

3. OPEN SPACE PLAN

RESPONSE TO COMMENTS

IDCP RESPONSE TO COMMENTS

CHAPTER 3 OPEN SPACE

R3.1 BLUE GARAGE ROOF

Applicant received several comments and questions about whether the Blue Garage will include open space for residents and what other uses may be considered in areas that are not private. As shown in **FIG. R3.1.1**, the Blue Garage will include two, separate private open spaces immediately abutting each residential project on the north and south sides of the garage. The area in between both open spaces is proposed as a solar array that will provide energy generation specifically for the residential projects.

Exhibit Reference: FIG.R3.1.1, FIG.R3.1.1B

Comment Reference: CRABoard3, CRABoard7, PLNBoard18, CRA10, CRA26,

R3.2 BROADWAY PARK

R3.2.1 LEVEL OF DESIGN OF PARKS: Applicant received a comment that the north and south parks are not designed thoroughly enough and that the parks should include moveable chairs.

Applicant agrees that the design is not finished but recommends that public spaces undergo the next stage of design at the time of Design Review of their associated phase consistent with the MXD IDCP Chapter 9 Phasing Plan and approved as a condition of that phase. For example, the 6th Street connector would be presented and reviewed during Design Review for Commercial Building A and approved as a condition of Phase I. This process will allow for the conceptual design of the parks to be approved with the IDCP but will also provide for additional review in the future, as the phases get developed, that can accommodate potential changes in community needs or preferences.

Exhibit Reference: N/A

Comment Reference: PLNBoard4

R3.2.2 EMERGENCY CALL BOXES: Applicant received a public request that Broadway Park include Emergency Call Boxes. Broadway Park will include an Emergency Call Boxes. A proposed location has been identified for the concept plan and can be subject to further review during Design Review.

Exhibit Reference: FIG.R3.2.2

Comment Reference: Public1

R3.2.1 DIAGONAL PATHWAYS: Applicant received different comments about the diagonal pathways and desire lines through the park. Applicant notes the comments and is willing to study desire lines further but recommends that this level of review occur at the time of design review for Phase II consistent with the MXD IDCP Chapter 9 Phasing Plan.

Exhibit Reference: FIG.R3.2.1

Comment Reference: CDD6, CRABoard4

R3.2.4 COMMUNITY TABLE LOCATION: Applicant received a comment that the location of the community table should be studied. Applicant notes the comments and is willing to study table composition and location further but recommends that this level of review occur at the time of design review for Phase II consistent with the MXD IDCP Chapter 9 Phasing Plan.

Exhibit Reference: N/A

Comment Reference: CDD8

R3.2.5 PARK PLANTINGS: Applicant received a public comment stating that the lush nature of the existing park should be preserved. Applicant notes the comment and is willing to provide further details on plantings but recommends that this level of review occur at the time of design review for Phase II consistent with the MXD IDCP Chapter 9 Phasing Plan.

Exhibit Reference: N/A

Comment Reference: Public5

R3.2.6 EXTENSION OF WEST SERVICE DRIVE PAVEMENT: Applicant received a comment about extending the plaza paving condition further North along the West Service drive to create connection with the pathway located to the North of 145 Broadway. **FIG 3.2.2** shows the extension of the paving.

Exhibit Reference: FIG R3.2.2

Comment Reference: CDD7

R3.3 PLAN FOR OTHER OPPORTUNITIES FOR PUBLIC REALM WITHIN MXD

Applicant received a request to define other areas in the MXD where other property owners may explore public realm enhancements as part of a broader planning framework. **FIG R3.3.1** shows future potential areas of public realm enhancement that may be considered by other property owners. Applicant will coordinate with other property owners but is not recommending specific plans or proposing any of the areas shown in Applicant's proposal other than those listed in Section 3.2.

Exhibit Reference: FIG R3.3.1, IDCP revisions 3.2 Proposed Open Space
Comment Reference: CDD1, CRA11

R3.4 ENCLOSED WINTER GARDEN SPACE

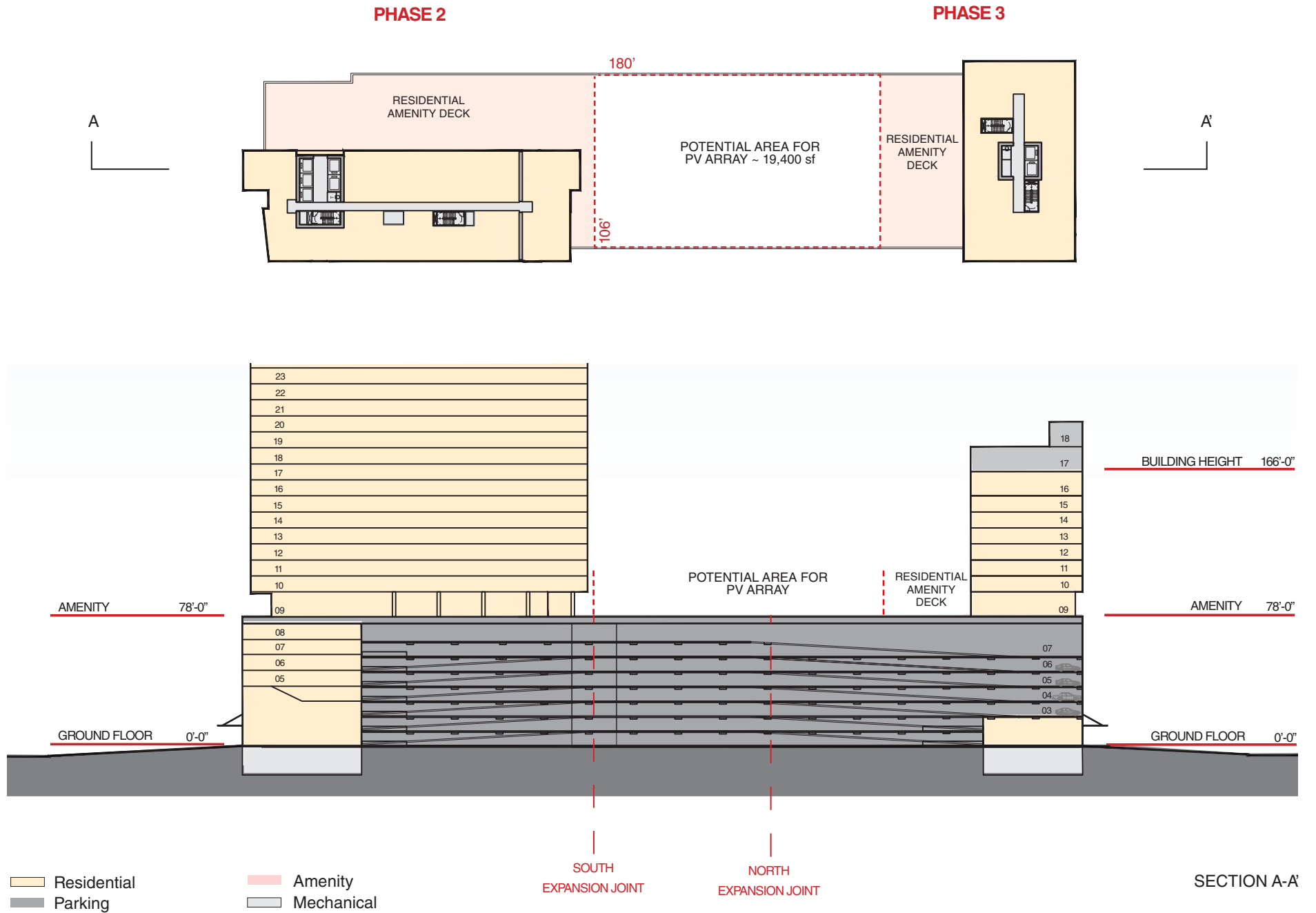
Applicant was asked to explore the possibility for other enclosed indoor spaces similar to the Winter garden that was explored in earlier proposals. During many community meetings, Applicant heard that there was a strong preference TO maintain as much open space as possible. As a constrained urban infill site, there are many demands on the limited ground floor space and Applicant is unable to locate a suitable space for indoor public gardens.

Exhibit Reference: N/A
Comment Reference: PLNBoard19

BLUE GARAGE ROOF

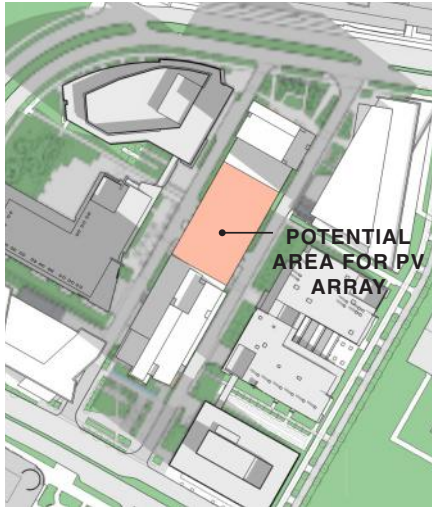
POTENTIAL PV ARRAY LOCATION

FIGURE R3.1.1

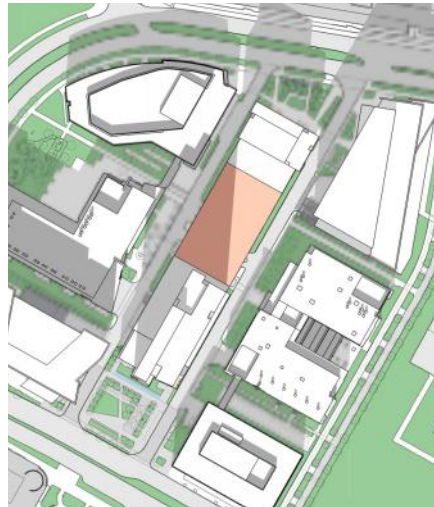


MARCH 21ST

9AM



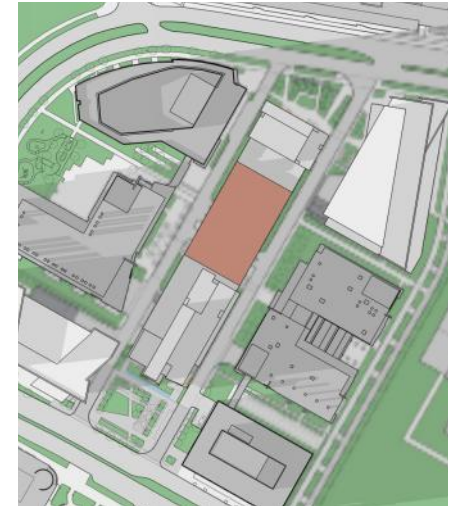
12 PM



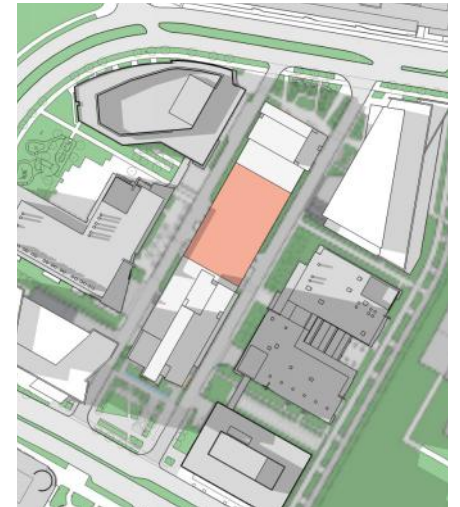
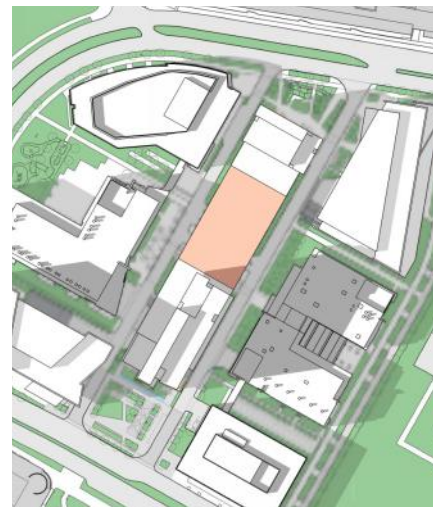
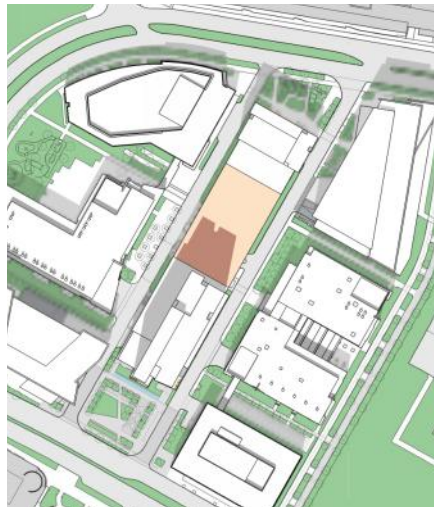
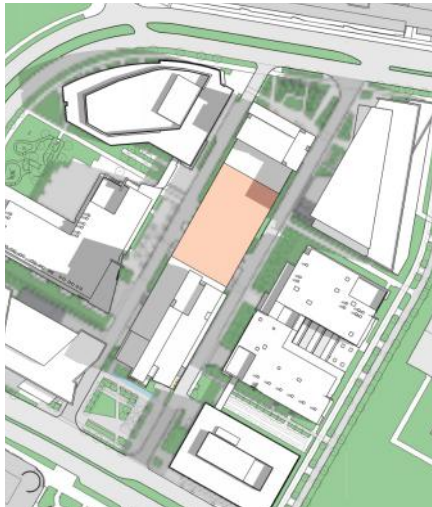
3 PM



