INFILL DEVELOPMENT CONCEPT PLAN

RESPONSE TO COMMENTS

CAMBRIDGE, MASSACHUSETTS ISSUED NOVEMBER, 2016



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

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

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

PREPARED BY SASAKI / VHB In association with: BOSTON PROPERTIES

NOVEMBER 2016

THE CONSULTANT TEAM Sasaki VHB

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

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

1. PROPOSED DEVELOPMENT PLAN RESPONSE TO COMMENTS

IDCP RESPONSE TO COMMENTS

CHAPTER 1 DEVELOPMENT PROGRAM

R1.1 145 BROADWAY (COMMERCIAL BUILDING A)

R1.1.1 RETAIL AND ACTIVE USE IN LOBBY: Applicant received several comments and questions about the configuration of the lobby, retail and active use space. The lobby entrance is designed to be oriented toward the corner of Broadway Park both to provide an active use element and to provide further strength to the concept of reconfiguring Broadway Park as an open plaza that connects the entrances of 145 Broadway, 105 Broadway and the South Residential Tower as shown in **FIG. R1.1.1A**, ensuring an active plaza, all times of the day. An updated ground floor plan for 145 Broadway that relocates the garage shuttle elevators to the interior of the building **FIG R1.1.1B**. The result is increased glass line along the park for the northeast retail suite. In addition, the plan provides for outdoor seating along Broadway to increase the active use edge percentage from the 68% detailed in the MXD IDCP August 09, 2016 submission to 75% see **FIG. R1.1.1C**. The retail will be designed with flexibility to ensure multiple options for entrances to accommodate various uses and potential demising plans. **FIG. R1.1.1C** Represents the concept plan's active frontage on Broadway being Retail and Consumer Services or Active Public Gathering Space for a cohesive response to the proposed developments and the public realm

ZONING REFERENCE: 14.38 Active Ground Floors. The ground floor of newly constructed buildings utilizing 50,000 square feet or more of Infill GFA, where that ground floor fronts onto Main Street, Broadway or Ames Street, must be occupied by (i) Retail and Consumer Service uses, as listed in Section 14.21.3, or (ii) active public gathering space (whether enclosed or open), along a minimum length of seventy-five percent (75%) of the building façade along this frontage. Dimensional variations and alternate uses may be approved by the Planning Board upon determining that the specific uses and designs proposed are consistent with the purpose and intent of this Section 14.36. Alternatively, if a Concept Plan provides for the redevelopment of existing buildings to include new Retail and Consumer Service uses along the ground floor of any of the identified street frontages, then the Planning Board may permit a reduction in the required length of active street frontage for new buildings for up to fifty percent (50%) of the length of new active street frontage provided in existing buildings and only if the Board finds that it results in a better outcome for the District as a whole.

Exhibit Reference: FIG. R1.1.1A, FIG. R1.1.1B, FIG. R1.1.1C Comment Reference: CRA6, CRA 9, CRA14, CDD6, CDD7 **R1.1.2 WEST FAÇADE ON GALILEO AND BROADWAY:** Applicant received comments and questions about the west façade and its form as a gateway. The relative simplicity of the west facade is intended to contrast with the interlocking joinery of the eastern façade and makes a definitive marker on the prominent corner of Galileo and Broadway that will be further supported by lighting and facade articulation further defined in design review. As requested in the comments, a study was conducted to review the impact of a second "puncture" on the Western facade **FIG. R1.1.2.** Applicant advocates for the preservation of the Western façade with a single "puncture" and welcomes additional feedback during the design review process on how the proposed façade and lighting articulation will reinforce the gateway concept.

Exhibit Reference: FIG. R1.1.2 Comment Reference: CRA1, CRA2, CRA10, CDD3

R1.1.3 MASSING AND CANTILEVERS: Applicant received comments about the impact of the 145 massing and cantilevers on the western service drive and Broadway Park. Applicant has made active efforts to ensure 145 Broadway is not only designed to ensure internal usability and flexibility but is also visually interesting from the street with multiple expansions and contractions. In addition, the design as proposed provides a distinctive and interesting approach to the scaling goals that are part of the K2 datum height and podium guidelines. Applicant has reviewed the proposed massing in the context of creating a functional and interesting building, along with K2 guidelines and concerns over cantilevers expressed in the comments. **FIG. R1.1.3A** and **FIG. R1.1.3B** shows a massing that reduces the cantilevers along the western service drive by 10 feet, reorients the southeast cantilevers towards the street to create visual connection and still maintains the interest and scaling inherent in the original design intent.

Exhibit Reference: FIG. R1.1.3A, FIG. R1.1.3B Comment Reference: CRA3, CRA4, CDD4, CDD5, CDD9, CRABoard9

R1.2 250 BINNEY STREET

R1.2.1 FLOOR PLATE SIZE: Applicant has received comments regarding the size of the floor plates at of 250 Binney Street. The 250 Binney building is being designed to support programmatic flexibility for both potential office and laboratory tenants. In the current market context, both within the Kendall Square submarket and the broader Boston market, many creative and technology firms are seeking large, open floor plates in order to foster connectivity and communication between their workforce and ease of configuration for a variety of space planning possibilities. The typical floor plate at 250 Binney Street is targeted at 30,000 Gross Square Feet, which is consistent with current market demand. The floor plate is also a product of efficient and effective core to exterior wall dimensions that foster the kind of programmatic flexibility necessary to be competitive in the market and attract excellent long-term tenants.

Exhibit Reference: FIG. R1.2.1

Comment Reference: CDD14, CRA2, PLNBoard10, PLNBoard13, CRABoard10, CDD13

R1.2.2 MASSING: Applicant has received comments about the massing and form of 250 Binney Street. Two comments were received regarding the Binney Street facade, the proposed overhang and the pedestrian experience along the street. As shown in FIG. R1.2.2, a number of design evolutions have been made to address these concerns. The entire Binney Street facade has been pulled south 5'-3" to provide more setback from the property line and street (A). The first two floors have also been pulled in on the northern and western sides to allow for increased pedestrian circulation and to create a more generous arcade (A') and gathering space on the site across from the Binney Park. In addition, the edge of the western facade element has been pulled south to create a deeper reveal between two of the volumes and a more cohesive relationship with the opposite end of the revised western facade. Lastly, as further discussed below, the proportions of the overhanging volume have been adjusted to make it feel more integrated into the overall design. Other comments focused on the height of the podium component along the 6th Street Connector and the length of the eastern façade. FIG. R1.2.2 shows proposed massing modifications designed to address these concerns. The podium has been increased from 2 to 3 stories (B) and the projecting volume at the corner of Binney Street and the 6th Street Connector has been modified to pull the intersection point between the two eastern volumes further south (C). This had the effect of decreasing the uninterrupted length of the eastern façade and by differentiating the two components, creating a dynamic and visually interesting corner at Binney Street. Additionally, comments were received on the proximity of the southern façade to the abutting building and the uninterrupted length of the western façade along the service drive. As shown in FIG. R1.2.2, to address these comments, the southern facade has been angled in at the center (D) creating more visual separation along the pedestrian connector and giving the facade more movement. Along the western facade, the team has modified the design to include an inset corner at the southwest corner of the building. This strategy helps to break down the massing and length of the façade (E).

