

2. REGULATORY CONTEXT



2.0 INTRODUCTION

The following sections address the zoning requirements and describe how the Project complies with those requirements.. This section also outlines the anticipated review and approval process for the Concept Plan Amendment and the individual Project Components as the design advances through Design Review Submission. Lastly, this section outlines the criteria for approval pursuant to Sections 12.35.3(3) and 19.25 of the Zoning Ordinance (as required by Section 14.32.2.2 of the Zoning Ordinance),, and consistency with the KSURP.

CHAPTER UPDATES

The following section summarizes refinements to this Chapter since the Concept Plan Amendment #1.

Building Height: The Project proposes the construction of a single residential building with a maximum height of 400 feet along Broadway, and two commercial buildings with a maximum height of 250 feet along Binney Street (as permitted by the recent amendments to the MXD Zoning and KSURP).

Retail/Active Ground Floor Uses: The Project will result in a net increase of enhanced retail GFA through the construction of new ground-level retail/active uses in Commercial Building C and Commercial Building D, which will better activate the public realm, as well as the new cross-block connections that will promote pedestrian connectivity through the North Parcel and with the Volpe development to the east.

Open Space: With the demolition and relocation of the Blue Garage below-grade, the Project proposes the construction of approximately 45,000 square feet of new open space, an increase of more than 15,000 square feet compared to the Concept Plan Amendment #1. The new open space and pedestrian realm improvements will include a new central open space known as “Center Plaza”, which will contribute to a vibrant public realm, foster new cross-block connections and promote pedestrian connectivity through the North Parcel, and to between the Volpe development to the east. The new open space and public realm improvements will serve the residents and workers in the MXD, and the general public alike. Completion of the proposed modifications to the Amendment#1 Concept Plan shall result in approximately 302,919 square feet of Public Open Space in the MXD district (subject to Eversource rights to access the electrical substation sited below), exceeding the minimum of 100,000 square feet required by Section 14.42.

Parking: To accommodate the electrical substation, the approximately 1,170 existing above-grade parking spaces associated with the Blue Garage will be relocated below-grade into two, connected parking garages situated beneath Commercial Building C and Commercial Building D. The Project also proposes up to an additional 414 vehicle parking spaces to be accommodated within the two garages. Please refer to Section 5.5 for a detailed summary of the Applicant's approach to accommodating vehicle parking needs via minor additions of new parking and adoption of a managed parking strategy to service existing and proposed commercial buildings.

Bike Parking: The Applicant is proposing to implement a commercial bicycle valet to service the majority of anticipated demand for bicycle parking from the Residential Building, as well as Commercial Buildings C and D. Acknowledging the unique approach to bicycle parking being proposed as part of this plan, in accordance with Article 6.108.1 the Applicant therefore intends to seek a modification of bicycle parking requirements via special permit. The implications of applying these minimum bicycle parking requirements to the Project have been determined by applying the ratios established by the City of Cambridge Bicycle Parking Guide, shown in Table 10 of the TIS Update Memo #2 in Appendix B.

2.1 ZONING REQUIREMENTS

This table summarizes the key zoning requirements and demonstrates how the Project aims to comply with these requirements. Sections of the document are referenced for further details.

CATEGORY	ZONING REQUIREMENT	EXISTING / UNDER CONSTRUCTION	PROPOSED	DOCUMENT REF.
14.33: LOT DENSITY LIMITATION	NO MAXIMUM FLOOR AREA RATIO FOR ANY PROJECT UTILIZING INFILL GFA (INCLUDING UTILITY PROJECT GFA).	COMMERCIAL BUILDING A: 5.25 FAR COMMERCIAL BUILDING B: N/A	RESIDENTIAL BUILDING SOUTH: N/A COMMERCIAL BUILDING C: N/A COMMERCIAL BUILDING D: N/A	DIMENSIONAL FORMS
14.34: MAXIMUM BUILDING HEIGHT	UP TO 250 FEET	250 FEET (COMMERCIAL BUILDING A) 250 FEET (COMMERCIAL BUILDING B)	250 FEET (COMMERCIAL BUILDING C) 250 FEET (COMMERCIAL BUILDING D)	TABLE 1-1
	UP TO 400 FEET FOR NO MORE THAN ONE (1) MIXED-USE/ RESIDENTIAL BUILDINGS	N/A	400 FEET (RESIDENTIAL BUILDING SOUTH)	TABLE 1-1
14.32.5: INNOVATION SPACE	MINIMUM OF 10% OF OFFICE AND BIOTECH MANUFACTURING USES (NOTE: EXCLUDES UTILITY PROJECT GFA)	105,200 GFA	N/A	SECTION 1.3.2
	EXISTING GFA WITHIN THE DISTRICT CAN BE CONVERTED	INNOVATION SPACE CONVERSION AT 255 MAIN STREET COMPLETE	N/A	
14.36: AFFORDABLE HOUSING	AT LEAST 5% OF THE TOTAL FLOOR AREA DEVOTED TO MULTI-FAMILY RESIDENTIAL SHALL BE DEVOTED TO MIDDLE INCOME HOUSING	N/A	20,000 GFA	SECTION 2.1.1
	NO LESS THAN 20% OF THE TOTAL FLOOR AREA DEVOTED TO MULTI-FAMILY RESIDENTIAL SHALL BE DEVOTED TO AFFORDABLE UNITS	N/A	80,000 GFA	
14.37: DWELLING UNITS	A MINIMUM 5% OF RESIDENTIAL GFA SHALL BE DEVOTED TO UNITS OF 3-BEDROOMS OR MORE	N/A	20,000 GFA	
14.38: ACTIVE GROUND FLOORS	GROUND FLOOR OF BUILDINGS OF 50,000 SF OR MORE MUST BE OCCUPIED BY RETAIL AND CONSUMER SERVICE USES OR ACTIVE PUBLIC GATHERING SPACE (WHETHER OPEN OR CLOSED) ALONG A MINIMUM 75% OF FRONTAGE; PROVIDED, HOWEVER, THAT THE REQUIREMENT SHALL BE 40% FOR ANY BUILDING WITH A FAÇADE LENGTH OF ONE HUNDRED (100) FEET OR LESS ALONG SUCH FRONTAGE ⁵	8,700 GFA NET NEW	9,000 GFA NET NEW	SECTION 4.2 FOR FURTHER DETAILS
		40,000 GFA EXISTING/ RECONSTRUCTED	N/A	
14.42: DISTRICT PUBLIC OPEN SPACE	MINIMUM 100,000 SF WITHIN THE DISTRICT RESERVED OR DESIGNATED AS PUBLIC OPEN SPACE	REFER TO CHAPTER 3, OPEN SPACE		SECTION 3.2 FOR FURTHER DETAILS
	MINIMUM OF 15% OF TOTAL LAND AREA WITHIN THE MXD DISTRICT DESIGNATED OR RESERVED AS PUBLIC OR PRIVATE OPEN SPACE			

TABLE 2-1 ZONING COMPLIANCE SUMMARY

CATEGORY	ZONING REQUIREMENT	EXISTING / UNDER CONSTRUCTION	PROPOSED	DOCUMENT REF.
14.43: PROJECT-BASED OPEN SPACE	CONTRIBUTE TO THE OPEN SPACE NETWORK OF THE DISTRICT, PER SECTION 403 OF THE KSURP	REFER TO CHAPTER 3, OPEN SPACE		SECTION 3.1
14.71.3: DISTRICT PUBLIC OPEN SPACE – AMES STREET DISTRICT	MEET DISTRICT PUBLIC OPEN SPACE REQUIREMENT (SECTION 14.42), AND MAINTAIN A MINIMUM OF 53,000 SQUARE FEET OF PUBLIC OPEN SPACE WITHIN THE AMES STREET DISTRICT	70,540 SF OF PUBLIC OPEN SPACE	N/A	SECTION 3.1
14.52: PARKING	MAX 0.9 /1,000 SF COMMERCIAL 1,414,200 ² GFA 1,273 SPACES MAX 0.5 SPACE/1,000 SF RETAIL 17,500 GFA 9 SPACES MIN 0.25 SPACE/DWELLING UNIT 465 UNITS 116 SPACES MAX 0.75 SPACE/DWELLING UNIT 465 UNITS 349 SPACES TOTAL MAXIMUM PARKING 1,631 SPACES TOTAL MINIMUM PARKING 1,398 SPACES	UP TO 1,042 SPACES ³		SECTION 5.5
14.52: BIKE PARKING	LONG-TERM 0.3 SPACES/1,000 SF OFFICE 939,180 ² GFA 281 SPACES 0.22 SPACES/1,000 SF R&D 475,020 GFA 104 SPACES 0.1 SPACES/1,000 SF RETAIL 17,700 GFA 2 SPACES 1.05 SPACES PER DWELLING UNIT ⁴ 465 UNITS 487 SPACES TOTAL LONG-TERM BIKE PARKING 875 SPACES	COMMERCIAL BLDG.A 134 SPACES COMMERCIAL BLDG. B 108 SPACES	RESIDENTIAL BLDG. SOUTH 20 SPACES ⁵ COMMERCIAL BLDG. C & D 400-610 SPACES ⁵	TABLE 5-1 SECTION 5.3 FOR FURTHER DETAILS
	SHORT-TERM 0.06 SPACES/1,000 SF OFFICE 939,180 ² GFA 56 SPACES 0.06 SPACES/1,000 SF R&D 475,020 GFA 29 SPACES 0.6 SPACES/1,000 SF RETAIL 17,700 GFA 11 SPACES 0.10 SPACES PER DWELLING UNIT 465 UNITS 47 SPACES TOTAL SHORT-TERM BIKE PARKING 143 SPACES	COMMERCIAL BLDG.A 34 SPACES COMMERCIAL BLDG.B 47 SPACES	RESIDENTIAL BLDG SOUTH 12 SPACES ⁵ COMMERCIAL BLDG. C & D 24 SPACES ⁵	TABLE 5-1 SECTION 5.3 FOR FURTHER DETAILS
14.53: LOADING REQUIREMENTS	SUFFICIENT OFF-STREET LOADING TO MEET NEEDS OF USERS	COMMERCIAL BUILDING A 3 BAYS* COMMERCIAL BUILDING B 3 BAYS* *(ONE TRASH)	RESIDENTIAL BUILDING SOUTH 2 BAYS COMMERCIAL BUILDING C 3 BAYS* COMMERCIAL BUILDING D 3 BAYS* *(ONE TRASH)	SECTION 5.6

1. Active Ground Floor Uses can include retail uses and active public gathering space (whether open or enclosed) where that ground floor fronts Main Street, Broadway or Ames Street, per Article 14.38 of the Cambridge Zoning Ordinance.

2. Excludes 14,000 GFA dedicated to Broad Institute Office Conversion.

3. The Applicant is proposing to accommodate these spaces across Commercial Building A the existing Green and Yellow Garages, and in below-grade parking to be constructed under Commercial Buildings C and D. As approved by the Concept plan Amendment #1 Commercial Building A will accommodate 457 total spaces, the Green Garage will accommodate 804 total spaces, and the Yellow Garage will accommodate 734 total spaces. The approximately 1,170 existing above-grade parking spaces associated with the Blue Garage will be relocated below-grade into two, connected parking garages situated beneath Commercial Building C and Commercial Building D that will accommodate a total of 1,584 spaces. Concept Plan Amendment #2 proposes a net addition of 414 spaces, and a total addition of 1,042 spaces since the Original Concept Plan was approved.

4. Per schedule in Section 6.107.2 of the Zoning Ordinance the first 20 units in a building are subject to a ratio of 1.00 spaces per dwelling unit.

5. The Applicant intends to satisfy bicycle parking demand from the Residential Building South, Commercial Building C and Commercial Building D via a commercial bicycle valet. In accordance with Article 6.108.1 the Applicant therefore intends to seek a modification of bicycle parking requirements via special permit. To complement the services of the envisioned bicycle valet, the Applicant also seeks to deliver approximately 20 traditional long-term bicycle parking spaces within the Residential Building South and 12 short-term bicycle parking spaces for Residential Building South, Commercial Building C, and Commercial Building D. The range of valet spaces illustrated (400-600) conveys the changing maximum capacities of the valet from its temporary premises within Commercial Building C to its permanent location within Commercial Building D. The Applicant also anticipates that the proposed bicycle valet will be able to offer short-term bicycle parking, subject to capacity utilization trends. The implications of applying the minimum bicycle parking requirements established by the City of Cambridge Bicycle Parking Guide to the Project are shown in Table 10 of the TIS Update Memo #2, Appendix B."

2.1.1 HOUSING PROGRAM

This Concept Plan Amendment #2 does not request any changes to the amount of approved residential GFA. Consistent with the Approved Concept Plan, the Project is proposing the addition of 420,000 GFA of residential development, consisting of 400,000 SF of Infill GFA and 20,000 SF of GFA attributable to middle-income housing that is excluded from the calculation of Aggregate GFA under Section 14.32.6(5) of the Zoning Ordinance. In addition, a prior letter of commitment stipulating the incorporation of condominium units has been subsequently replaced, allowing the Applicant to deliver the aforementioned residential density via rental units exclusively. This addition of residential GFA will contribute to the housing needs of the City through the delivery of up to 465 units, offering a broad spectrum of residential units ranging in size, type and affordability.

The Project will meet the requirements under the Zoning Ordinance. This includes a minimum of twenty percent (20%) of residential Infill GFA dedicated to affordable units, a minimum of five percent (5%) of residential Infill GFA dedicated to middle-income units, and a minimum of five percent (5%) of the residential Infill GFA dedicated to three-bedroom units. These commitments contribute to the City of Cambridge's goal of creating more housing product in the Kendall Square area, across a range of sizes and affordability. To ensure the Project's housing component is accessible and welcoming to all, the Applicant intends to pursue appropriate DEI training for maintenance, security, and property management teams as well as ensure that all residents enjoy access to amenities and available programming. The Applicant will also seek to identify and mitigate barriers to the housing qualification process.

AFFORDABLE HOUSING

Concept Plan Amendment #2 will deliver 80,000 SF of GFA dedicated to affordable housing. This represents twenty percent (20%) of the residential Infill GFA and will create approximately 90-100 units. This will be delivered entirely in a single phase within Residential Building South.

MIDDLE INCOME HOUSING

Concept Plan Amendment #2 will deliver 20,000 SF of GFA dedicated to middle-income housing. This represents five percent (5%) of residential Infill GFA and will contribute approximately 20-25 units. This will be entirely delivered in a single phase within Residential Building South.

THREE BEDROOM UNITS

The Concept Plan Amendment will continue to deliver a minimum of 20,000 GFA as three-bedroom units, equivalent to five percent (5%) of the residential Infill GFA and will contribute approximately 20-25 units. All three-bedroom units up to the five percent (5%) threshold will be devoted to middle-income and affordable uses. These units are designed as larger units to accommodate families with children and are intended to further the City's goal of providing affordable family-sized accommodations for lower income levels.

TABLE 2-2 SUMMARY OF HOUSING PROGRAM

	RESIDENTIAL BUILDING SOUTH	UNIT RANGES
<i>Affordable Housing</i>		
TOTAL Affordable Housing	84,000	90-100 Units
<i>Market Rate Housing</i>		
TOTAL Market Rate Housing	316,000	300-355 Units
<i>Middle Income Housing - GFA EXEMPT</i>		
TOTAL Middle Income Housing	21,000	20-25 Units
<i>Residential GFA</i>		
TOTAL Residential GFA	420,000	Up to 465 Units

2.1.2 CAMBRIDGE OUTDOOR LIGHTING ORDINANCE

Since the Concept Plan Amendment #1 was approved, the City has adopted an Outdoor Lighting Ordinance to regulate outdoor lighting in the City to allow the safe use and enjoyment of outdoor areas while mitigation potential nuisance. The Project will comply with the Outdoor Lighting Ordinance and will explore outdoor lighting that promotes the safe use and enjoyment of outdoor areas, mitigates light trespass and glare to abutters and the public at large, reduces light pollution, and promotes energy conservation.

2.2 REVIEW AND APPROVAL PROCESS

Concept Plan Amendment #2 is being submitted to the Planning Board and the CRA Board as a Major Amendment to the Approved Concept Plan, and therefore this application shall be subject to all of the same notice and hearing requirements as would be applicable to a new Special Permit. Under the Concept Plan Amendment #2, the Planning Board and the CRA Board shall consider the substance of the proposed changes (and not review the entirety of the Original Concept Plan) where proposed changes do not constitute a substantial alteration to the intent, purpose and substance of the Special Permit.

This Concept Plan Amendment seeks to amend the Special Permit for the entire Project, but still allows for specific design review of each of the remaining three proposed Project Components at the appropriate junctures in the future. Accordingly, the information presented within this Concept Plan Amendment #2 provides narratives and supporting graphical materials that address the public realm, open space, design guidelines and urban design context along with the massing of each of the Project Components.

As described in the Zoning Ordinance, a Design Review Submission will continue to be submitted for each Project Component, and its associated public improvements addressing specific design criteria, that seeks to supplement the conceptual design elements described within the Approved Concept Plan. The Design Review Submission seeks to develop upon the revised design guidelines provided in this Concept Plan Amendment #2, and provide specific details about the individual Project Components appropriate for review and approval jointly by the Planning Board and the CRA Board.

Table 2-4 presents the anticipated sequence and general detail of information submitted with each component piece of the Special Permit:

SPECIAL PERMIT SUBMISSION INFORMATION PLAN				
	Submission 3	Submission 4	Submission 5	Submission 6
	INFILL DEVELOPMENT CONCEPT PLAN AMENDMENT #2	DESIGN REVIEW COMMERCIAL BUILDING C	DESIGN REVIEW RESIDEN- TIAL BUILDING SOUTH	DESIGN REVIEW COMMERCIAL BUILDING D
Transportation	X			
Ped. Circulation	X			
Concept Open Space	X			
Final Open Space		X	X	X
Bike Parking	X	X	X	X
Vehicle Parking	X	X		X
Loading	X	X		X
Retail Planning	X			
Stormwater	X			
Shadow Analysis	X	X	X	X
Noise	X			
Wind – Wind Tunnel	X	X	X	X
Sustainability	X	X	X	X
Building Design		X	X	X

TABLE 2-4 ARTICLE 14 FILING STRATEGY

2.3 FINDINGS AND APPROVAL

The currently proposed amendment is being submitted to the Planning Board as a Major Amendment, meaning that this Concept Plan Amendment #2 shall be considered an original application for a Special Permit to construct a Planned Unit Development (PUD), and shall be subject to the procedures specified in Sections 12.34 through 12.36 of the Zoning Ordinance. This section has been restated and updated, where applicable to demonstrate that Concept Plan Amendment #2 complies with all applicable review requirements.

As described in Section 14.32.2.2 of the Zoning Ordinance, the Planning Board shall grant a special permit approving a Concept Plan upon determining that the Project identified within the plan meets the criteria for approval of a PUD set forth in Section 12.35.3(3) of the Zoning Ordinance and the criteria for approval of a Project Review Special Permit set forth in Section 19.25 of the Zoning Ordinance. In making its findings, the Planning Board shall consider the objectives set forth in the Kendall Square Final Report of the K2C2 Planning Study (the “K2 Guidelines”) and the Volpe Working Group’s Planning & Design Principles dated July 20, 2017 (the “Volpe Guidelines”). The approval of a Concept Plan shall serve to meet any applicable project review requirements of Article 19.000. No additional Project Review Special Permit shall be required for any new development identified within an approved Concept Plan and only design review shall take place for each specific Project Component

2.3.1 CONFORMANCE WITH ARTICLE 12.35.3(3)

Section 12.35.3.3 of the Zoning Ordinance provides that:

Approval of the Development Proposal shall be granted only upon determination that the Development Proposal provides benefits to the City which outweigh its adverse effects. In making this determination the decision-making authority shall consider the following:

QUALITY OF SITE DESIGN

This Concept Plan Amendment #2 continues to present a vision that reflects the unique needs and interests of the people who live, work, connect and innovate within Kendall Square. The Project will comply with the MXD Zoning and KSURP (as each of the same have been recently amended). At the heart of the Project Change lies the delivery of critical energy infrastructure essential to supporting electrical service not only for businesses and residents of the

MXD, but the broader Cambridge community. Moreover, the unique approach of constructing this infrastructure below grade promises to substantially advance key public realm improvements, including the construction of Center Plaza and new cross-block pedestrian connections—all while satisfying urgent market demand for additional commercial space in Kendall Square, a hotbed of the global life sciences sector. In sum, this Concept Plan Amendment #2 grants the Applicant the opportunity to make important adaptations to market conditions while delivering a unique public benefit alongside urban design strategies tailored to build on the MXD’s notable success.

For details on this refer to Section 3, Open Space, Section 4, Retail Plan and Section 10, Design Guidelines.

TRAFFIC FLOW AND SAFETY

A Traffic Impact Study (TIS) was developed and certified by the City of Cambridge Traffic, Parking and Transportation Department (TP&T) on July 14, 2016. Refer to Section 5, Transportation, and Appendix B for more details.

The Applicant has prepared an update to the approved TIS for Concept Plan Amendment #2 (TIS Update #2). TIS Update #2 provides an updated trip generation analysis and comparison, as well as an updated parking analysis, to reflect the Project detailed in Chapter 1, Development Plan, and Table 1-1.

ADEQUACY OF UTILITIES AND OTHER PUBLIC WORKS

City utilities are generally adequate to support the Project. Section 6, Infrastructure, details the existing and proposed utility infrastructure, and specific infrastructure improvements and services associated with the Project. This section also details measures that the Applicant will take to reduce the impacts of the Project on the existing utility systems.