5 PM



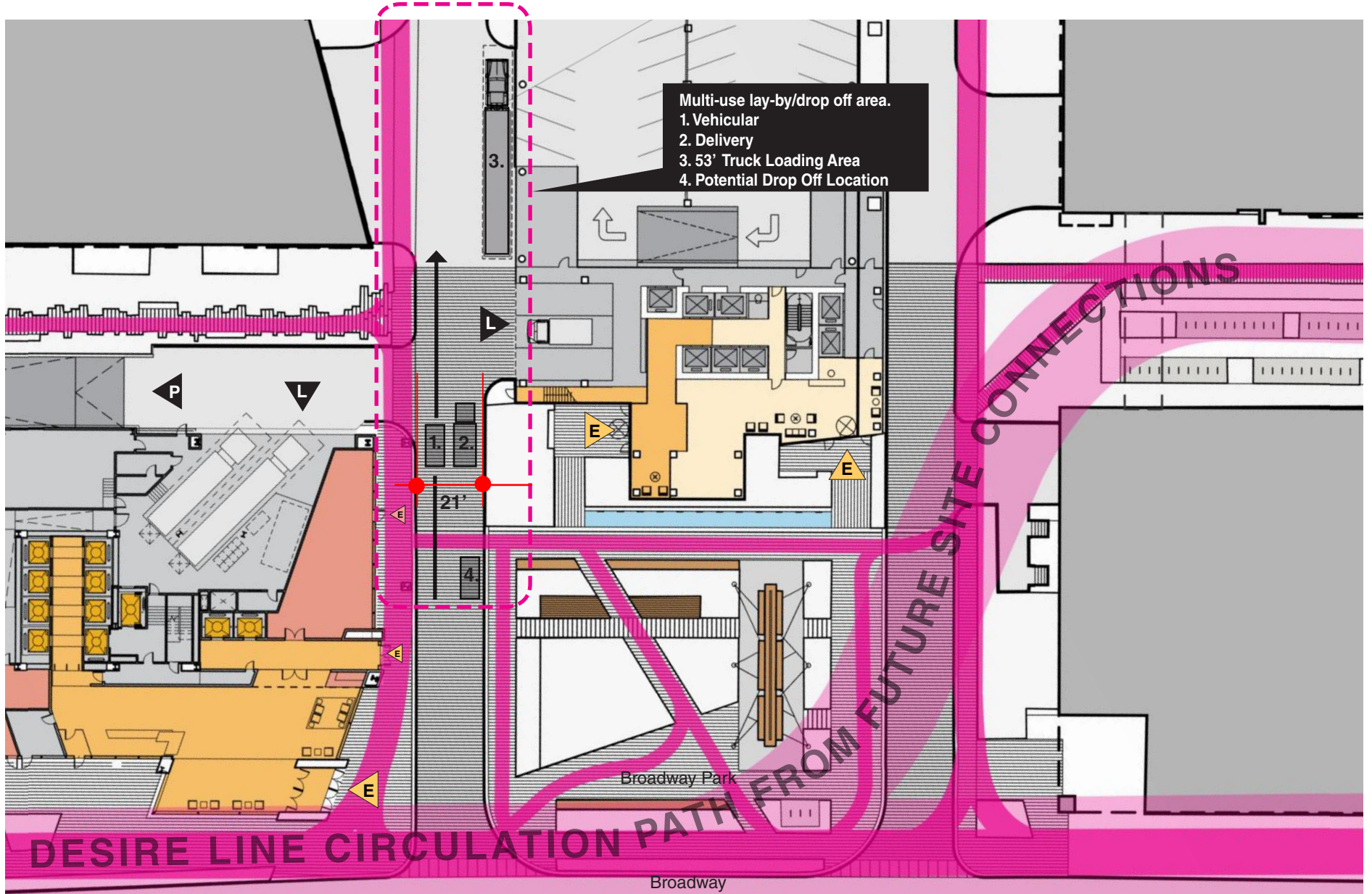
JUNE 21ST



BROADWAY PARK

BROADWAY PARK: PEDESTRIAN ACCESS AND CIRCULATION PLAN: PATHWAYS

FIGURE R3.2.1

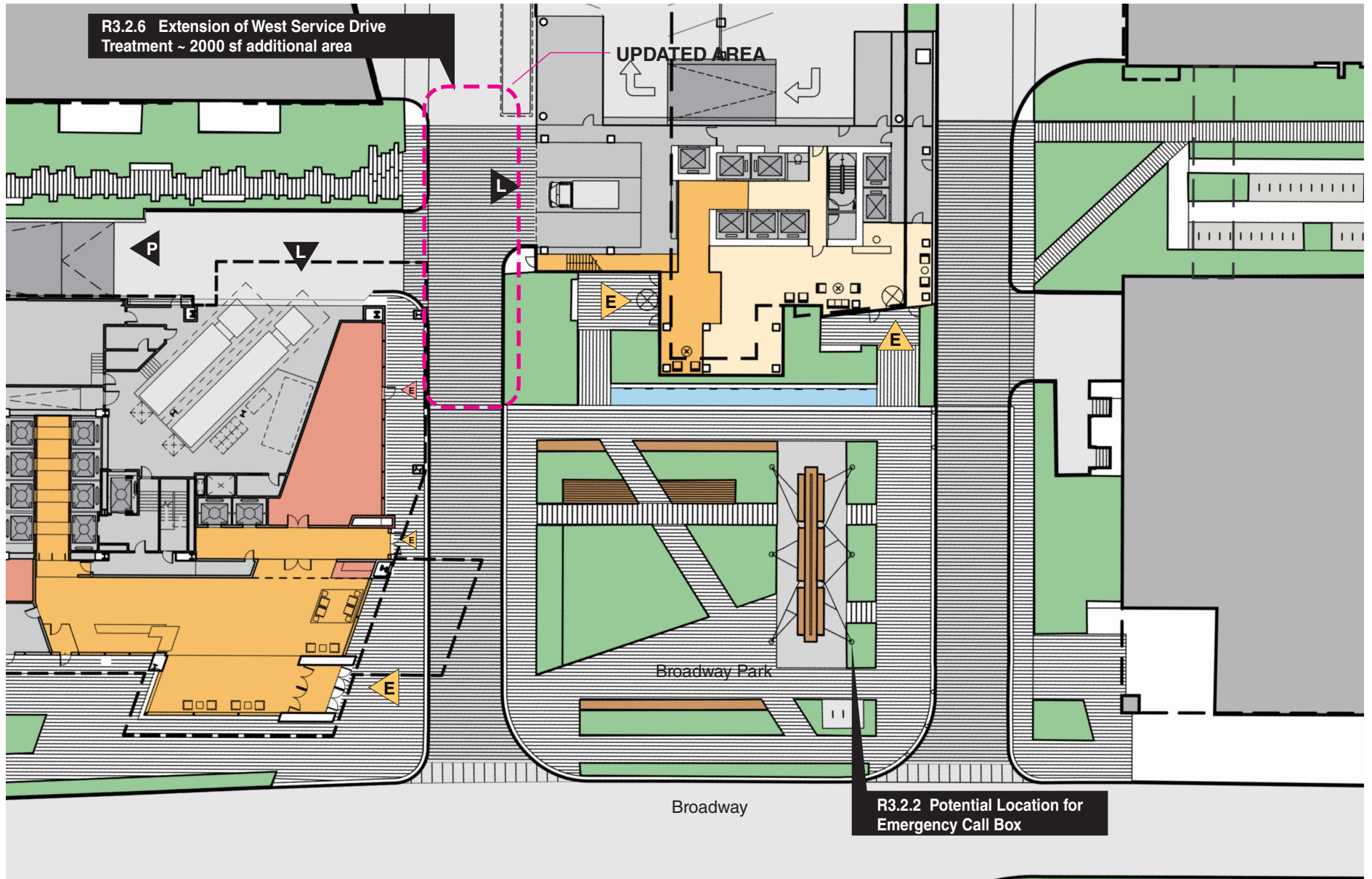


- ← Vehicular Passing
- Circulation Routes
- ▭ Lobby
- ▭ Active Use
- ⬇️ P Parking Entrance Loading
- ⬇️ L
- ⚠️ E Entrance (per use type)



GROUND LEVEL

0' 20' 40'

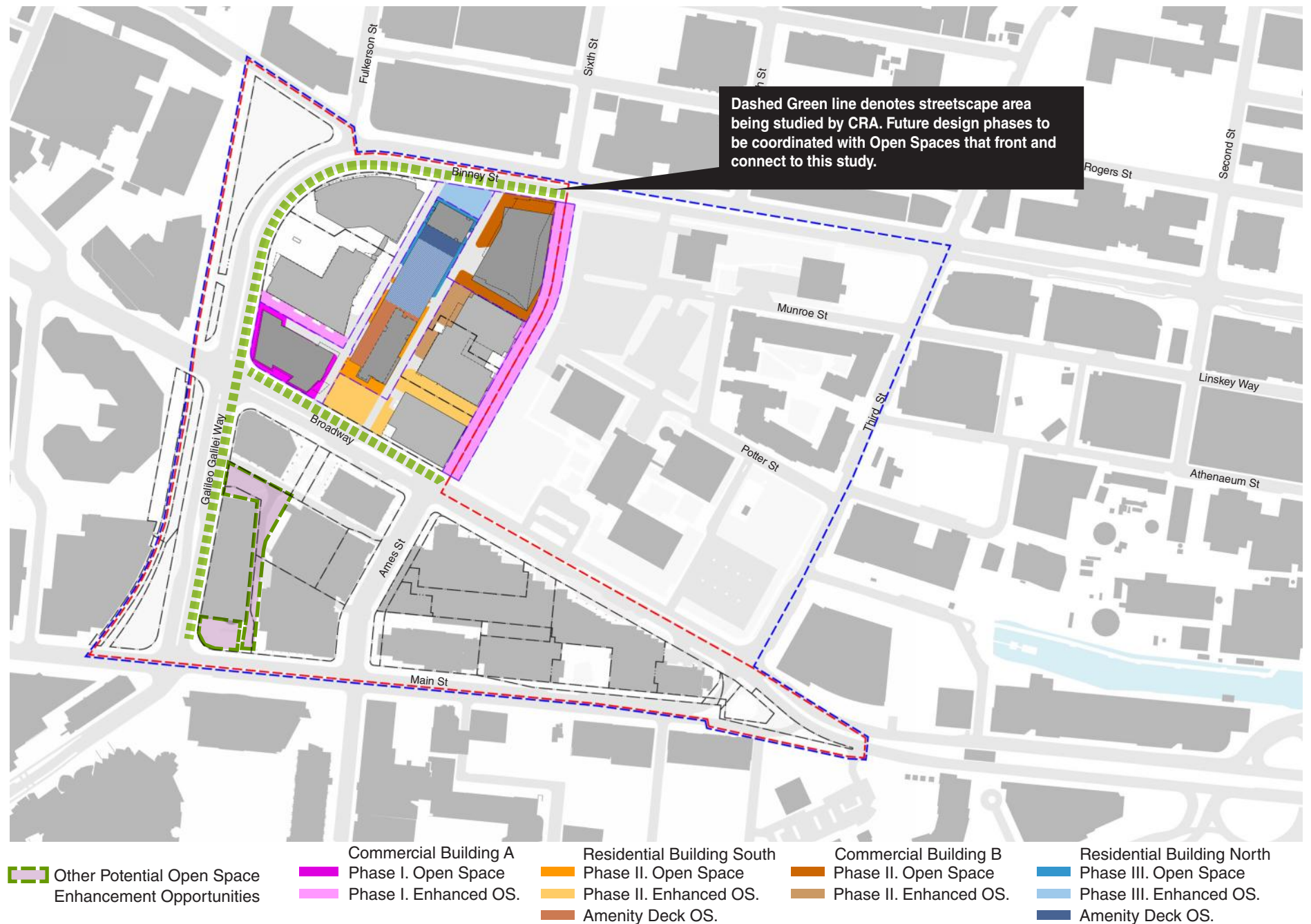


- Lobby
- Active Use
- P Parking Entrance
- L Loading
- E Entrance (per use type)

GROUND LEVEL

N

0' 20' 40'



4. RETAIL PLAN

RESPONSE TO COMMENTS

IDCP RESPONSE TO COMMENTS

CHAPTER 4 RETAIL

R4.1 RETAIL MARKET ANALYSIS BOUNDARY

Applicant was asked to clarify the boundaries of the market analysis that was provided. **FIG R4.1.1** supplements the IDCP maps included on page 165 of the MXD IDCP submitted on August 9, 2016.

Exhibit Reference: FIG.R4.1.1

Comment Reference: CRA7

R4.2 RETAIL VIABILITY

Applicant received a number of comments expressing concern about retail viability in light of existing low traffic areas at 250 Binney, high rents, dining amenities provided by companies within their office buildings and the general idea that Kendall has reached a saturation point for food service.

Applicant also has concerns about general retail viability but believes the continued growth of the neighborhood, the addition of residential space and the potential future development of the Volpe site offer opportunities that will strengthen future retail viability. Further, the concerns being expressed in comments reflect a common understanding that the MXD has materially less traffic than Main Street and, even after being built out, will likely reflect a lower market rent. Applicant is also aware that some employers provide dining amenities but observes that employees often regard these amenities principally as a time saving conveniences and not a preferred dining option, minimizing their potential adverse impact on surrounding retailers. Finally, Applicant agrees that there are abundant dining options in the market area and is planning the proposed retail space with as much flexibility as possible in terms of space division, options and infrastructure should other viable retail opportunities present themselves at the time of marketing and leasing. Retail is a very dynamic use with constantly changing concepts and consumer preferences. Applicant will continue to monitor the evolution of Kendal Square's retail market to maximize the potential for complementary uses within the market area and consistent with the requirements found in Article 14.