Exhibit Reference: FIG. R1.2.2, FIG. R1.2.3 Comment Reference: CDD12, CDD15, CRA1 **R1.2.3 HEIGHT:** 250 Binney Street has been designed with flexible floor to floor heights to allow for multiple possible configurations of the on-floor mechanical systems that may be necessary depending upon whether the building is used as an office, a laboratory, or both. To respond to concerns raised about height, the number of stories has been reduced to twelve and the maximum height of the last occupied floor has been reduced from 200' to 185', as shown in **FIG. R1.2.3** and **FIG. R1.2.4** this reduction will allow the building to respond more sensitively to the surrounding context **(F)**. In comparison to other proposed buildings on Binney Street the end façade has much less impact given the relative width.

Exhibit Reference: FIG. R1.2.2, FIG. R1.2.3, FIG. R1.2.4 Comment Reference: PLNBoard10, PLNBoard13, CRABoard10, CDD13

R1.2.4 LOADING DOCKS: CDD staff has noted that the curb cut at the loading dock is wider than the 30' recommended by K2. The loading dock has been thoughtfully located at the interior most corner of the site, off of the internal service drive, which protects it from view from the public streets. It is located directly adjacent to the garage access, so that the impact of these two uses on the overall façade and pedestrian experience can be minimized as much as possible. The design will include loading dock doors and additional design measures have been implemented to minimize its visual impact along the service drive, such as recessing it from the primary façade and forming the streetscape to minimize the curb cut as much as possible. A buffer has been added between the garage entry and the loading dock and the curb cut has been narrowed to 30' by extending the sidewalk zone further south and angling the drive leading to the loading dock. **FIG. R1.2.1**

Exhibit Reference: FIG. R1.2.1 Comment Reference: CD17

R1.3 RESIDENTIAL BUILDINGS

R1.3.1 BALCONIES: Applicant received three suggestions that the residential buildings include balconies. As indicated in the Residential Facades and Fenestration Guidelines, the residential buildings will provide balconies. The exact size and location will be included with the Design Review submission for the residential buildings. **FIG. R1.3.1** represents a conceptual study of the North Residential building with such proposed balconies in the slots per the design guidelines.

Exhibit Reference: FIG. R1.3.1, Design Guidelines: Residential Facades and Fenestration Guidelines Comment Reference: CRA3, CDD11, PLNBoard2

R1.3.2 RESIDENTIAL LOBBIES: Applicant received multiple questions and comments about the proposal for two, separate lobbies for the South Residential building. The space for ground floor use in the South Residential building is tightly constrained by the locations of parking circulation ramps required within the Blue Garage and shows as **FIG. R1.3.2** Further, the internal programming of the lobby, including USPS required package room dimensions and ADA access dimensions, results in a lobby size that is well below comparably sized lobby spaces as presented in **FIG. R1.3.2A** for a Condo Lobby comparison and **FIG. R1.3.2B** for a Rental Lobby comparison. The lobbies as designed are already constrained by dimensional requirements. Consolidation or further reduction from the proposed lobby size would call into question the viability of the residential project which is a critical element to creating a successful and dynamic mixed use development. A letter from our residential brokerage and marketing expert describing the necessity of the two-lobby proposal is included in the **Appendix: Exhibit A**. In addition, the lobbies are separated to allow for different maintenance and elevator service contracts between a condo home owners association and a multifamily property owner who often have different standards and requirements. For clarity, there is no distinction between affordable and market rate housing lobbies. The lobbies are distinguished by the 'for rent' housing and the 'for sale' housing, both of which contain an equal proportion of affordable and market rate units.

Exhibit Reference: FIG. R1.3.2, FIG. R1.3.2A, FIG. R1.3.2B Comment Reference: CRA33, PLNBoard15, CDD9

R1.3.3 EXTERIOR CHARACTER OF RESIDENTIAL BUILDINGS: CRA staff asked for further clarity on whether the two, proposed residential buildings will look similar or distinct. Applicant proposes that the two buildings be visually distinct from each other but consistent with the proposed Residential Facades and Fenestration Guidelines. The specifics of the exterior of the building will be further detailed in the required Design Review process for each building.

Exhibit Reference: Design Guidelines: Residential Facades and Fenestration Guidelines Comment Reference: CRA4 **R1.3.4 CHARACTER OF BINNEY STREET FRONTAGE:** The CRA staff has inquired about the relationship of parking within the Blue Garage to the Binney Street façade. **FIG. R1.3.1** represents a conceptual study of the proposed North Residential building with the parking masked in the same building fenestration. Screening elements will be consistent with the design guidelines for parking structure screening.

Exhibit Reference: FIG. R1.3.1, Design Guidelines: Residential Facades and Fenestration Guidelines/Adapted Garage Structures Comment Reference: CRA5

R1.3.5 BLUE GARAGE FAÇADE: Applicant received multiple comments with differing points of view on treating the Blue Garage façade. Applicant proposes a combination of landscaping and graphic treatments on the east face of the garage focusing on the surfaces visible from the proposed east-west pedestrian connections. Additional enclosure or screening of the garage has the potential to require substantial lighting and mechanical upgrades to the Blue garage which would substantially increase equipment requiring energy consumption which is inconsistent with overall district sustainability goals. Applicant proposes that the specific nature of these treatments be included as part of the Design Review process for the South Residential building in Phase II. Potential percent examples of strategies to enliven the façade of the Blue Garage are included in the Design Guidelines: Adapted Garage Structures.

Exhibit Reference: Design Guidelines: Adapted Garage Structures Comment Reference: CRA 25, CDD10, CRABoard11

R1.3.6 BLUE GARAGE BICYCLE PARKING LOCATION: Applicant has received multiple comments about the location of long term residential bike parking in the Blue Garage. As shown in attached **FIG. R1.3.6A**, a location for 10% of the total long term bike parking is located on the ground floor in addition to a plan to accommodate the existing car and van pool parking spots, EV charging stations and accessible vehicle parking spots. Applicant proposes that the exact location within the first floor for long term bike parking be reviewed as part of the Design Review process for the South Residential building. **FIG. R1.3.6B** represents the remaining long term bike parking distributed in accordance with the phases of the North and South Residential Buildings.

Exhibit Reference: FIG. R1.3.6A, FIG. R1.3.6B Comment Reference: PLNBoard20, CRA15, TPT3. **R1.3.7 BICYCLE TRANSPORTATION ROUTES:** CRA staff advocated for the continued study of the transportation routes of bicycles from the site to short and long term bike parking. Applicant proposes that further study of bicycle routes beyond what was specified in the MXD IDCP Submission of August 9, 2016 take place during the Design Review process for each individual building. In general, Applicant is committed to providing efficient bicycle routes that allow for safe circulation and prevent potential safety hazards and conflicts between pedestrian, vehicle and bicycle circulation.