IMPACT ON EXISTING PUBLIC FACILITIES WITHIN THE CITY

It is not anticipated that the Project will have a significant impact on City services. The proposed buildings contained in the Project will meet all applicable codes at the time of building construction.

DELIVERY OF PUBLIC BENEFIT

The Project is proposing to deliver significant public benefits, as outlined throughout this Concept Plan and highlighted below:

- Up to 465 units of new, diverse housing across a broad spectrum of unit type, size and affordability;

- 1,414,200 GFA of new commercial office space;
- Relocation and construction of a below-grade Eversource electrical substation from its previously-envisioned Fulkerson Street location to the MXD, that will serve the Cambridge community and improve the resilience of the area electrical grid for decades to come;
- Relocation of the 1,170 existing above-grade parking spaces associated with the Blue Garage into two, connected parking garages situated beneath Commercial Building C and Commercial Building D;
- Construction of the new approximately 30,000 square foot Center Plaza that will contribute to a vibrant public realm, foster new cross-block connections and promote pedestrian connectivity through the North Parcel, and to between the Volpe development to the east;
- New and enhanced open space and streetscapes along Broadway, Binney and Main Streets;
- Activation of Binney Street through 8,700 GFA of new ground floor retail/active use, as well as the addition of two commercial lobbies that will encourage pedestrian activity throughout the day;
- Activation of Broadway Street through 700 GFA of new ground floor retail/active use, and the addition of a residential lobby;
- Enhancement of the Main Street retail corridor through approximately 40,000 GFA of reconstructed ground floor and second floor retail/active use;
- Delivery of approximately 105,200 gross square feet of new innovation space conversion with Commercial A and Commercial B;
- Generate substantial new annual real estate taxes revenue for the City, as well as additional income and sales tax revenues generated through the influx of new workers and residents; and
- Provide a series of enhancements that will encourage alternative modes of transportation, through the addition of new covered and secure long-term and short-term bicycle parking spaces, and the enhancement of pedestrian and bicycle connections.
- The Project will deliver aesthetic and functional upgrades to the MBTA Red Line Outbound Headhouse.

2.3.2 CONFORMANCE WITH ARTICLE 19.25

The following section demonstrates that the Project conforms with Article 19.25: Review Criteria.

TRAFFIC IMPACT FINDINGS

A TIS was developed for the Project that is 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. The TIS, dated June 23, 2016, was Certified by the TP&T on July 14, 2016.

The Applicant has prepared TIS Update #2 as an update to the TIS for Concept Plan Amendment #2. The TIS Update #2 technical memorandum provides an updated trip generation analysis and comparison, as well as an updated parking analysis, to reflect the Project detailed in Section 1, Development Plan, and Table 1-1. Refer to Appendix B for a copy of the TIS Update #2.

TRAFFIC IMPACT INDICATORS

The analysis done in the TIS (as augmented by TIS Update #2) identifies identified impacts that the Project will have on the transportation network and is used by the City to identify possible mitigation to offset these impacts. Based on the TIS analysis, the Project has been evaluated within the context of the Planning Board Criteria to determine if the Project has any potential adverse transportation impacts. The Planning Board Criteria evaluates the Project's vehicular trip generation, impact to intersection level of service and queuing, as well as increase of volume on residential streets. In addition, pedestrian and bicycle conditions are considered. A discussion of the criteria set forth by the Planning Board and a summary of Planning Board Criteria Performance is presented in the TIS update.

Exceeding one or more of the criteria is indicative of a potentially adverse impact on the City's transportation network. However, the Planning Board will consider mitigation efforts, their anticipated effectiveness, and other information that identifies a reduction in adverse transportation impacts. The TIS analysis demonstrated that the Project had 57 criteria exceedances out of a possible 449 data entries. Refer to Section 5.2 for a description of proposed transit mitigation projects and program options being considered to enhance transit services in Kendall Square.

(Intentionally Blank)

The image is a full-page architectural rendering of a public plaza, overlaid with a semi-transparent yellow filter. It depicts a lively outdoor space with several groups of people. In the foreground, a woman in a striped dress stands near a small table where two people are seated. To the right, a man sits at a table, looking at a device. In the background, more people are scattered throughout the plaza, some sitting at tables and others standing. The plaza is paved with light-colored rectangular tiles. Modern, angular buildings are visible in the background, along with some trees and a clear sky. The overall atmosphere is bright and open.

3. OPEN SPACE PLAN

3.0 INTRODUCTION

The public realm in the redevelopment area of the North Parcel between Broadway and Binney Street consists of the newly proposed Center Plaza, The Kitty Knox/Loughrey Bike and Pedestrian path (6th Street Connector), two East West Pedestrian Connectors on the East side of the site and one East West Pedestrian Connector on the West side of the site. Streetscapes include Broadway, Binney Street and Galileo Galilei Way as well as the associated raised cycle track and public space improvements included as part of the 2016 IDCP development plan which are now partially complete and under construction.

The site plan in general and the proposed Center Plaza require the modification and replacement of the open spaces located on the south (Broadway) and north (Galileo) sides of the Blue Garage. These open spaces have existing covenants that expire in 9 years (from 2021) and this proposal requires that these covenants be modified to allow for the substation relocation to incorporate the substation under the Center Plaza and reconfigured site plan proposed as part of Concept Plan Amendment #2. The combined square footage of these two existing privately-owned open spaces (approximately 21,785 square feet) will be consolidated into one larger open space called Center Plaza (approximately 30,000 square feet) resulting in a public space with more programming and design options able to complement the broader network of parks and open spaces throughout Kendall Square.

The proposed buildings and related areas of the public realm are designed to enhance pedestrian connectivity through increased porosity and the establishment of clear desire lines to convey people through the larger MXD parcels. As further described below, the Project has been modified to accommodate the relocation of an electrical substation from its previously-envisioned Fulkerson Street location to a below-grade site within the MXD. Re-siting this electrical substation will require the demolition of the existing above-grade parking structure at the center of the North Parcel known as the “Blue Garage,” as well as extensive excavation to house the new facility below grade. The unique approach of constructing this infrastructure below grade provides the opportunity to advance key public realm improvements, including the construction of the Center Plaza open space, redesign of the two easternmost East-West Pedestrian Connectors, and to reimagine the East and West Service Drives. Further, this will allow the now contemplated Fulkerson site to be envisioned for a new use more favorable than electrical infrastructure.

Since Concept Plan Amendment #1 was approved, the Applicant has completed construction of the commercial space, ground floor retail and public realm improvements associated with Commercial Building A (Phase 1). Improvements delivered as a component of Phase 1 include a new bicycle path paralleling the Sixth Street Connector separating pedestrian and bike traffic on this well used route, and an enhanced westernmost East-West Pedestrian Connector. The streetscape along Broadway and Galileo Galilei associated with Commercial Building A at 145 Broadway has been transformed and expanded to accommodate new active ground floor uses.

Additionally, since Concept Plan Amendment #1 was approved, Commercial Building B and its associated public realm improvements have commenced on the Kendall Roof Garden, MBTA Redline Head house reconstruction, associated I&I infrastructure

and the completion of the raised cycle track along Galileo and Broadway. Commercial Building B will further enhance and enliven the public realm in multiple ways, including a redesigned ground and second floor retail edge along Main Street and the building’s east facade, directly abutting Kendall Plaza, thus enhancing the pedestrian experience at the street level and further enlivening the Plaza. In addition, the Project will create a new pedestrian connection from Kendall Plaza up to the Kendall Roof Garden through a combination of publicly accessible stairs and an elevator, providing an opportunity for multi-level public space and potential programming as well as increased visual interest on Kendall Plaza. Further, Commercial Building B will provide enhanced access from Pioneer Way through the ground floor retail portion of the building to facilitate pedestrian connection between Ames Street and the Kendall Plaza, enhance neighborhood connectivity and permeability and to enliven the proposed retail. While all improvements are underway, forecasted completion has been impacted due to delays associated with Covid-19 and the ongoing re sequencing required to accommodate the MXD substation siting proposal. Timing and status of these improvements have been communicated to City Staff and the applicant will discuss further in public hearings associated with this proposal.

CHAPTER UPDATES

The following section summarizes minor refinements to this Chapter since the Approved Concept Plan.

District Open Space: With the demolition and relocation of the Blue Garage below-grade, the Project Change proposes the construction of approximately 34,000 square feet of new open space, and approximately 8,000 SF increase compared to Concept Plan Amendment #1. The new open space and pedestrian realm improvements will include a new approximately 30,000 SF Center Plaza, which will contribute to a vibrant public realm, foster new cross-block connections and promote pedestrian connectivity through the North Parcel, and to the Volpe development to the east. The project requires the modification and replacement of the open spaces located in the South (Broadway) and North (Galileo) sides of the Blue Garage.

Public Realm/Streetscape Improvements: The demolition of the Blue Garage and the construction of the Center Plaza presents the opportunity to modify the character of the service drives to emphasize a pedestrian character through the use of flush grades, broad crosswalks, traffic calming sidewalk expansions (see NE side of 145 Broadway) and paving material that clearly indicates a mixed modal condition. Based on the heavily trafficked Kitty Knox / Loughrey Walkway to the East of the site, the West Service drive has been identified as the primary service drive to emphasize North South pedestrian circulation. The service drives will be designed to allow for critical and existing utility uses including lay-by space for buses and delivery vehicles, ride share vehicles and automobile circulation.

Tree Protection/Mitigation: Additional Information has been added to Section 3.6 on trees related to Project changes on the North Parcel.

3.1 EXISTING OPEN SPACE

DEFINITION OF OPEN SPACE

Open spaces, as described in this document, and reinforced by Article 14, are described in the following ways:

1. Portion of a lot or other area of land associated with and adjacent to a building for a group of buildings in relation to which it serves to provide light and air, or scenic, recreational or similar purposes. Such space shall, in general, be available for entry and use by the occupants of the building(s) with which it is associated, and at times to the general public, but may include a limited proportion of space so located and treated as to enhance the amenity of development by providing landscape features, screening or buffering for the occupants or neighbors or a general appearance of openness. Open space shall include parks, plazas, lawns, landscaped areas, decorative plantings, pedestrian ways as listed in Section 14.45 of the Zoning Ordinance, active and passive recreational areas, including playgrounds and swimming pools.
2. Parks, gardens and plazas reserved for public use and enjoyment as guaranteed through one or more of the following:
 - Retention by the CRA.
 - Dedication to and acceptance by the City or other public entity.
 - Easements or deed restrictions over such land sufficient to ensure its perpetual reservation for public open space purposes.
 - Dedication, by covenant or comparable legal instrument to the community use of the residents, lessees and visitors to the MXD District for reasonable amounts of time on a regular basis.
 - Lease agreements of 99 years or longer from the private developer or owner to the City or other public entity.
3. Open space on the development lot. Some or all of this required open space may be designated and also serve as open space.
4. Pocket parks, bike paths and enhanced planting zones created through modification of roadways as part of the ALTA cycle track.
5. Circulation elements including stairs, elevators, elevated plazas or pathways used to enhance connection to and between publicly accessible spaces.
6. Spaces that are not considered as open spaces, as described in this document and reinforced by the Zoning Ordinance are:
 - Streets, parking lots, driveways, service roads, loading areas, and areas normally inaccessible to pedestrian circulation beneath pedestrian bridges, decks or shopping bridges.



- Existing open space on grade
- Existing open space above grade
- Open Space/Park

- Project Boundary Amendment #1
- Project Boundary Amendment #2

- MXD Boundary
- KSURP Boundary
- Ames Street District ASD

3.1 EXISTING OPEN SPACE

EXISTING MXD PARCEL AREAS & OPEN SPACE CALCULATION

EXISTING MXD DEVELOPABLE PARCEL AREA (P)		
P2		445,825
P3		229,558
P4		257,824
LOUGHREY WALKWAY (WITHIN MXD)		19,569
GRAND JUNCTION + BINNEY ST PARK		77,361
TOTAL EXISTING MXD AREA (±SF)		1,010,596

EXISTING OPEN SPACE (OS) TOTALS		
P2		148,825
P3		77,429
P4		141,247
LOUGHREY WALKWAY (WITHIN MXD)		19,569
GRAND JUNCTION + BINNEY ST PARK		77,361
TOTAL EXISTING MXD OS (±SF)		462,021

EXISTING OPEN SPACE (OS) TOTALS		
(BROADWAY PARK)@BLUE GARAGE		13,970
(BINNEY PARK)@BLUE GARAGE		7,815
KENDALL SQUARE ROOFTOP GARDEN	ASD	25,340
KENDALL PLAZA	ASD	14,372
GALAXY PARK	ASD	18,664
75 AMES ST OPEN SPACE	ASD	6,867
DANIEL LEWIN PARK (CENTER ONLY)	ASD	5,297
DANIEL LEWIN PARK (WEST)		4,955
DANIEL LEWIN PARK (EAST)		7,341
ORIGINAL BROAD OPEN SPACE (7CC)		5022
WHITEHEAD PLAZA		10,930
GRAND JUNCTION		27,300
BINNEY STREET PARK		50,061
LOUGHREY WALKWAY (WITHIN MXD)		19,569
LOUGHREY WALKWAY (OUTSIDE OF MXD)		19,790
TOTAL EXISTING PUBLIC OS (±SF)		237,293

REQUIRED

100K
100,000

15% OF TOTAL MXD AREA

151,585

AMES STREET DISTRICT*

53,000

PROVIDED

TOTAL EXISTING PUBLIC OPEN SPACE

237,293±SF

TOTAL EXISTING OPEN SPACE

462,021±SF

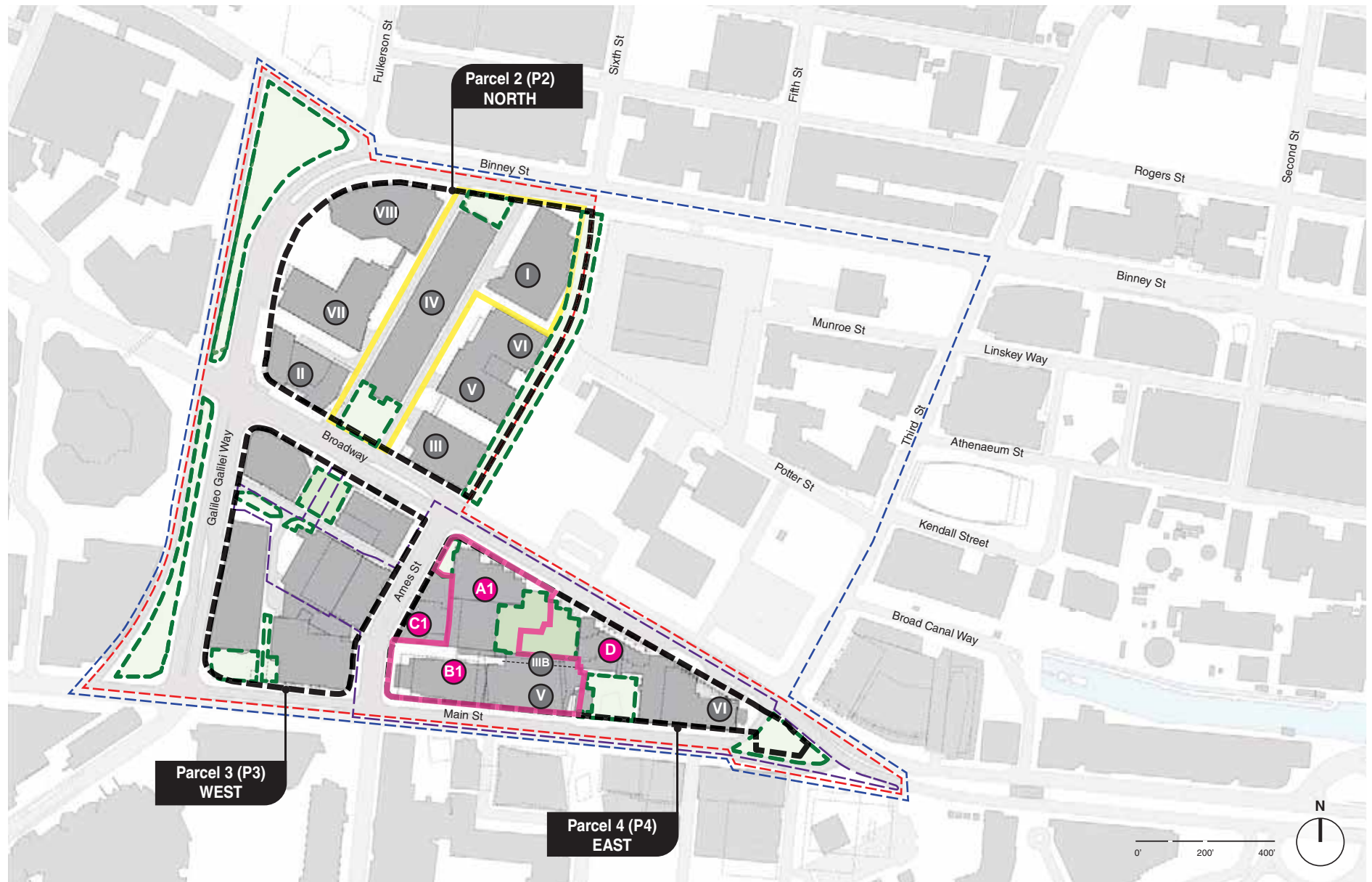
OPEN SPACE

70,540±SF

REQUIRED OPEN SPACE VS. PROVIDED OPEN SPACE

SOURCES

1. CAD/Alta survey
2. Exhibit A Development Area Map. CRA Document. March 18, 1982.
3. Exhibit A Development Area Map. CRA Document. May 25, 1979.
4. CRA's KSURP Open Space Accounting. June, 2015
5. Kendall Center Open Space Parcels 2, 3, and 4. July 31, 2015.
6. North Parcel Consolidation Plan. April 11, 2017.
7. Ames Street District Open Space. July 25 2018.
8. CRA Privately Owned Public Spaces in the Kendall Square MXD District
<https://www.cambridgeredevelopment.org/pops/>



- I Tract Number
- A Lot Letter
- Project Boundary Amendment #1
- Project Boundary Amendment #2
- Open Space/Park

- MXD Boundary
- KSURP Boundary
- Ames Street District ASD

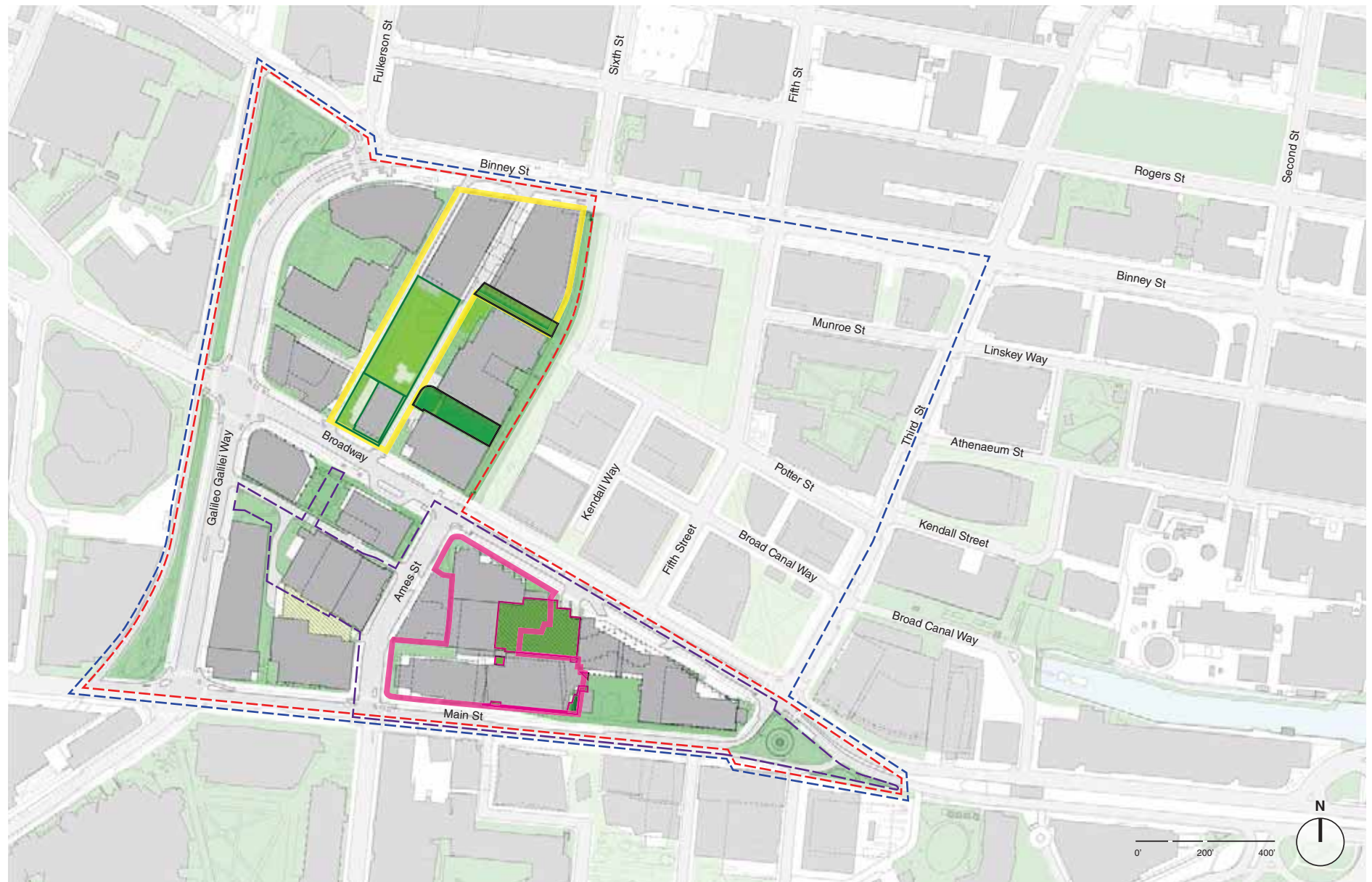
3.2 PROPOSED OPEN SPACE

OPEN SPACE OBJECTIVES

The landscape and open space in the MXD District is intended to function as a complete system within the broader Cambridge park and open space network that embraces, integrates and embodies inclusive and accessible design, environmental sustainability, and multi purpose activation informed by the broader context of proximate open spaces. Further, the open space responds to the aspiration of transforming the MXD from a largely commercial district to a vibrant mixed use district that appeals broadly to the needs of the resident, academic, and innovation communities.

