

MIT VOLPE FINAL DEVELOPMENT PLAN

Volume 2

Planning Board Number - PB368

Submitted to: City of Cambridge

Submitted by: Massachusetts Institute of Technology (MIT)

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Volume 2, Section 1: PUD-7 Requirements

Per Section 13.91.2, within the Master Plan Area, the locations of streets and open spaces, the quantities of proposed land uses, and general building envelopes, locations and heights shall be indicated in sufficient detail that the Planning Board can reasonably assess the impact of the Master Plan and its general consistency with the Master Plan Criteria set forth in Section 13.91.4 and the guidance provided in the PUD-7 Guidelines and Principles.1 At a minimum, a Development Proposal and subsequent Final Development Plan for a Master Plan Area must contain the components included below.

¹ For the purposes of this Application, unless otherwise specified herein, the term "Section" shall be deemed to refer to a specific section of the City of Cambridge Zoning Ordinance (the "CZO").

A.
SITE
ORGANIZATION
AND
DEVELOPMENT
PLAN

A. Site Organization and Development Plan

Describe how the Master Plan Area is divided into distinct building sites (including any Government Owned Lot), streets, and open spaces and their development characteristics, including potential uses and Gross Floor Area (GFA).

The overarching goal of the Project is to create a welcoming, connected innovation environment, establishing a vibrant, diverse, inclusive, mixeduse district that provides opportunities for shared discovery, community and collaboration. It will be a social mixing bowl of people, events and activity.

The Project's proposed highly interconnected and differentiated network of streets and public realm spaces—its streets, squares, parks, and courts—constitute the plan's fundamental organizing principle. As shown on Figure A3: Street Ownership Plan, Figure A4: Site Context Map - PUD-7 District, and Figure A5: Existing Conditions Plan, today the Site is a superblock, with little to no public access and streets that are controlled by several different owners.² The Project anticipates breaking down the superblock and developing an urban grid that is continuous with the streets of Kendall Square and with connection points to adjacent developments and uses. The plan creates or completes connections among the neighborhoods of East Cambridge, Wellington-Harrington, The Port, MIT and Kendall Square. It maximizes permeability for pedestrians, cyclists, workers, residents and neighbors and it will create a more understandable and accessible district for regional visitors.

Key to weaving the Project into the fabric of Cambridge is the establishment of a diverse, connected network of open spaces, strategically

located to draw the public into and through what will be a new swatch of that fabric. This is combined with a set of proposed streets that break down the scale of the existing block and restore eastwest and north-south connections through the Site, including connections along the Government Owned Lot. This proposed network, including detail on the realignment of Fifth Street since the initial filing, is shown on Figure A6: Alignment of Fifth Street, and Figures A7 and A8: Site Development Plan - Street Network and Open Space.

The streets are designed to enhance public life in Kendall Square by providing a continuous and welcoming public realm that is shaded, comfortable, safe, and lively—during the day and into the night. The streets, parks, and squares will support a wide range of outdoor uses, and they will be enlivened by pedestrian-oriented retail and active uses located in the ground floors of the surrounding buildings. These spaces will create a varied, yet continuous public realm that gives the district permeability, porosity, strong view corridors, and a palpable and unique identity for Kendall Square. All streets are designed to support high-performance street tree installation to ensure the presence of a long-term urban canopy. As the Project is built out and matures, MIT will attain or exceed the City's goals for a continuous tree canopy on its streets and within its open spaces. The Project's streets, squares, and

² Of note, 303 Third Street owns significant portions of Potter Street and Fifth Street, subject to easement rights benefitting the Development Parcel (Figure A1: Survey - Volpe Property).

parks will all permit public use and character.

The Project will introduce four new parks to Kendall Square and the City of Cambridge which will provide a network of diverse and engaging public open spaces.

- The Third Street Park will be a new major park located at the most public corner of the development at the northwest corner of Broadway and Third Street. The inclusion of this park at this location is a direct response to community input. The Third Street Park will be bounded by streets on three sides underlining its public accessibility, and its location at the southeast corner of the Project will maximize its solar exposure. At approximately one acre, Third Street Park will be characterized by an open lawn which can be used for informal games, community gatherings and passive recreation.
- The Community Center Park will be adjacent to the Community Center and will provide space for related activities including recreation for residents, families, seniors, outdoor classroom activities, and flexible space for entertainments and games. Its location diagonally across Broad Canal Way from the Third Street Park will enable the two spaces to work together for larger community events.

- The Sixth Street Park, directly abutting the southerly half of the Loughrey Walkway/Kittie Knox Bike Path, will expand the public nature and activation of this important and wellutilized public walkway. This park will include active recreation spaces such as a 3-on-3 basketball court, a dog run and children's play space.
- The Binney Street Pocket Park, between Binney Street and Munroe Street, will host shared community amenities and provide a protected tot lot for families and neighbors, as well as short-term bicycle parking.