Exhibit Reference: N/A Comment Reference: CRA 14

R1.3.8 EXACT LOCATIONS OF SHORT AND LONG TERM BIKE PARKING: TP&T staff recommended additional specific information about the location of short and long term bike parking facilities. **FIG. R1.3.6A** In addition to details included in the MXD IDCP submission of August 9, 2016 and the details that will be provided as part of the required PTDM plan, applicant will present specific location for all long and short term parking locations during Design Review of each building. **FIG. R5.3.3** shows a combined long and short term bike location plan with existing and proposed Hubway locations.

Exhibit Reference: FIG. R1.3.6A, FIG. R5.3.3 Comment Reference: TPT4

R1.4 INNOVATION SPACE

R1.4.1 CONCEPTUAL DESIGN AND OPERATIONAL DETAILS: CRA and CDD staff memos requested additional detail about the character and operation of the innovation space at 255 Main Street. Conceptual details on the character and phasing of the innovation space can be found in **FIG. R1.4.1- FIG. R1.4.4** Additional details about the entry design and interior character will be included as part of a separate Design Review Packages prepared specifically for the Innovation Space at 255 Main Street. Identity and entry opportunities are represented in **FIG. R1.4.4**

In addition, the specific operations plan will be presented at the Design Review phases. Specifics in operation depend upon whether Boston Properties manages the Innovation space directly or subleases the space to a third party operator of innovation space. As required by zoning, the MXD IDCP plan commits that a portion of the space will be offered at below market rate.

Exhibit Reference: R1.4.1 - R1.4.4 Comment Reference: CDD34, CRA6

R1.5 URBAN DESIGN

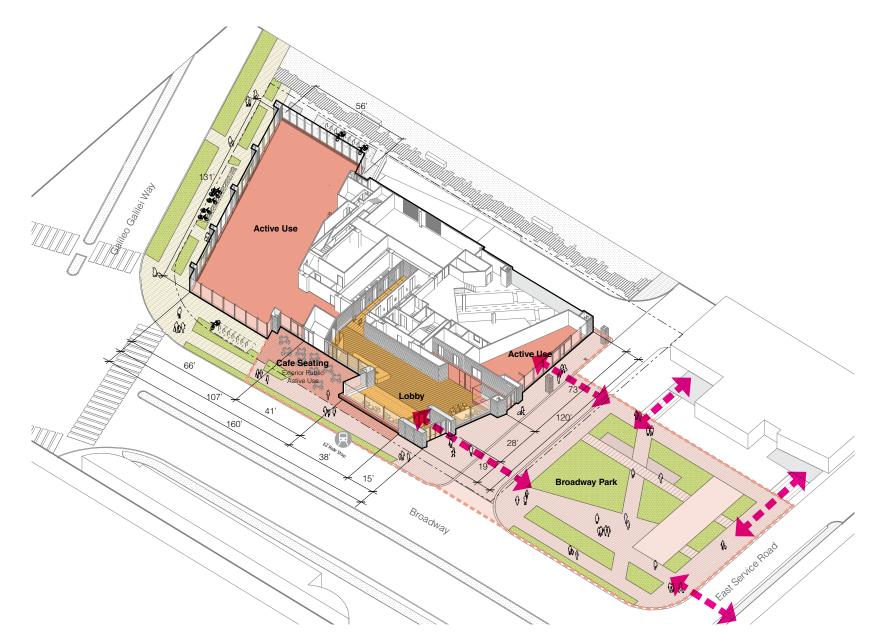
R1.5.1 DISTANCE VIEWS OF THE PROJECT: The CRA Board has requested additional massing views of the project from various distances, especially the South Residential tower. **FIG. R1.5.1A-F** represents views from similar locations to the requested views from 88 Ames Street Residences Project. Massing views include the proposed MIT PUD Projects to represent the future context of the MXD proposed buildings.

The views are listed as follows:

FIG. R1.5.1A MASSING VIEW KEY FIG. R1.5.1B VIEW FROM HARVARD BRIDGE LOOKING NORTH FIG. R1.5.1C VIEW FROM CHARLES RIVER ESPLANADE LOOKING NORTH FIG. R1.5.1D VIEW FROM LONGLELLOW BRIDGE LOOKING WEST FIG. R1.5.1E VIEW FROM 1-93 LOOKNIG SOUTH FIG. R1.5.1F VIEWS ON BROADWAY AND BINNEY STREET

Exhibit Reference: R1.5.1 A-F Comment Reference: CRABoard5

COMMERCIAL BUILDING A (145 BROADWAY) RETAIL AND ACTIVE USE



COMMERCIAL BUILDING A (145 BROADWAY)