With the demolition and relocation of the Blue Garage below-grade, the Project Change will deliver a new approximately 30,000 square feet of new open space atop the roof of the electrical substation, and between Residential Building South and Commercial Building C. The new open space and pedestrian realm improvements will contribute to a vibrant public realm, foster new cross-block connections and promote pedestrian connectivity through the North Parcel, and between the Volpe development to the east. The new open space and public realm improvements will serve the residents and workers in the MXD, and the general public alike.

The current proposal for Center Plaza is informed by A) the CRA Kendall Square Amenities Report; B) Extensive public feedback over the past 18 months including the dialogue on the MXD Co-Urbanize site (<https://courbanize.com/projects/mxdsubstationdevelopment>); and C) The realities of locating a public space on a below grade electrical sub station. The goal of Center Plaza is to create a new and complimentary space with a defined and distinct identity and purpose as opposed to replicating other available open spaces or simply creating an “omni park” of un-cohesive but popular component pieces that are readily available in the immediate area.



- | | | | |
|---|---|--|--|
| ■ Proposed open space | ■ Existing open space on grade | — Project Boundary Amendment #1 | - - - MXD Boundary |
| ■ Proposed open space enhancements | ▨ Existing open space above grade | — Project Boundary Amendment #2 | - - - KSURP Boundary |
| ■ Proposed open space under construction | ■ Proposed open space by others | - - - Ames Street District ASD | |

3.2 PROPOSED OPEN SPACE

PROPOSED PARCEL AREA AND OPEN SPACES

EXISTING MXD DEVELOPABLE PARCEL AREA (P)			
	P2		445,825
	P3		229,558
	P4		257,824
	LOUGHREY WALKWAY (WITHIN MXD)		19,569
	GRAND JUNCTION + BINNEY ST PARK		77,361
	TOTAL EXISTING MXD AREA (±SF)		1,010,596

PROPOSED OPEN SPACE (OS) TOTALS			
	P2		151,590
	P3		77,429
	P4		141,247
	LOUGHREY WALKWAY (WITHIN MXD)		19,569
	GRAND JUNCTION + BINNEY ST PARK		77,361
	TOTAL EXISTING MXD OS (±SF)		467,196

EXISTING OPEN SPACE (OS) TOTALS			
	(BROADWAY PARK)@BLUE GARAGE		13,970
	(BINNEY PARK)@BLUE GARAGE		7,815
	P2 ENHANCED OPEN SPACE		64,593
			82,011
	KENDALL SQUARE ROOFTOP GARDEN	ASD	25,340
	ROOFTOP CONNECTOR TERRACES	ASD	5,400
	KENDALL PLAZA	ASD	14,372
	GALAXY PARK	ASD	18,664
	75 AMES ST OPEN SPACE	ASD	6,867
	DANIEL LEWIN PARK (CENTER ONLY)	ASD	5,297
	DANIEL LEWIN PARK (WEST)		4,955
	DANIEL LEWIN PARK (EAST)		7,341
	ORIGINAL BROAD OPEN SPACE (7CC)		5022
	WHITEHEAD PLAZA		10,930
	GRAND JUNCTION		27,300
	BINNEY STREET PARK		50,061
	LOUGHREY WALKWAY (WITHIN MXD)		19,569
	LOUGHREY WALKWAY (OUTSIDE OF MXD)		19,790

	TOTAL PROPOSED PUBLIC OS (±SF)		301,886 302,919
--	--------------------------------	--	--------------------

REQUIRED

100K
100,000

15% OF TOTAL MXD AREA
151,585

AMES STREET DISTRICT*
53,000

REQUIRED OPEN SPACE VS. PROVIDED OPEN SPACE

PROVIDED

TOTAL PROPOSED PUBLIC OPEN SPACE
~~301,886±SF~~
302,919±SF

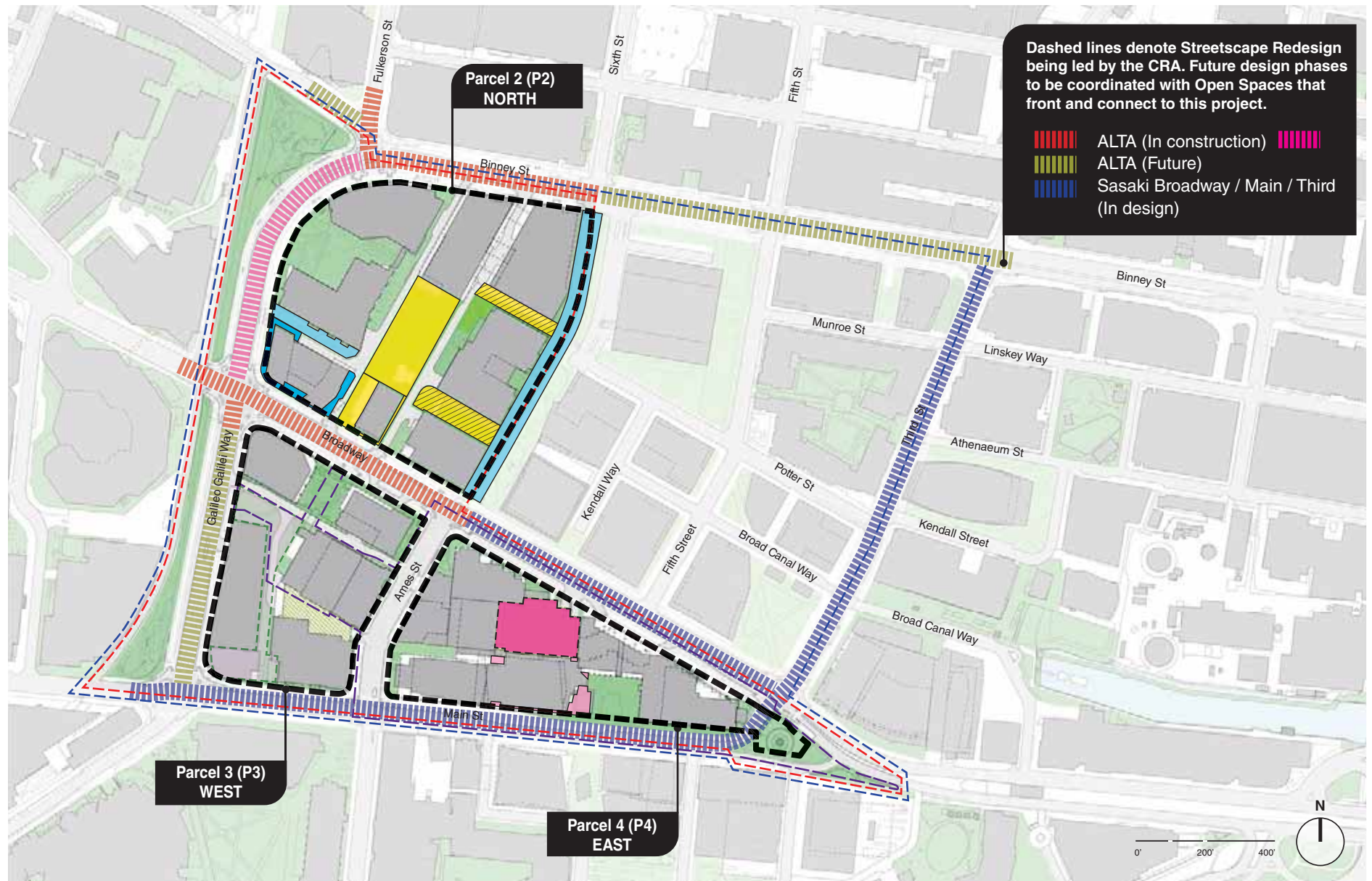
TOTAL PROPOSED OPEN SPACE
~~462,021±SF~~
467,196±SF

OPEN SPACE
~~70,540±SF~~
75,940±SF

SOURCES

1. CAD/Alta survey
2. Exhibit A Development Area Map. CRA Document. March 18, 1982.
3. Exhibit A Development Area Map. CRA Document. May 25, 1979.
4. CRA's KSURP Open Space Accounting. June, 2015
5. Kendall Center Open Space Parcels 2, 3, and 4. July 31, 2015.
6. North Parcel Consolidation Plan. April 11, 2017.
7. Ames Street District Open Space. July 25 2018.
8. CRA Privately Owned Public Spaces in the Kendall Square MXD District
<https://www.cambridgeredevelopment.org/pops/>

Pursuant to City Council Ordinance No. 2020-17, Section 14.33 of the Zoning Ordinance was amended to provide that "...there shall be no maximum floor area ratio for any project utilizing Infill GFA (including Utility Project GFA)." All of the GFA reflected in this application is Infill GFA, and therefore there are no maximum floor area ratio requirements for the buildings described herein.



Commercial Building A

Commercial Building B

Commercial Building C / D
Residential Building South

Phase I. Open Space

Phase I. Enhanced OS.

Phase II. Enhanced OS.

Phase II. Enh. Garden OS.

Phase IV. Open Space

Phase IV Enhanced OS.

Other Potential OS
Enhancement Opportunities

MXD Boundary

KSURP Boundary

Ames Street District ASD

3.2 PROPOSED OPEN SPACE

OPEN SPACE (OS) COMPARISONS AMENDMENT #1 AND AMENDMENT #2

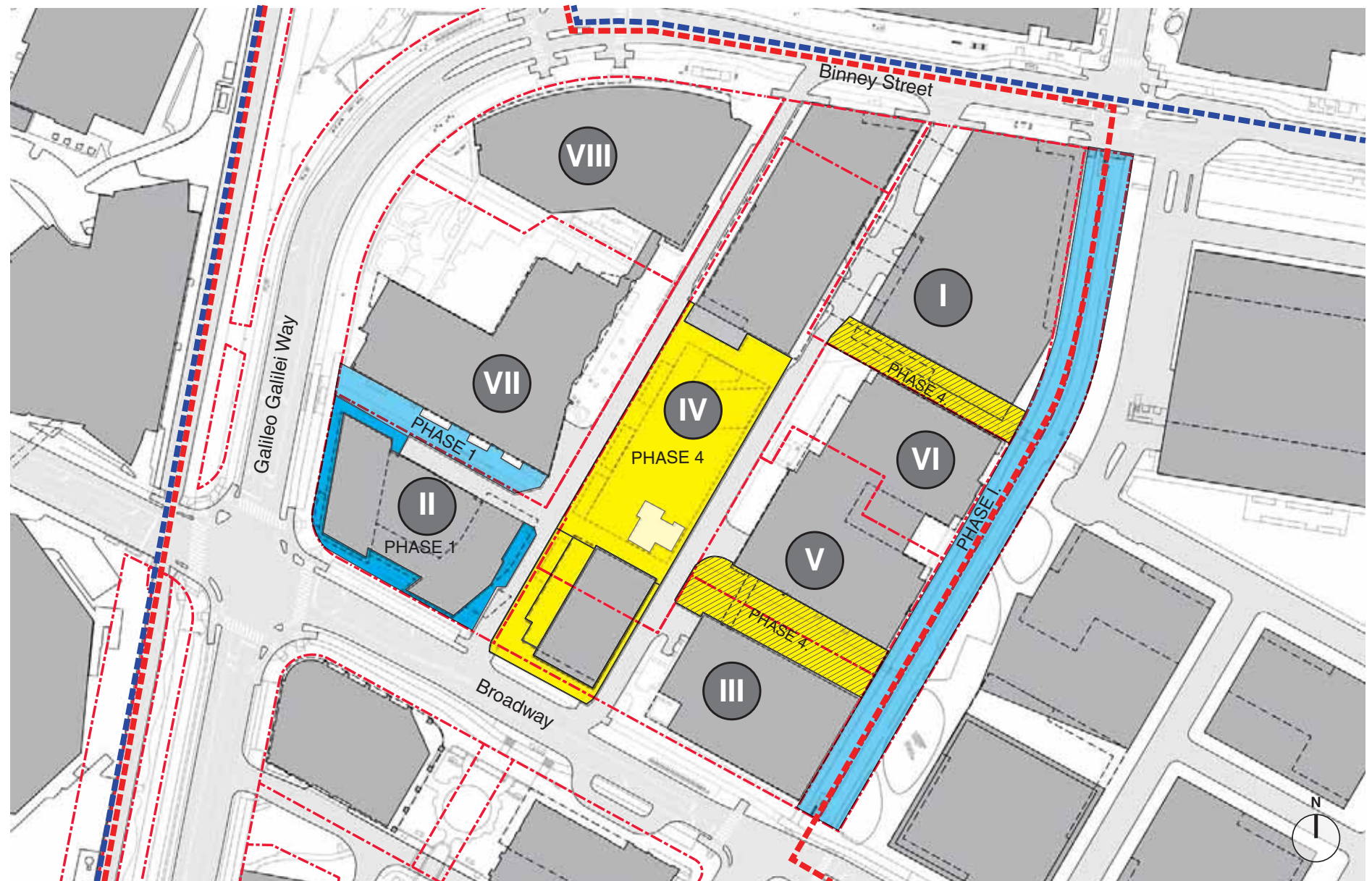
IDCP AMENDMENT #1 OPEN SPACE	
(OS) COMMERCIAL BUILDING A (PHASE I)	
REQUIRED	35,504 ±SF
PROVIDED	54,801 ±SF
145 BROADWAY (OS)	8,114 ±SF
(SW) EW CONNECTOR (EASEMENT C)	7,328 ±SF
6TH ST CONNECTOR (WITHIN MXD)	19,569 ±SF
(OS) COMMERCIAL BUILDING B (PHASE 2)	
REQUIRED	0 (ASD)
PROVIDED	27,501 ±SF
KENDALL SQUARE ROOFTOP GARDEN*	18,789 ±SF
ENHANCED OS PLAZA AREA	2,562 ±SF
ENHANCED OS TERRACE	4,750 ±SF
ENHANCED OS TERRACE (PENDING MBTA)	1,400 ±SF
RESIDENTIAL BUILDING SOUTH (PHASE 2)	
REQUIRED	28,000 ±SF
PROVIDED*	32,070 ±SF
RESIDENTIAL BUILDING NORTH (PHASE 3)	
REQUIRED	5,600 ±SF
PROVIDED*	16,895 ±SF
P2 ENHANCED OPEN SPACE	64,593 ±SF

* Denotes OS calculations made for IDCP AMENDMENT #1 via Lot calculations

* *Denotes OS calculation updates made after IDCP Amendment 2 for 325 Main St Design Review

IDCP AMENDMENT #2 OPEN SPACE	
(OS) COMMERCIAL BUILDING A (PHASE I)	
PROVIDED	54,801 ±SF
(OS) COMMERCIAL BUILDING B (PHASE 2)	
**PROVIDED (UPDATE)	30,790 ±SF
KENDALL SQUARE ROOFTOP GARDEN	25,340 ±SF
ROOFTOP CONNECTOR TERRACES	5,450 ±SF
(OS) COMMERCIAL BUILDING C (PHASE 4)	
(OS) RESIDENTIAL BUILDING SOUTH (PHASE 4)	
PROVIDED	30,000 ±SF
CENTER PLAZA	30,000 ±SF
(OS) COMMERCIAL BUILDING D (PHASE 4)	
PROVIDED	17,000 ±SF
(NE) EW CONNECTOR	7,000 ±SF
(SE) EW CONNECTOR	10,000 ±SF
P2 ENHANCED OPEN SPACE	82,011 ±SF
P2 NET NEW OVER AMD#1	17,418 ±SF

Pursuant to City Council Ordinance No. 2020-17, Section 14.33 of the Zoning Ordinance was amended to provide that "...there shall be no maximum floor area ratio for any project utilizing Infill GFA (including Utility Project GFA)." All of the GFA reflected in this application is Infill GFA, and therefore there are no maximum floor area ratio requirements for the buildings described herein.



Commercial Building A

Commercial Building B
Phase II. see Fig 3.4

Commercial Building C
Residential Building South

Commercial Building D

Phase I. Open Space

Phase II. Enhanced OS.

Phase IV. Open Space

Phase I. Enhanced OS.

Phase II. Enh. Garden OS.

Phase IV. Enhanced OS.

MXD Boundary

KSURP Boundary

Tract/Lot Number

3.2 PROPOSED OPEN SPACE - VISION

CENTER PLAZA

The Center Plaza will be a flexible and seasonally programmable active use space that promotes gathering, performance, sport and play across generations and interests to serve the Cambridge community, with a public space distinct from existing open spaces within the broader open space network.

The above vision statement was informed by the following information:

A) The CRA Kendall Square Amenities Report

Based on the above guiding references, The proposed Center Plaza is intended to be a broad and flexible plaza space with seasonal programming to emphasize active uses. The CRA report ultimately identifies that a top priority for Kendall Square is to add new open space where people can meet, play or just get out of the office for a few minutes. The Kendall Square Open Space Survey also identifies more programming, seating and shade, more greenery, and more transportation amenities as unique and unaddressed needs in the existing park and open space infrastructure.

B) Public Feedback

Public feedback has echoed many of the same sentiments expressed about the Kendall Roof Garden redesign with emphasis many desirable, individual components. As is often the case in designing public spaces, there is no perfect consensus around any one idea and suggestions run across a broad range of individual preferences. However, based on the approach outlined above to create a distinct space that works in concert with the broader surrounding open space and multiple public feedback sources, the design of Center Plaza is intended for public active use that allows for accessible cross generational activity opportunities. This points to a design that allows for flexible space programming without single use, prescriptive design features like fixed seating or fixed play structures that prevent other uses across seasons and generations. Instead, Center Plaza is intended to be an open central canvas with defined edges (which can include fixed structures) and scaling elements that allow for multiple, seasonal play opportunities that are broadly appealing. Consider as precedent the frog pond in Boston Common as an ice skating ring in winter and a splash pool in summer. Consider Lawn on D or Starlight Square as flexible gathering spaces with movable furniture that allow for performance as well as activity.



A. FINSBURY AVENUE SQUARE



B. HARVARD PLAZA



C. PENN STATION PLAZA



E. DC WHARF



D. LAWN ON D



F. NEW ROAD BRIGHTON UK

C) Sub Station Engineering

The Center Plaza is made possible by the opportunity to relocate the Fulkerson substation underground in the North Parcel. Fundamental to this opportunity is the feasibility to construct, operate and maintain critical electrical infrastructure immediately below grade. These include the following necessary considerations:

1. Ventilation for equipment cooling. Center Plaza must accommodate structures that allow for the intake and exhaust of air to cool equipment at a speed and acoustic setting that does not impact the usability of the public space but still serves the CFM requirements of the equipment. Precedent exists for the creation of sculptural scaling elements that can make the Plaza more visually interesting and still serve this critical function. The design of the ventilation equipment is ongoing. Additional details will be provided during Phase 4, which will consist of equipment provision and required construction to outfit and commission the proposed electrical substation beneath the Center Plaza open space by Eversource.

2. Access for Equipment. The shipping dimensions of the largest individual component of substation equipment is presently estimated to be 29 feet x 11 feet x 15 feet with an approximate weight of 153,200 Lbs. Accordingly, an access hatch located on the perimeter of the Center plaza must be sized accordingly for initial construction and periodic maintenance or emergency use.

3. Human and small equipment Access: The Center Plaza must contain code required ingress and egress via stair and elevators for workers as well as small equipment. The ingress and egress points will require head house or sculptural components on the Center Plaza.