Exhibit Reference: N/A

Comment Reference: CRA21, CDD33, PLNBoard22

R4.3 RETAIL RETROFITS AT 105 BROADWAY, 150 BROADWAY AND 255 MAIN STREET

Applicant was asked to provide further detail about the future potential retail at 105 Broadway, 150 Broadway and 255 Main Street. As previously stated, these retail spaces are not part of this proposal and were included at the direction of CRA staff for the purposes of district wide planning. If in the future these spaces are converted to retail, they would require substantial retrofits. Both 105 Broadway and 150 Broadway's lobbies are above sidewalk grade and will likely require accommodations for accessibility that could potentially include ramps but will be subject to future design efforts. The retail at 255 Main Street is a potential two story opportunity located behind a set of decommissioned venting louvres. The space is comparatively shallow but could accommodate a limited restaurant or café use, convenience or service retail or other boutique or dry goods uses. Additional details about 255 Main Street can be found on page 164 of the MXD IDCP submitted on August 9, 2016.

Exhibit Reference: N/A

Comment Reference: CRA9, CRA23

R4.4 SIZE OF RETAIL SPACES

Applicant received a comment indicating that 250 Binney should restrict its retail suite sizes to 3,000 square feet to ensure local retail and a comment asking Applicant to identify where larger blocks of space could be located to accommodate larger retailers (including grocery and pharmacy) should other recent proposals for the district not achieve the anticipated uses in their proposals. The retail spaces are being designed for maximum flexibility to ensure they will be responsive to the evolution of the retail market and with a clear understanding of the community preference for local retail, nighttime uses and convenience retail like drycleaners, pharmacy and barber shops or salons. At this time, Applicant does not propose any specific division of space within the two larger retail spaces on the west side of 145 Broadway and east side of 250 Binney in order to preserve the opportunities for larger retail or multiple smaller retailers depending on the future conditions of the constantly evolving retail market. **FIG R1.1.1B** shows the areas for Active Use/Retail at 145 Broadway being approximately 7,225 sf and 1,300 sf respectively. **FIG R1.2.1** shows the areas for Active Use/Retail at 250 Binney Street of approximately 8,029 sf.

Exhibit Reference: FIG.R1.1.1B, FIG.R1.2.1

Comment Reference: CRA22, CDD32

R4.5 RETAIL AND ACTIVE USE REQUIREMENTS IN ARTICLE 14

Applicant was asked to provide cross references to other chapters in the MXD IDCP submission of August 9, 2016 related to the active use requirements and whether the retail spaces are being designed and programmed as exempt retail spaces. Additional information about active use edges can be found in the MXD IDCP submission of August 9, 2016 in Chapter 1.3.1 Overall Vision, Chapter 1 Development Components page 45, page 58, page 71 and Chapter 4. The retail spaces are being designed with flexibility for multiple potential uses including uses that qualify as Exempt Commercial Space under Article 14. However, it is premature to commit to programming at this stage as most retailers will not commit to space until the physical space is built. Also, retail concepts and consumer preferences constantly change based on broader trends and local market dynamics. The Applicant will continue to monitor the retail market throughout the development of the proposed project.

Exhibit Reference: N/A

Comment Reference: CRA8



- Existing Retail
- Proposed Retail (by others)
- Retail Market Analysis Boundary
- Future Potential Retail
- Proposed Project Retail
- MXD Boundary
- KSURP Boundary

5. TRANSPORTATION

RESPONSE TO COMMENTS

IDCP RESPONSE TO COMMENTS

CHAPTER 5 TRANSPORTATION

In addition to the responses below, applicant is completing the required PTDM plan and providing the technical memo updating the TIS trip generation as discussed with TP&T.

R5.1 WALK WAYS AND SERVICE DRIVES

Applicant received various comments about the East and West Service Drives that serve as the primary loading and vehicular access through the site and how they might be modified to enhance the pedestrian experience. **FIG. R5.1.1** shows a typical section of the East Service Drive. Applicant reviewed the width of the sidewalks and service drives and determined that the existing sidewalk width is adequate to service current and future projected pedestrian requirements. More importantly, the width of the service drives needs to be maintained to allow for traffic to continue to circulate in the event of a drop off, breakdown or fast delivery. While technically one lane service drives, the existing width ensures that any of the aforementioned events can occur and traffic is able to continue to circulate without causing back up onto city streets. **FIG. R5.1.2** shows truck turning studies for different truck sizes and illustrates the fact that the service drives need to maintain their current width for operations. Applicant will provide additional signage and site furnishings, including benches, to enhance the pedestrian experience.

Exhibit Reference: FIG. R5.1.1, FIG. R5.1.2

Comment Reference: CDD3, CRABoard12, CRA 16

R5.2 PARKING LOCATION AND PUBLIC ACCESS

Applicant received questions on whether the Blue Garage as well as the garage at 145 Broadway and 250 Binney Street are planned to be publicly accessible **FIG. R5.2.1** and where visitor parking will be accommodated. The Blue Garage is publicly accessible and currently has 500 spaces allocated for commercial use. 145 Broadway and 250 Binney Street are not planned for public use but will be designed to accommodate visitor parking. The parking for the residential buildings is planned in the Blue Garage. Additional specific information on parking will be provided in the PTDM plan to be submitted by Applicant.

Exhibit Reference: FIG. R5.2.1

Comment Reference: CRA13, CRA27, CRA28, TPT2

R5.3 PEDESTRIAN CIRCULATION

Applicant received various comments about internal pedestrian pathways and circulation within the project particularly as it relates to pedestrian circulation from east to west. **FIG. R5.3.1A** and **FIG. R5.3.1B** shows the proposed pedestrian circulation plan that is deliberately designed to reinforce activation of the parks, ensure retail viability and provide paths to logical connection points within the district, for example the corner of Galileo and Broadway. The existing pedestrian path, **FIG. R5.3.2** through the center of the Blue Garage will be enhanced to include new signage and a differentiated paving pattern to reinforce the crosswalk across the service drives. Applicant proposes that additional design of the Blue Garage pedestrian path and the pathways on the east west connectors take place during the Design Review of the phase that is outlined in the MXD IDCP phasing plan in Chapter 9 as a condition of Design Approval.

Exhibit Reference: FIG. R5.3.1A, FIG. R5.3.1B, FIG. R5.3.2

Comment Reference: CDD4, CDD5, TPT1, CRA30, CRABoard2

R5.4 LOADING MANAGEMENT PLAN

Applicant was asked to provide a service/loading management plan to minimize the amount of time when loading doors are open. Applicant will commit to providing a service/loading management for each of the residential and commercial buildings prior to issuance of a building permit for each building. This is consistent with the Applicant's recent project at 88 Ames Street.

Exhibit Reference: N/A

Comment Reference: CRA31

R5.5 TURNING RADIUS

Applicant received the comment that the turning radius from Binney into the site was too large. The radius of that connection is designed to accommodate deliveries from trucks with 53' trailers as shown in **FIG. R5.5.1**

Exhibit Reference: FIG. R5.5.1

Comment Reference: PLNBoard16

R5.6 PEDESTRIAN ACCESS TO BLUE GARAGE

Applicant received comments requesting clarification on pedestrian access to the Blue Garage both during and after construction. The construction access plan will be developed in Phase II with other construction logistics plans in conjunction with other factors including vehicular traffic, bicycle circulation, construction staging and safety considerations that require further details that will be submitted through the Design Review Process. Pedestrian access for the Blue Garage in the final built condition is shown in **FIG. R5.2.1** with further refinement to occur when the Residential Projects submit a full Design Review package.

Exhibit Reference: FIG.R5.2.1

Comment Reference: CRA32, CRA30

R5.7 DROP OFF LOCATIONS

Applicant was asked to provide greater detail on visitor and delivery drop off for the residential and commercial projects. As shown on **FIG. R3.2.1**, a multi-use lay-by/drop off area is planned for the West Service drive in Phase II. This area is designed to accommodate a truck with a 53' lay by area as well as taxi and ride share drop offs, short term deliveries and pedestrian loading and unloading. In addition the service drives that exist today are designed to be wide enough to accommodate drop offs, breakdowns or deliveries while allowing for the continued circulation of traffic.

Exhibit Reference: FIG. R3.2.1

Comment Reference: CRA29

R5.8 HUBWAY AND SHORT TERM BIKE PARKING

Applicant was asked to provide further information on the location of Hubway stations and provide for greater clarity on short term parking. **FIG. R5.8.1** shows the location a 27 dock Hubway built into the existing planter structure along Broadway in front of 150 Broadway and an expanded Hubway dock along the existing locating at Binney Street. In addition, **FIG. R5.8.1** shows the short term bike parking for 145 Broadway has been distributed in smaller pods along Galileo and Broadway to accommodate for multiple, potential, future retail entrances. Further, short term bike parking that is part of the requirement for 145 Broadway and the South Residential building have been moved into Broadway Park at the direction of CDD staff. Short term Bike parking that is part of the requirement for the North Residential has been moved into Binney Park as well. The final location of the short term bike parking in both the Broadway and Binney Parks will be in a visible location and agreed upon during Design Review for the Phase II and III open spaces.

Exhibit Reference: FIG.R5.8.1

Comment Reference: TPT5

R5.9 ON GOING CRA ACTIVITY

Applicant was asked to include information about some of the Cambridge Redevelopment Authority's ongoing activities including traffic monitoring and the redesign of surrounding roadways. As required and further described, in the MEPA submission and approvals, the Cambridge Redevelopment Authority has made an ongoing commitment to continue to monitor and report on traffic and transportation data. In addition, the CRA has commissioned planning studies associated with the surrounding streetscape. **FIG. R3.3.1**

Exhibit Reference: FIG.R3.3.1

Comment Reference: CRA17,CRA18

R5.10 KSTEP

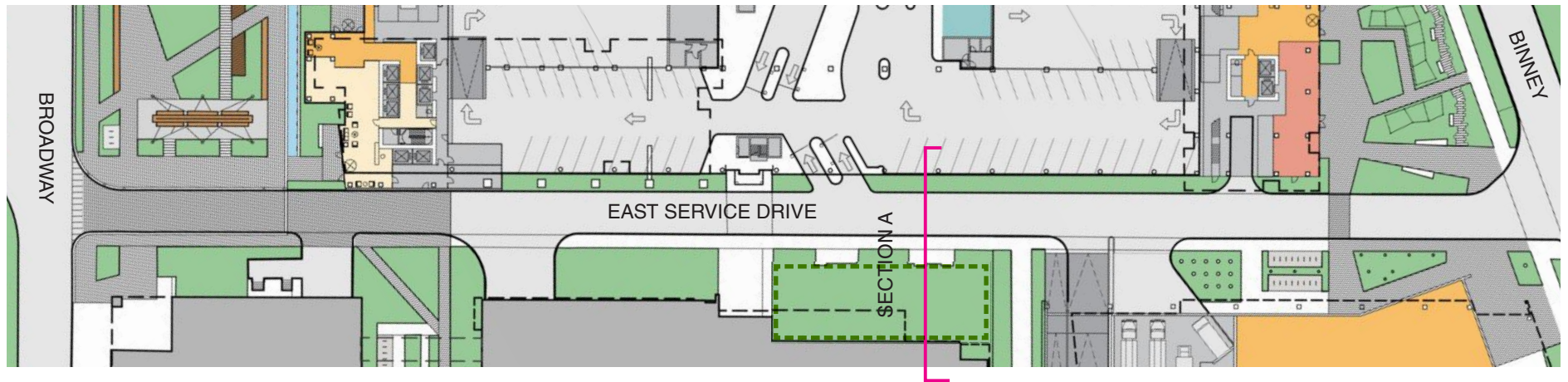
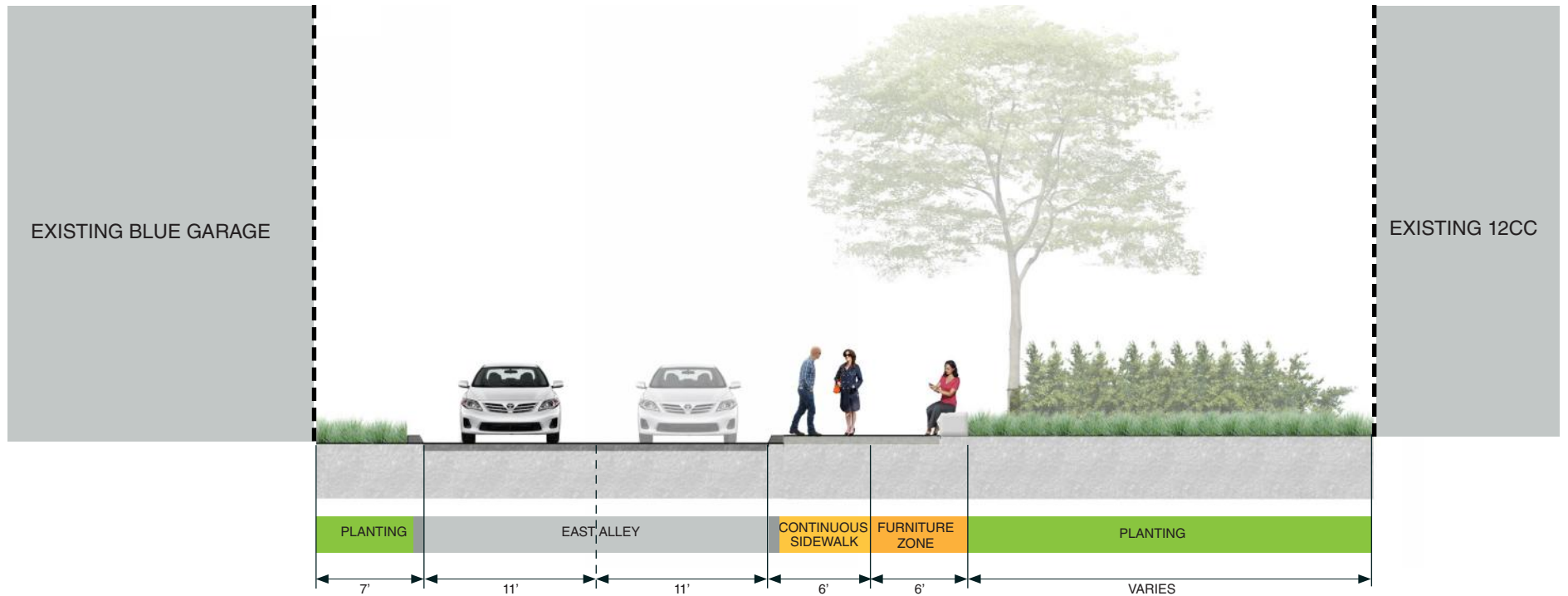
Applicant received a public comment about the use of KSTEP funds and various potential transit enhancements recommendations including a rubber tire bus from Sullivan Square to Kenmore Square via Kendall Square. Further, applicant received recommendations about encouraging tenants to engage in various behavioral and incentive programs, like charging full price for parking and requiring employers to provide transit passes to employees. Applicant acknowledges the comments and notes that the use of KSTEP funds is governed by the multiple parties in the MOU and that the Applicant will be working with the City to establish a PTDM plan that will address employer and tenant transit commitments.

