at a highly visible location near the center of the MXD District and is envisioned as a key gathering space for employees, residents and visitors. The expanded Broadway Park has a small flexible lawn area and a contiguous paved area which could be the setting for community events such as performances, outdoor cinema, temporary public art installations, market, and other events and gatherings. The community table in Broadway Park is envisioned being used for outdoor dining, as a meeting place, board game table, outdoor classroom as well as other possible programmed events. Existing Binney Park, at the northern edge of the MXD District, is currently a small green space with paths to the parking garage. With new active ground floor uses planned for the edge of Binney Park, the park is envisioned as a more usable public space. There is an expanded range of seating places, including colorful structures that support netting and may be used as informal and relaxing seating structures, appealing to adults as well children. These unique seating structures could be used by employees during the weekday and be used as play structures at other times.

These programming opportunities complement the current programming initiatives that are underway in the MXD District at the Kendall Plaza on Main Street and the Kendall Square Roof Garden above the Green Garage. Programming in these spaces is focused on creating engaging opportunities for all communities including office workers, residents, students, visitors within Kendall Square to connect and interact. Ongoing events on Kendall Plaza include a seasonal farmer's market on Kendall Plaza, concerts with both Cambridge institution Club Passim and Berklee College of Music, and participatory community art projects and performances with the Community Art Center and the Multicultural Arts Center. In addition, temporary public art installations are sourced annually for the Plaza, and include a sidewalk mural in collaboration with the Cambridge Science Festival this spring, as well as an upcoming collaboration with local non-profit Now + There. Programming on the Kendall Square Roof Garden includes free fitness programming, cooking demonstrations and tastings, urban gardening workshops and available lawn games. Both spaces are programmed with cushions for easy, portable seating and participate in programs through the KSA, including hosting libraries as part of the Kendall Reads promotion. Partnerships with local non-profits enhance activities in these spaces and provide valuable exposure for local community groups and an opportunity for office customers to participate in the community around them.

## PUBLIC PROGRAMMING ELEMENTS

### A. BROADWAY PARK

- Outdoor Community Table (Collaboration Space)
- Outdoor Seating (Collaboration Space)
- Summer Movies / Concerts / Digital WIFI Connection

### B. 6TH STREET CONNECTOR

- Outdoor Seating (Collaboration Space)

### C. BINNEY PARK

- Outdoor Seating (Collaboration Space)
- Sculptural Netting
  - Interactive Lounge Seating
  - Children's Play

### D. GRAND JUNCTION

- Outdoor Seating (Collaboration Space) / Bike Path

### E. BINNEY STREET PARK "Play Valley"

- Hitching Posts for Hammocks /Rock Climbing Walls
- Sculptural Netting / Children's Play

### F. KENDALL PLAZA

- Outdoor Seating (Collaboration Space) / Summer Concerts
- Public Markets / Temporary Public Art Installations
- Community Partner Programming

### G. KENDALL SQUARE ROOF GARDEN

- Outdoor Seating (Collaboration Space) / Fitness Classes
- Urban Gardening Workshops / Cooking Demonstrations/Tastings
- Lawn Games