RETAIL AND ACTIVE USE

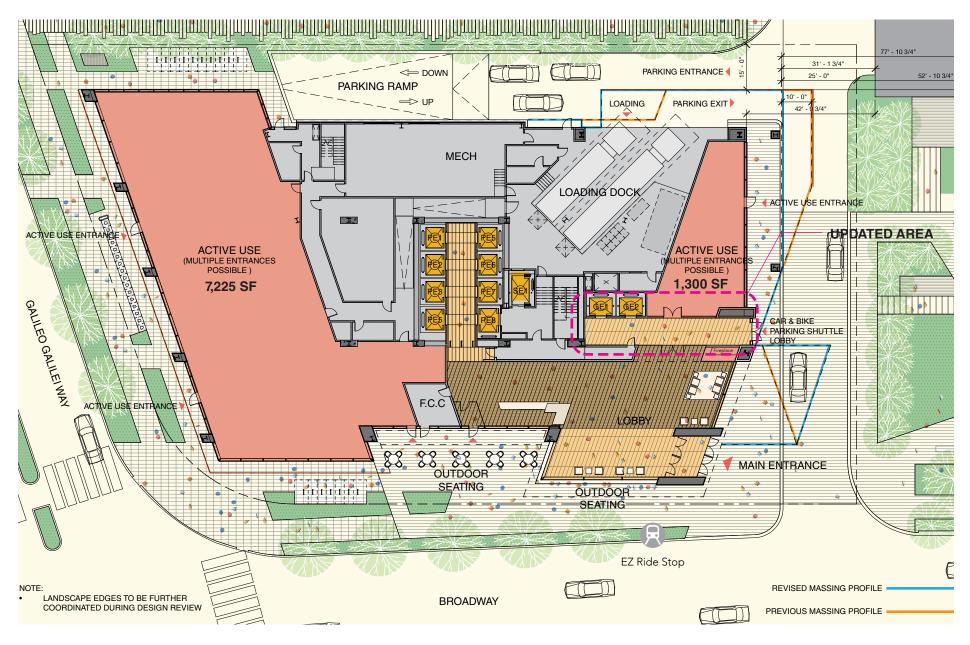
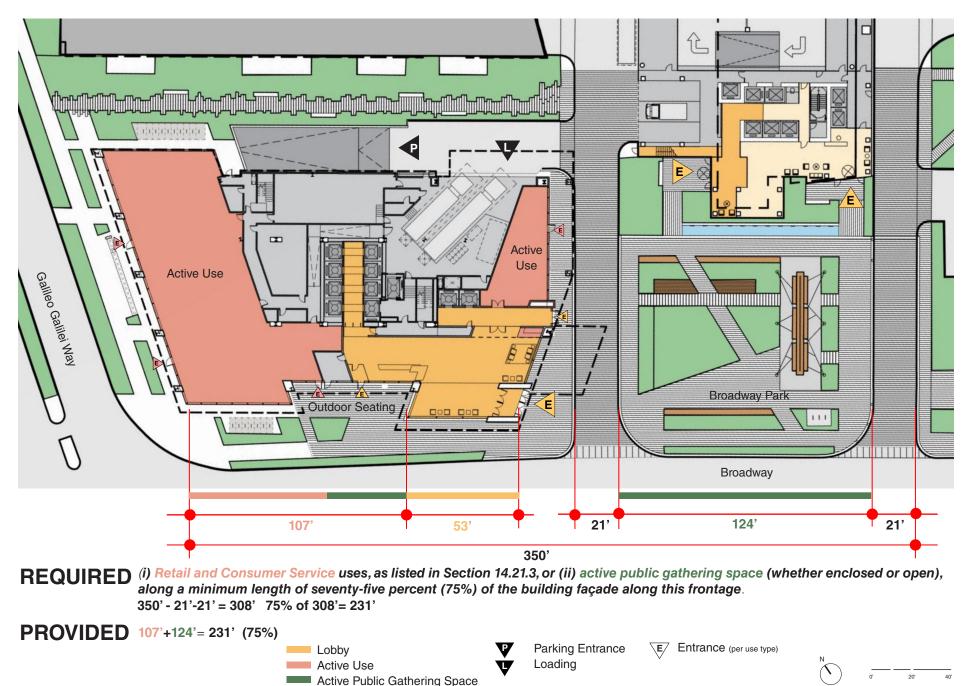
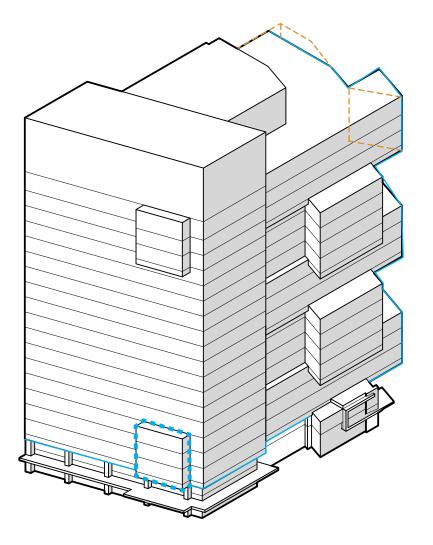


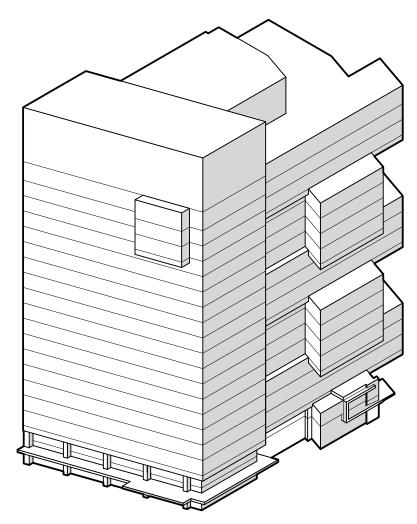
FIG. R1.1.1C



RESPONSE TO COMMENTS NOVEMBER 2016



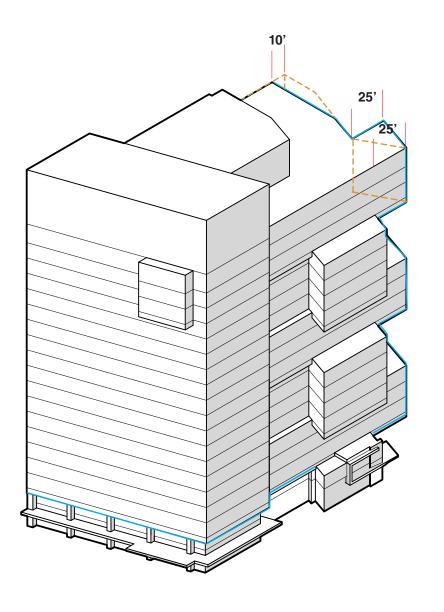


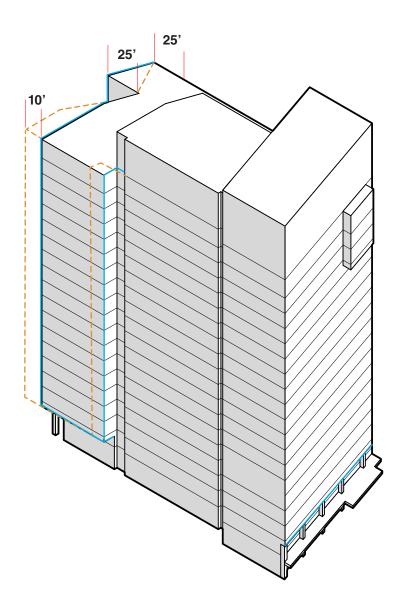


Prefered Option provides for one Western Facade "puncture"

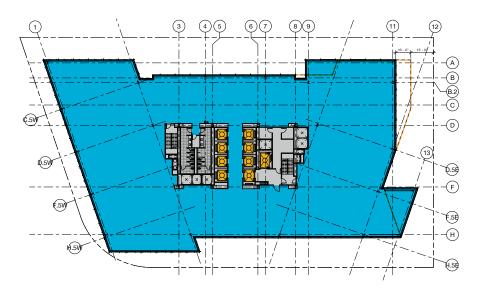
Revised Massing ProfileRevised Massing Profile Study