Exhibit Reference: N/A

Comment Reference: TPT6, Public2

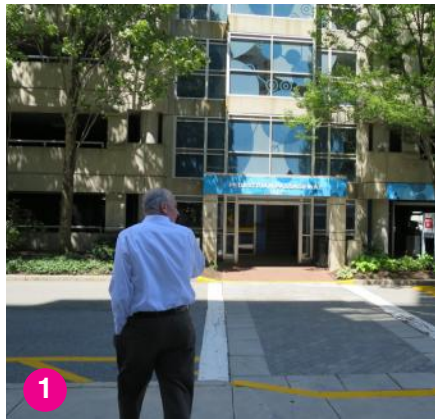
EAST SERVICE DRIVE SECTION THROUGH TYPICAL WALKWAY

FIGURE R5.2.1



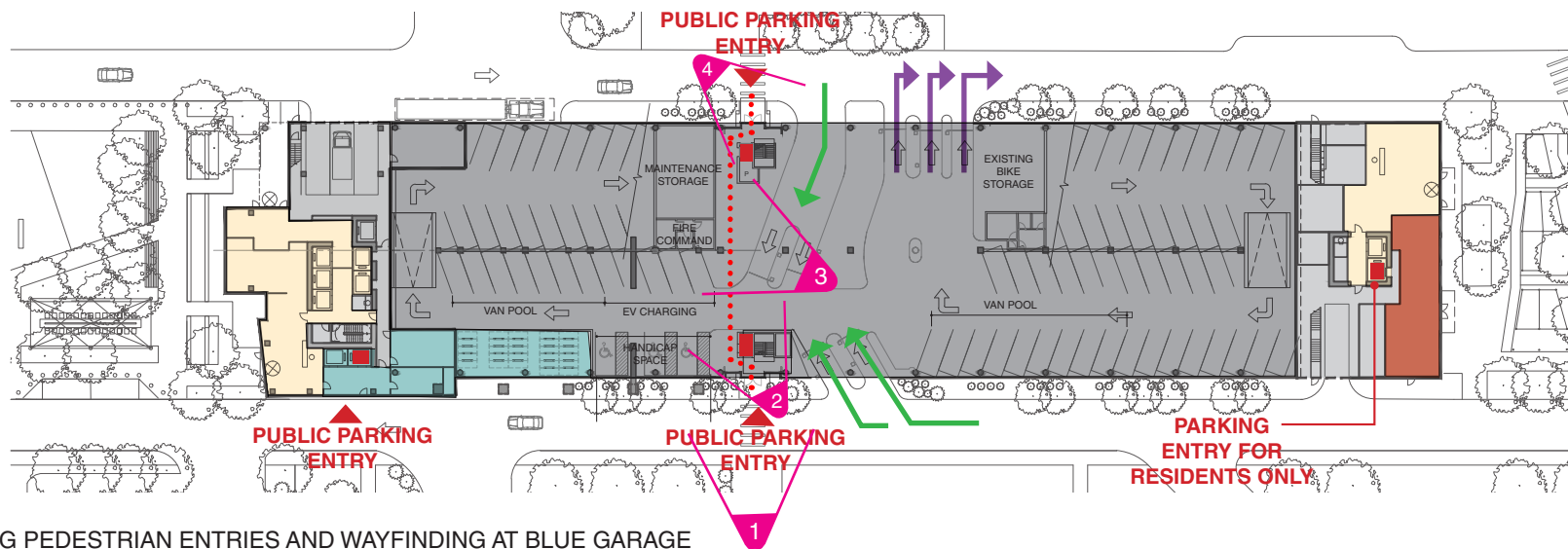
PUBLIC PARKING PEDESTRIAN ENTRIES

FIGURE R5.2.1



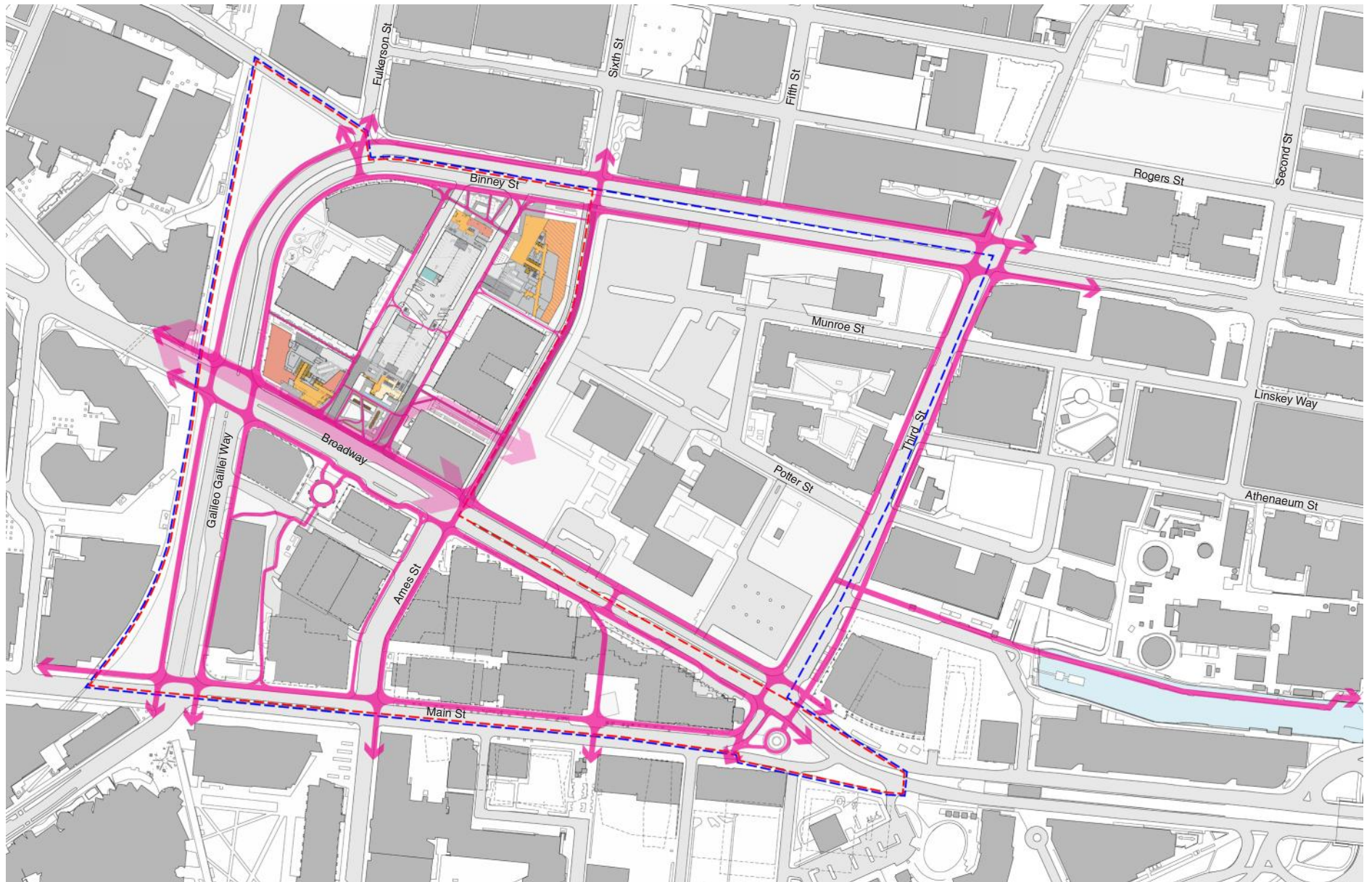
EAST SERVICE DRIVE ENTRY

WEST SERVICE DRIVE ENTRY

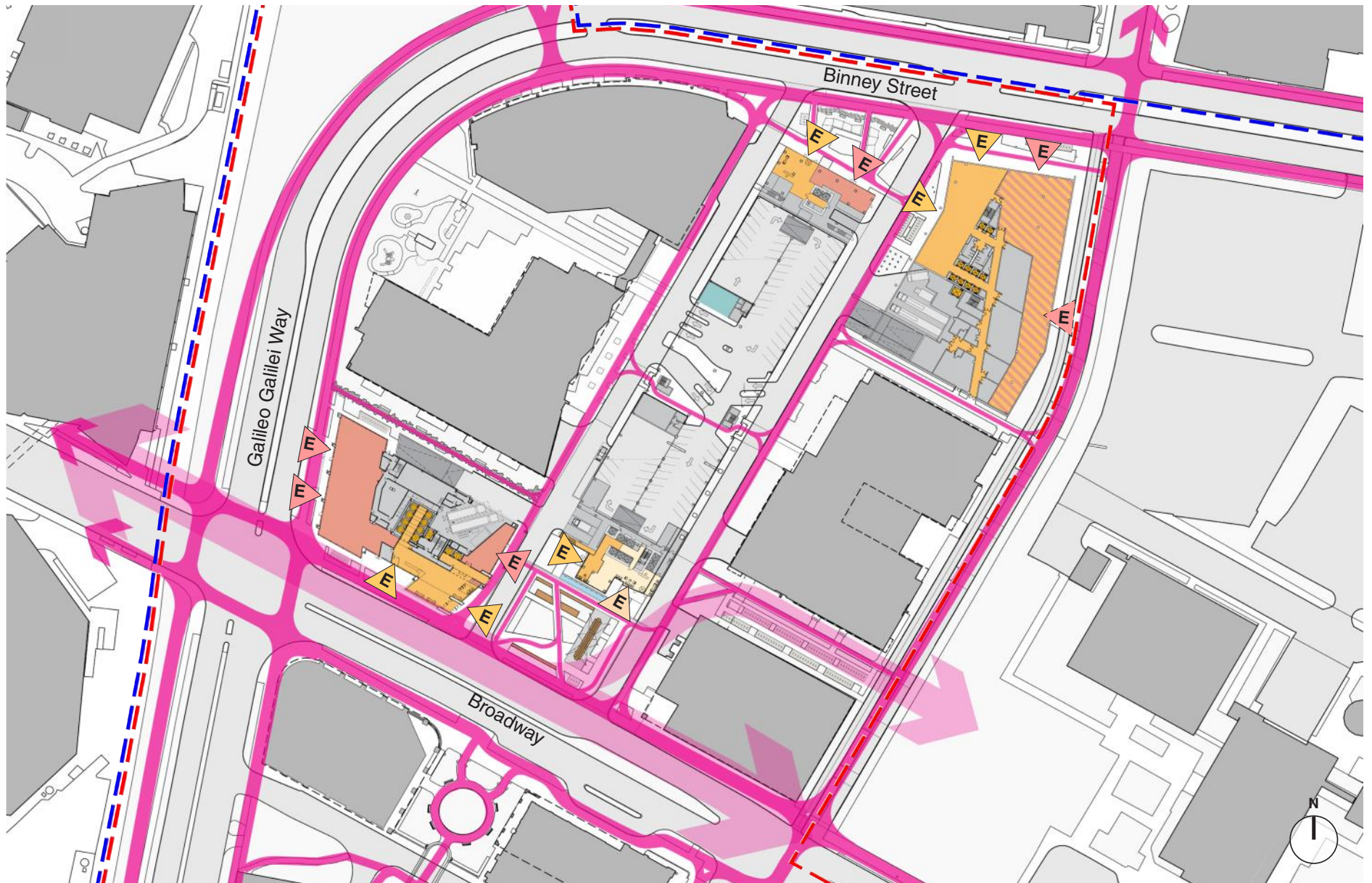



EXISTING PEDESTRIAN ENTRIES AND WAYFINDING AT BLUE GARAGE

- ← Vehicular Circulation Entry
- ← Vehicular Circulation Exit
- ▲ Pedestrian Entry





- █ Circulation Routes
- █ Lobby
- █ Active Use



 Circulation Routes

 Lobby

 Entrance (per use type)