### H. POINT PARK

- Outdoor Seating and Gathering / Sculpture Park

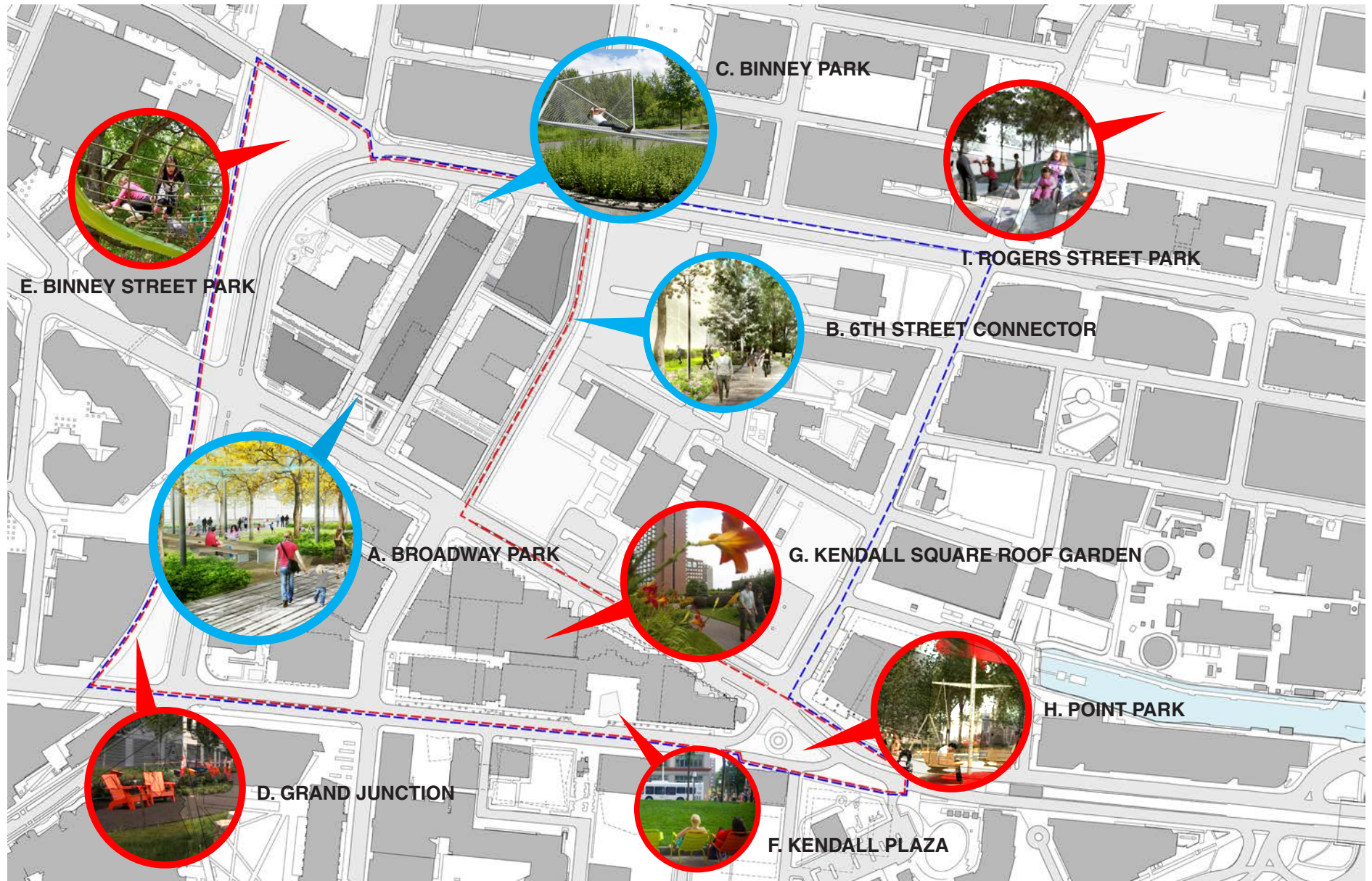
### I. ROGERS STREET PARK

- Outdoor Seating / Water Play / Dog park / Bike Loop

-  Enhanced Open Spaces included in Project
-  Open Spaces Projects not part of Project