All these spaces will serve as a vital connection between Kendall Square and the greater East Cambridge neighborhood. Not only do these significant open spaces establish a network that permeates the Development Parcel, they are intentionally open along the Development Parcel's perimeter, creating urban green space that is openly shared with neighboring buildings and streets. Each planned building on the Development Parcel has been carefully sited to allow open space to permeate the larger site. For example, the revised location of the Community Center creates more continuity with Third Street Park. Locating this community-focused building slightly inboard of the busiest urban corner will draw the public into the heart of the development while using the park as a buffer between the Community Center and the

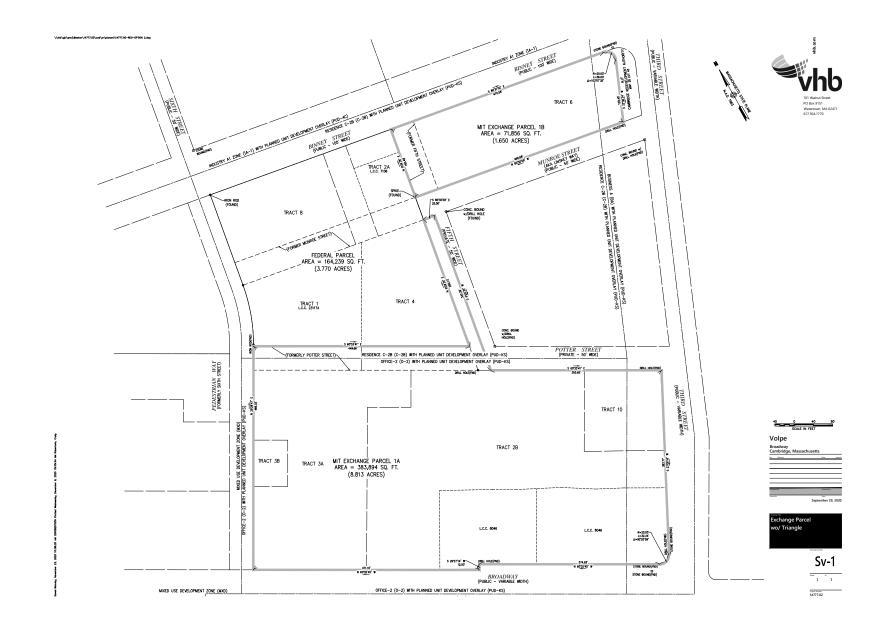
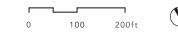
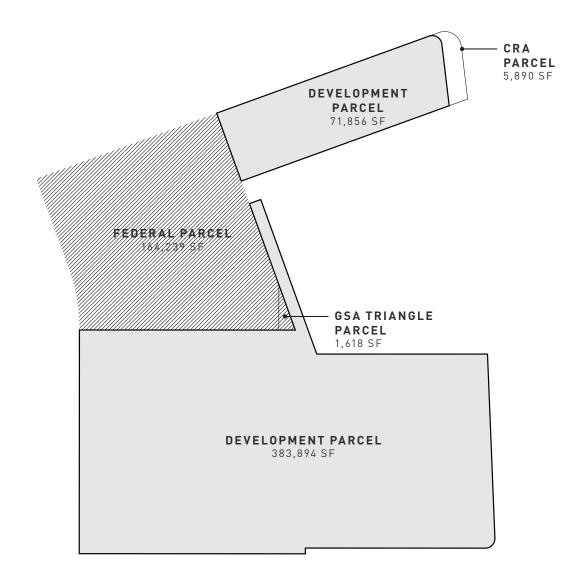


Figure A1: Survey - Volpe Property





*ALL SQUARE FOOTAGE FIGURES ARE APPROXIMATE

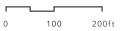
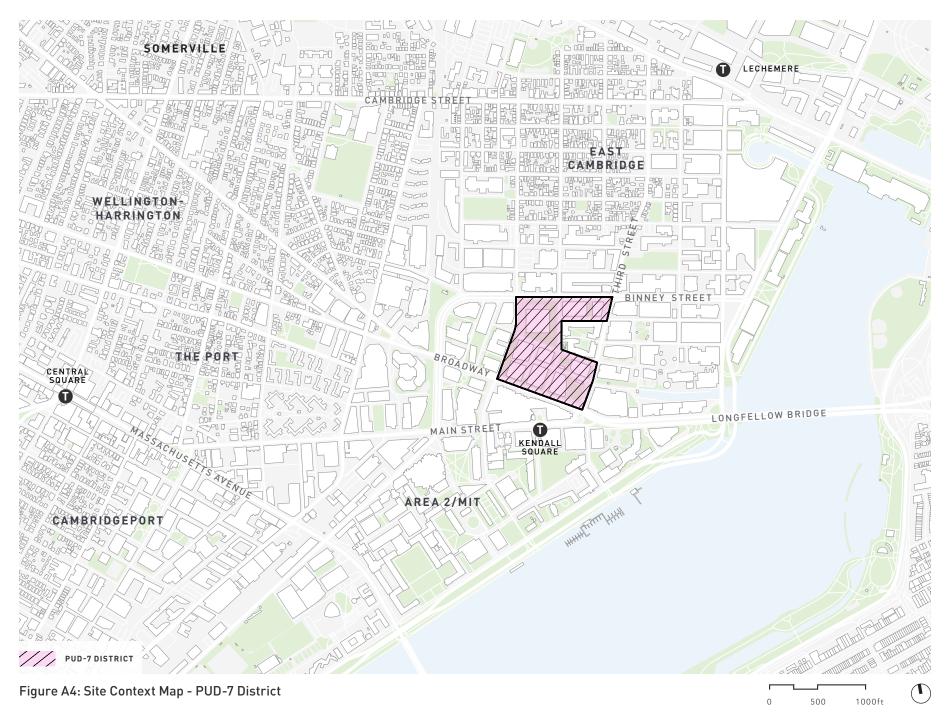




Figure A3: Street Ownership Plan





bustle of Broadway and Third Street. Similarly, the government has designed its Government Owned Lot with an art lawn along Fifth Street on which the government intends to permit public use.