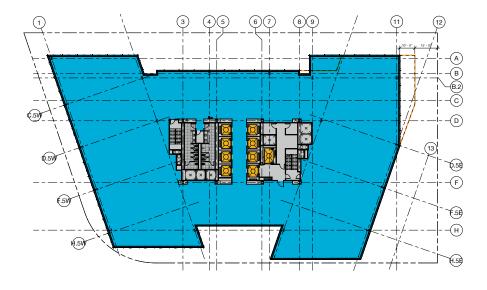
--- Previous Massing Profile



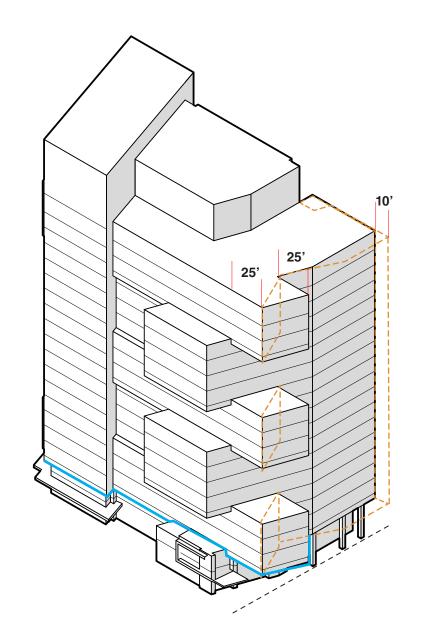


Revised Massing ProfilePrevious Massing Profile





Revised Massing ProfilePrevious Massing Profile



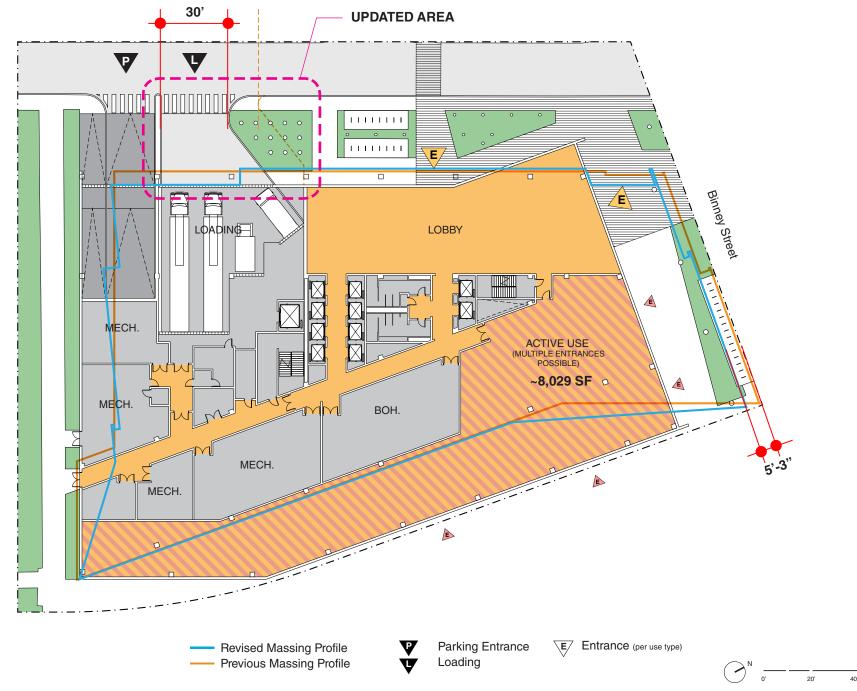
COMMERCIAL BUILDING A (145 BROADWAY): MASSING AND CANTILEVERS

RESPONSE TO COMMENTS NOVEMBER 2016

FIGURE. R1.1.3B

COMMERCIAL BUILDING B (250 BINNEY STREET)

FIGURE. R1.2.1



RESPONSE TO COMMENTS NOVEMBER 2016

FIGURE. R1.2.1



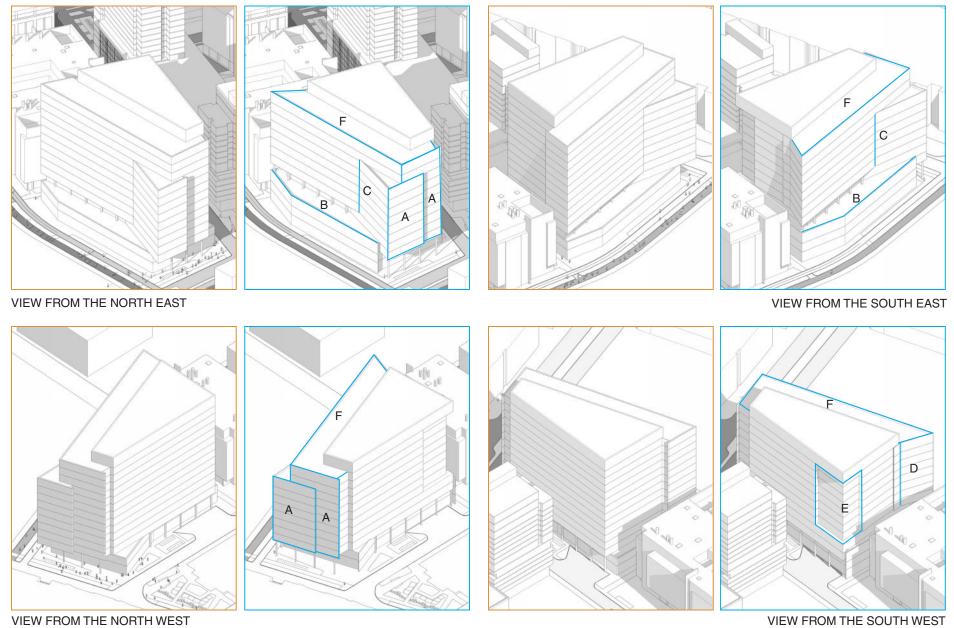


20'

40'