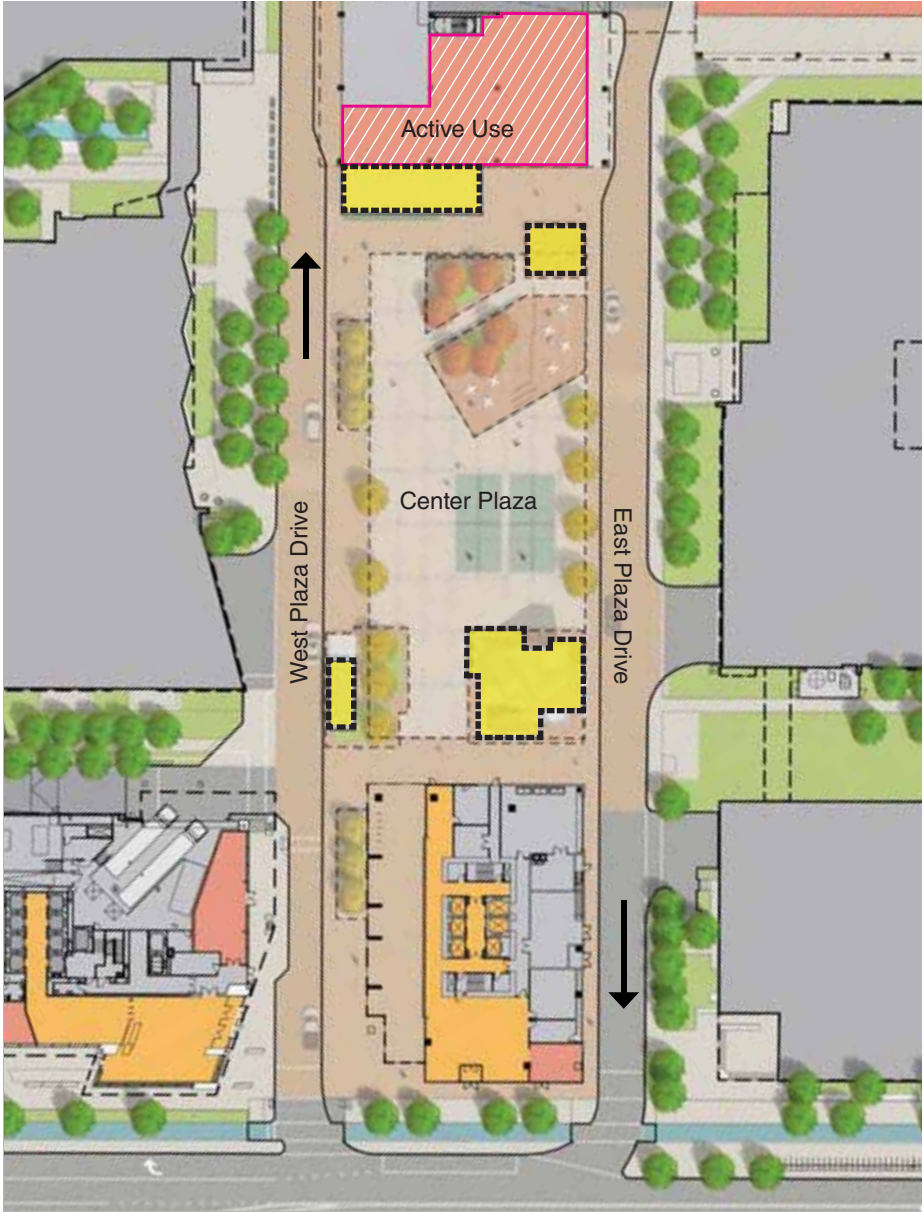
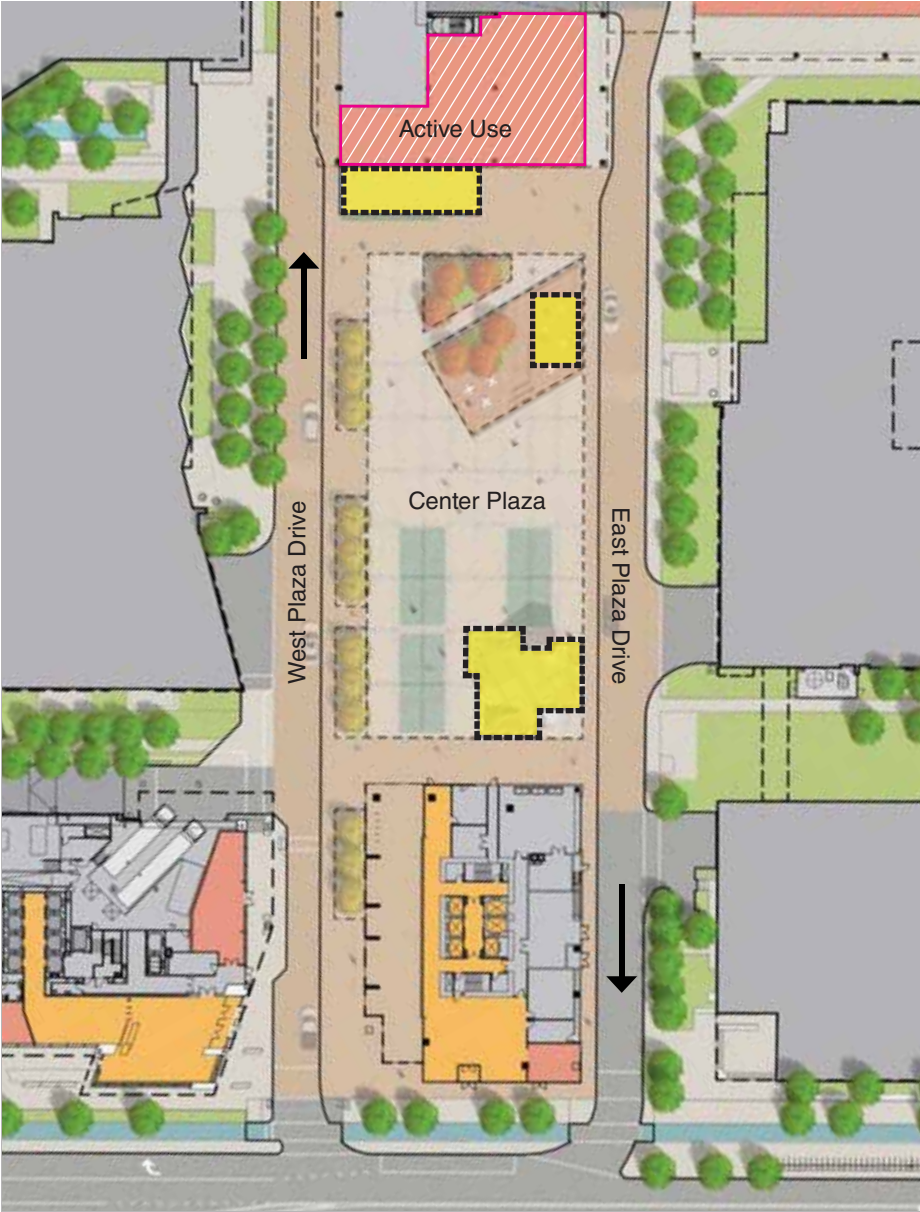
4. Resilience: In addition to locating any vertically accessible element four feet above the projected 100 year flood level as well as integrating infrastructure for deployable flood barriers, any design will have to account for the prevention of leaks via maturing root systems or charged irrigation lines that would introduce water into the electrical equipment.

5. Transmission and Distribution: The station is a component piece of a larger system, not a free standing element. Accordingly, its location, position and constraints are informed by the access of transmission lines via Broadway and distribution lines via Galileo Galilei Way.

In the course of our study of other below grade stations we remain confident that the vision statement above is more than achievable with the realities of the engineering. However this proposal should be viewed in the context of the very unique and substantially complicated engineering challenge of the relocation of the Fulkerson substation. Further, design of the station is ongoing and will likely encounter unforeseen constraints and engineering issues that may require changes that will be reflected in future design review submissions for Center Plaza.

Map of the intersection of Broadway and Biogen Boulevard showing proposed transit station locations. The map includes labels for 'Alameda', 'Biogen B', 'Biogen C', 'Residential', 'Commercial West', 'Biogen Broad', 'Biogen S', and 'Commercial East'. Dimensions for station footprints are provided: 67.5 ft and 53.6 ft for the northern stations, and 66.5 ft and 147.6 ft for the southern stations. A scale bar indicates 0 to 100 feet.

FIGURE 3.8



BREATHING TREE CONCEPT

BREATHING TREE CONCEPT 2

 Sub Station Service Element Locations

OPTIONS FOR SUBSTATION EXHAUST AND INTAKE SERVICES

FIGURE 3.9

The below grade substation will be cooled by the use of above-grade ventilation structures connected to fans located below the plaza to bring air into contact with electrical machinery. The separate air intake and exhaust structures have been located with the intake structure located at the south end of the plaza and the exhaust structure located adjacent to the commercial west building on the north side of the plaza. Several options, illustrated here, have been explored for the free standing intake structure that will be located adjacent to the future residential building at the southeast corner of the plaza. Vertical circulation will also need to be considered as represented in the Breathing Tree concept 2.



1. BREATHING TREE CONCEPT

A preferred option is a single structure approximately 35 feet square and approximately 50 high and designed as a sculptural element. This concept of a "breathing tree" is designed with a perforated or latticed screen that allows for air flow and will feature internal lighting to provide a civic beacon at night.

2. CANAL PIERS CONCEPT

A second option references the historic canal with vertical "pilings" that surround the air intake structure and provide seating areas around the perimeter.

3. GALLERY / EXHIBIT CONCEPT

A third option divides the air intake into multiple vents thereby creating three objects that define smaller "urban rooms" and opportunities for interpretive elements or exhibitions within the larger plaza.

CENTER PLAZA VIEW LOOKING NORTH EAST

FIGURE 3.10





EAST / WEST CONNECTORS

LOUGHREY WALKWAY (SIXTH STREET CONNECTOR)

Concurrent with the completion of Commercial Building A, the applicant delivered improvements to the Sixth Street Connector Pathway by constructing separated pedestrian and bicycle facilities while maintaining and protecting the mature trees along the existing pathway. A new 10' wide bicycle path was constructed in the space between the existing 12.5' path and the buildings to the west. The completed bicycle path (Kittie Knox Bike Path) aligns with paths to the north on Sixth Street and to the south on Ames Street. The completed bike path was set at the existing grade to reduce impacts on the existing tree roots. The East / West Pedestrian Connectors cross the new bike path where a change of material, texture and color serves as a warning to pedestrians crossing the bike path.

At a few selected locations where the grading permits, seating was added between the pedestrian path and bicycle path with crushed stone as a permeable surface. New shade tolerant and drought resistant ground cover plantings were added between the trees and on the Eastern and Western edge of the paths. The lighting was updated with new LED cut off fixtures to enhance safety and the pedestrian experience at night, as well as improve energy efficiency and reduce maintenance costs. The new lights are located in the same location as the existing lights to avoid disturbing the existing tree roots with new conduit.



EAST / WEST PEDESTRIAN CONNECTIONS

There are three East / West Pedestrian Connectors in the overall Project area. The Southwestern East West Pedestrian Connector was constructed in Phase 1, and creates a link between the West Service Drive and the sidewalk along Galileo Galilei Way.

The Northeastern East / West Pedestrian Connector will be designed to create a new connection between the Center Plaza, the Sixth Street Connector and the Volpe Parcel along its western edge. This promises to further enhance the intra-block porosity expected with the demolition of the Blue Garage, as well as build greater intra-parcel connectivity.

Commercial Building D is expected to open onto the enhanced Northeastern East/West Pedestrian Connector. Upon completion of Commercial Building D, it is anticipated that the proposed bicycle valet would be relocated to expanded facilities within the ground floor of Commercial Building D. The final bicycle valet operations would front the East / West Pedestrian Connector and the Sixth Street Connector. The Applicant also envisions that some active use/retail space in Commercial Building D could be flexible in configuration, and designed with a mutually-supporting bicycle valet and bicycle shop.

The Southeastern East / West Pedestrian Connector will be designed to accommodate short term bicycle parking for the Residential Building South to the west. If possible, linear rain gardens will be water receiving landscapes along the path as one part of the storm water strategy. Further the connector will have a broad and clearly marked pedestrian pathway to reinforce connection to Volpe.

Each of the East / West Pedestrian Connectors will have new LED lighting in cut off fixtures to enhance safety and the pedestrian experience at night, as well as improve energy efficiency and reduce maintenance costs.



LOOKING SOUTH ALONG THE (KITTEE KNOX BIKE PATH)



LOOKING NORTH ALONG THE LOUGHREY WALKWAY

3.2 PROPOSED OPEN SPACE - PLANS

CENTER PLAZA SITE PLAN

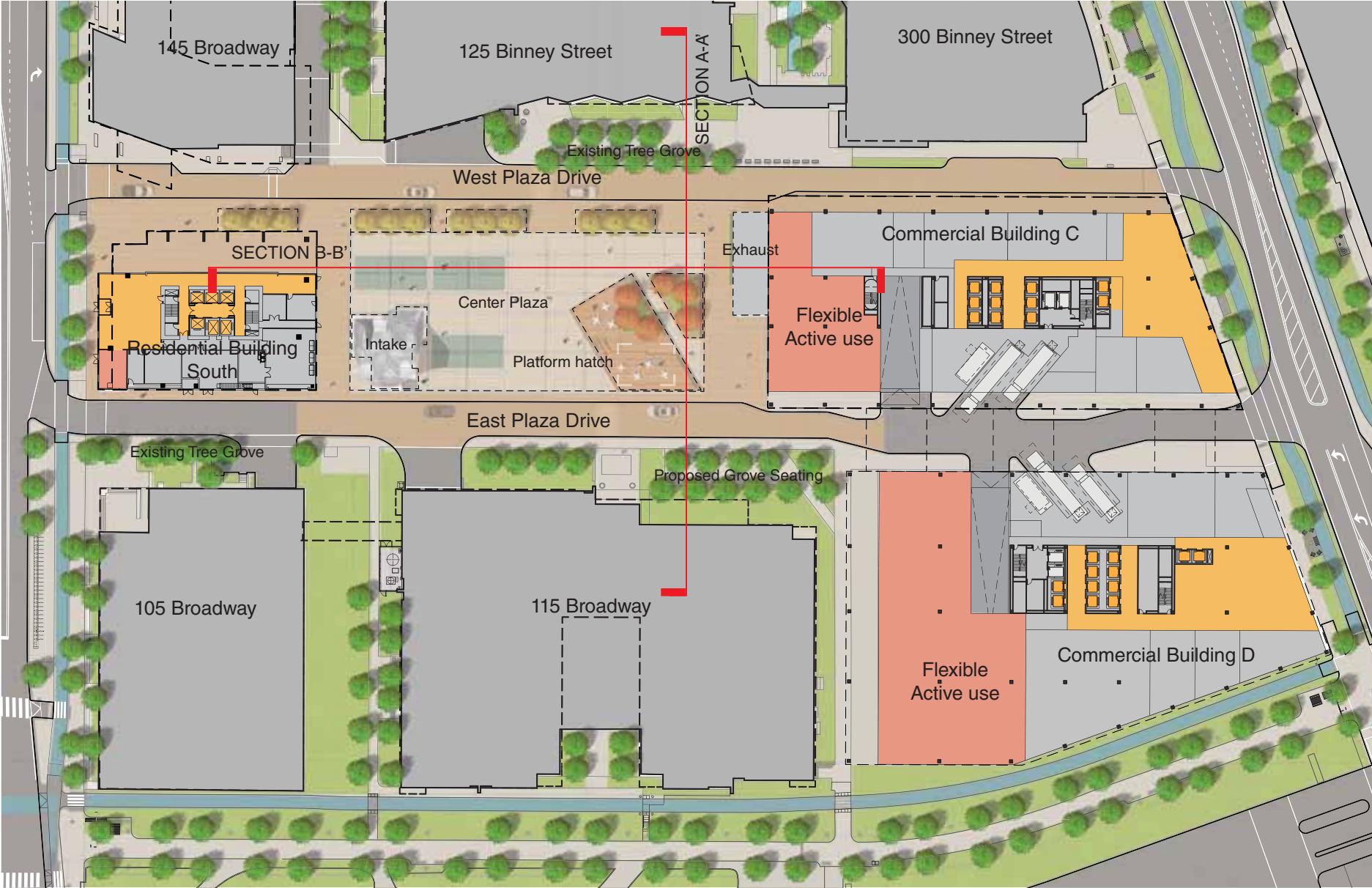


FIGURE 3.13

GROUND LEVEL

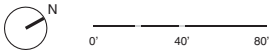
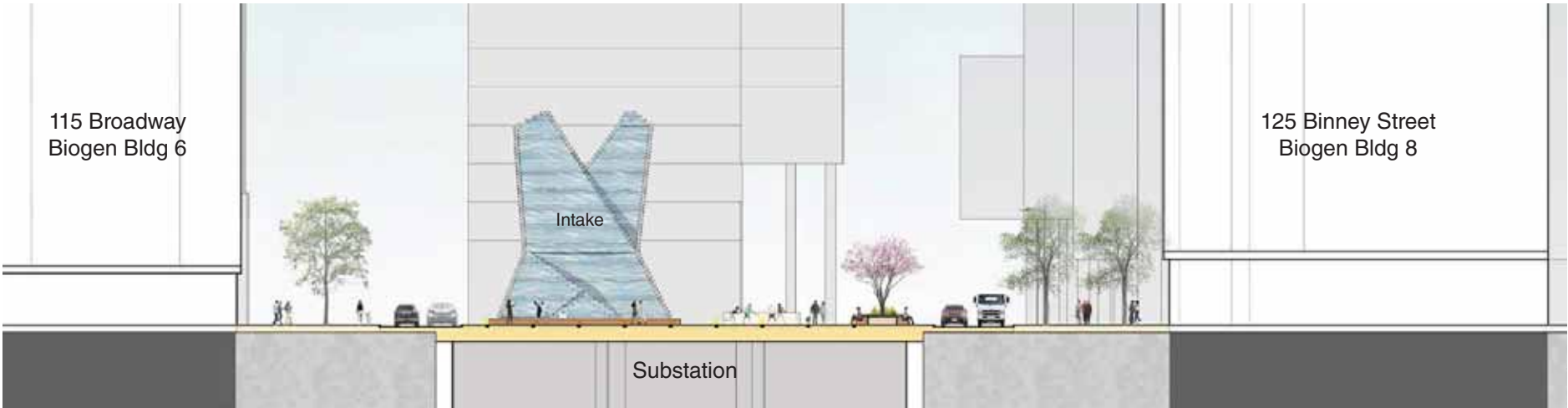


FIGURE 3.14

CENTER PLAZA SECTION A - A' FACING SOUTH



CENTER PLAZA SECTION B - B' FACING EAST



FIGURE 3.15

CENTER PLAZA SECTION B - B' FACING EAST

3.2 OPEN SPACE UNDER CONSTRUCTION - PLANS

KENDALL SQUARE ROOFTOP GARDEN



FIGURE 3.15

325 MAIN STREET (COMMERCIAL BUILDING B)

The streetscape along Main Street in front of the Project was very recently and thoughtfully redesigned and renovated by the City of Cambridge and includes street trees, traditional and sculptural benches, bike parking hitches and other street furniture as documented in the following pages. Per discussions with the Cambridge Department of Public Works, before beginning construction, Commercial Building B will remove and protect the street furniture and remove and replant the existing eight (8) street trees at another appropriate jointly-agreed upon location. At the Project's completion, the street furniture and existing paving will be restored to its current condition and eight (8) replacement street trees will be planted in kind on Main Street.

KENDALL SQUARE ROOFTOP GARDEN

The existing Kendall Roof Garden sits on the roof level of the Green Garage and is accessible to the public via elevators and stairwells on the Garage's north side along Broadway and the Garage's south side off Pioneer Way. With the redevelopment of 325 Main Street, the Project will deliver a new, highly visible and accessible pedestrian connection from Kendall Plaza up to the Kendall Roof Garden through a combination of publicly-accessible stairs, pathways and an elevator. This new feature will not only serve to connect two previously disconnected public spaces, but will also encourage increased public enjoyment of the Kendall Roof Garden. As shown in the following plans and sections, the roof garden has been completely redesigned and reimagined to accommodate a wide range of programming through the day and into the evening hours during the warmer seasons. The new landscape design will functionally divide the roof garden into three general areas: a "living room" area that includes a large digital screen and stage; a kitchen and dining area equipped with the proper infrastructure to serve and prepare food and drinks for large gatherings; and a lawn area with a multi-purpose sports and recreation court.

KENDALL PLAZA

The existing Kendall Plaza was most recently renovated in 2012 and primarily serves as a major circulation element through and around Kendall Square, a connection point between MIT and the surrounding neighborhood and an access point to the MBTA Red Line Outbound Headhouse. The plaza is flanked by retail along its east side, future retail and the MBTA Headhouse on its west side, the Marriott hotel lobby to the North, and Main Street to the South. In addition to serving as a public gathering space for Farmer's markets and other community events, Kendall Plaza features passive green space as well as movable seating, promoting enjoyable public interaction and community engagement. With the redevelopment of 325 Main Street, the Project will significantly upgrade the public experience in Kendall Plaza through a revitalized two-story retail edge along its west side as well as aesthetic and minor functional upgrades to the existing MBTA Outbound Headhouse. Additionally, the Project will create a new pedestrian connection from Kendall Plaza to the Kendall Roof Garden, facilitating public access and enhancing visual and physical connections between these two important public spaces and the visual activation of Kendall Plaza. These improvements will all serve to augment Kendall Plaza's role as a central hub of activity, neighborhood connector and transportation access point, further reinforcing Kendall Plaza as the center of Kendall Square.