Urban Design Principles

It is an extraordinary opportunity within a mature city and neighborhood to develop significant new elements of the public realm that will create inclusive pathways, open spaces and a civic gathering space, all for diverse stakeholders. The Project is planned around several complementary and specific urban design principles for placemaking.

- Continuity start with existing people and places, streets and pathways, surrounding land use, and open space corridors.
- **Identity** provide a strong visual identity by the continuity in alignment of building facades and the relationships of built form and open space.
- **Diversity** provide a mix of uses that attract diverse users from the neighborhood and City, from residents, workforce and guests, from science and technology, and from retail, dining and entertainment.
- **Proximity** build things close together on the ground - including the Project's open spaces

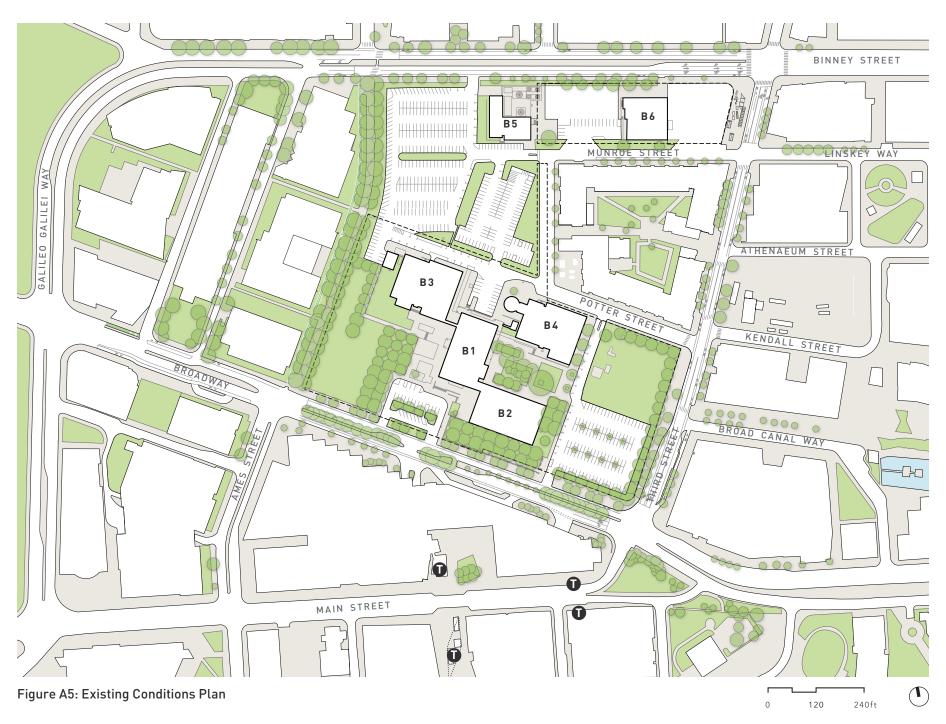
- and passageways like rooms that form a coherent public realm.
- **Inclusion** make the pedestrian environment and the public-facing uses welcoming by connectivity and permeability to adjoining districts.
- **Scale** divide the existing block into a grid of small walkable blocks.

Continuity

The urban blocks are largely defined by the continuity or extension of existing streets and passageways:

- Fifth Street will now continue from Binney Street to Broadway:
- Potter Street will extend beyond its current configuration to Sixth Street Park near the Loughrey Walkway/Kittie Knox Bike Path; and
- Broad Canal Way will extend from the Broad Canal across Third Street through the Development Parcel to Kendall Way, with a visual anchor at the proposed Entertainment Venue and further to Sixth Street Park near the Loughrey Walkway/Kittie Knox Bike Path through a covered passageway.

The important north/south pedestrian connections of the Sixth Street Park and Loughrey Walkway and



the "green corridor" of Fifth Street and proposed Volpe Art Lawn at the US DOT Volpe Exchange Project are continued and enhanced through the Site. Finally, the defining open space at Third Street and Broadway is located and configured as the civic square in Kendall Square – a large urban room that creates a heart for Kendall Square.

Identity

As shown on Figure A9: Site Development Plan -Uses and Figure A10: Use Distribution by Building Site, the six orthogonal blocks south of Potter Street are the location for three commercial buildings, three residential buildings and the Community Center at the base of R1. The Binney Street parcel is the location for one commercial and one residential building. The building facades respond to a consistent "build-to" datum on the interior of the Development Parcel as well as on the Development Parcel's perimeter streets -Broadway, Third Street and Binney Street. This simple and regular alignment of building facades gives the public realm and open spaces a strong visual identity and legible form as a foundation for the Development Parcel's civic structure.

Diversity

The mix of commercial buildings and residential buildings - four of each - provide diverse activity throughout the day, week and year. Street-level

retail, dining and entertainment will provide a citywide and regional destination that contributes to the diversity of quests, vitality and authenticity when these tenants and this activity is both locally based and programmed to reflect a world-class innovation cluster.

Proximity

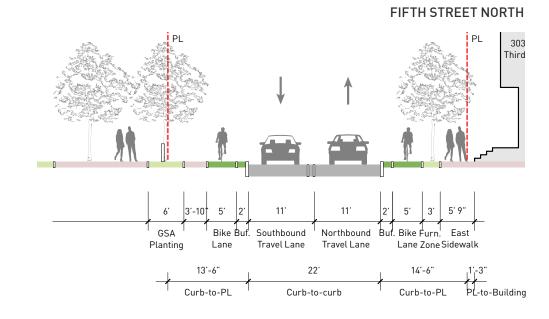
The Project provides a grid of streets and urban street walls that do, in fact, "build things close together on the ground," promoting the walkability and creative collisions that are essential to placemaking in an innovation district. In addition, these block dimensions and building street walls constitute the vertical surfaces that frame open space in three dimensions.