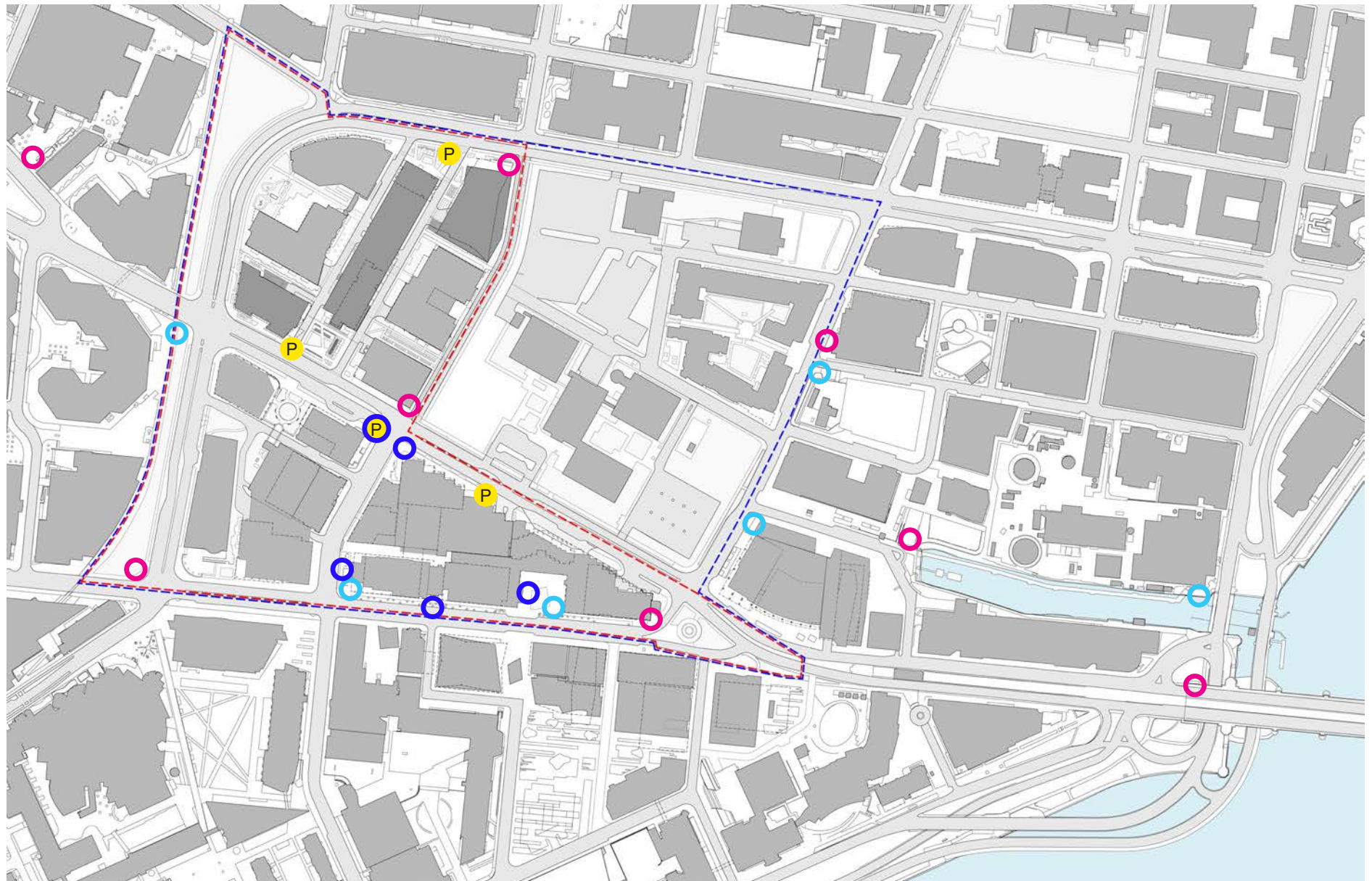


# 3.2.1 PUBLIC PROGRAMMING



Enhanced Open Spaces included in Project  
Open Spaces Projects not part of Project

# KENDALL SQUARE IDENTITY BRANDING AND WAYFINDING



- Pilot Kiosk Locations
- Potential Kiosk Locations
- Freestanding Directory Locations
- P Public Parking Sign

# 3.4 TREE MITIGATION AND PROTECTION PLAN

## ASSESSMENT OVERVIEW

The assessment of existing trees on the project site-MXD Parcel 2 and adjacent Lowry Walkway (also known as 6th Street Connector)-was conducted by Barlett Tree Experts. Barlett assessed the conditions of the said trees based on the species, their growing conditions, and the current constraints impacting the trees. The following points were used in considering the conditions and the future viability of the trees on the site:

1. Life span of species
2. Constraints on soil depth
3. Soil compaction
4. Tree canopy competition
5. Insect damage
6. Impact of Sasaki's design intent

Additional information regarding diameter at breast height (DBH) of trees are referenced in existing survey (Appendix SV-1).