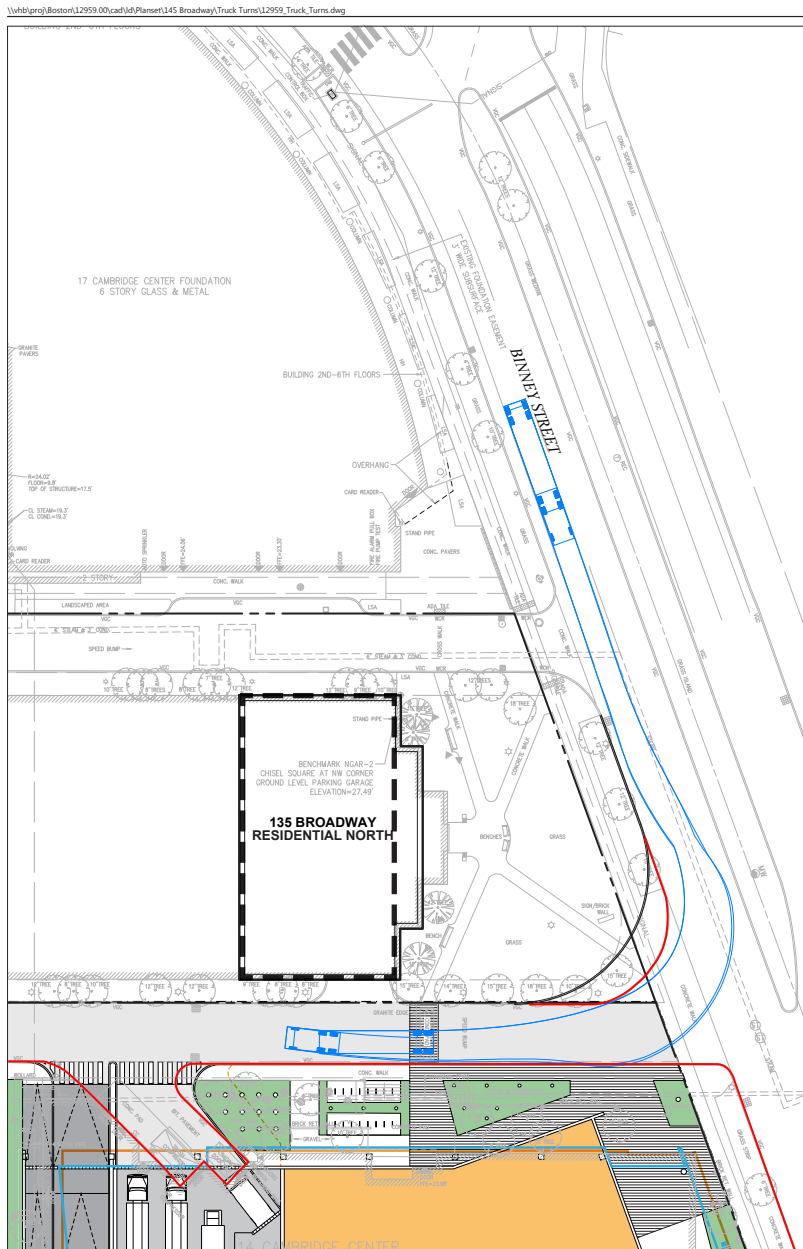
 Potential Entrance (per use type)

 Active Use

TRUCK TURNING RADIUS STUDY WB 50 TRUCK

TRUCK TURNING RADIUS STUDY WB 67 TRUCK

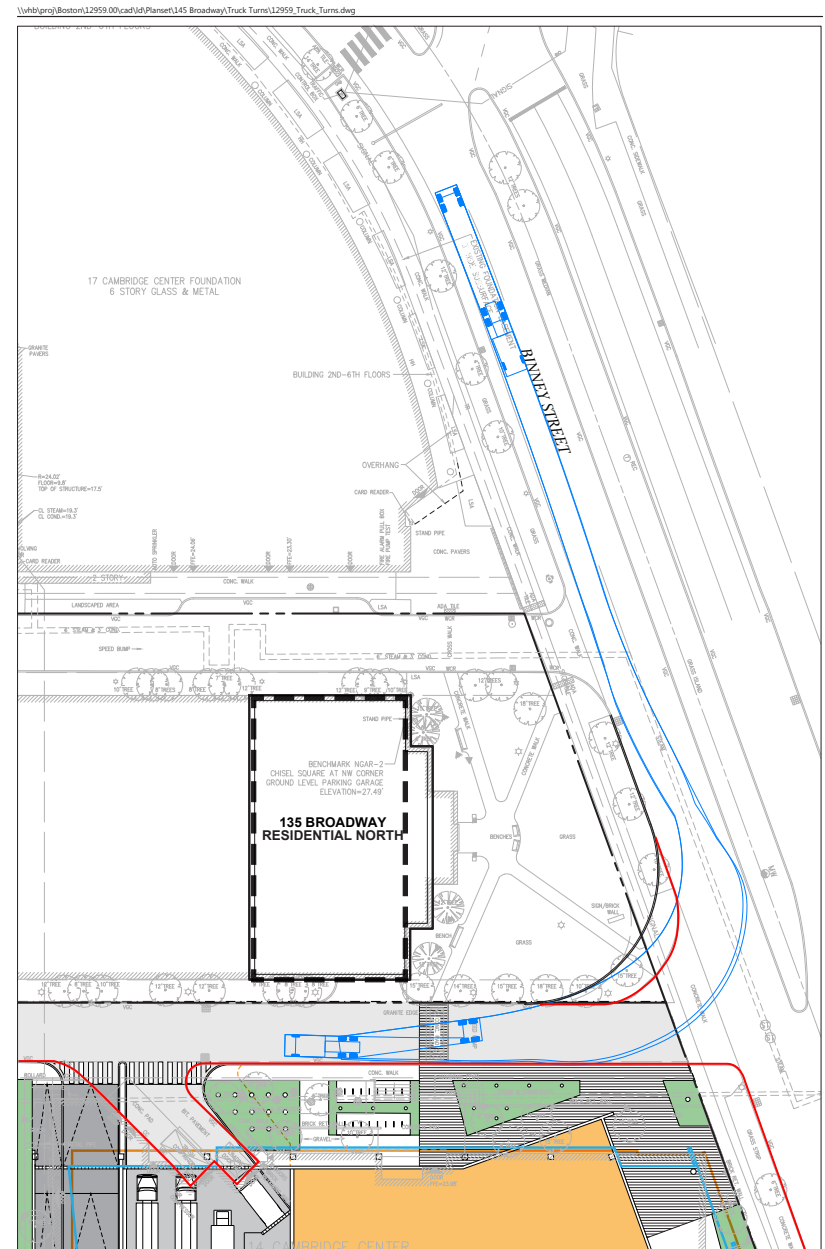
FIGURE R5.1



Existing Curb

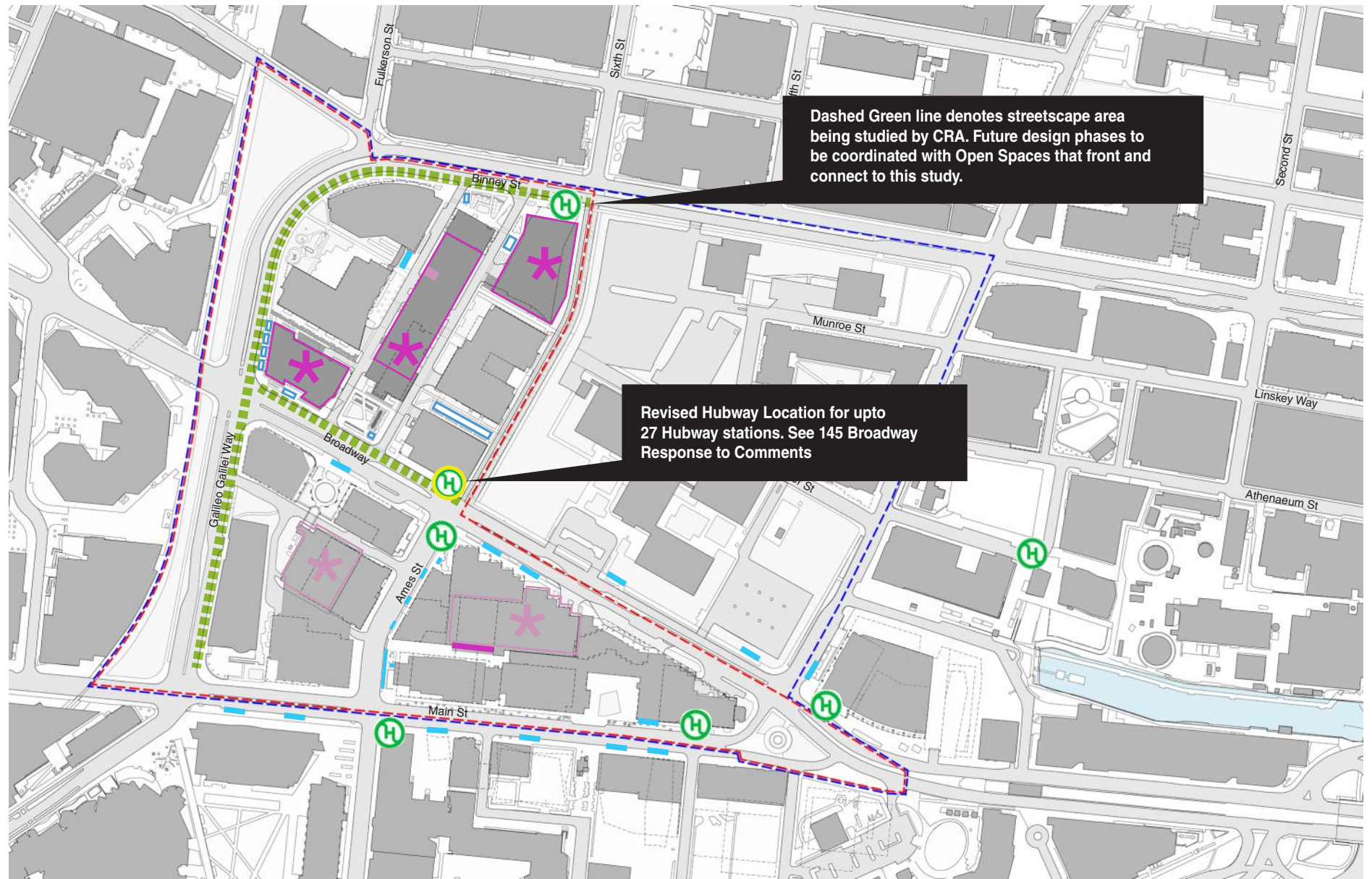
vhb Truck Turns - WB-50
Binney Street
Cambridge, MA

10/31/2016



vhb Truck Turns - WB-67
Binney Street
Cambridge, MA

10/31/2016



- ▬ Existing Short Term Bike Parking
- ▬ Proposed Short Term Bike Parking
- ▬ Existing Long Term Bike Parking
- ▬ Proposed Long Term Bike Parking
- ✱ Within Parking Structure
- Ⓜ Hubway Existing Locations
- Ⓜ Hubway Proposed Potential Locations

6. INFRASTRUCTURE

RESPONSE TO COMMENTS

IDCP RESPONSE TO COMMENTS

CHAPTER 6 INFRASTRUCTURE

R6.1 STORMWATER

Applicant received comments and a letter about storm water management. To manage the storm water, the landscaping guidelines and current plans call for indigenous drought resistant plantings and pervious paving surfaces, where possible, to maximize the opportunities for storm water retention and infiltration onsite. The specifics on planting schedules and locations will be provided during Design Review of the appropriate phase. In addition, each project will provide a proportionate amount of I&I mitigation that will be determined in consultation with the Department of Public Works after Design Review and prior to the issuance of a Certificate of Occupancy. Finally, as part of the district solution to storm water both Commercial Building A and B will provide onsite water storage tanks that will retain storm water and be used as process make up water for each building's cooling tower. In the event of overflow, injection wells will ensure that outflow to the City storm water system is minimized.

Exhibit Reference: N/A

Comment Reference: Public3, PLNBoard23

R6.2 GROUNDWATER IMPACTS

Applicant received an inquiry about potential impacts that foundations may have on groundwater deflection. **Appendix: Exhibit B** is a letter from our Geotechnical Engineer, Haley & Aldrich, stating that the foundation designs present no adverse impact to the ground water.

Exhibit Reference: N/A

Comment Reference: PLNBoard3

R6.3 CAPACITY STUDY

Applicant received a letter from the Department of Public Works about a metering program to evaluate current flow conditions. Applicant awaits additional details but is prepared to evaluate existing flow conditions.

Exhibit Reference: N/A

Comment Reference: DPW2

7. ENVIRONMENTAL IMPACTS

RESPONSE TO COMMENTS

IDCP RESPONSE TO COMMENTS

CHAPTER 7 ENVIRONMENTAL IMPACTS

R7.1 WIND ANALYSIS

Applicant received general questions about wind and comments about the sufficiency of the desktop wind study provided in the MXD IDCP submission from August 9, 2016. Chapter 7 of the MXD IDCP included a selection of the desktop wind model run by RWDI on the initial massing of all four proposed buildings. In addition to these select elements of the analysis, the entire desktop study can be found in the appendices located on the CD rom attached in the back sleeve of the MXD IDCP book and submitted electronically to the Community Development Department. Applicant understands the concern about wind, however, wind tunnel analysis is sensitive to changes in massing. Accordingly, Applicant proposes that each building provide a wind tunnel analysis during Design Review after massing has been approved as part of the Infill Development Concept Plan and at a time when the building design can be appropriately altered to respond to a wind tunnel study. For the purposes of comparison, Applicant has included a wind tunnel analysis of existing summer and winter conditions **FIG. R7.1.2** serve as a baseline for future review.