Inclusion

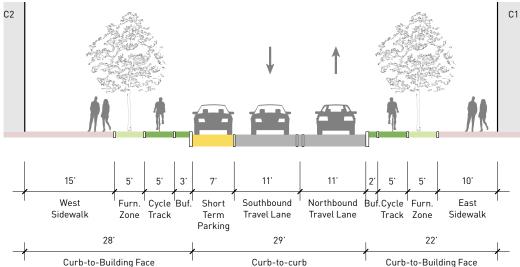
The Project includes a grid of publicly-accessible passageways that connect to public streets and walkways, thereby inviting and welcoming access. The street-level program is dominated by publiclyaccessible uses of retail, dining, entertainment, and other active uses, and the major open spaces are adjacent to public ways; these attributes promote unrestricted and inclusive participation and use by adjoining districts.

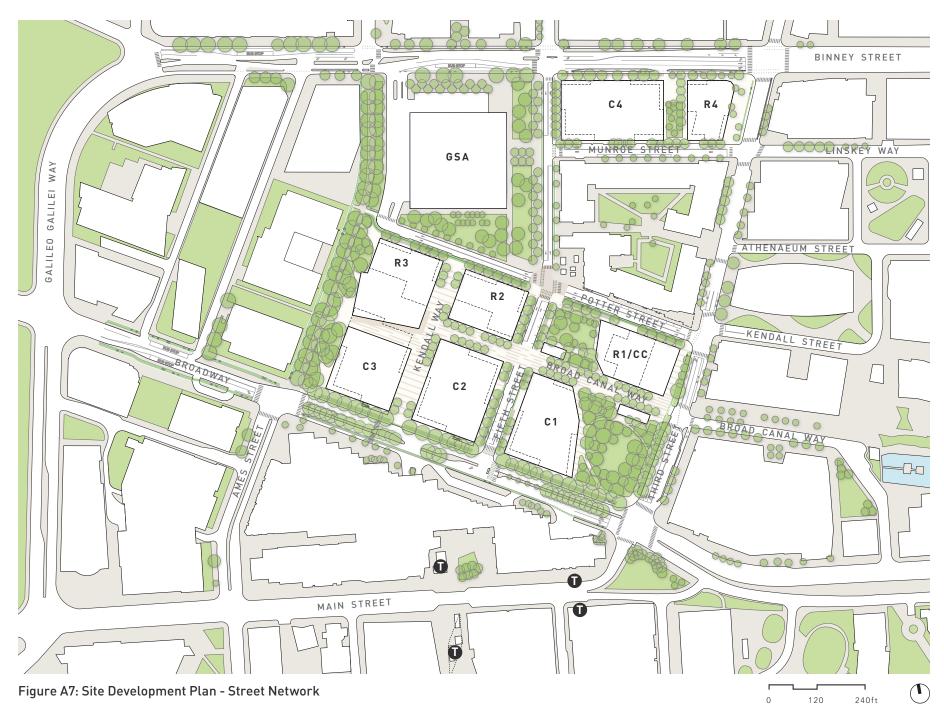
POTTER STREET R2 R1/CC BROAD CANAL WAY STREET C 2 C 1 BROADWAY

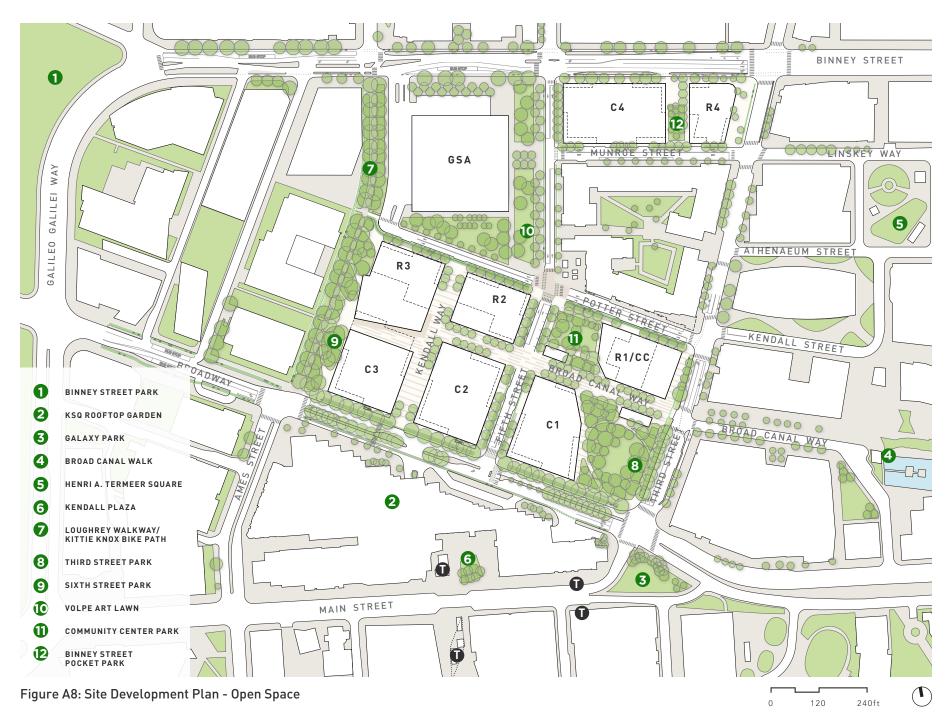
Figure A6: Adjustment of Fifth Street











Scale

The Project divides the existing superblock into a grid of small walkable blocks with a network of open spaces connected to the surrounding neighborhood, and continuity of street-level uses along Broad Canal Way, Third Street, Broadway and Binney Street.