3.2.1 PUBLIC PROGRAMMING

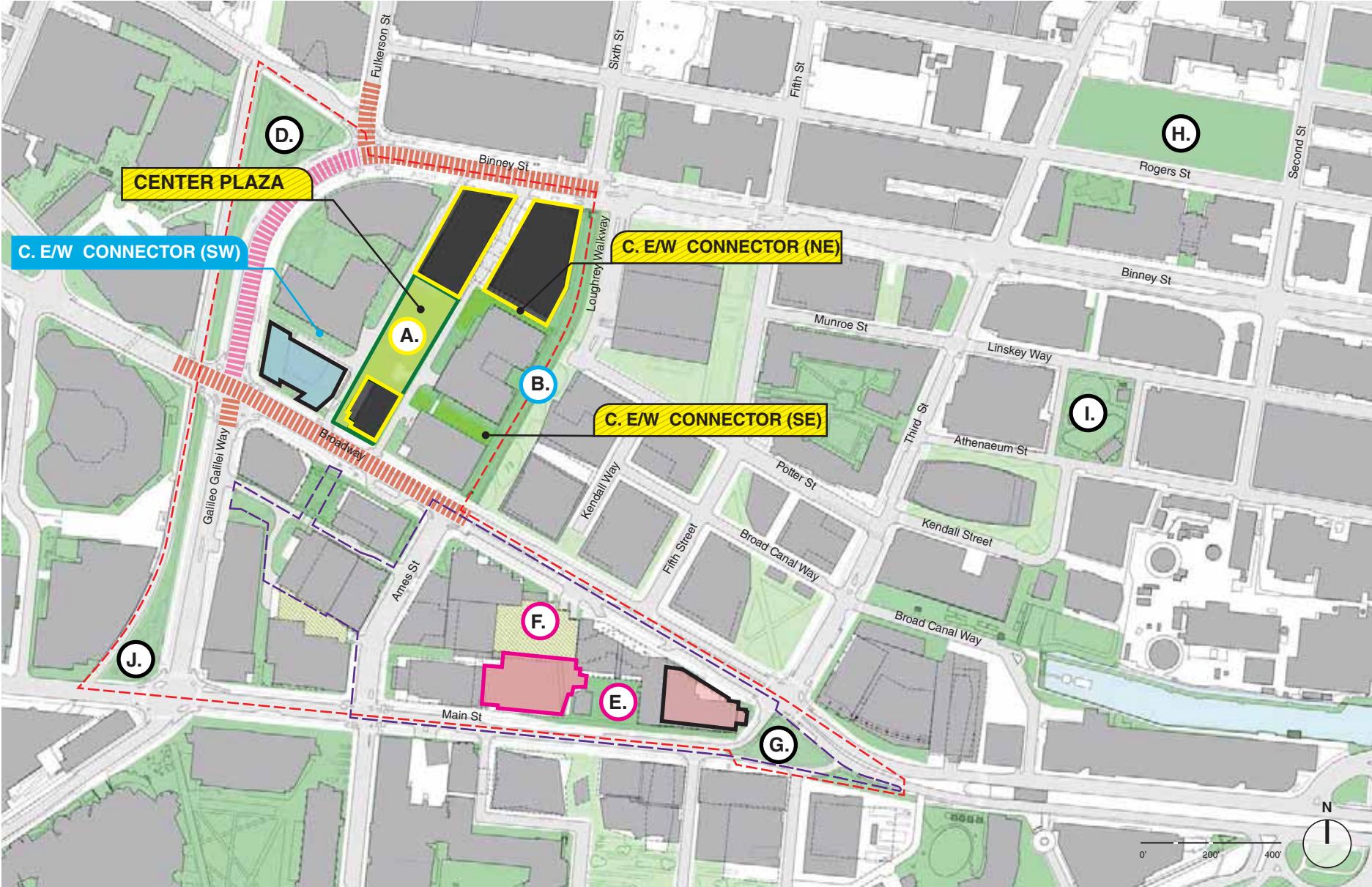
MXD DISTRICT PUBLIC PROGRAMMING

Programming at the existing, recently renovated Kendall Plaza will be enhanced primarily through the re-conception of its western, edge containing more direct retail frontage, an open, vertical connection to the Kendall Roof Garden and aesthetic improvements to the MBTA Outbound Headhouse. Programming opportunities will complement the current programming initiatives that are underway in the MXD District at the Kendall Plaza on Main Street and the Kendall 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 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.

Consistent with the stated vision for Center Plaza, programming will include the set up and take down of seasonally appropriate active use components which may include pickle ball, basketball, bocce courts, kids play structure, curling (winter), ice sculptures, movable seating, performance infrastructure etc. The nature of what activity is desirable will change but Center Plaza will be designed with defined edges and open central canvas and actively managed in a way that allows for the inevitable evolution and community responsiveness with the underlying goal of activity. To foster equity and inclusion in public programming within these spaces, the Applicant also intends to pursue proper training for maintenance, security, and property management teams, ensuring that these spaces feel welcoming to all.

PUBLIC PROGRAMMING ELEMENTS

		Potential day activity	Potential night activity
A	CENTER PLAZA		
	Temporary Public Art Installations	X	X
	Outdoor Seating (Individual, Small and Larger Groups)	X	X
	Summer Concerts and Performances	X	X
	Public Markets	X	
	Outdoor dining/ movable tables and chairs	X	X
	Seasonal Sport and Games	X	X
	Fountain as Potential Play Amenity	X	
B	LOUGHREY WALKWAY		
	Outdoor Seating (Collaboration Space)	X	
	Kittie Knox Bike Path		
C	E/W-CONNECTORS		
	Outdoor seating (Individual, Small Groups)	X	X
	Bike Parking		
D	BINNEY STREET PARK		
	Dog Run / Seating Bike Path	X	
E	KENDALL PLAZA		
	Outdoor seating (Individual, Small and Larger Groups)	X	X
	Summer Concerts	X	X
	Public Markets	X	
	Temporary Public Art Installations	X	X
	Outdoor dining / Movable table and chairs	X	X
	Community Partner Programming	X	X
F	KENDALL SQUARE ROOFTOP GARDEN		
	Outdoor Seating (Individual, Small Groups)	X	
	Urban Gardening Workshops	X	
	Yoga / Quiet Oasis Space / Reading / Meditation	X	
	Public / Private Programmed Events	X	X
G	GALAXY PARK (POINT PARK)		
	Outdoor Seating and Gathering / Sculpture Park	X	X
H	ROGERS STREET PARK		
	Play Fiend / Event Area / Lawn Slope / Sledding Hill	X	
	Dog Run / Pergola / Water Play/ Sand Play	X	
I	HENRI A. TERMEER SQUARE		
	Outdoor Seating / Play	X	X
J	GRAND JUNCTION		
	Outdoor seating (Individual, Small Groups)	X	X
	Outdoor Seating (Collaboration Space) / Bike Path	X	X



- | | | | |
|--------------------------------------|---------------------------|-------------------------------|--------------------------|
| Proposed Projects | PHASE I. Public Benefits | Open Space Projects by others | MXD Boundary |
| Proposed Projects Under Construction | PHASE II. Public Benefits | ALTA (approved) | KSURP Boundary |
| Proposed Projects Complete | PHASE IV. Public Benefits | ALTA (In construction) | Ames Street District ASD |

3.3 PEDESTRIAN ACCESS AND CIRCULATION

The proposed enhancements to the pedestrian network and open spaces between Broadway and Binney Street are planned to logically extend to adjacent areas in East Cambridge.

The improvements completed to the Sixth Street Connector during Phase 1 for pedestrians and bicyclists are an extension of pedestrian and bicycle paths on Ames Street to the south and Sixth Street to the north. New active uses at the ground floor of the completed Commercial Building A and the future Residential South Building that front the Broadway streetscape should have a positive impact on east-west pedestrian use. The expanded streetscape at Commercial Building A will accommodate this new pedestrian volume. This east-west pedestrian route along the north side of Broadway could also potentially be further enhanced in the future, if and when 105 Broadway redevelops, which could include an expanded sidewalk and streetscape zone, as well as active ground floor uses. Further eastward, the future redevelopment of the Volpe site could continue this activated street edge on the north side of Broadway.

As a component of the Commercial Building B to be completed in Q2 of 2022, the Project will deliver a new, publicly-accessible and highly visible vertical connection from Kendall Plaza to the Kendall Roof Garden, facilitating access and encouraging increased public enjoyment of these open spaces. In addition, the existing connection from Ames Street to Kendall Plaza (via Pioneer Way and the Commercial Building B ground floor) will be reimaged to create a dynamic and active pedestrian path connected to vibrant retailers.

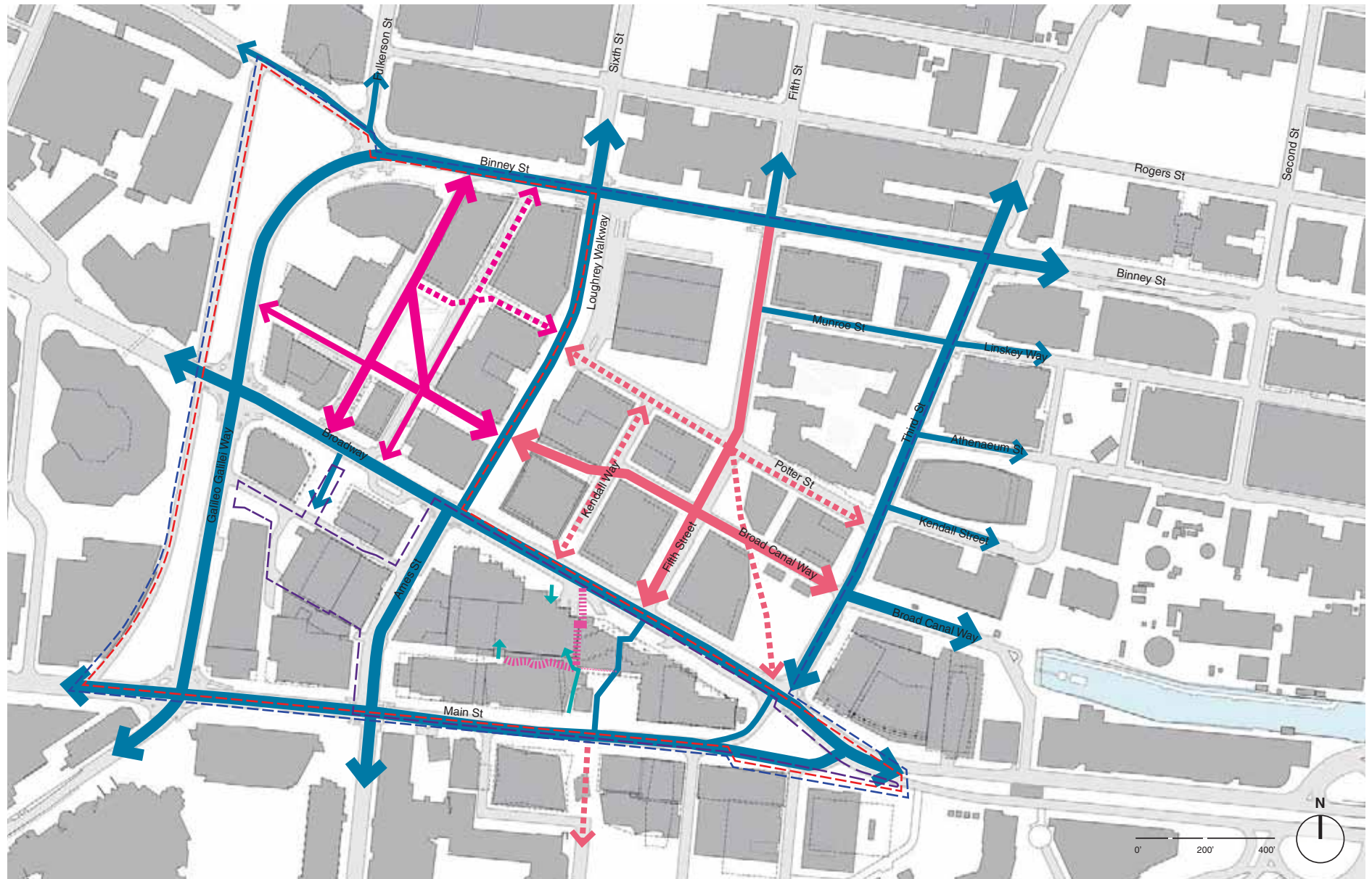
At the heart of the North Parcel lies the anticipated construction of Center Plaza, which will contribute to a vibrant public realm, foster new cross-block connections and promote pedestrian connectivity through the North Parcel, and begin to facilitate the integration of the Volpe site to the MXD District and East Cambridge.

Center Plaza will have defined east-west desire lines supported by flush paving conditions and defined ground marking to clearly allow for uninhibited circulation for those willing to pass through to another destination in the MXD or broader surrounding neighborhood. However, the space is large enough to function as both a circulation and a gathering space. While the edges of Center plaza will be well defined by clearly marked East West circulation path to the south, multi-use Plaza Drives to the East and West, a bike valet and potential future retail to the North. The Center Plaza will remain a flexible canvas for programed activity, games, flexible seating performance and gathering.

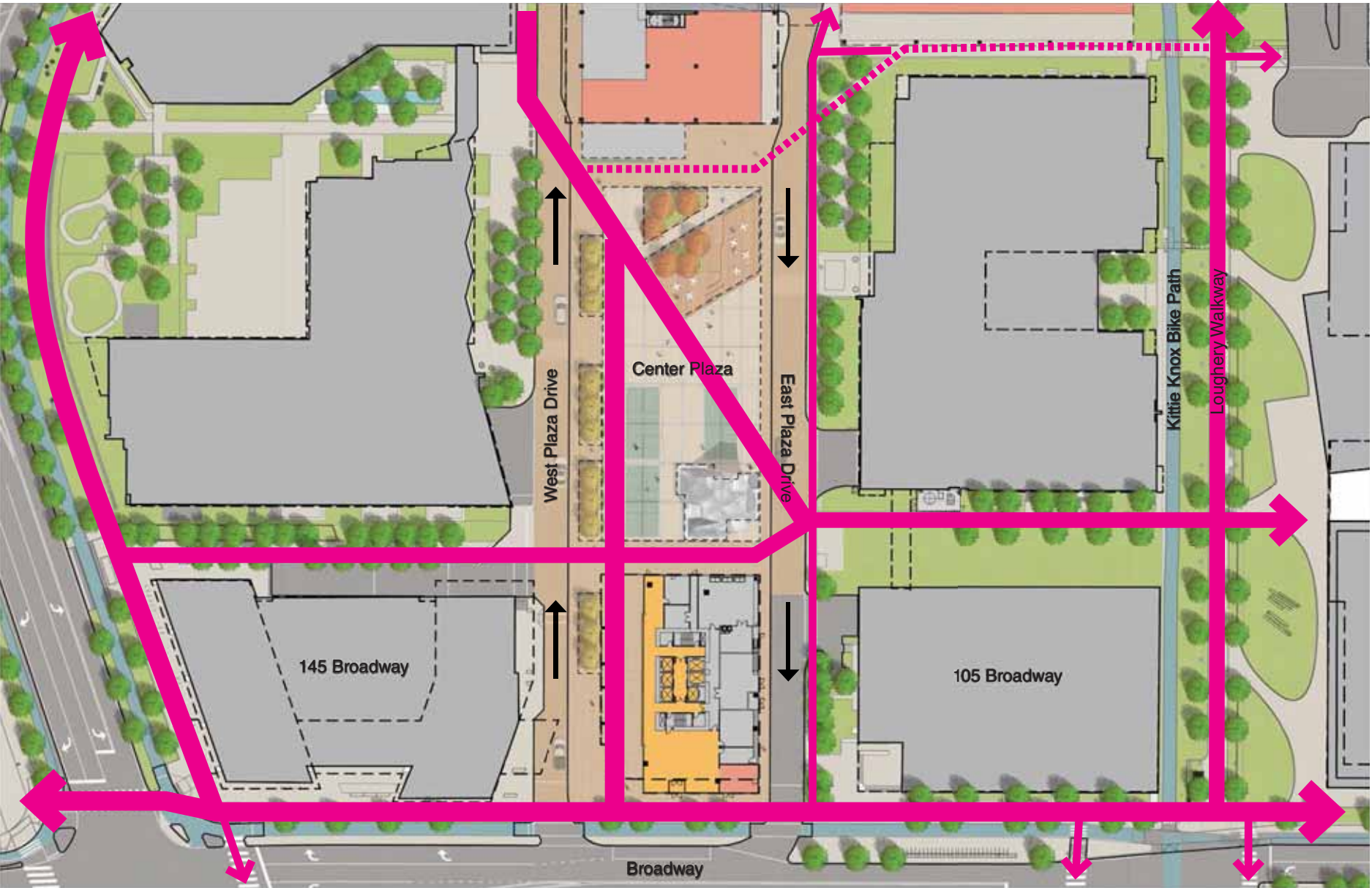


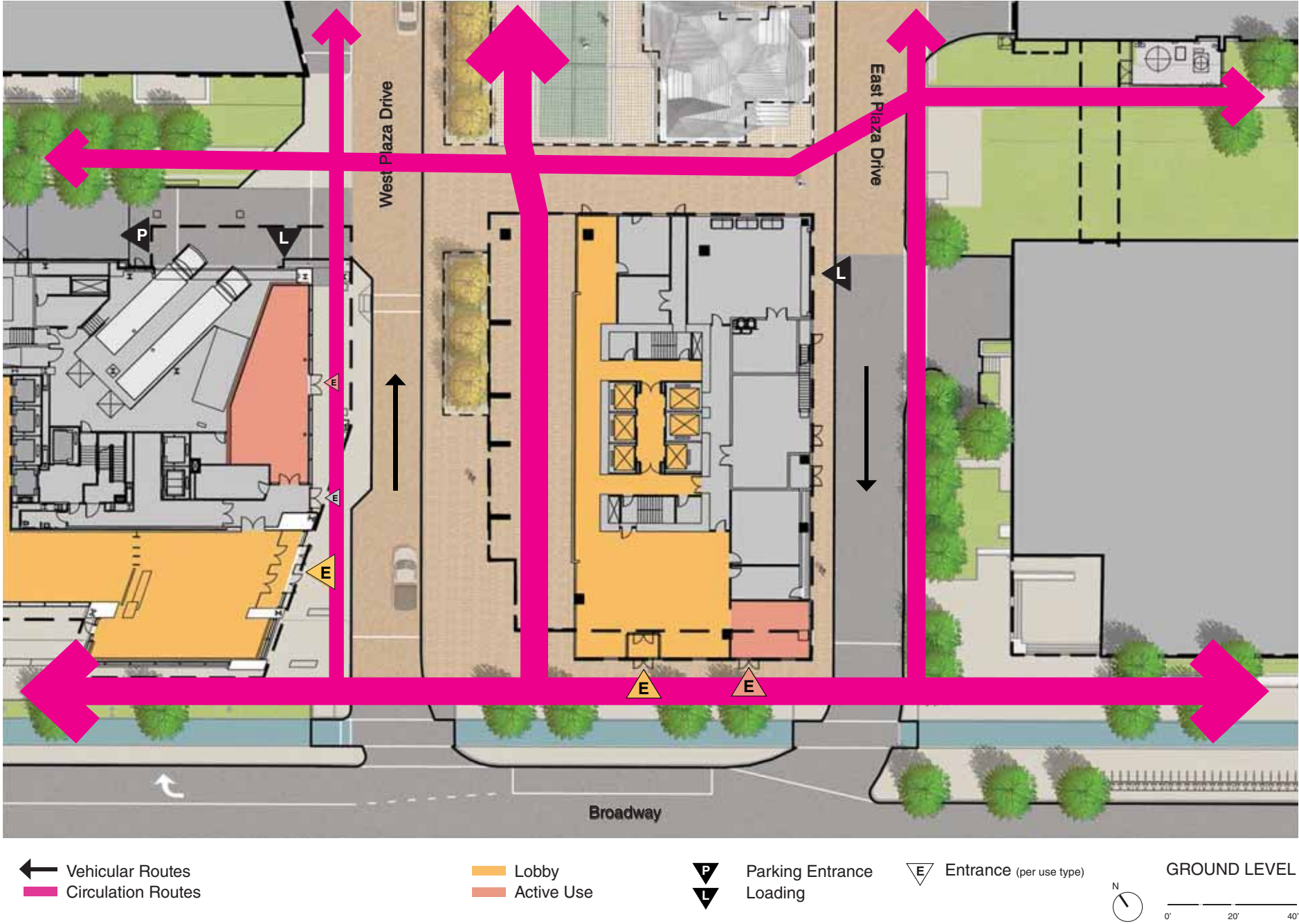
CYCLE TRACK ON BROADWAY

FIGURE 3.8



- | | | | |
|--------------------------------|--|-----------------------------|--------------------------|
| Existing Primary Circulation | Proposed Primary Circulation by others | Internal Circulation Route | MXD Boundary |
| Existing Secondary Circulation | Proposed Secondary Circulation by others | Potential Circulation Route | KSURP Boundary |
| Proposed Primary Circulation | | Vertical Circulation | Ames Street District ASD |
| Proposed Secondary Circulation | | | |





3.4 STREETSCAPE / LANDSCAPE IMPROVEMENTS

STREETSCAPES

COMMERCIAL BUILDING A - STREETSCAPE ON BROADWAY AND GALILEO GALILEI WAY

The planting zones along Broadway are aligned in front of Commercial Building A to extend the continuity of the pedestrian walking zones as well as planting along Broadway. Short term bicycle parking is located along the Broadway streetscape framed with low planting. The eastern facade of Commercial Building A is splayed to open up the corner along Broadway at the intersection of the West Service Drive.

EAST AND WEST PLAZA DRIVES (SERVICE DRIVES)

The existing service streets flanking the Blue Garage are designed solely as circulation and loading paths defined by traditional curb heights, narrow East West crossing opportunities and standard paving. The relocation of the Blue Garage and the Construction of the Center Plaza presents the opportunity to modify the character of the service drives to emphasize a pedestrian character.