COMMERCIAL BUILDING B (250 BINNEY STREET): MASSING ADJUSTMENTS

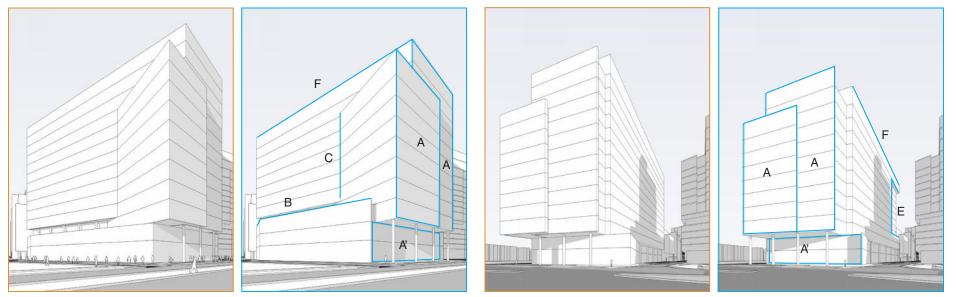
FIGURE. R1.2.2



Revised Massing Profile - Previous Massing Profile

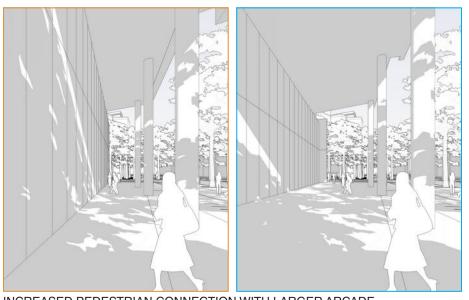
COMMERCIAL BUILDING B (250 BINNEY STREET): MASSING ADJUSTMENTS

FIGURE. R1.2.3



PODIUM INCREASED FROM 2 TO 3 STORIES

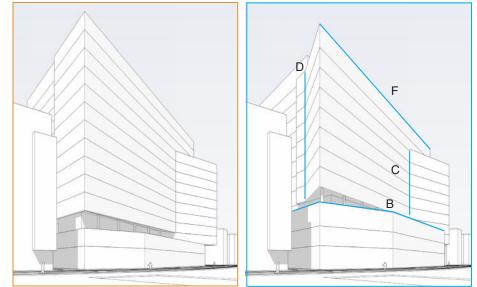
SETBACK FROM BINNEY STREET



INCREASED PEDESTRIAN CONNECTION WITH LARGER ARCADE

- Revised Massing Profile

Previous Massing Profile



PROJECTING VOLUME AND INTERSECTION BROUGHT FURTHER SOUTH

56-60 Binney Street 8-10' Setback from property line 18 100 Binney Street 10' Setback from property line 8 203 185 153 270 third street 4' setback from property line 95 75 Binney Street 4' Setback from property line 250 Binney Street 5'-8' Setback from property line

RESIDENTIAL BUILDINGS

RESIDENTIAL BALCONIES AND PARKING GARAGE FACADE TREATMENT

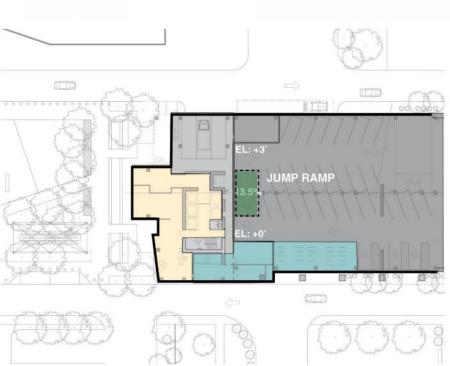




GLASS AT BASE

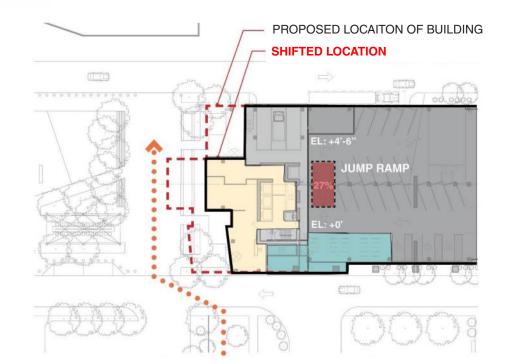
PRECAST OR PHENOLIC PANELS WITH PUNCHED OPENINGS





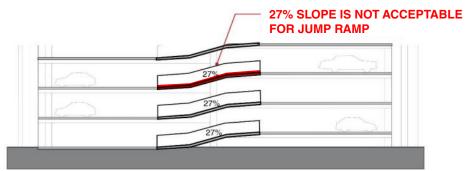
PROPOSED CONDITIONS

PROPOSED JUMP RAMP

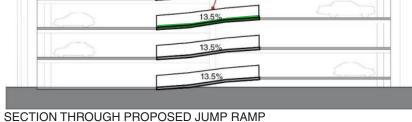


SHIFTED BAY STUDY

BAY SHIFTED ONE STRUCTURAL BAY NORTH



SECTION THROUGH JUMP RAMP STUDY



SECTION THROUGH PROPOSED JUMP RAMP

FIGURE R1.3.2A

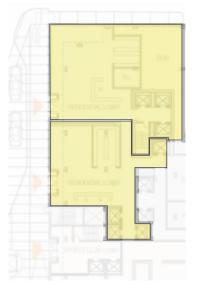


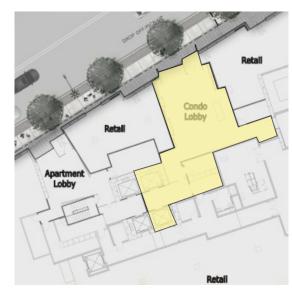
MILLENNIUM TOWER BOSTON, MA

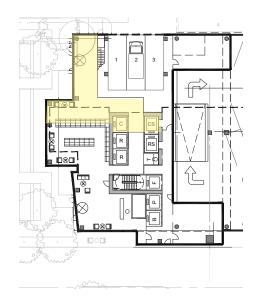
PIERCE BOSTON, MA

135 BROADWAY CAMBRIDGE, MA









AREA: 2,500 GSFAREA: 3,100 GSF CONDO HIGH
2,200 GSF CONDO LOWAREA: 2,780 GSF RENTAL
3,120 GSF CONDOAREA: 2,750 GSF RENTAL
1,400 GSF CONDOUNITS: 35 CONDOUNITS: 442 CONDOUNITS: 240 RENTAL
109 CONDOUNITS: 312 RENTAL
84 CONDO