By extending Broad Canal Way deep into the Development Parcel as a multi-modal, pedestrianfocused street that can be closed off to vehicular traffic, the Project emphasizes the Broad Canal and increases the sense of connectivity to the Charles River with other properties and public amenities situated to the west of the Development Parcel. The introduction of active ground floor uses on four sides of the proposed new buildings, including small local independent businesses, recreation, live music, dining and makerspaces, will energize each block, engage with the surrounding neighborhood, and will be specific to Kendall Square and East Cambridge. By planning for a diverse mix of residential, lab and office, retail and community uses, the Project will become part of the East Cambridge neighborhood and an integral piece of the City. Where there is currently an isolated parcel that is not open for public use or access, the Project will reconnect the Site to the City and serve as an extension of the existing fabric, in which the edges between existing neighborhood and new development are intentionally blurred.

This Development Plan provides a framework of site organization, massing, programming and impacts of the Project. Specific building and park designs will be presented to the Planning Board as part of the Design Review process on a parcel-byparcel basis. Figure L5: Site Development Plan -**Block Plan** shows preliminary parcel boundaries (at the ground level) as currently planned. These parcel boundaries may change as the Project evolves.3

³ The Development Parcel does not include 5,890 sf "CRA Parcel" or 1,618 sf "GSA Triangle Parcel" shown on Figure A2: Development Parcel, one or both of which may be added in the future. MIT notes that the parcelization for individual building parcels within the Development Parcel could change or be modified as buildout occurs. If changes are made to the configuration of individual building parcels during the course of the development of the Project, MIT will file revisions to the proposed parcelization with the Planning Board for its records, but no approval for such reparcelization shall be required from the Planning Board.

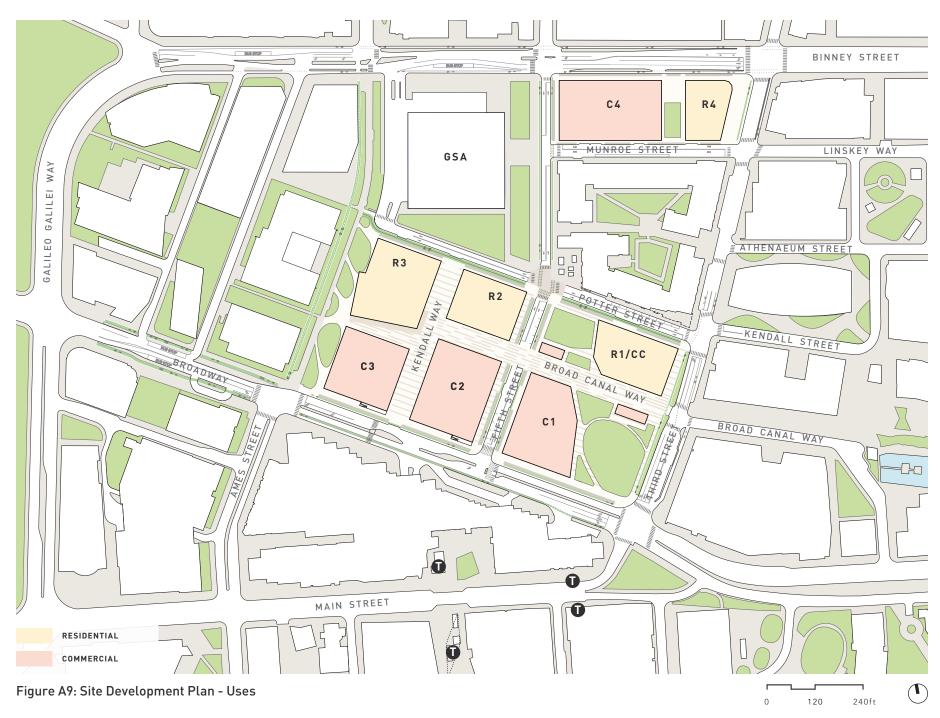


Figure A10: Use Distribution by Building Site				
	Residential SF	Commercial SF	Retail/Active Use SF	Total SF
R1	188,200		9,500	197,700
R2	292,600	'	10,000	302,600
R3	425,200		25,000 (Venue)	450,200
R4	222,000		5,000	227,000
C1		417,700	20,000	437,700
C2		506,700	15,000	521,700
C3		467,113	7,000	474,113
C4		365,400	5,000	370,400
CC			25,000	25,000
Pavilions			3,500	3,500
Total SF	1,128,000	1,756,913	125,000	3,009,913
Exempt Innovation		(83,663)		
Exempt Retail/ Active			(81,250)	
Exempt Community			(25,000)	
Total GFA	1,128,000	1,673,250	18,750	2,820,000

B. SITE MASSING PLAN

B. Site Massing Plan

Illustrate the height and massing of building volumes for each proposed building site and include studies of anticipated shadow and wind impacts resulting from building mass.

The Project includes eight (8) buildings, including four commercial buildings and four residential buildings. The Community Center is incorporated into the base of the residential building at the corner of Third and Potter Streets. One commercial building and one residential building are planned along Binney Street on the portion of the Site that is north of Munroe Street. The other six buildings are located south of Potter Street. The commercial buildings south of Potter Street are located along Broadway.