Exhibit Reference: FIG.R7.1.1, FIG.R7.1.2

Comment Reference: CRABoard13, PLNBoard6

FIGURE R7.1.1



**Wind Tunnel Study Model
Existing**

Kendall Square Masterplan – Cambridge, MA

Figure No. 1a

Project #1603158

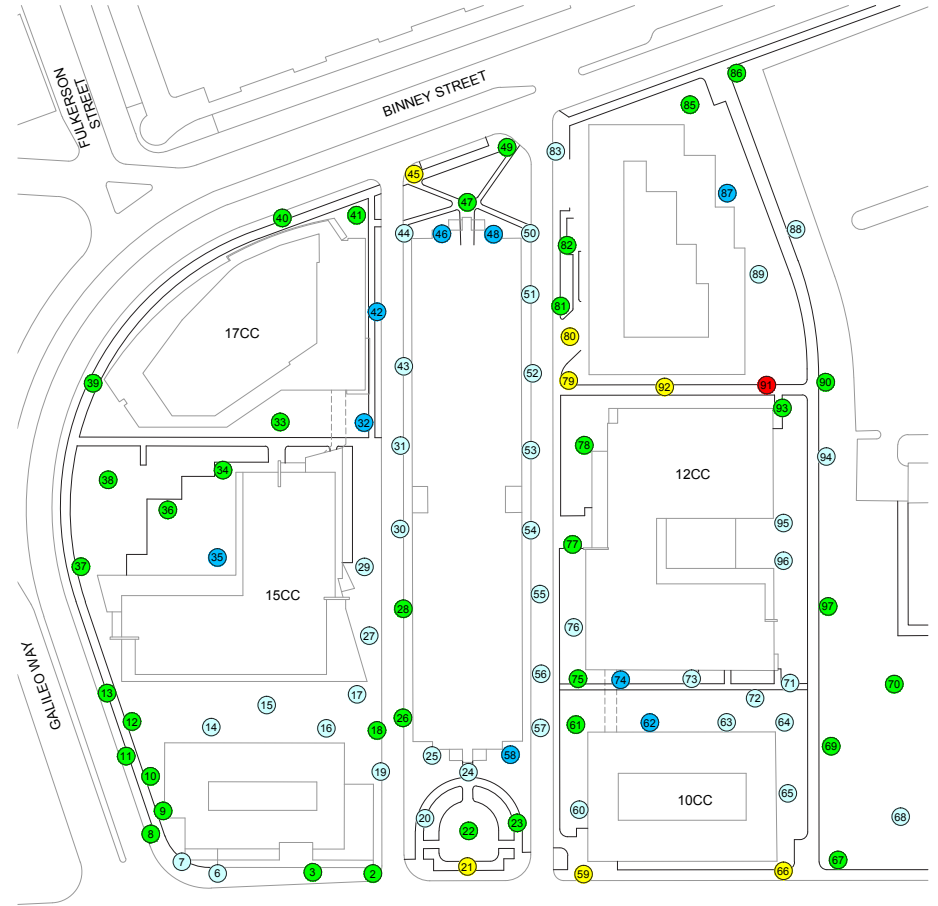
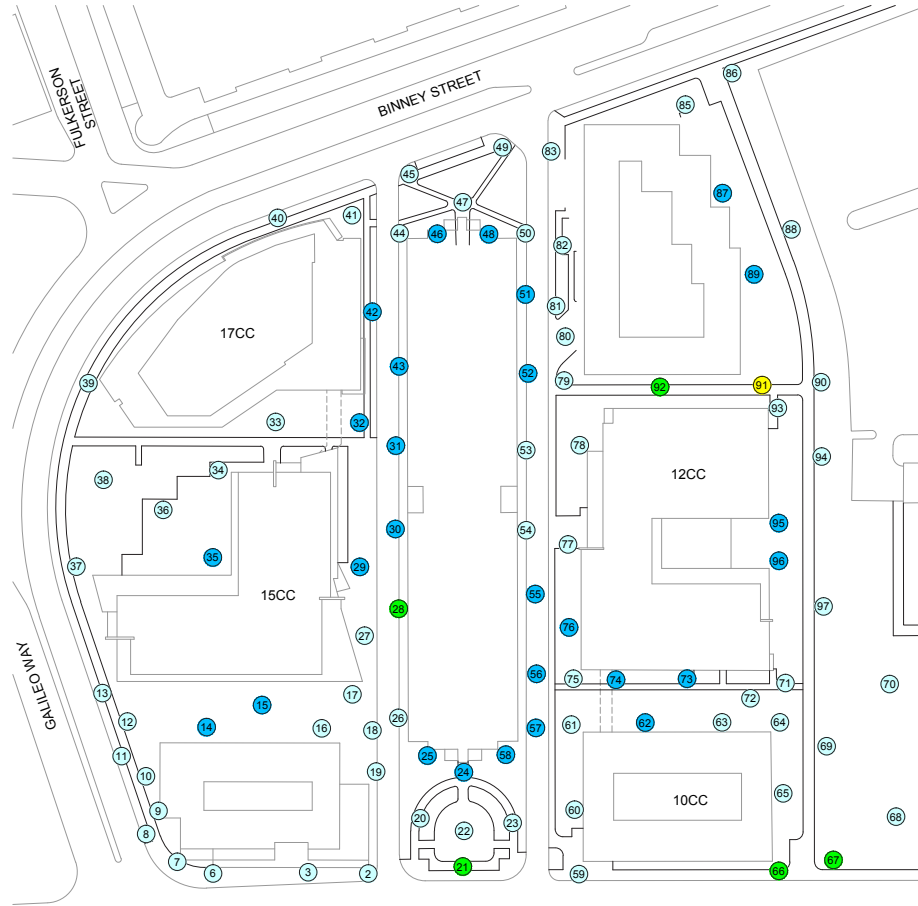
Date: October 25, 2016



PEDESTRIAN WIND CONDITIONS: EXISTING SUMMER

PEDESTRIAN WIND CONDITIONS: EXISTING WINTER

FIGURE R7.1.2



LEGEND:

COMFORT CATEGORIES:

- Sitting
- Standing
- Strolling
- Walking
- Uncomfortable

SENSOR LOCATION:

- Grade Level

LEGEND:

COMFORT CATEGORIES:

- Sitting
- Standing
- Strolling
- Walking
- Uncomfortable

SENSOR LOCATION:

- Grade Level

Pedestrian Wind Comfort Conditions - Existing Summer (May to October, 6:00 to 23:00)

True North Drawn by: ck Figure: 3a

Approx. Scale: 1"=120'

Date Revised: Oct. 25, 2016

Kendall Square Masterplan - Cambridge, MA Project #1603158

Pedestrian Wind Comfort Conditions - Existing Winter (November to April, 6:00 to 23:00)

True North Drawn by: ck Figure: 4a

Approx. Scale: 1"=120'

Date Revised: Oct. 25, 2016

Kendall Square Masterplan - Cambridge, MA Project #1603158

8. SUSTAINABILITY

RESPONSE TO COMMENTS

IDCP RESPONSE TO COMMENTS

CHAPTER 8 SUSTAINABILITY

R8.1 RESILIENCE

Applicant received inquiries about the plans to mitigate flooding associated with the potential 2030 100 year storm and 2070 100 year storm. As shown on page 206 Figure 6.4 of the MXD IDCP submission of August 9, 2016, the site benefits from an existing elevation that projects little to no flooding throughout the site. However, as also shown on the plan, the surrounding streets are projected to retain standing water. Applicant is exploring raised floors in transformer and switch gear rooms to add additional clearance from potential floodwaters subject to review and approval by applicable utility providers. Additionally, Applicant may employ mobile, water filled or other type of temporary dam solutions as a secondary precaution to prevent potential flooding of the garage structure or major entrances. Ultimately, the recovery for any building will be dependent upon the duration and severity of a potential weather event but the combination of the natural elevation benefits and strategies listed above will allow for an efficient recovery.

Exhibit Reference: FIG.6.4 IDCP p 206

Comment Reference: DPW3, DPW4, PLNBoard5, CDD29

R8.2 INNOVATIVE SUSTAINABILITY DETAILS

Applicant received inquiries about specific and creative sustainability strategies being proposed. In addition to the proposed solar array over a portion of the Blue Garage as well as the storage and use of Storm water in cooling towers, Applicant has provided additional details on Sustainability Guidelines in this IDCP Response Submission that will apply to Design Review for all future buildings. Given the relatively distinct nature and proposed use of each building and the zoning requirements for further review, the creative and in depth sustainability strategies will be specifically outlined as part of the Design Review process. The concepts and guidelines listed in the MXD IDCP submission from August 9, 2016 and in this response, are intended to outline possibilities and standards that each building will follow in future submissions.

Exhibit Reference: N/A

Comment Reference: CRABoard2

R8.3 GREEN ROOF AND SOLAR GENERATION

Applicant was requested to provide an approach on balancing solar and green roofs. Green roof and solar generation cannot exist in the same, exact space and serve their intended purpose. The exact balance and presence of either or both green roofs and solar generation facilities will depend upon the solar conditions that apply to each building. **FIG. R3.1.1** shows the balance between solar and occupied, green roof top space that applies to the Residential Buildings on the North Garage. In general, green roof treatments will be concentrated on roof top areas that are in shade but still allow for plant growth but are less productive potential locations for solar generation. Additionally, solar facilities may be vertically installed on rooftops with proper solar orientation. Details for Commercial Building A and B will be provided during Design Review.

Exhibit Reference: FIG.R3.1.1

Comment Reference: CDD21

R8.4 COGENERATION FEASIBILITY STUDY

Applicant was requested to provide a specific time frame for a feasibility study to use the existing cogeneration facility located onsite. The cogeneration facility is not owned by the Applicant but is instead a privately-owned facility that would require approval and consent from the existing owner. Applicant will commit to completing the study as part of the Design Review for Commercial Building B in phase II.

Exhibit Reference: N/A

Comment Reference: CDD22

R8.5 STRETCH CODE

Applicant was asked whether the 2017 Stretch Energy Code will be employed. All buildings will comply with the newly adopted Stretch Energy Code for 2017.

Exhibit Reference: N/A

Comment Reference: CDD23

R8.6 TARGET LEED VERSION

Applicant was asked to clarify which version of LEED Gold will be employed. Design for each building began in January of 2016 and all buildings were registered under LEED V3 in April of 2016, the current standard. As of October 2016, new projects register under LEED V4 but the USGBC will maintain LEED V3 as an active standard until it's eventual sunset of June 30, 2021. However, Applicant will commit that all buildings will be designed to LEED V4 Gold standards.

Exhibit Reference: N/A

Comment Reference: CDD24

R8.7 ADDITIONS TO SUSTAINABILITY GUIDELINES

Applicant was asked to incorporate specific study obligations in addition to the proposed Sustainability Guidelines in chapter 8 of the MXD IDCP submitted on August 9, 2016. For clarity, specific sustainability strategies and commitments for each building will be provided during Design Review. The following study obligations and preferences will be added to the Sustainability Guidelines:

Geothermal Assessment: The Design Review submission for each building will include a feasibility assessment for geothermal systems including the potential for shared geothermal with other building sites.

Energy Storage: Incorporating energy storage systems into the building or sites, either at the time of construction or in the future, is encouraged.

Commissioning: Each project will incorporate mechanical, electrical, plumbing, envelope and renewable energy systems commissioning standards that are required of the LEED Enhanced Commissioning credit.

Pathways to Net Zero: Each Design Review submission will include a conceptual assessment of how the building can be adapted to net zero greenhouse gas emissions in anticipation of future technologies and in consideration of technology that exists at the time of the Design review. Potential means of reaching net zero greenhouse gas emissions may include building retrofits, incorporation of new technologies and alternative energy procurement or generation.

Resilience: Each project will provide a resilience narrative that outlines asset level and potentially district wide strategies that protect building systems and occupants in the event of major storm events or long term power outages and potential impacts associated with climate change including floods, storm surges, changes in sea level.

Evolving Standards: Each building's Design Review will incorporate the most recent standards set forth in applicable zoning to accommodate future evolutions in sustainability strategies.

Tracking Greenhouse Gas Emissions: Each Design Review submission will include a Greenhouse Gas emissions assessment for both the building being reviewed and an update of Greenhouse Gas emissions for the building that was reviewed and approved in the prior Design Review process.

Exhibit Reference: N/A

Comment Reference: CDD25, CDD26, CDD27, CDD28, CDD29, CDD30, CDD31

9. PHASING PLAN

RESPONSE TO COMMENTS

IDCP RESPONSE TO COMMENTS

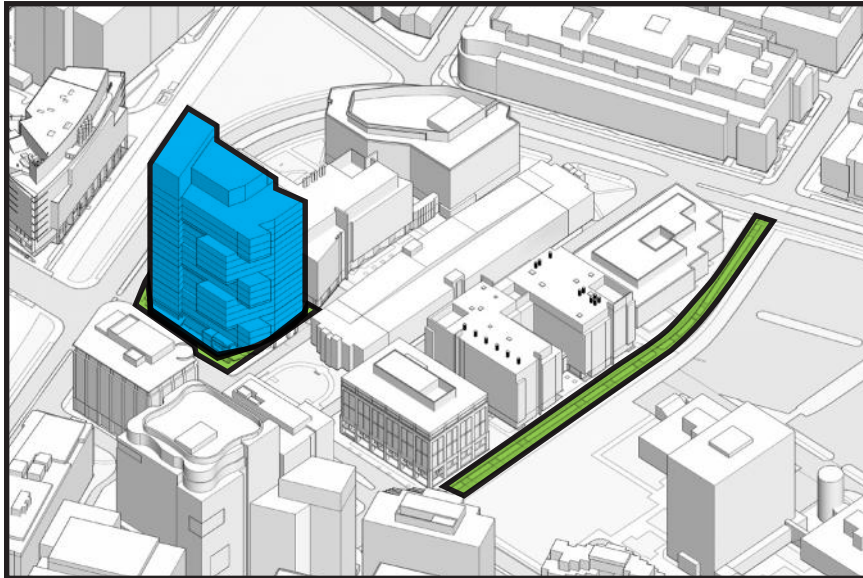
CHAPTER 9 PHASING

R 9.1 OPEN SPACE PHASING

Applicant received multiple requests for clarification on the phasing of each open space related to the project including the parks and east to west pedestrian connector paths. A color-coded plan showing greater detail of the open spaces that will accompany each building and phase is represented in **FIG. R9.1.1** for Phase I, **FIG. R9.1.2** for Phase II and **FIG. R9.1.3** for Phase III. Also, describing the Open space related to project phasing is **IDCP revisions 3.2 Proposed Open Space**. Each phase indicates the required open space per allotted GFA for that phase and demonstrates that through provided open space and enhanced existing open space that each phase provides more than the necessary open space area.