## LOWRY WALKWAY (6TH STREET CONNECTOR)

The red oaks (*Quercus rubra*) along this portion of the site were assessed to be in good condition. The intended materials of Sasaki's design for the walkway (primarily concrete pavers with sand joints and pervious asphalt systems) would allow for proper water penetration and gas exchange, while minimizing negative impacts on the existing root structure and system, beneficial to the long-term lifespan of the trees. Additional measures to be taken to ensure the long-term health of the trees along the walkway will be as follows:

1. Maintain a minimum of 10-foot radius of uncovered, natural soil around each tree.
2. Allow for an expanded soil zone for the existing oak trees by raising the sidewalk to the height of the existing curb.

Additional information regarding the management of the trees within the 6th Street Connector are located within the management plan from the arborist (Appendix A).

## BROADWAY (STREET)

The little-leaf lindens (*Tilia cordata*) along Broadway were identified to be in poor condition due to their limited root zone and soil compaction.

## BROADWAY PARK

The Japanese Elms (*Zelkova Serrata*) within the existing Broadway Park, in front of the North Garage, were evaluated to be in fair condition, though several of the trees have become constrained due to canopy competition amongst other existing Japanese elm in the area.

## EASEMENT C (EXISTING TRACT II)

The birch trees (*Betula*) north of Commercial Building A were evaluated to be in poor condition. Due to birch trees being an early successional tree species, the trees have lived past their life expectancy.

## BLUE GARAGE

The Red Maples (*Acer rubrum*) along the North Garage were evaluated to be in poor condition, suffering from limited root zone and soil compaction. Due to the red maple trees being an early successional tree species, these trees have lived past their life expectancy.

## PROPOSED TREES – GENERAL STRATEGY

Trees being placed in for the proposed landscape will be positioned and located for optimal growing conditions. Larger tree spacing between trees, maximum soil volumes and depth will be employed as part of the design solution. At constrained soil conditions, structural soil will be deemed suitable for use.