Location of Uses

On the south parcel, three commercial buildings, Buildings C1, C2 and C3 are located on Broadway. These bigger building footprints and larger building masses will address the wide boulevard that is Broadway. Although the most desirable location from a marketability standpoint, commercial buildings are purposely not located at the corner of Third Street and Broadway in order to locate a new park at that corner per community feedback.

Three of the residential buildings, Buildings R1, R2 and R3, and the Community Center located in the base of the R1 building are sited north of Broad Canal Way fronting along Potter Street, which today is more residential in nature. These more slender structures allow greater daylight penetration to Fifth Street and Volpe Art Walk and complement the adjacent residential use at 303 Third Street.

Binney Street has evolved over the last decade as a mixed-use street with large commercial buildings and a mix of historic renovations and new construction for residential use. The plan includes one commercial building, Building C4, on the west side of the parcel situated to the north of Munroe Street and one residential building, Building R4, on the east side of such parcel. The heights conform to the PUD-7 Zoning, putting the taller residential building closest to the corner of Third Street and Binney Street.

The Community Center is located at the lower floors of Building R1 with its entrance on the southwest corner in order to be centrally located in the neighborhood. Locating the Community Center in the base of Building R1 allows for the expansion of Community Center Park to more than half an acre and better connectivity to Third Street Park. Alternative sites were considered but the proposed location offers the best opportunity to attract the widest diversity of users.

Innovation Space measuring up to 167,326 square feet will be provided within the Development Parcel and will be located in at least two (2) of the commercial buildings. Innovation Space in any one building shall measure at least 20,000 square feet. MIT may modify the location of all or any of the proposed Innovation Space among the buildings situated on the Development Parcel and/or, as provided in 13.96.3(a)(3), in buildings situated, or to

be constructed, within one and one-half miles of the Development Parcel.

Massing Strategy

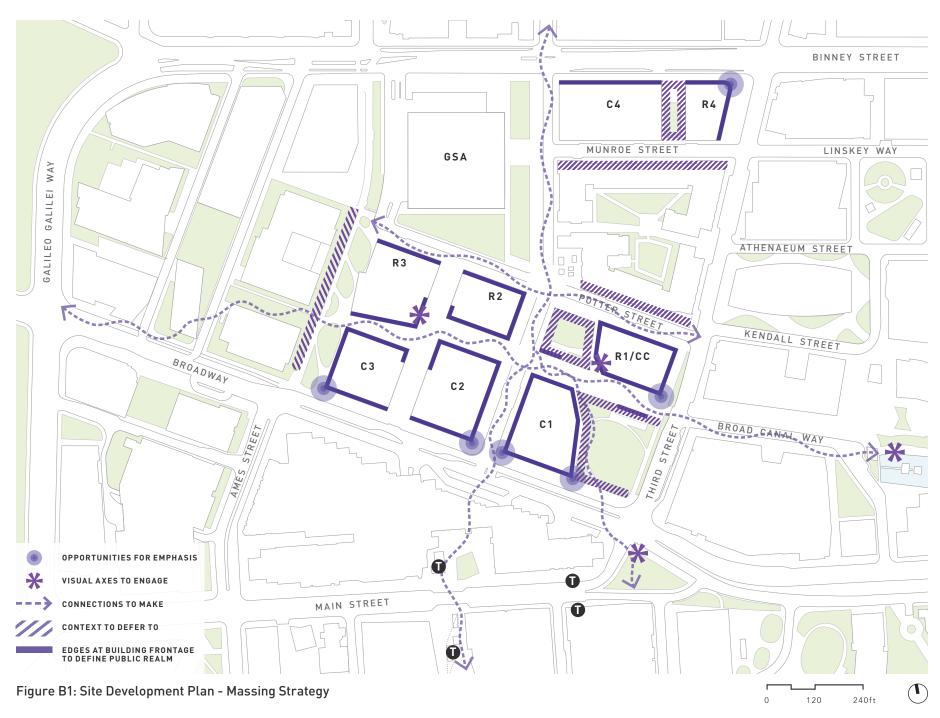
The building masses will be configured to define urban streets and to define urban space. Figure B1: Site Development Plan - Massing Strategy illustrates opportunities for the massing to respond to existing and planned gateways, visual axes, connections, context and public realm. The street wall frontage along Broad Canal Way is aligned block to block to define a special street, 55 feet in width, with direct connection to Broad Canal Way east of Third Street. Similarly, Buildings R1, R2, and R3 along Potter Street are aligned by a build-to line to create a regular urban grid that aligns with 303 Third Street and defines a specific edge to the open space surrounding the US DOT Volpe Exchange Project.

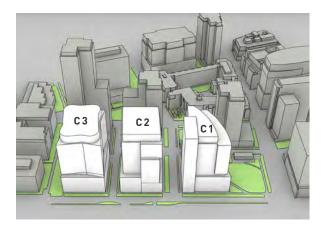
Buildings C1, C2 and C3 reinforce the existing street wall of Broadway. Building C1 and the Community Center Park expanding out from the ground floor of the R1 building break the grid to announce the special attraction that is the Community Center and to provide a pedestrian path from the intersection of Fifth Street and Potter Street to the intersection of Third Street and Broadway and on to Main Street and Wadsworth Street leading to the MBTA east headhouses and the Charles River.

Residential Buildings R1, R2 and R3 have smaller footprints with more light and air around the towers and are more suitable for the interior blocks. The massing of Building R1 creates a narrow tower in the north south direction, preserving views for the permanent residents of 303 Third Street who are located at the southwest and southeast corners of 303 Third Street.