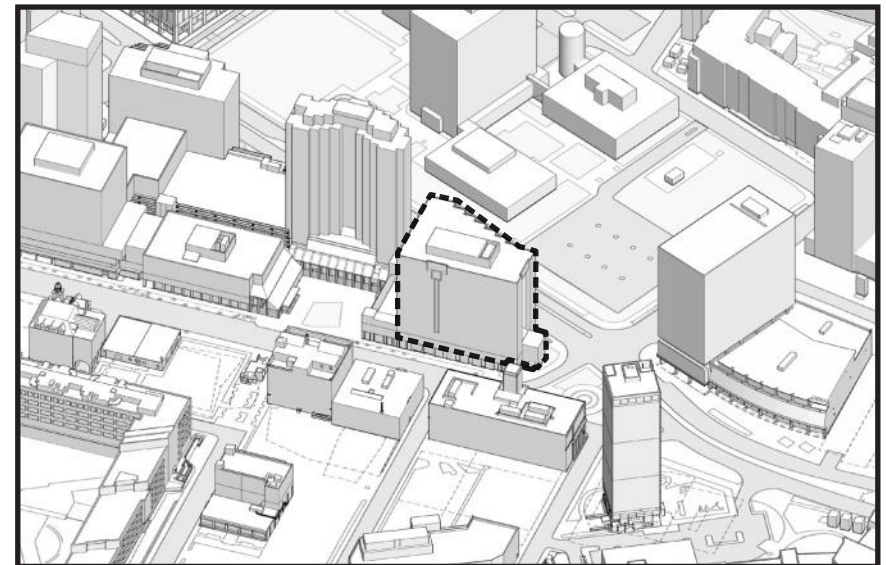
Applicant proposes that a greater detail of design, beyond what is shown in the MXD IDCP August 9, 2016 submission accompany each building phase based on **IDCP revisions 3.2 Proposed Open Space**. For example, the 6th Street connector Design Review would accompany the Commercial Building A-Phase I Design Review process. This approach would allow the design of the proposed open spaces to evolve at the same time as the building associated with that phase, ensuring continuity in the evolution of design ideas and community interests.

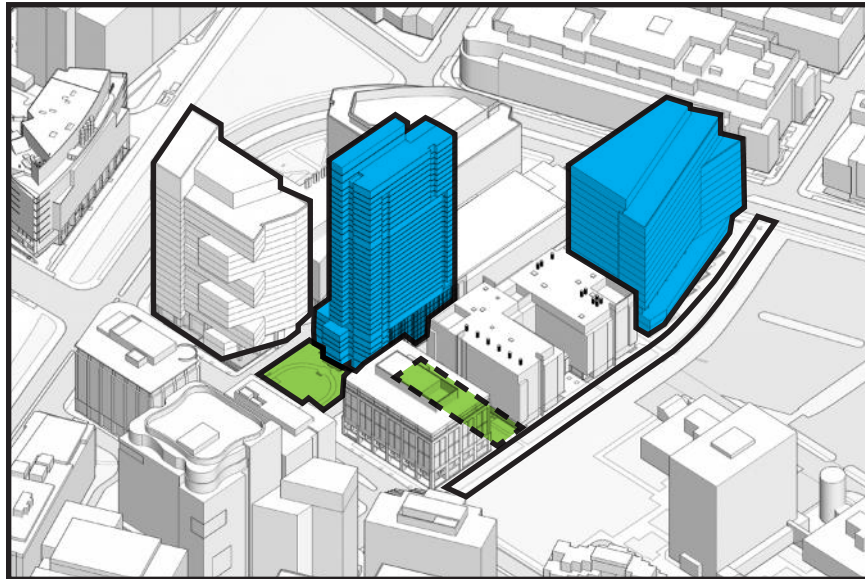
Exhibit Reference: FIG.R9.1.1, FIG.R9.1.2, FIG.R9.1.3, IDCP revisions 3.2 Proposed Open Space
Comment Reference: CDD18, CDD19, DPW1, CDD2



PROJECT PHASING FORECAST									
	2016	2017	2018	2019	2020	2021	2022	2023	2024
Phase 1	█								
Phase 2			█						
Phase 3							█		

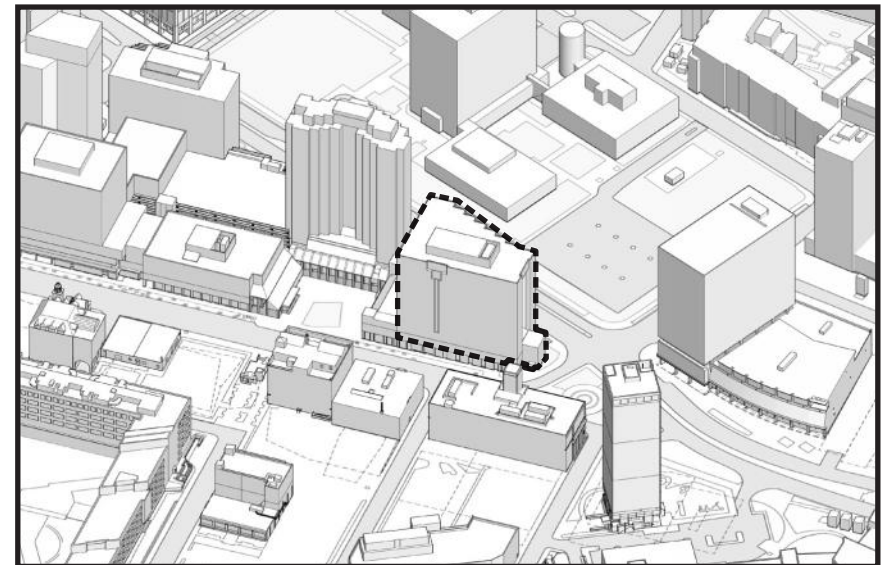
PHASE 1 will consist of the demolition of the existing building at 145 Broadway and the construction of the Commercial Building A. In addition Phase 1 will include the planned enhancements to the 6th Street Connector and the East/West connector to the west of the West Service Drive. Innovation Space will be made available in 255 Main Street. As required by zoning, the MXD IDCP plan commits that a portion of the space will be offered at below market rate.





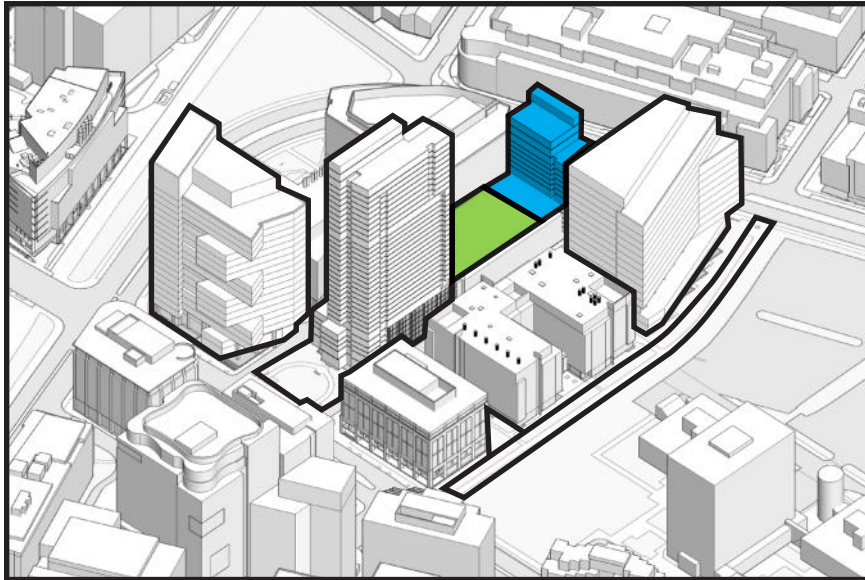
PROJECT PHASING FORECAST									
	2016	2017	2018	2019	2020	2021	2022	2023	2024
Phase 1	█		█						
Phase 2			█						
Phase 3							█		

PHASE 2 will consist of both the Residential Building South and Commercial Building B which will likely start construction at different times depending on site logistics, relative complexity of each building, and market conditions. The Residential Building South will require demolition and reconfiguration of the south side of the Blue Garage. Commercial Building B will require demolition of the existing building at 250 Binney. Phase 2 will also include the planned enhancements to Broadway Park and the East / West Connectors from the 6th Street Connector. The remaining Innovation Space will be provided in conjunction with the completion of Commercial Building B at 250 Binney Street.



PHASE 3

FIGURE R9.1.3



PROJECT PHASING FORECAST									
	2016	2017	2018	2019	2020	2021	2022	2023	2024
Phase 1	█								
Phase 2			█						
Phase 3							█		

PHASE 3 will consist of the demolition and reconfiguration of the north portion of the Blue Garage and the construction of Residential North Building. Phase 3 will also include the planned enhancements to Binney Park.



10. DESIGN GUIDELINES

RESPONSE TO COMMENTS

IDCP RESPONSE TO COMMENTS

CHAPTER 10 DESIGN GUIDELINES

R10.1 DESIGN GUIDELINES

R10.1.1 DESIGN GUIDELINES: CDD staff has requested the addition of more information about the architectural and urban design character of the building façade treatments.

The additional guidelines are listed as follows:

- FIG. R10.1.1A** **GARAGE STRUCTURES**
- FIG. R10.1.1B** **COMMERCIAL FACADES AND FENESTRATION
(STREET LEVEL CONDITIONS/ CURTAIN WALL PANELS)**
- FIG. R10.1.1C** **COMMERCIAL FACADES AND FENESTRATION
(GLAZED VOLUMES/ OPAQUE WALL AREAS)**
- FIG. R10.1.1D** **RESIDENTIAL FACADES AND FENESTRATION GUIDELINES
(STREET LEVEL CONDITIONS)**
- FIG. R10.1.1E** **RESIDENTIAL FACADES AND FENESTRATION GUIDELINES
(UPPER LEVEL CONDITIONS)**

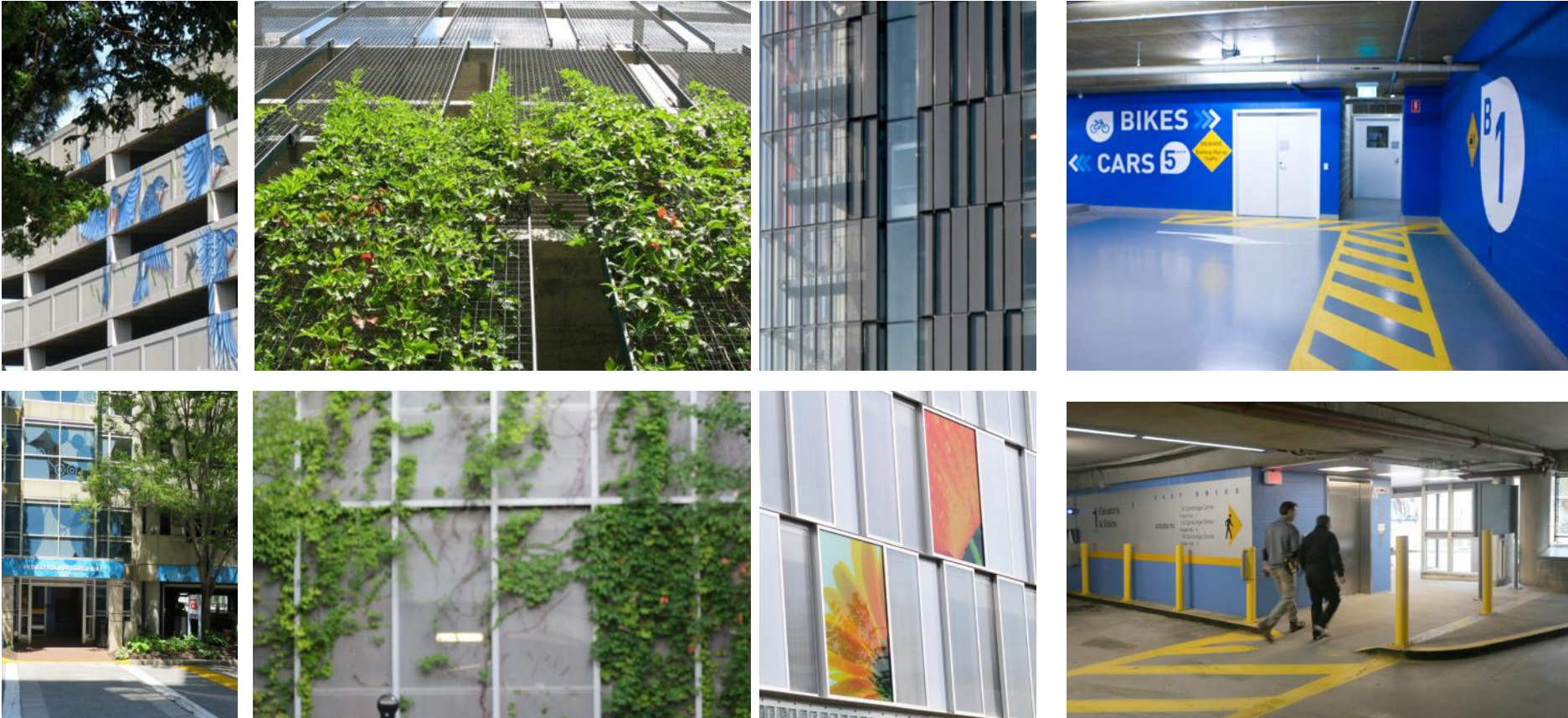
Exhibit Reference: R10.1.1 A-E

Comment Reference: CDD20

LANDSCAPE MATERIALS GUIDELINES

EXISTING / ADAPTED GARAGE STRUCTURES

FIGURE R10.1.1A



Within the MXD district, recent developments have proposed to mask existing garage structures with new building proposals. For exposed parking garage surfaces, murals and screening devices or the continuation of building facade fenestration can be introduced when appropriate to mask or enliven these existing structures without impacting necessary open area for ventilation of the garage functions.