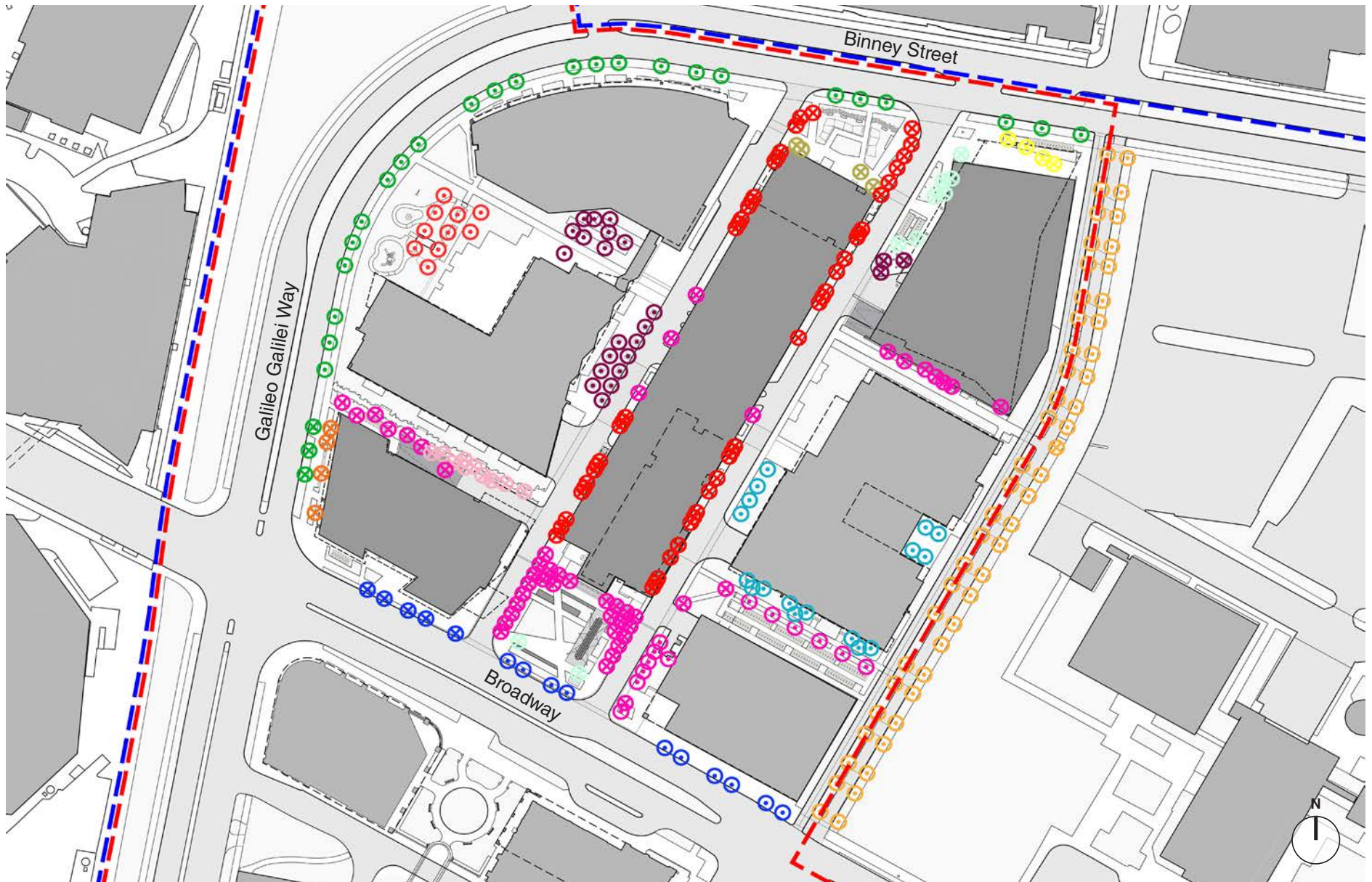
# TREE MITIGATION AND PROTECTION PLAN

TREE PROTECTION PLAN



- Trees for Protection
- Trees for Removal

EXISTING TREE IDENTIFICATION AND SPECIES TYPE



- |  |   |   |  |
|--|---|---|--|
| <span style="color: red;">■</span> <i>Acer rubrum</i> (Red Maple)            | <span style="color: purple;">■</span> <i>Gleditsia triacanthos</i> (Honey Locust)     | <span style="color: magenta;">■</span> <i>Zelkova serrata</i> (Zelkova)       | <span style="color: olive;">■</span> <i>Pinus Nigra</i> (Austrian Pine)    |
| <span style="color: yellow;">■</span> <i>Acer Japonicum</i> (Japanese Maple) | <span style="color: pink;">■</span> <i>Betula papyrifera</i> (White Birch)            | <span style="color: blue;">■</span> <i>Tilia Cordata</i> (Little-Leaf Linden) | <span style="color: orange;">■</span> <i>Malus coronaria</i> (Crabapple)   |
| <span style="color: orange;">■</span> <i>Quercus rubra</i> (Red Oak)         | <span style="color: cyan;">■</span> <i>Crataegus crus-galli</i> (Thornless Hawthorne) | <span style="color: green;">■</span> <i>Platanus occidentalis</i> (Syramore)  | <span style="color: lightgreen;">■</span> <i>Prunus serrulata</i> (Cherry) |