FIGURE R1.3.2B

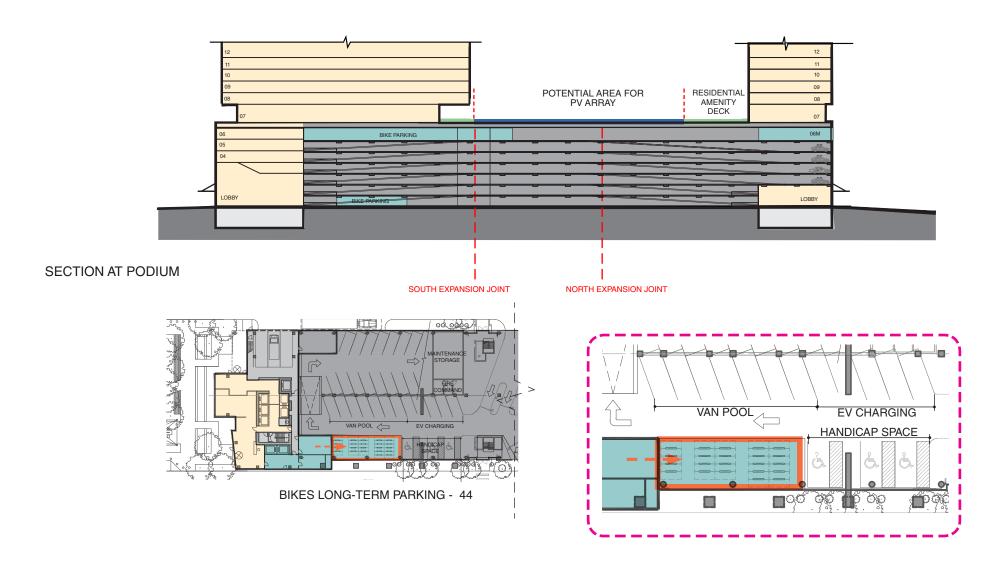
88 AMES CAMBRIDGE, MA

500 LAKESHORE DRIVE CHICAGO, IL

BOSTON GARDEN BOSTON, MA

135 BROADWAY CAMBRIDGE, MA











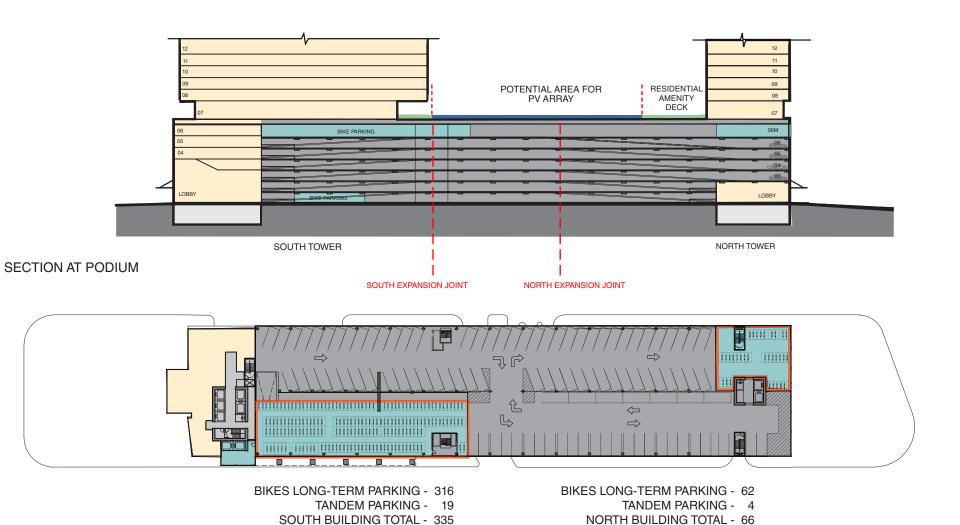
40'

80

MXD INFILL DEVELOPMENT CONCEPT PLAN

Parking

Residential Green Roof / Amenity



SHORT TERM PARKING LOCATED IN EAST-WEST CONNECTOR

40' 80 RESPONSE TO COMMENTS NOVEMBER 2016

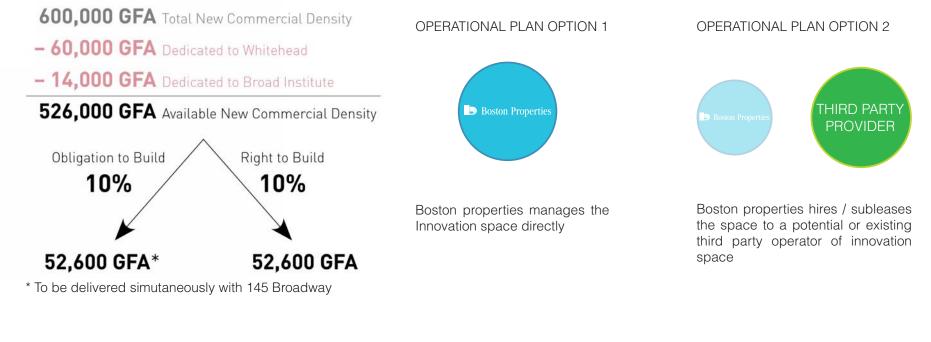
300

Long Term Bicycle Parking
Bicycle Access

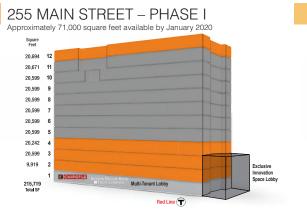
INNOVATION SPACE

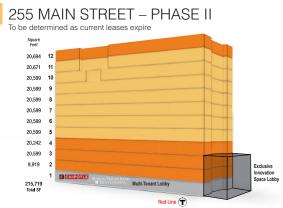
CONCEPTUAL OPERATION PLAN OPTIONS

FIGURE R1.4.1



255 MAIN STREET- EXISTING Square Feet 20.694 20.671 20 599 20,599 20.599 20.599 20.599 20 599 20 242 20.599 9.919 xclusiv Innovation Space Lobby 215,719 Total SE Multi-Tenant Lobb Red Line (T)





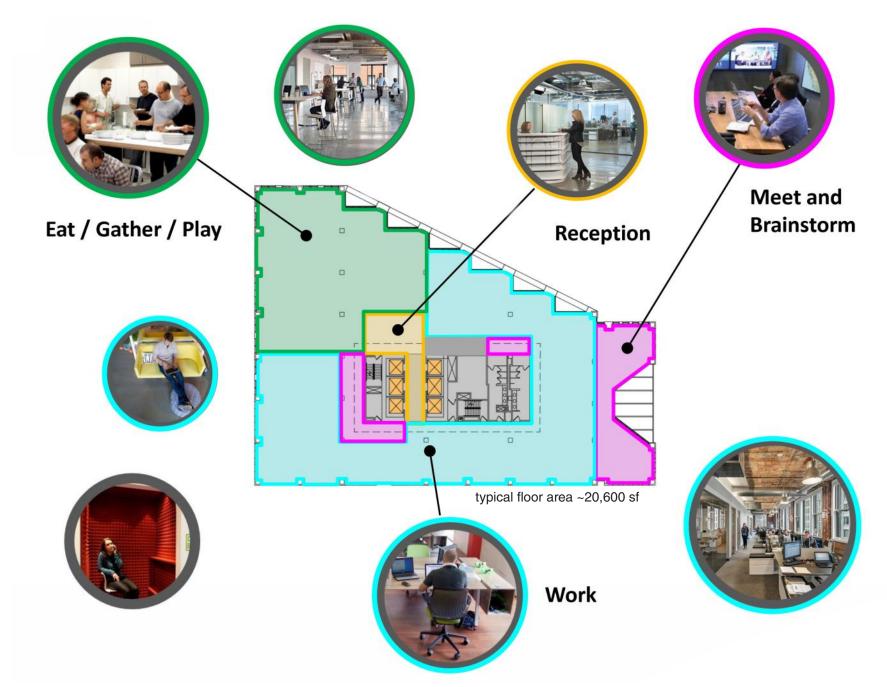
Phasing and percentage of Innovation space will be in conjunction with the GFA of Commercial Buildings