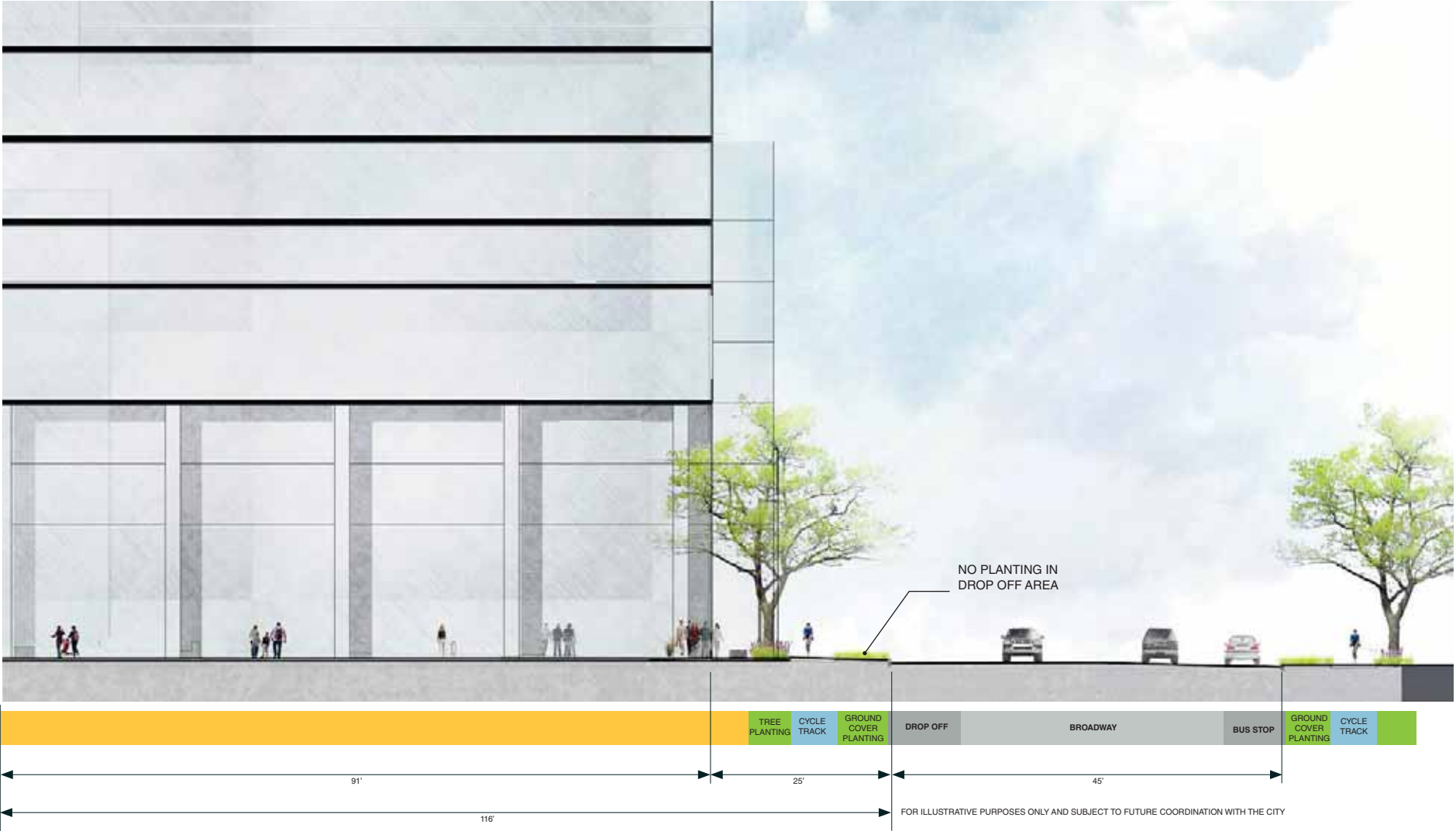
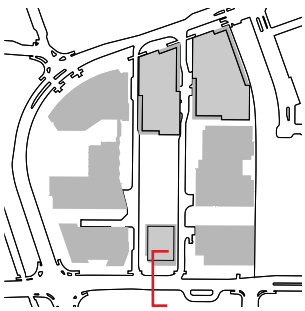
To accommodate the complete reconfiguration of the parcel from a centrally parked commercial zone to porous multi use block, the character of the service drives will emphasize a pedestrian character through the use of flush grades, broad crosswalks, traffic calming sidewalk expansions (see NE side of 145 Broadway) and paving material that clearly indicates a multi modal condition. Based on the heavily trafficked Kitty Knox Bike / Loughrey Walkway to the East of the site, the West Service drive has been identified as the primary service drive to emphasize North South pedestrian circulation. The service drives will be designed to allow for critical and existing utility uses including lay-by space for buses and delivery vehicles, ride share vehicles and automobile circulation.

COMMERCIAL BUILDING B - STREETSCAPE ON MAIN STREET

The existing streetscape at 325 Main Street consists of sidewalks, street trees, seating, bike racks, and other street furniture along Main Street to the South and the MBTA Red Line Outbound Headhouse and some limited retail frontage to the West. The new active ground and second floor retail uses along with the new connector from Kendall Plaza to the Kendall Roof Garden will contribute to both the visual and physical activity of the streetscape, create multi-level public open space, and further activate the existing Kendall Plaza. With the Project, the street edge and existing plantings along Main Street will be revitalized, but without material proposed changes to the character of the existing streetscape, which was recently reimagined and reconstructed by the City of Cambridge.

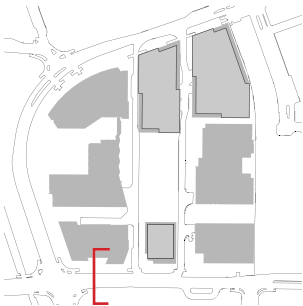
STREET SECTION AT 135 BROADWAY

FIGURE 3.20A



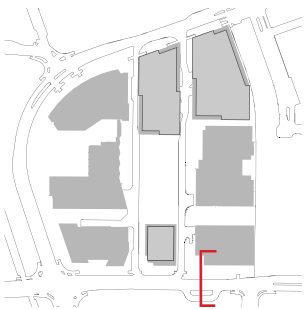
STREET SECTION AT 145 BROADWAY

FIGURE 3.20B



STREET SECTION AT 105 BROADWAY

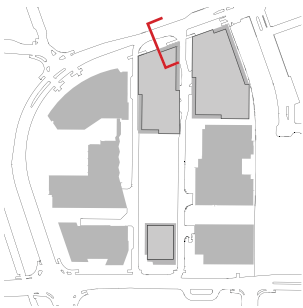
FIGURE 3.20C



3.4 STREETSCAPE / LANDSCAPE IMPROVEMENTS

STREET SECTION AT 290 BINNEY

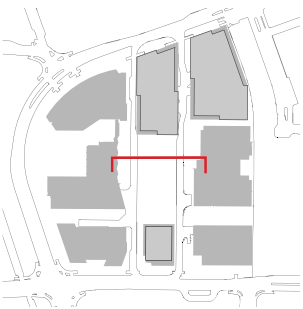
FIGURE 3.20D



FOR ILLUSTRATIVE PURPOSES ONLY AND SUBJECT TO FUTURE COORDINATION WITH THE CITY

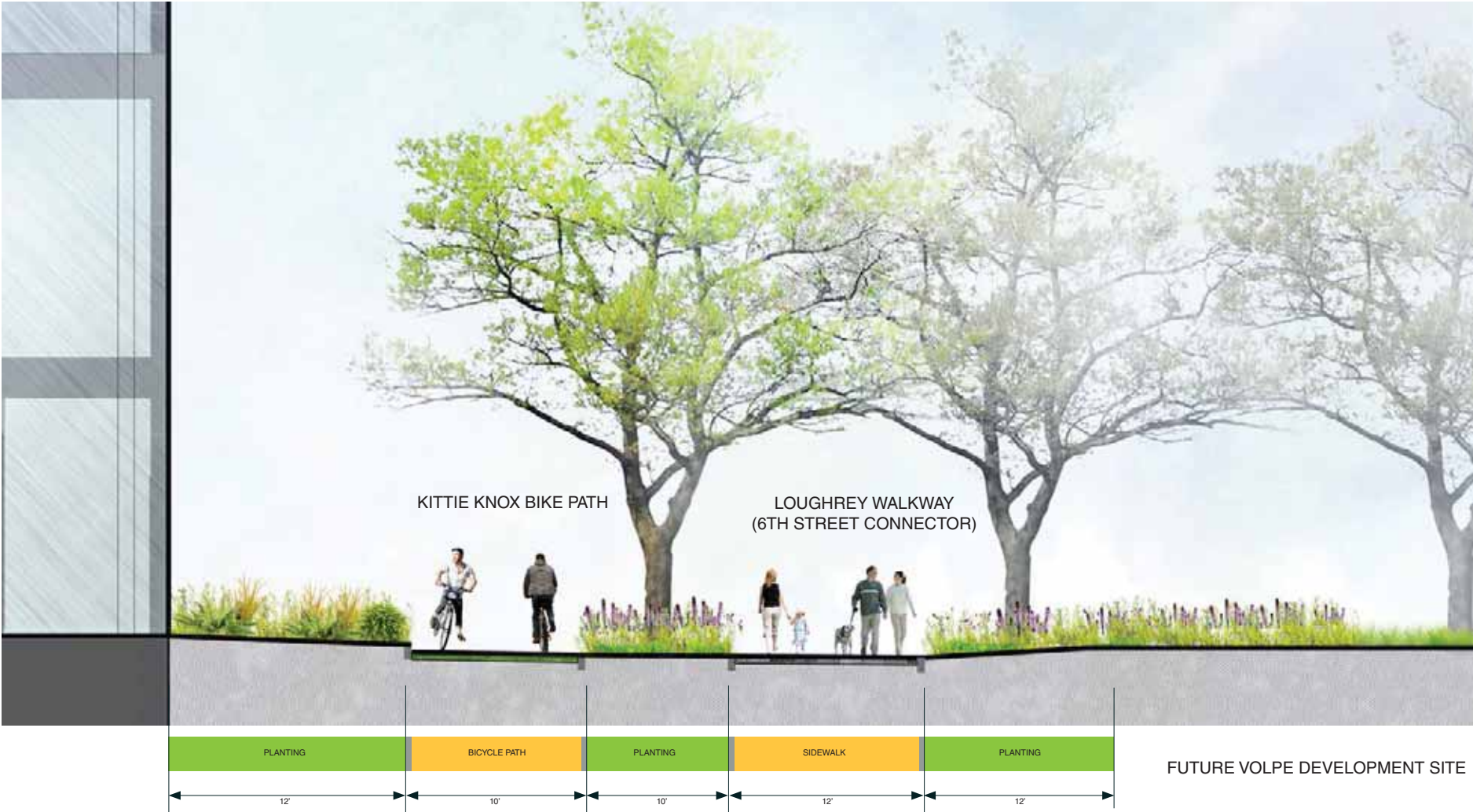
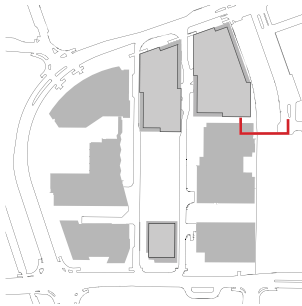
SECTION THROUGH EAST AND WEST PLAZA DRIVE

FIGURE 3.20E



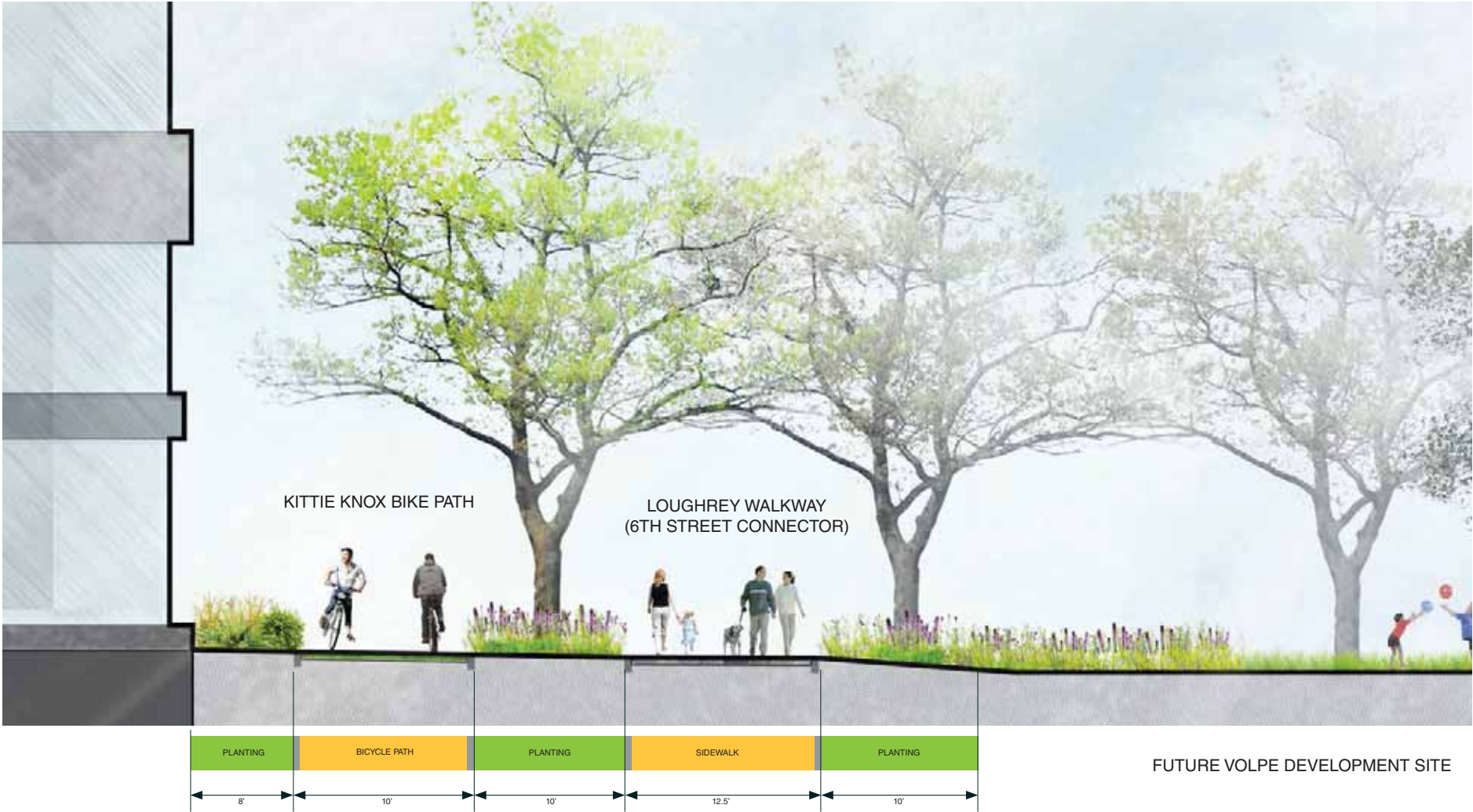
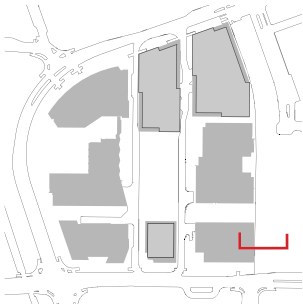
6TH STREET CONNECTOR AT 115 BROADWAY (BIOGEN BLDG 6)

FIGURE 3.20F



6TH STREET CONNECTOR AND 105 BROADWAY (BIOGEN BLDG 10)

FIGURE 3.11G



3.5 WAYFINDING

KENDALL SQUARE IDENTITY BRANDING AND WAYFINDING

The Kendall Square area is in the midst of implementing a new civic wayfinding system, intended to clarify navigation around the area and to enhance its identity as a vibrant, innovative community. This effort, led by the Kendall Square Association (KSA) in partnership with the CRA, is a welcome addition to the community, which has traditionally lacked a comprehensive, district-wide system. Simultaneously, other signage projects, in various stages of completion, create new visual layers and visual complexity. Notably the Biogen campus is revising building and amenity identification, with new freestanding signs, directionals, and building graphics (See image B - Biogen Omloop). Surrounding properties, collectively known as Kendall Center, are likewise in the process of revising building identity, tenant signage, and directories. Visible elements, such as large-scale parking structure graphics, bring more visual stimulation. (See image A - Blue Garage)

In this context, the Concept Plan will continue to be sensitive to existing and ongoing efforts. As the project develops, it will align with the visual language and messaging of district-wide wayfinding, while enabling individual buildings and tenants to express their identity. The Concept Plan is an opportunity to not only align with, but also to enhance, district-scale wayfinding. Taking visual cues from the KSA system, the Project can welcome visitors to public spaces clearly marking parks and privately-owned park space (POPS) and enliven the 6th Avenue Connector with environmental graphics. There are additional opportunities for storytelling and interpretive elements that introduce pedestrians to the unique culture of the Kendall Square community while maintaining a sense of continuity within the district. (See Image C-Lawn On D)



A. SIGN POST IDENTIFICATION



B. BIOGEN OMLOOP



C. LAWN ON D



D. FLEXIBLE CIVIC SPACES



F. RETAIL DIRECTORY



G. ART AS LANDMARK



E. PUBLIC BOOK SHARE



H. CUSTOMIZABLE REALTIME
COMMUNITY MESSAGING SIGNS
(SOOFA SIGNS)



I. PAINTED MURALS FOR BRAND AND GARAGE IDENTIFICATION

3.5 WAYFINDING

KENDALL SQUARE IDENTITY BRANDING AND WAYFINDING

Figure 3.13 represents an inventory of proposed and existing wayfinding signage in the district. This will provide the basis for recommendations to enhance, remove or consolidate signage. Any new signage will be sensitive to existing visual and urban cues - from streetscape elements to building signs.

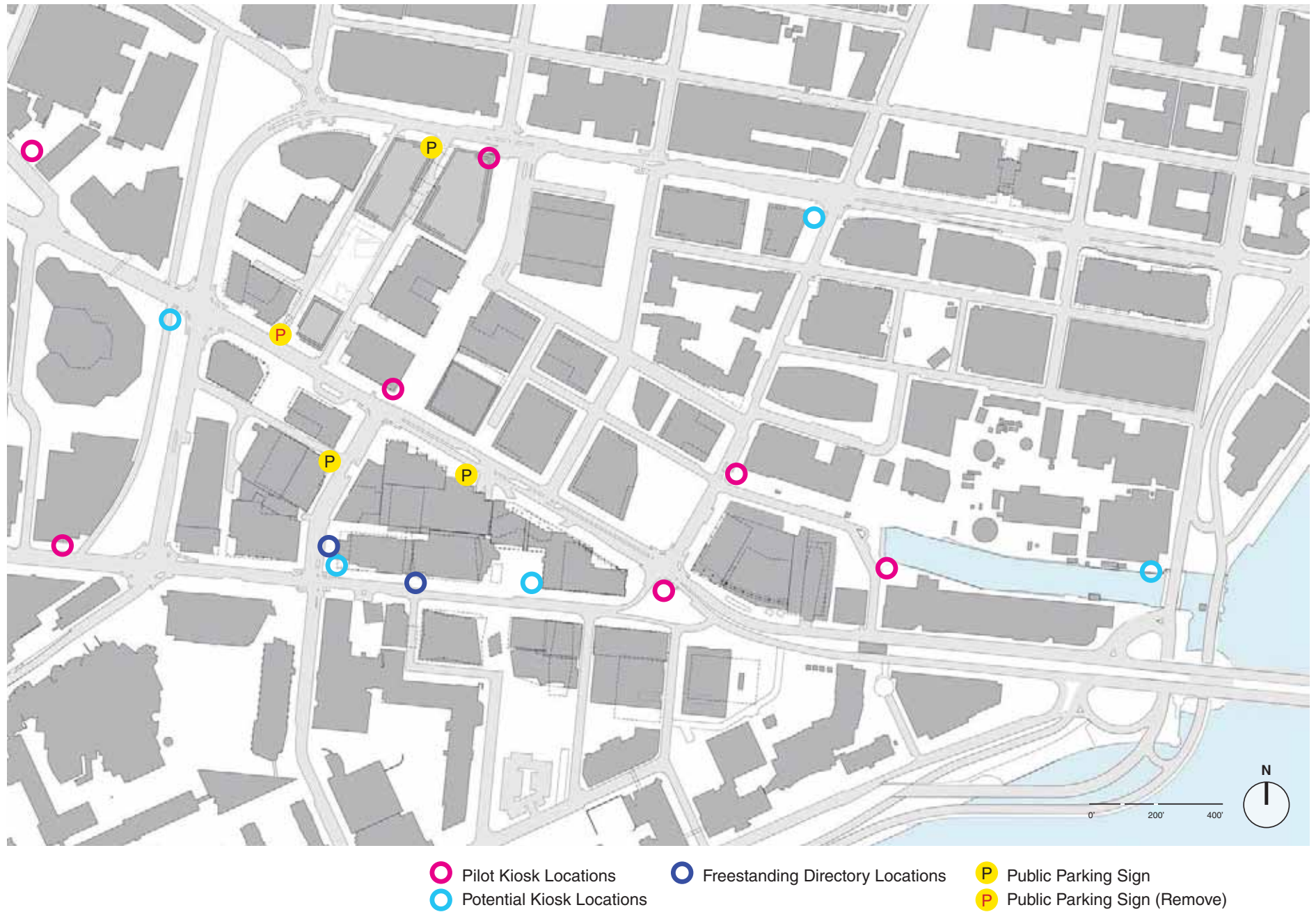
An established set of sign standards and visual guidelines, enable building tenants to maintain consistency throughout the system. As tenants implement components of the system, the guidelines can contribute to overall aesthetic, including both stylistic and material aspects, such as the Kendall Square Association signage (See image A - KSA District Signage). Such a system may also incorporate requirements for individual tenants to maintain and update relevant components, ensuring that the system remains current and functional.

This system is meant to function within established review and approval processes, with oversight from the CRA and KSA. Its intent is to enhance current wayfinding and contribute to a strong, coherent sense of place in Kendall Square.