EXISTING TREE CONDITION ASSESSMENT



- Good Condition
- Poor Condition
- Fair Condition
- Dead Condition

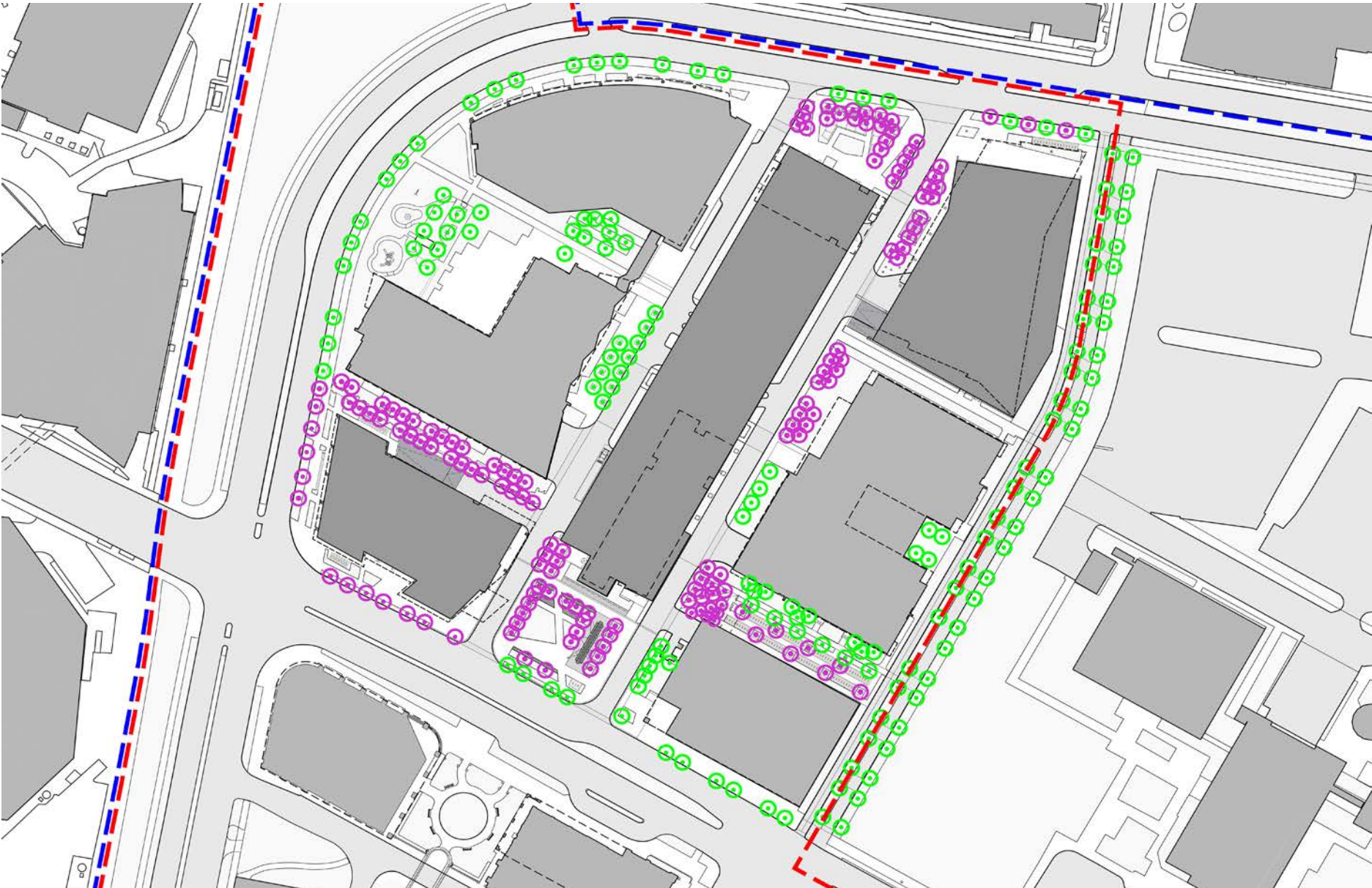
EXISTING SIGNIFICANT TREES (8" DBH+)



- Significant Tree to Remain (Trees with a DBH of 8" or higher)
- Removal of Significant Tree (Trees with a DBH of 8" or higher)