The buildings on Binney Street are regular in massing. Building R4 acknowledges the important gateway corner of Third Street and Binney Street. Building C4 is a simple form that maintains the prevailing street wall and frames the civic space planned for the US DOT Volpe Exchange Project.

The site and massing plan anticipate and allow for block-by-block massing alternatives that will create diversity while all maintaining the principles of the urban street wall. Some of these massing examples are shown on Figure B2: Broadway Massing Variations.

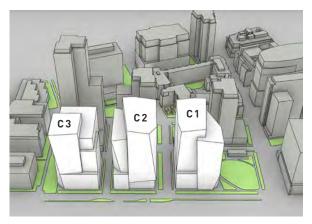




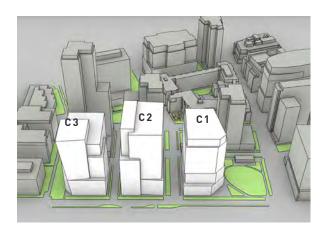
MASSING OPTIONS FROM DESIGN GUIDELINES



MASSING OPTIONS HORIZONTAL EXPRESSION



MASSING OPTIONS VERTICAL EXPRESSION



MASSING COMBINATION #1



MASSING COMBINATION #2

Figure B2: Broadway Massing Variations

Alternative Site Plan Analysis

MIT studied a number of alternative massings to optimize the plan to meet the goals of connecting Broad Canal Way to Sixth Street Park, Loughrey Walkway and the Kittie Knox Bike Path and activating the Broad Canal Way to draw pedestrians east-west through the site.

- MIT evaluated aligning Broad Canal Way to intersect Loughrey Walkway between the southeastern two buildings of the MXD site. As shown on Figure B3: Alternate 1, this alignment would require the exchange of R3 and C3, and more importantly, would eliminate the Entertainment Venue as a destination at the west end of Broad Canal Way, greatly reducing the viability of retail, dining, and entertainment along Broad Canal Way west of Fifth Street.
- MIT also evaluated aligning Broad Canal Way straight to the Sixth Street Park/Loughrey Walkway/Kittie Knox Bike Path. Again, as shown on Figure B3: Alternate 2, this alignment would eliminate the Entertainment Venue as a destination at the west end of Broad Canal Way, greatly reducing the viability of retail, dining, and entertainment along Broad Canal Way west of Fifth Street.

As described in Section F: Ground Floor and Activation Plan, MIT strongly believes that the Entertainment Venue is an important component of the plan as it will be designed to be a visible from multiple directions, will act as a magnet to the intersection of Broad Canal Way and the Sixth Street Park, will enhance viability of active uses along Broad Canal Way and provide activity along the Sixth Street Park/Loughrey Way/Kittie Knox Bike Path into the evening. Therefore, the preferred alignment of Broad Canal Way is as shown on Figure A7: Site Development Plan -Street Network.

MIT also analyzed moving Kendall Way to the west, creating two small blocks along Loughrey Walkway. In this analysis as shown in Figure B3: Alternate 3, Building R2 and R3 would be located on these blocks and C3 would be relocated to the current site of R2. This Plan change would make Broad Canal Way discontinuous in alignment and would very negatively impact the viability of retail, dining and entertainment west of Fifth Street. Therefore, the preferred location of Kendall Way is as shown on Figure A7: Site Development Plan -Street Network.



Figure B3: Alternate Site Plan Analysis

Building Heights

Heights will be consistent with that which are allowed by the PUD-7 Zoning as shown on Figure B4: PUD-7 Zoning Heights. Conceptual height distribution of the Project square footage is shown on Figure B5: Conceptual Project Heights and is shown in the existing context on the Figure B6: Context Building Heights. Project heights may evolve as buildings are designed and reviewed through the Design Review process. Height variety can be achieved by differences in required floor to floor heights for office versus different types of research, by differences in the number of floors between different commercial buildings and specialty floors on different buildings.

MIT requests that Buildings C2 and C3 can be constructed to a height of up to 280 feet, provided

that the GFA on the floors above does not exceed 15,000 square feet, which limitation shall not include any square footage that is excluded from the calculation of GFA under the CZO. This will contribute to variety of height along Broadway. Additional variation in heights is desirable and will be explored as design progresses as is more specifically set forth in Volume 1, Section 3.C of this document. The Final Development Plan contemplates allowing increases in height of up to 10% above the approved heights in the Final Development Plan by the Planning Board during the Design Review process and of more than 10% by Minor Amendment.

Wind and shadow impacts are included in Section K: Environmental Comfort Plan of this filing.