FIGURE R1.4.2



INNOVATION SPACE: REPRESENTATIVE PROGRAMMATIC FLOOR PLAN

FIGURE R1.4.3



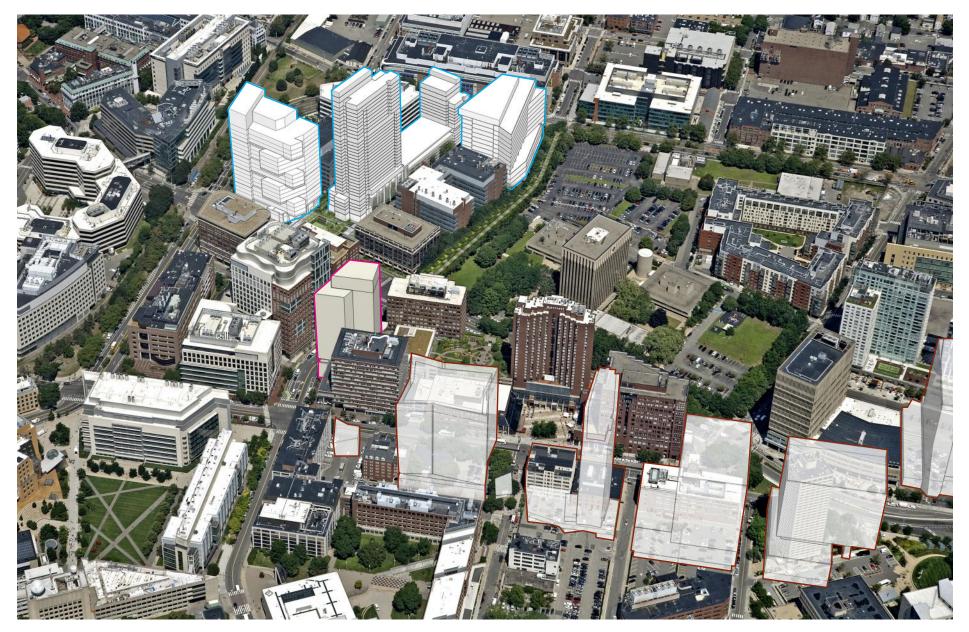
INNOVATION SPACE: ENTRY AND IDENTITY OPPORTUNITIES



URBAN DESIGN MASSING VIEWS

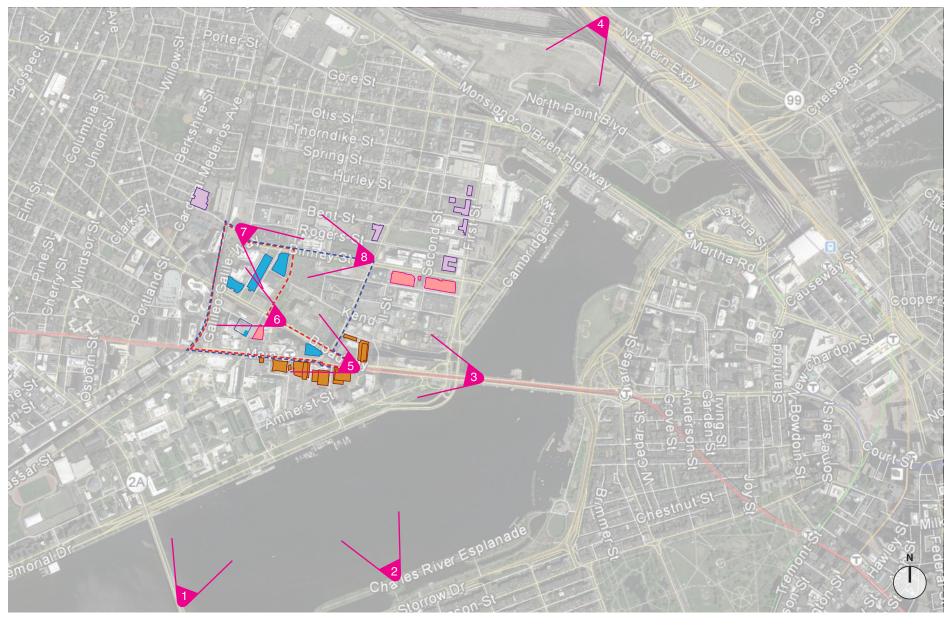
PROPOSED BUILDINGS CONCEPT MASSING

FIGURE R1.5.1



MASSING VIEW KEY

FIGURE R1.5.1A



Permitted Under Construction
Permitted Projects
Proposed MIT Noma/Soma

MXD BoundaryKSURP BoundaryProposed MXD Building

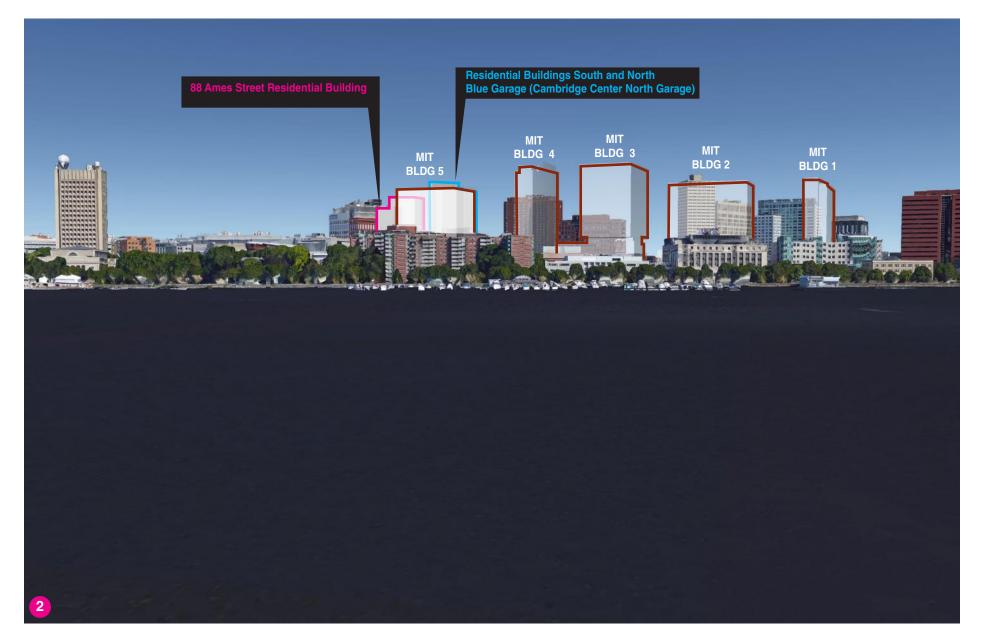
MASSING VIEWS: HARVARD BRIDGE LOOKING NORTH TOWARDS KENDALL SQUARE

Commercial Building A 145 Broadway (11 Cambridge Center) Residential Buildings South Blue Garage (Cambridge Center North Garage) MIT MIT -----ΜΙΤ BLDG 4 BLDG 3 BLDG 5 BLDG 2 A PARTY OF A PARTY OF A PARTY OF A PARTY Malandar an Professor

Proposed MIT Noma/Soma Proposed MXD Buildings

MASSING VIEWS: CHARLES RIVER ESPLANADE LOOKING NORTH TOWARDS KENDALL SQUARE

FIGURE R1.5.1C



Permitted Under Construction

Proposed MIT Noma/Soma Proposed MXD Buildings

FIGURE R1.5.1D



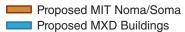


FIGURE R1.5.1E



Permitted Under Construction

Proposed MIT Noma/Soma Proposed MXD Buildings

MASSING VIEWS: VIEWS ON BROADWAY AND BINNEY STREET

FIGURE R1.5.1F



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