The Project will also work to implement privately-owned public space (POPS) signage. The CRA and the Cambridge Community Development Department are working together on POPS branding to establish universal citywide signage for privately owned, but publicly beneficial open spaces. These signs will help all residents, employees, and visitors know that a park space is welcoming and open for them to enjoy.



A. KSA DISTRICT SIGNAGE



3.6 TREE MITIGATION AND PROTECTION PLAN

Assessment Overview

The assessment of existing trees on the project site- MXD Parcels 2 and 4, the adjacent Loughrey Walkway (also known as 6th Street Connector), was conducted by Bartlett Tree Experts. Bartlett 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 Projects' design intent

Additional information regarding diameter at breast height (DBH) of trees are referenced in Figures 3.15.

Loughrey Walkway (6th Street Connector)

The red oaks (*Quercus rubra*) along this portion of the site were assessed to be in good condition. The new Kittie Knox Bike Path installed along this corridor was built using flexible porous pavement with an underdrain collection system that drains to leaching basins to promote infiltration of rainwater and maintain aeration of the soils around the existing trees

Bartlett tree experts have reviewed the condition of these trees and determined that they are well established and should adapt to the additional shading created as a result of this project.

Additional information regarding the management of the trees within the 6th Street Connector are located in Figures 3.12, 3.15 and 3.16.

Broadway

The little-leaf lindens (*Tilia cordata*) along Broadway were identified to be in poor condition due to their limited root zone and soil compaction. Five of these trees were removed during the construction of 145 Broadway. The remaining ten of these trees were removed for the construction of the new drainage culvert along the north side of Broadway. Four new honey locusts (*Gleditsia triacanthos*) will be planted in front of 145 Broadway once the culvert work is completed. Four additional honey locusts will be planted in front of 105 Broadway during the construction of the proposed cycle tracks on Broadway.

Galileo Galilei Way

The existing Sycamore (*Platanus occidentalis*) have been protected. An additional sycamore and red oaks have been planted at the corner of Broadway and Galileo Galilei Way. These trees have been identified as being in good condition.

Binney Street

There are six Sycamore (*Platanus occidentalis*) to the north of the Commercial East and West (Tracts IV and I) that are considered to be in good condition.

Tract I

There are four Japanese maple (*Acer japonicum*), seven Cherry (*Prunus serrulata*), three Honey locust (*Gleditsia triacanthos*), and seven Zelkova (*Zelkova serrata*) on this parcel, which are all considered to be in good condition.

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.

Binney Park

The trees to the north of the Blue Garage consist of red maple (*Acer rubrum*) and Austrian pine (*Pinus nigra*). These trees are considered to be in poor condition.

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 had lived past their life expectancy. These trees were removed during the construction of 145 Broadway and have been replaced with red oaks (*Quercus rubra*).

Blue Garage

The Red Maples (*Acer rubrum*) and Zelkova serrata 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.

Main Street

The American Elms (*Ulmus americana*) along Main Street were recently planted as part of a streetscape renovation. Installed tree support systems appear to be supporting the new trees successfully, but trees are still being established. These trees will be removed and relocated permanently at the beginning of construction and replaced in kind with new trees at the end of construction with similar sized American Elms including the same tree support system, structural soil and irrigation.

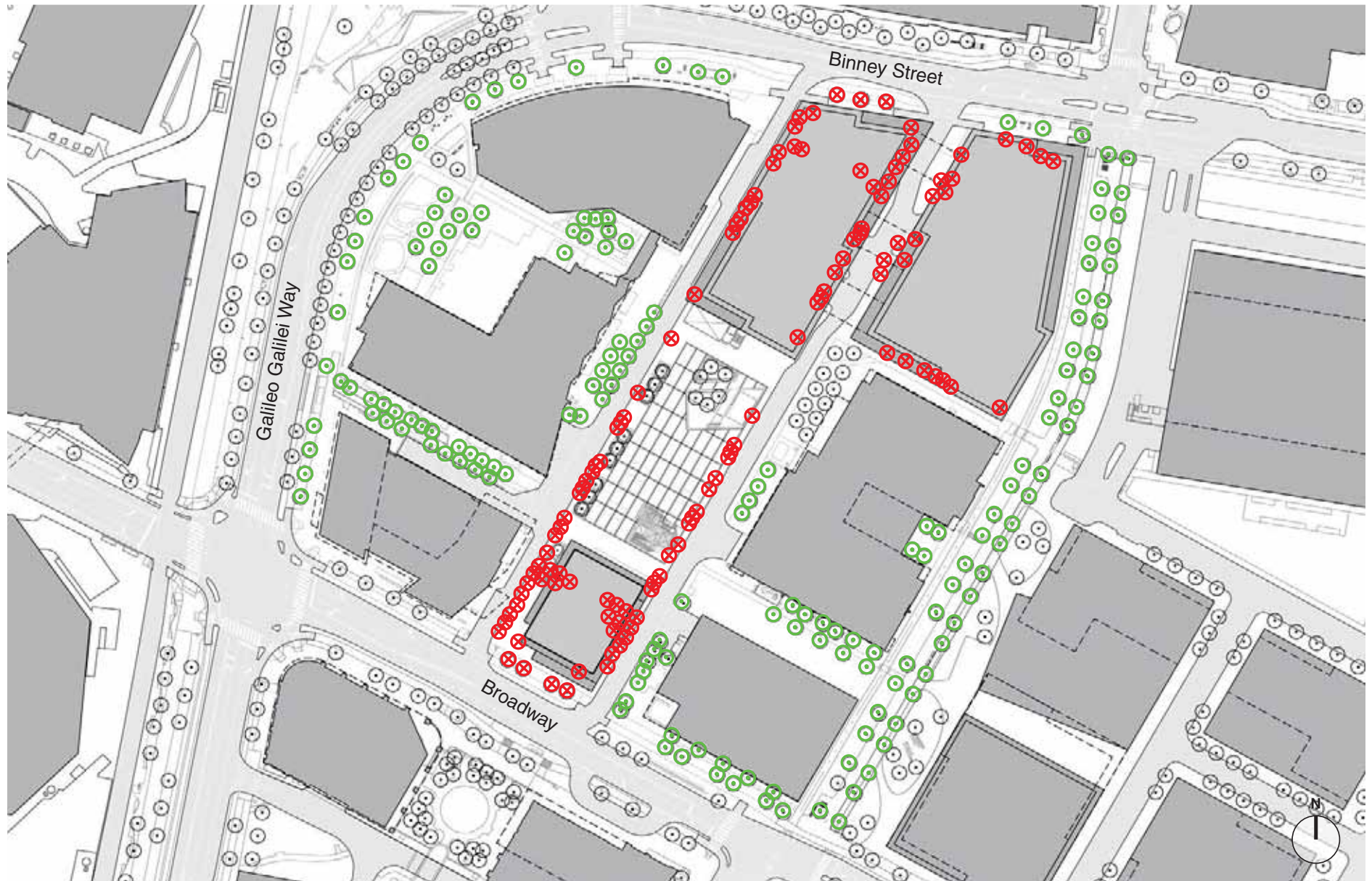
Proposed Trees – General Strategy

Trees being placed in 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.

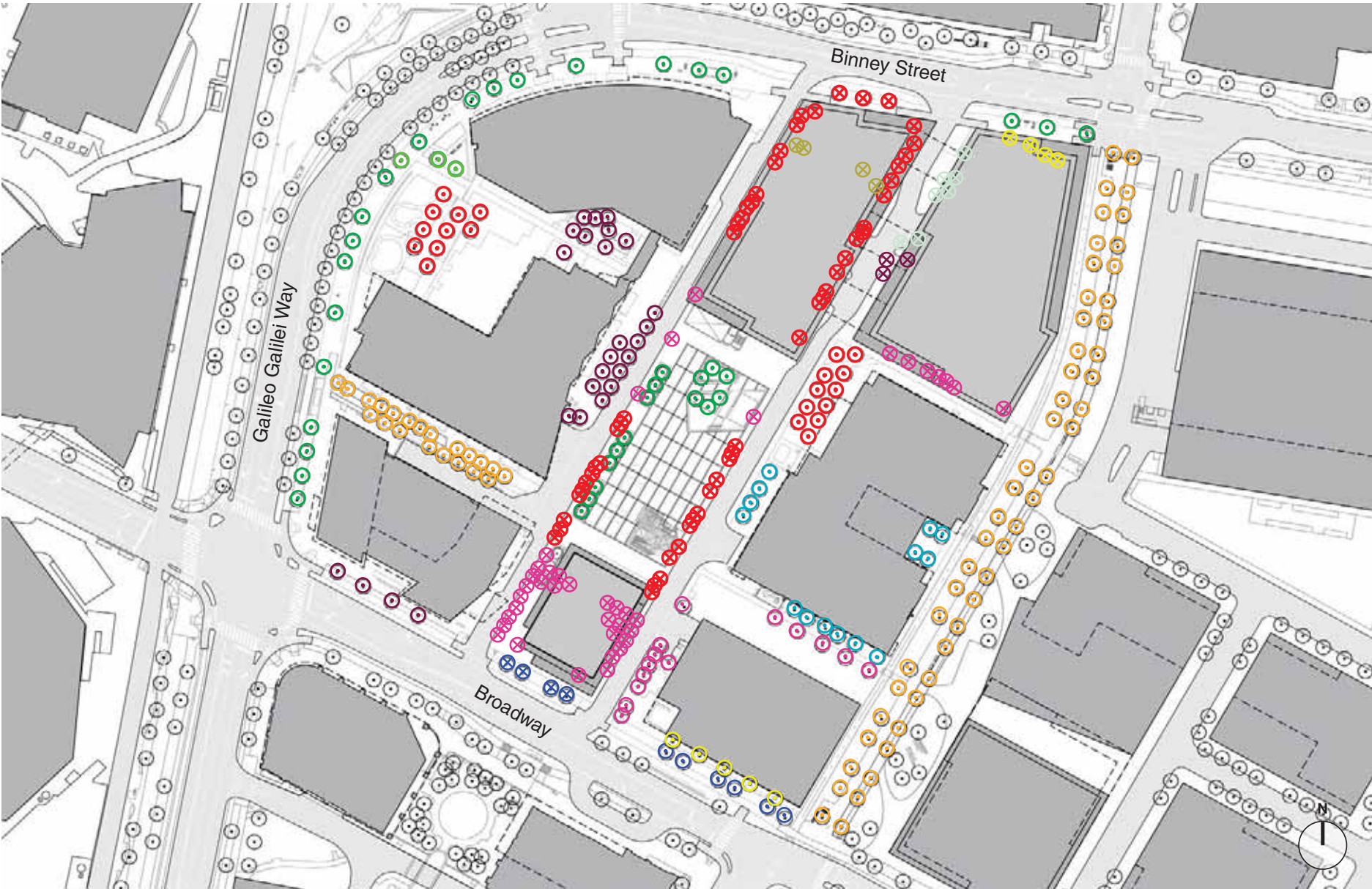
3.6 TREE MITIGATION AND PROTECTION PLAN

TREE PROTECTION PLAN

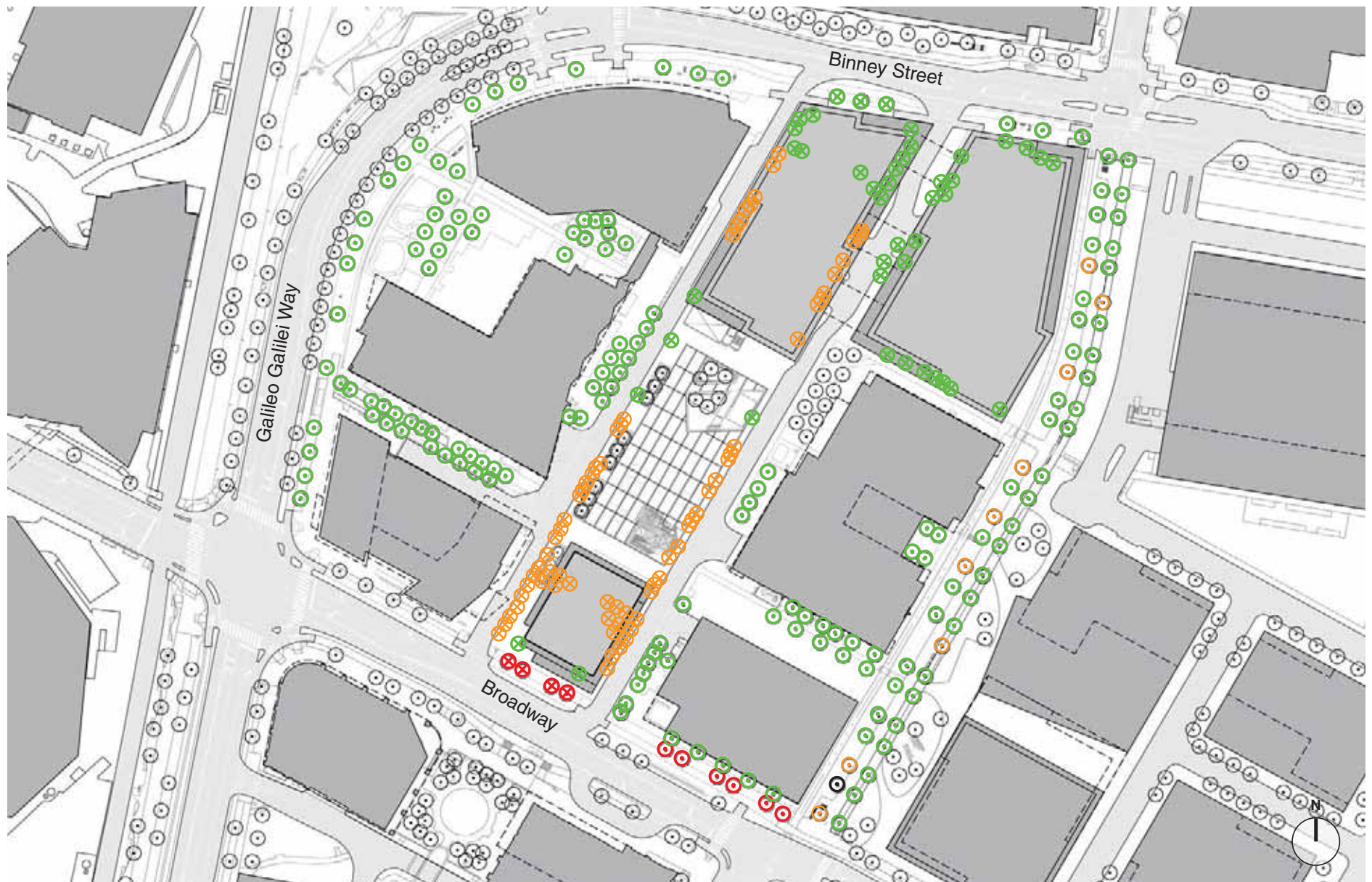
FIGURE 3.12

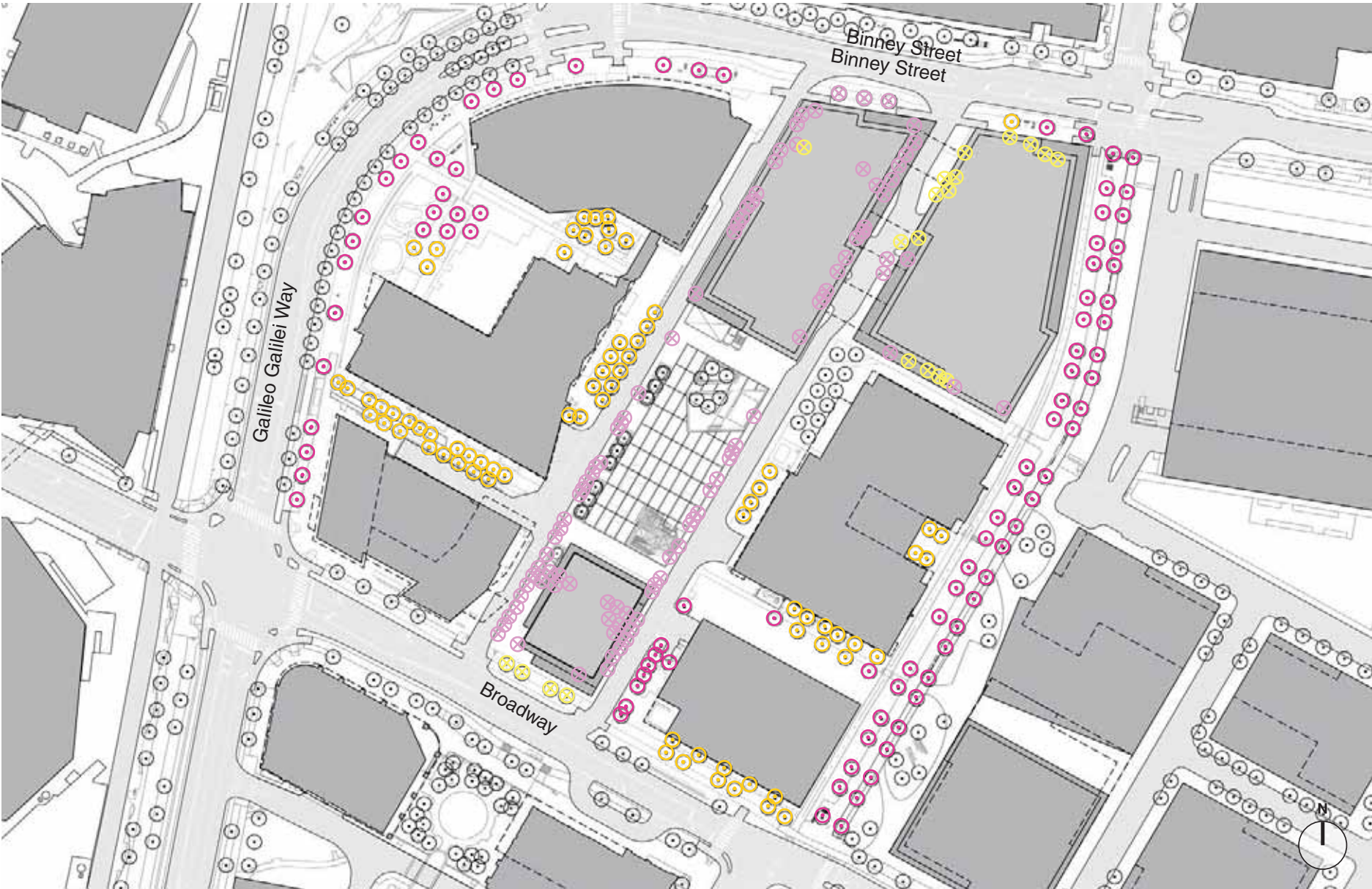


- Trees for Protection
- Trees for Removal

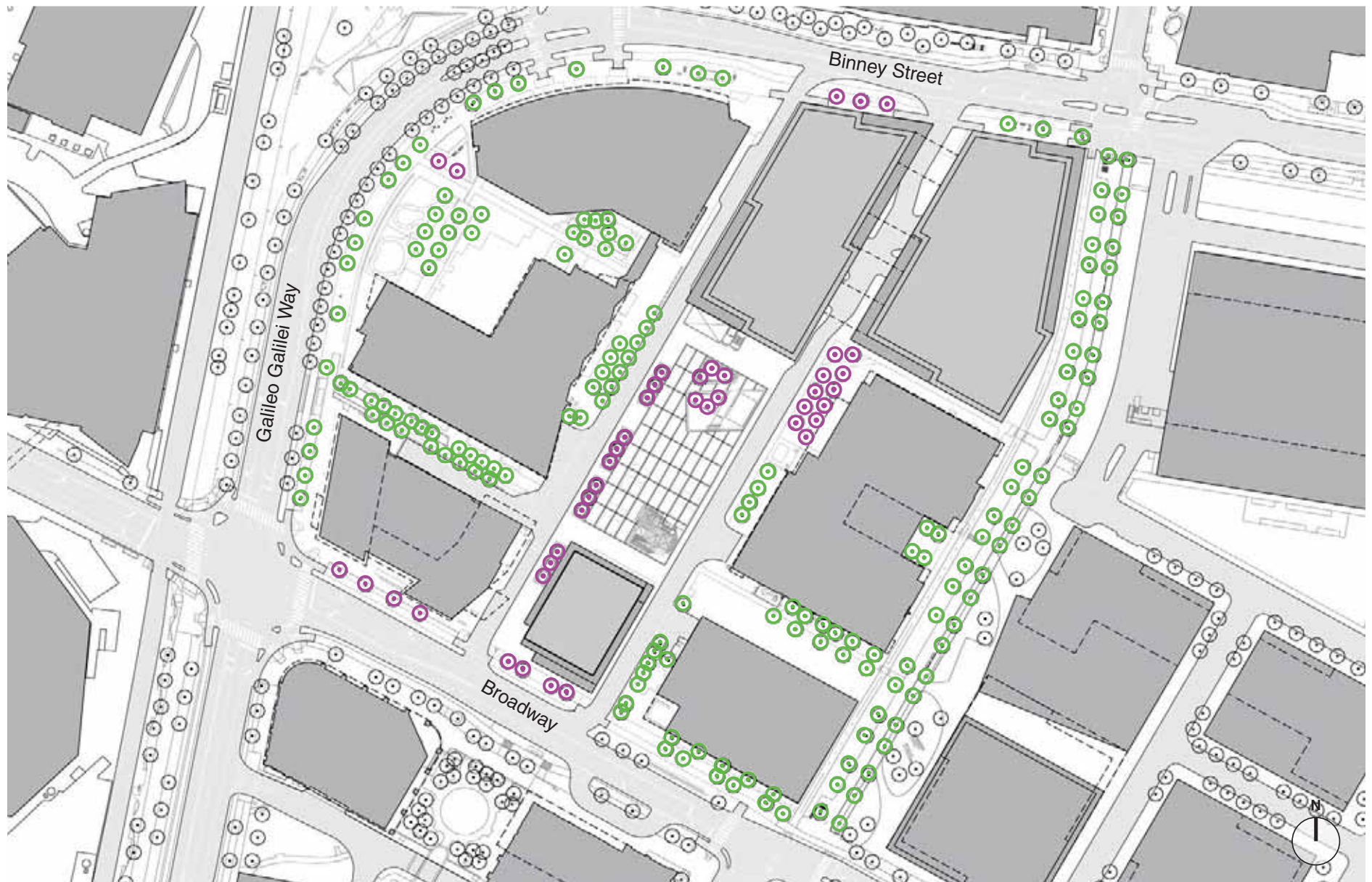


- | | | | |
|--|---|---|--|
| ■ Acer rubrum (Red Maple) | ■ Gleditsia triacanthos (Honey Locust) | ■ Zelkova serrata (Zelkova) | ■ Pinus nigra (Austrian Pine) |
| ■ Acer japonicum (Japanese Maple) | ■ Betula papyrifera (White Birch) | ■ Tilia cordata (Little-Leaf Linden) | ■ Malus coronaria (Crabapple) |
| ■ Quercus rubra (Red Oak) | ■ Crataegus crus-galli (Thornless Hawthorne) | ■ Platanus occidentalis (Sycamore) | ■ Prunus serrulata (Cherry) |





- 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")



- Trees for Protection
- Proposed Trees

(Intentionally Blank)

ORDER HERE

TODAY@KND

4. RETAIL PLAN



4.0 INTRODUCTION

Though under long-term pressure from e-commerce and substantially disrupted by the COVID-19 pandemic—ongoing at the time of this writing—the Applicant expects active use and retail space to play a role in framing and enlivening the new public spaces and streetscapes created as part of this Concept Plan Amendment #2. The ground floors of all of the buildings proposed will contain some capability to flexibly accommodate active uses, including retail where appropriate.