- Tree to Remain (DBH of Lower than 8")
- Removal of Tree (DBH of Lower than 8")

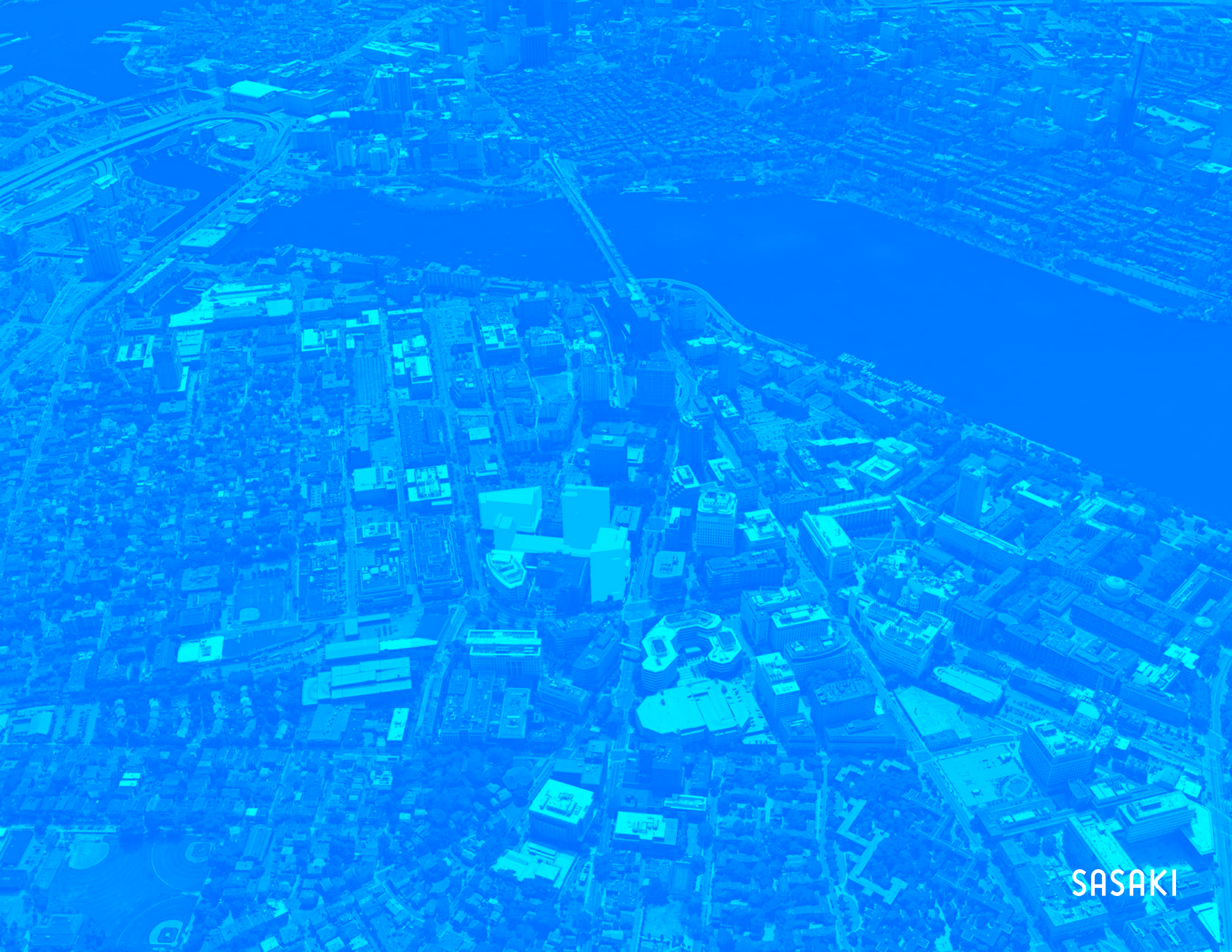
PROPOSED AND PROTECTED TREES



- Green square: Trees for Protection
- Purple square: Proposed Trees







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