Within existing parking structures opportunities for enhanced wayfinding graphics can be applied to surfaces for greater pedestrian safety and information

COMMERCIAL FACADES AND FENESTRATION GUIDELINES

STREET LEVEL CONDITIONS:

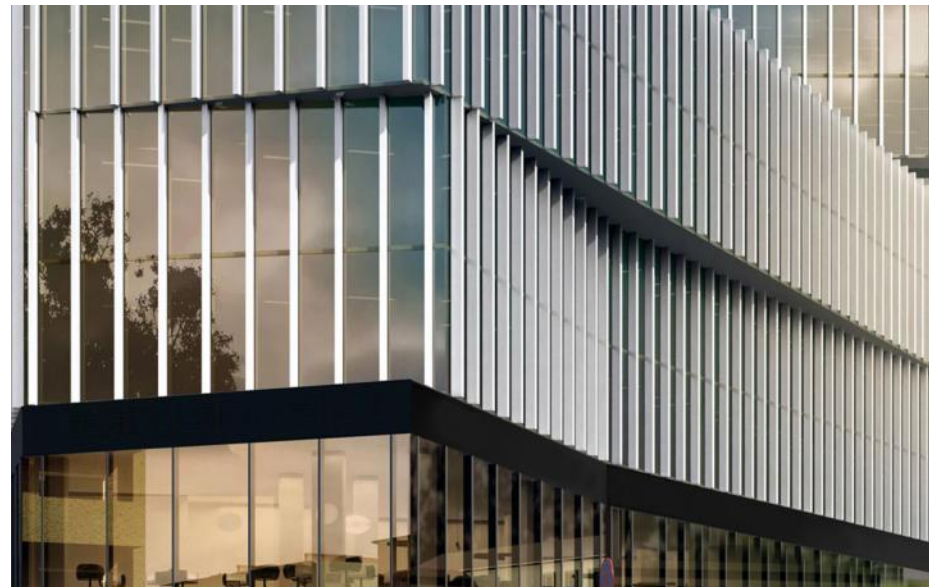


CURTAIN WALL PANELS:

FIGURE R10.1.1B



Transparency at the ground floor level reveals the activity within the building, extending the public realm and enlivening the streetscape.



Variation in glazing types, frame depths and scale s of horizontal and vertical expressions heightens visual interest.

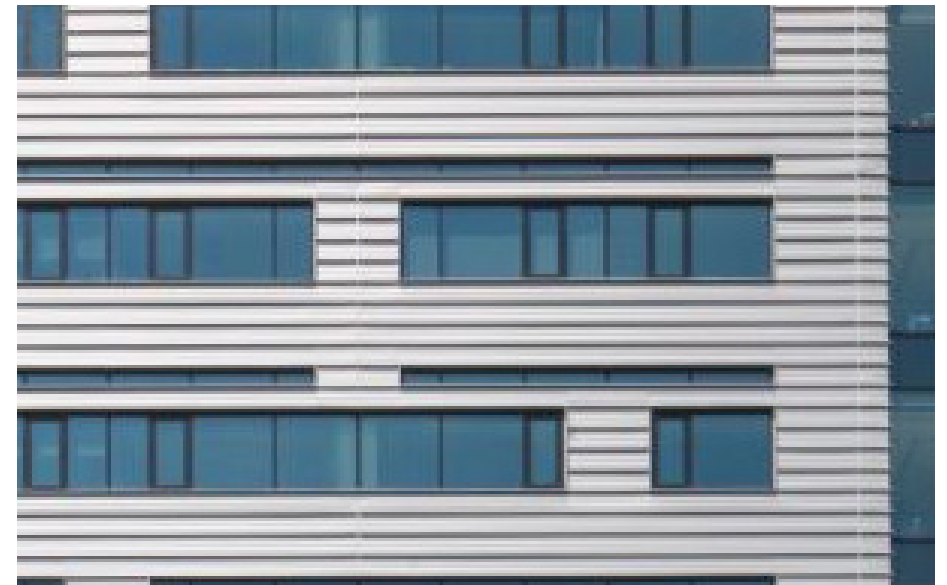
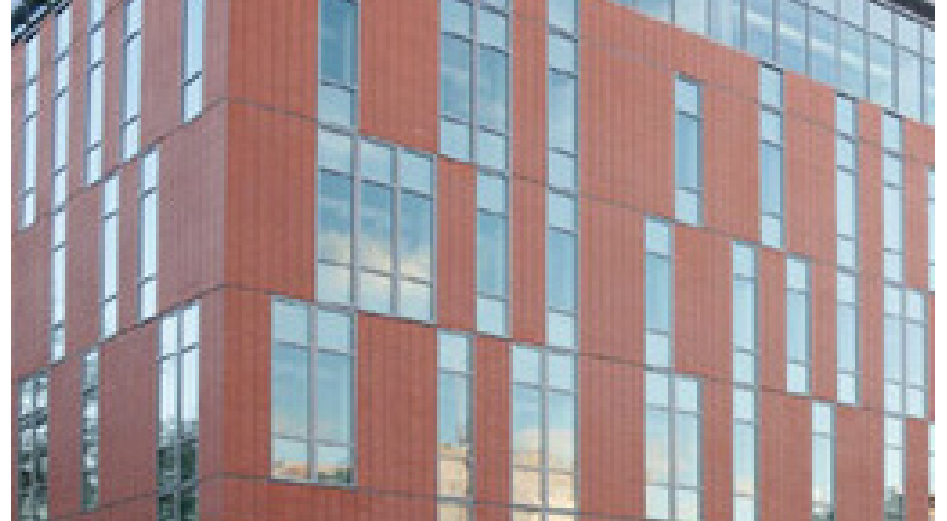
COMMERCIAL FACADES AND FENESTRATION GUIDELINES

GLAZED VOLUMES:



OPAQUE WALL AREAS:

FIGURE R10.1.1C



Above: Reveals and recesses in the facade breakdown the proportions of large facades. Below: Plane changes on the facade allow opportunities for exterior spaces and introduce a smaller scale of inhabitation on the facade.

Introducing solid wall cladding embeds the scale of occupants and interior spaces on the elevations in addition to allowing for complementary materials to the urban context.

RESIDENTIAL FACADES AND FENESTRATION GUIDELINES

STREET LEVEL CONDITIONS:

FIGURE R10.1.1D



Transparency at the ground floor highlights the residential lobby and animates the streetscape.



Well lit visible lobbies at the ground floor are designed to be the entrance to someone's new home. By creating a transparent and welcoming lobby, a strong sense of activity that is very inviting can be established along the street.



A podium and tower expression is enhanced through material changes and various breaks in the building. This strategy helps to reduce the scale of the building as it comes to the ground floor.

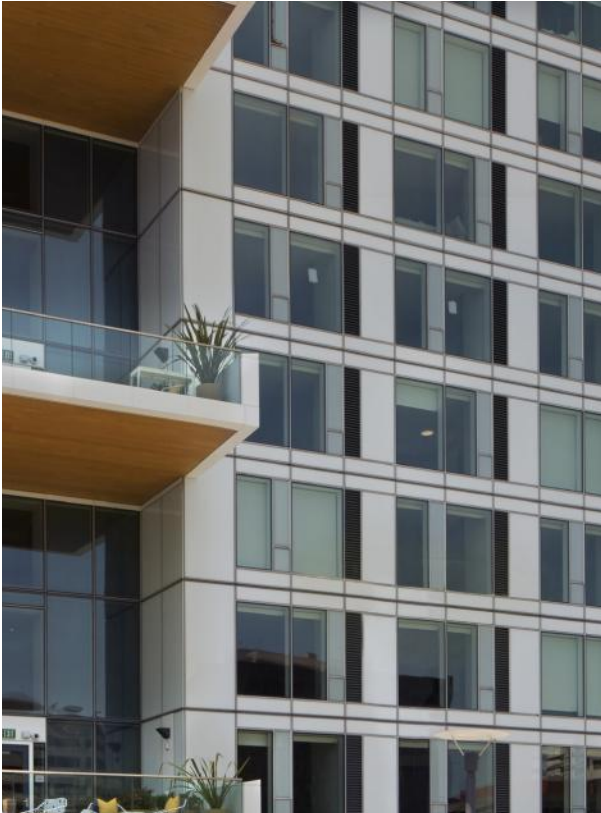
RESIDENTIAL FACADES AND FENESTRATION GUIDELINES

UPPER LEVEL CONDITIONS:

FIGURE R10.1.1E



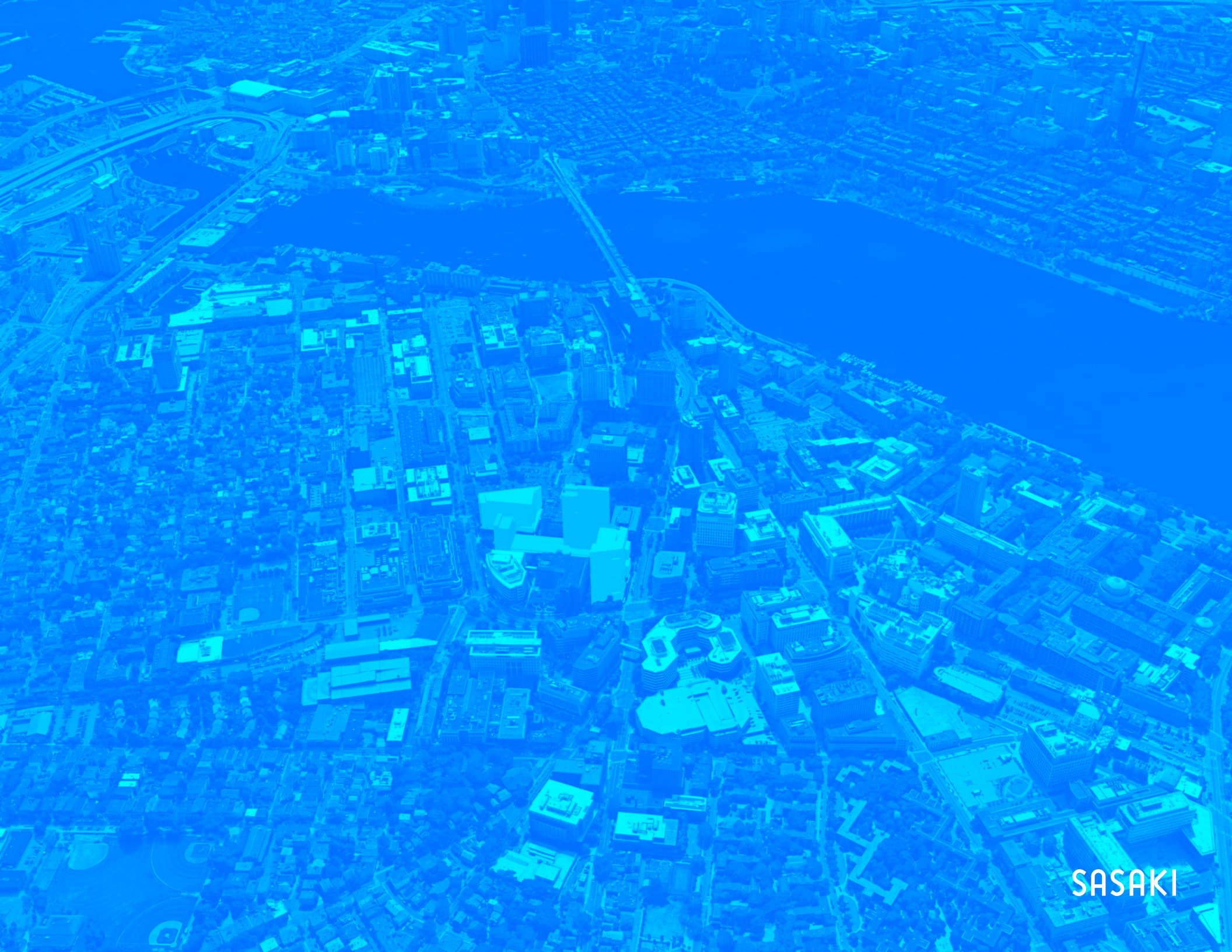
Inset balconies create visual interest and relief in large facades helping to break down the scale of the building as well as providing an outdoor space for residents to enjoy.



Punched window openings in the facade is a sustainable design approach that seeks to increase energy efficiency to meet the energy code and LEED requirements; while also respecting adjacencies to surrounding buildings. This is achieved through a combination of window glass and opaque materials which can be used architecturally to create interesting visual patterns.



Horizontal spandrels and other pattern facades can be used to accentuate thinner proportions within the building. These strategies work in combination to break down the scale of the mass.



SASAKI