The following goals will be pursued when designing the active use/retail program:

- Locating active use and retail in visible well-traveled areas that will help ensure its viability.
- Examining the broader market mix of current and proposed active uses/retail in Kendall Square to ensure that potential ground floor uses are complementary of existing offerings.
- Identifying retailers that can serve the diverse, 24/7 needs that come with a mixture of residential and commercial development from convenience and consumer service retail to place making dining offerings.
- Selecting retailers with a viable business model and material operational experience.
- Creating a retail program consistent with the requirements of Article 14.

In order to realize the goals above, the Project as a whole must contemplate how to position retail and active ground floor uses so as to ensure that they benefit as much as possible from new public space as well as new and existing pedestrian and cyclist access corridors. This important design guideline will help reinforce the City's chosen retail corridors along Broadway and Main Street, and create a dynamic and enlivened streetscape.

Further, the potential program needs to reflect the existing and newly proposed retail in other projects in Kendall Square to minimize programmatic redundancy and potential market conflicts. While the Applicant aspires to a diversity of retail uses consistent with public feedback, the ultimate tenancy for retail spaces will likely be food and service oriented retail based on the evolution of online commerce accelerated by the pandemic and available retail operators.

CHAPTER UPDATES

The following section summarizes minor refinements to this Chapter since the Approved Concept Plan.

Existing Retail: The existing retail analysis has been updated to reflect the completion of Commercial Building A, as well as the construction of Commercial Building B -each of which will bring additional retail opportunities, including but not limited to quick casual restaurants, coffee shops, entertainment retail, innovation space, and service retail, including a florist.

Future Retail: As a component of the Project Change, Residential Building South, Commercial Building C and Commercial Building D will all collectively possess the ground floor flexibility to accommodate active uses and retail where appropriate. Residential Building South will host approximately 700 SF of active use/retail GFA on its ground floor to activate Broadway Street, as well as draw passing pedestrians and cyclists towards the contemplated Center Plaza open space situated behind Residential Building South. The Applicant also plans the distribution of up to approximately 8,300 SF of ground floor active use or retail GFA between Commercial Building C and Commercial Building D so as to activate the northeast edge of the proposed Center Plaza open space. The majority of this space may be required for a bike valet to meet City of Cambridge requirements and may include some complementary bike oriented service retail.

Street Activation Approach: From a street activation standpoint, the ground floor of Residential Building South will benefit considerably from its frontage on Broadway Street and its proximity to the busy intersection of Broadway and Ames Street. Considering the pedestrian traffic between the Kendall/MIT Red Line Station and the development contemplated as part of this Concept Plan Amendment #2, Residential Building South is positioned to serve as a key “gateway” to the North Parcel in general, as well as the reimagined Center Plaza open space.

4.1 EXISTING RETAIL

On account of the COVID-19 pandemic, the current status and future condition of Kendall Square retail is more uncertain than at any time in recent memory. While a select group of retail operators are continuing to see success, many have been compelled to permanently close their doors as a result of the financial difficulties occasioned by the pandemic. Consequently, an appraisal of the Kendall Square retail market must possess considerable humility and by default be anchored by those establishments which have survived thus far or which have concrete plans to commence operations in the near future.

Refer to Figure 4.1, Existing District Retail.

1. MAIN STREET

Today, the area along Main Street in proximity to the Kendall Square MBTA Red Line stop is primarily composed of small service retailers, as well as a mix of restaurant, bars and a mix of fast casual offerings split between local retailers and national chains. These restaurants are defined by a diversity of culinary offerings that serve the local neighborhood and visitors alike. In addition, Kendall Square features both boutique and national hotels. The MIT COOP bookstore--formerly located on the ground floor and basement levels of the former 325 Main Street building--is expected to remain in its current temporary relocation premises at 80 Broadway until Commercial Building B is complete, at which point the MIT COOP will return to 325 Main Street at a reduced size reflective of the evolution of space requirements in the textbook industry.

2. AMES STREET RETAIL

The completion of 88 Ames Street has brought additional quick casual restaurants, coffee shops, a bank, and a florist, additive to the offerings of Sebastian's Cafe, Dumpling Daughter, Vester, and meadhall, which exist today along Ames Street.

3. THIRD STREET AND BROAD CANAL WAY

This developing retail area features a mix of restaurants with abundant outdoor seating situated along a landscaped plaza.

4. ONE KENDALL SQUARE

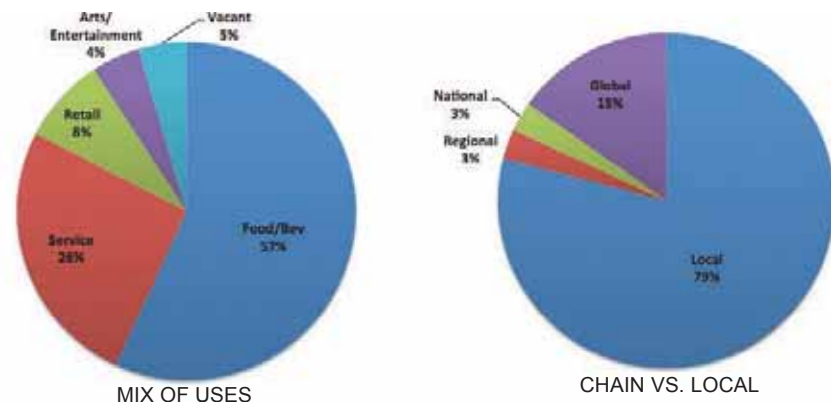
The area around the mixed use One Kendall Square project includes a movie theater, mix of restaurants and a brew pub.

5. CAMBRIDGESIDE GALLERIA (SEE FIG 4.3)

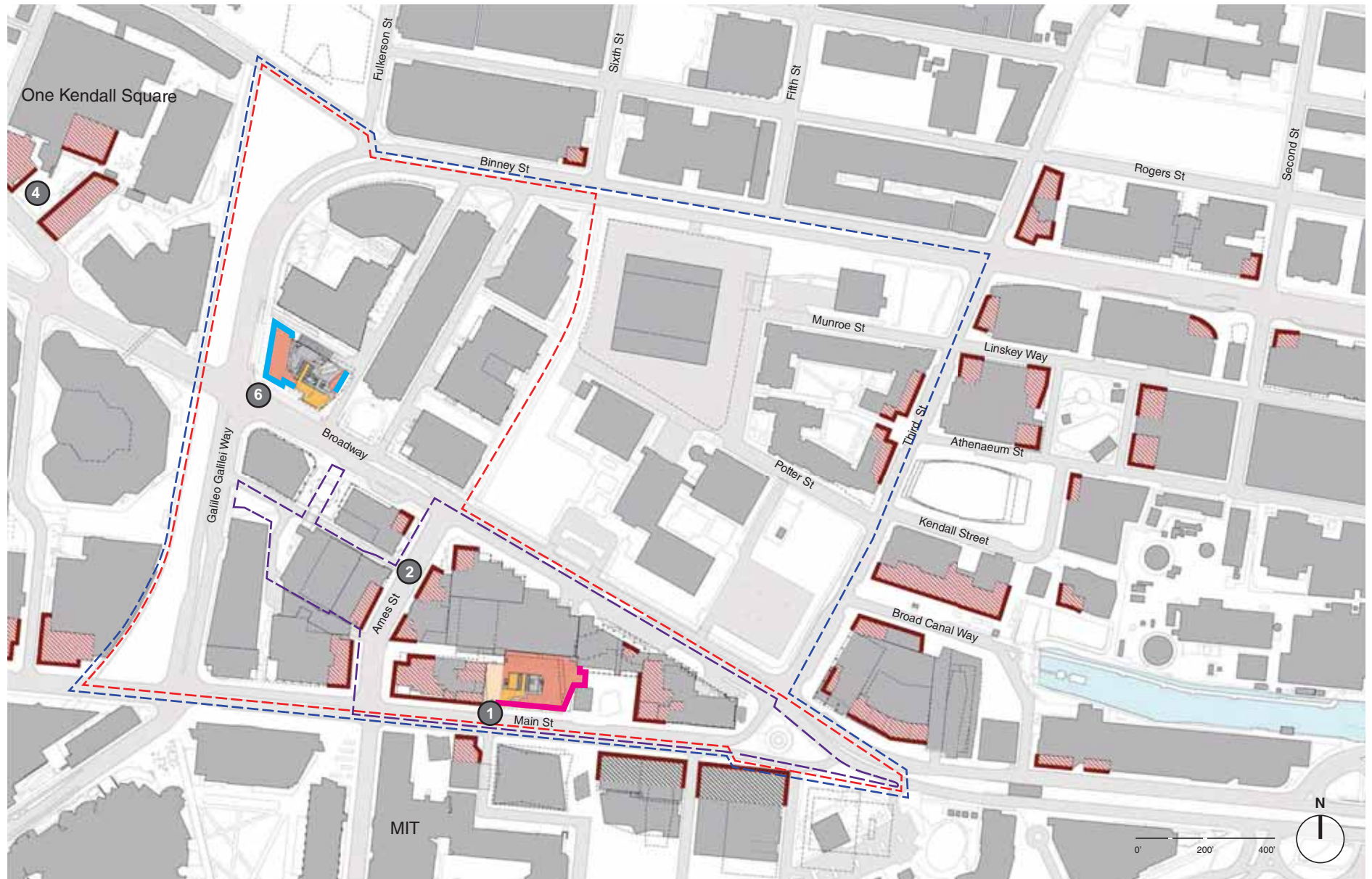
The nearby Cambridge side Galleria is a traditional anchored retail mall with established national chains offering apparel, electronics, consumer goods and fast casual dining. The mall is undergoing a re-conception that will integrate future commercial lab and office space but still include some retail operators.

6. BROADWAY AND BINNEY STREET

The Completion of Commercial Building A at 145 Broadway has brought a Sweet Greens restaurant to the MXD and a Core Power Yoga gym. As described in Section 4.2, Commercial Building A has additional capacity to accommodate additional active/retail uses, including a restaurant or bar, or dry good uses that is ideally situated to help activate the future open space.



*The graphics and analysis above are provided by Graffito SP



- | | | | |
|-----------------------------|--|-------------------------|--------------------------|
| Proposed Project Retail | Existing Retail | Future Potential Retail | MXD Boundary |
| Proposed Project Active use | Proposed Retail / Active use by others | | KSURP Boundary |
| Project Retail Complete | Project Retail Under Construction | | Ames Street District ASD |

4.2 FUTURE RETAIL PLAN

4.2.1 TARGET RETAIL OPPORTUNITIES BY BUILDING:

The following descriptions of potential retail and active use space attempts to offer context to the future retail program for long range planning purposes. The market conditions, retail concepts and needs of the Cambridge community will evolve between the time of this submission and the delivery of physical, ready to lease, retail space.

Refer to Figure 4.2, Future Retail Plan.

1. COMMERCIAL BUILDING B (325 MAIN STREET)

The redeveloped 325 Main Street building contains approximately 40,000 GFA of retail square footage, all or the majority of which will be located on the ground and second floors that could be subdivided in a variety of ways. A portion of the retail square footage will remain at one level below ground. With approximately half of the available square footage located on the ground and second levels, the frontage along both Main Street and the Kendall Plaza will be activated and offer opportunities for multiple retail entrances as well as retailers of varying size and type. An existing pedestrian connection from Kendall Plaza to Pioneer Way will be maintained through the ground floor, but could be reimagined if the retail programming followed a more “market-like” permeable model increasingly seen in urban areas. Potential uses could include restaurants, entertainment/sporting venues and/or bars, including fast casual dining options, as well as consumer service retail and dry goods. The MIT COOP bookstore currently located on the ground floor and basement levels of the 325 Main Street building will be temporarily relocated to 80 Broadway in early 2019 to accommodate the building’s redevelopment and will return once the new building is complete, at a reduced size reflective of the evolution of the space requirements of the textbook industry. Refer to Figure 4.2, Future Retail

2. COMMERCIAL BUILDING C (290 BINNEY STREET)

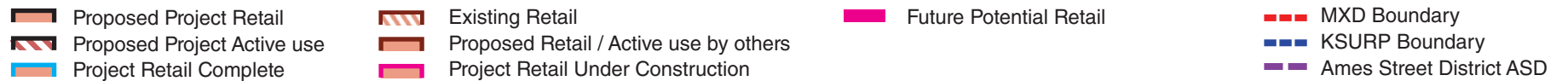
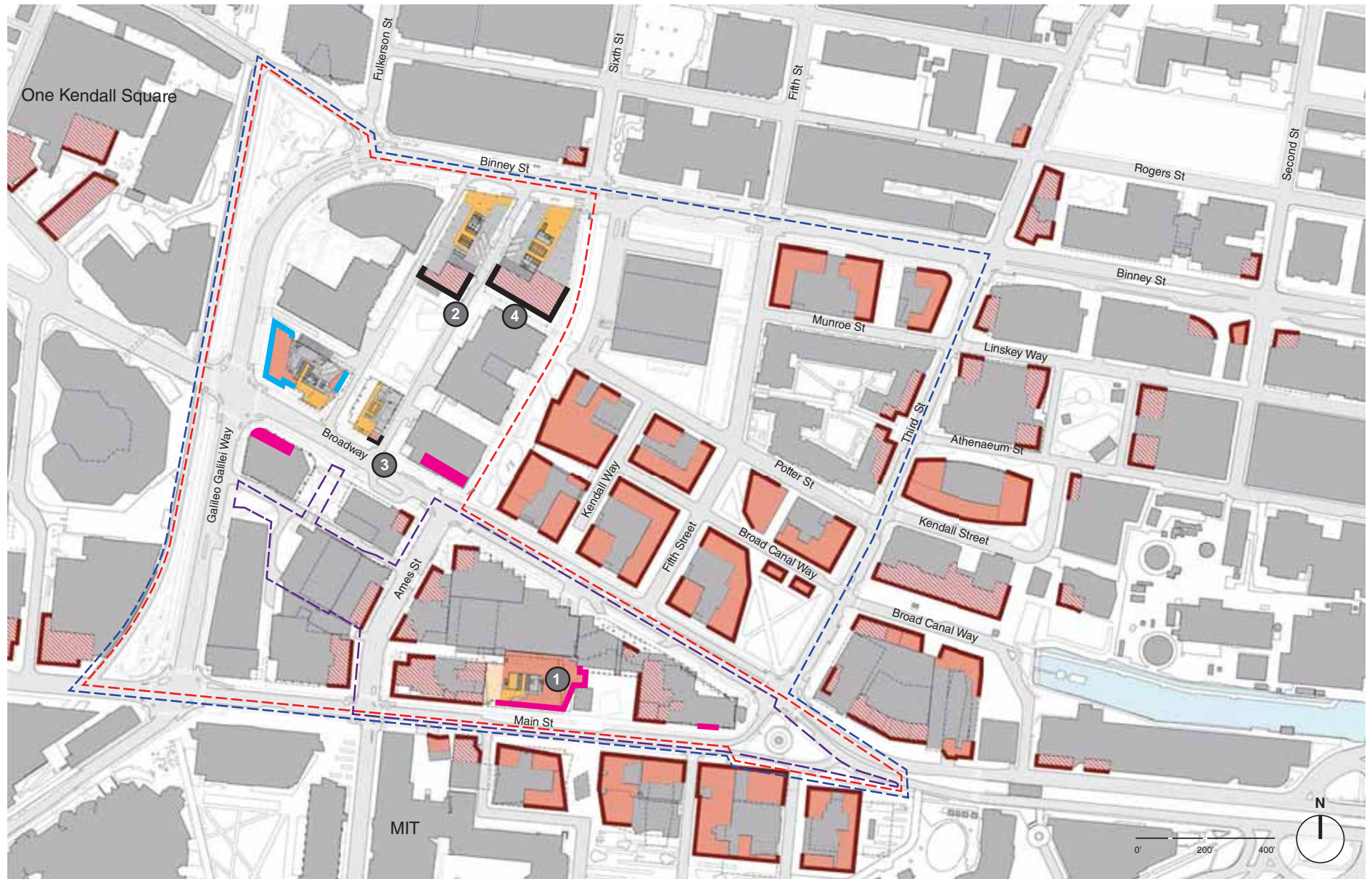
Commercial Building C will contain the capacity to host a single active use space of approximately 2,500 SF in size within the southeast corner of the building, adjacent to the northeast edge of the envisioned Center Plaza open space. The retail space would likely be maintained as a single suite, flexible in configuration and designed with the bike shop/valet use in mind, as this represents the most likely location for this operation—critical as it is to this Concept Plan Amendment #2’s transportation strategy. Seamless communication between this active use suite and the exterior will therefore be emphasized as the design of this Project component advances.

3. RESIDENTIAL BUILDING (135 BROADWAY)

Residential Building South will contain approximately 700 SF of active use/retail GFA on its ground floor to activate Broadway Street, as well as draw passing pedestrians and cyclists towards the contemplated Center Plaza open space situated behind Residential Building South.

4. COMMERCIAL BUILDING D (250 BINNEY STREET)

Commercial Building D will contain approximately 5,800 SF of active/retail GFA on its ground floor that could accommodate multiple or single tenants. Poised at a junction between the northernmost East West Pedestrian Connector linking the Sixth Street Pedestrian Connector to the Center Plaza open space, this contiguous suite presents a significant opportunity for activation. Moreover, as with the companion active use space located within Commercial Building C across the East Service Drive, there is a strong possibility that it could ultimately be utilized to support the combined bike shop/bike valet operation intended to simultaneously activate the open space and provide critical support for cyclists among Project residents and tenants.



4.2.2 IMPLEMENTATION AND POINT OF CONTACT

The Applicant initially designates Ian Hatch, Project Manager Development, as the point of contact for monitoring and implementation of retail planning. He can be reached at ihatch@bxp.com.

4.2.3 INCENTIVES FOR LOCAL RETAIL

In an effort to ensure the goals outlined above and the requirements outlined in Article 14 for local and independent retailers, the Applicant may consider certain economic incentives depending on market conditions and the location of the space. The following economic incentives may be explored and included in a lease with a desirable local or independent retailer:

- Rent that is set below the market rent for national chains;
- Flexible initial lease durations and extension options;
- Tenant Improvement allowances; and
- Using a percentage of sales structure as part of the total rent.

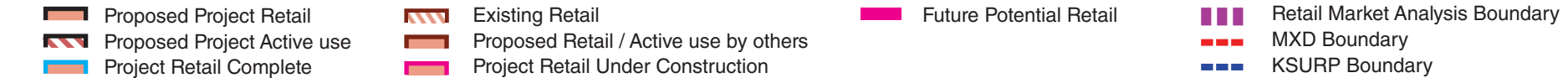
4.2.4 MONITORING

The Applicant will meet annually with the CRA and at least twice each year after the issuance of a building permit to discuss the retail market, new retail concepts, emerging local and independent retailers, and general leasing activity.

4.3 ECONOMIC FEASIBILITY

RETAIL MARKET OVERVIEW

The economics of retail have undeniably experienced considerable changes over the past 18 months that will take some time to fully understand. The need for social distance during the pandemic accelerated the considerable trend of online shopping for dry goods as well as groceries. Many established Kendall operators have permanently closed. Further, the proliferation of food delivery services and “Virtual Kitchens”, some operators are focusing almost exclusively on delivery based sales. However, the addition of new office and residential space via NOMA and SOMA as well as the completion of 325 Main street and future residential and commercial projects associated with this proposal will allow for a dense population of residents and office/lab workers that, combines with the student population of MIT and residents in adjacent neighborhoods will likely allow for a thriving environment for food and service retailers in the future.



(Intentionally Blank)