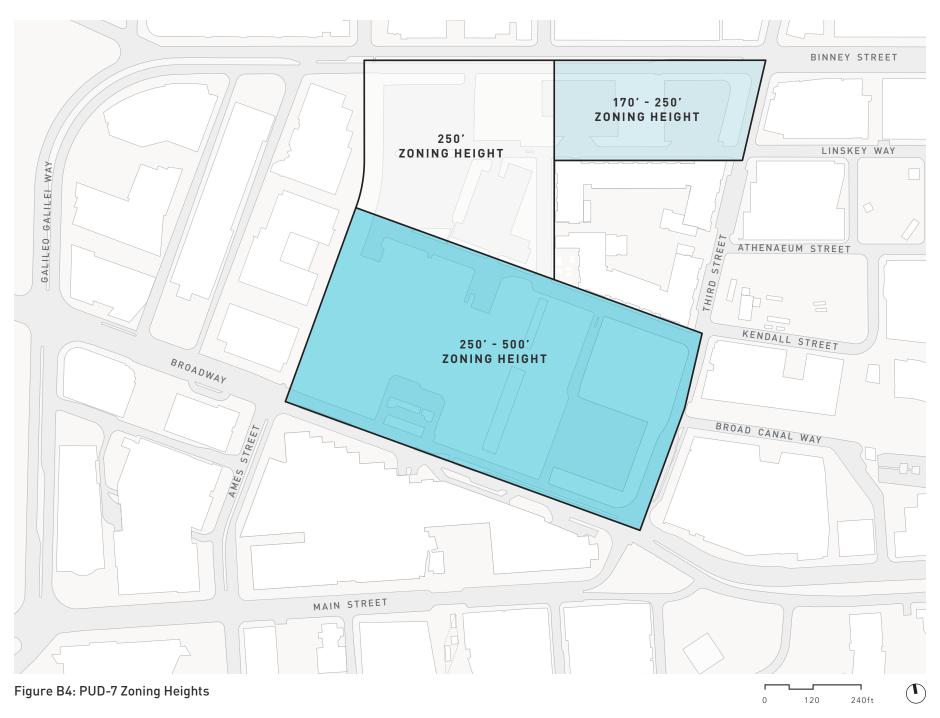




Figure B5: Conceptual Project Heights

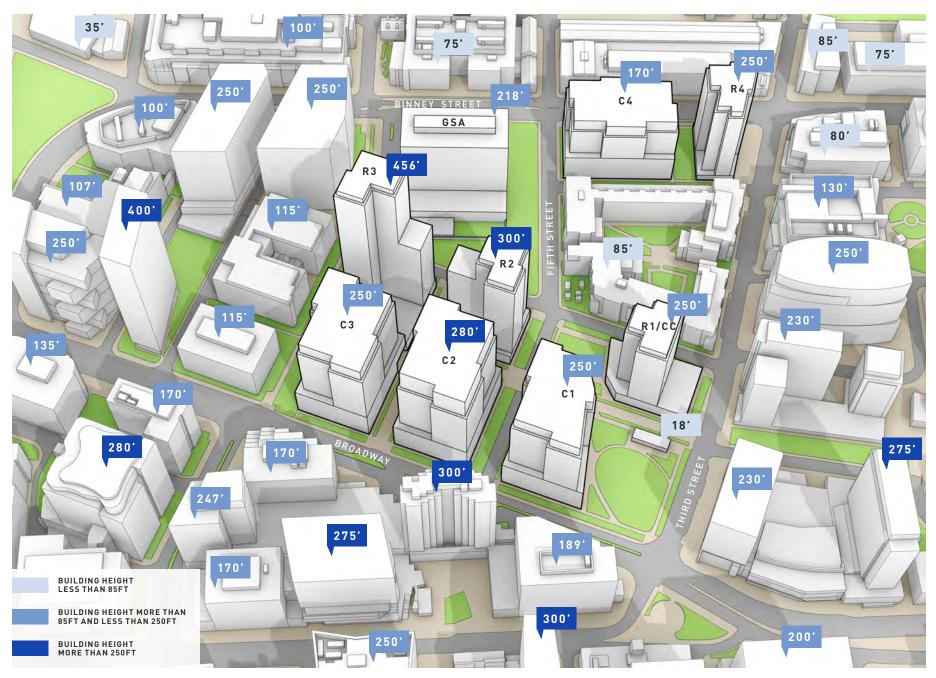


Figure B6: Context Building Heights

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C.
PARKING AND
LOADING PLAN

C. Parking and Loading Plan

Identify the locations of all parking facilities, bicycle parking facilities and facilities for loading or other vehicular service functions, and the number of spaces proposed at each location.

The Figure C1: Vehicular and Bicycle Parking Access Plan shows the locations of primary building entries, access to bicycle and vehicular parking facilities and loading facilities.

There are four below-grade parking entrances, three for the South Parcel and one for the North Parcel:

- one entrance on Fifth Street at Building C2
- one entrance on Potter Street at Building R1
- a second entrance on Potter Street at Building R3
- one entrance on Munroe Street at Building C4.

The parking entrance locations are strategically placed with regard to phasing of development and to siphon off vehicular activity on the perimeter of the site, and they minimize unnecessary vehicular circulation on shared streets internal to the Site. Each ramp provides access to a section of the garage that can be built and operated independently of the other sections. At C2, the entrance ramp is located on Fifth Street to preserve the useability of attractive retail corners around the block. The ramp on Potter Street is located at Building R1 to maximize open space in Community Center Park. The ramp at R3 is located to preserve uninterrupted curb along Potter Street between Fifth Street and Kendall Way. The entrance to parking on C4 is

located away from the southeast corner of C4 to maintain flexibility for active use of that frontage.

Presently, the entire 14-acre Site (including the Government Owned Parcel and the MIT Exchange Parcel(s)) contains 570 parking spaces that are used by the federal government. When constructed, the Project will be serviced by up to 1,759 parking spaces with on-site parking primarily located within two separate below-grade parking garages.⁴ The parking spaces associated with the government use will be reduced from 570 to 318 and will be relocated to the US DOT Volpe Exchange Project.

As proposed, the Project will be serviced by two separate below-grade parking structures, located in the northern (up to 360 spaces) and southern (up to 1,399 spaces) portions of the Development Parcel (Figures C3 - C5). The parking and service entries are located to maximize the activation of the Development Parcel while mitigating impacts. Parking ramps and loading docks are kept off of Broad Canal Way and parking ramps are kept off of Kendall Way, both of which are intended to be extensions of the publicly-accessible parks and open spaces on the Development Parcel. The south garage includes three separate garage entries that are located on Potter Street (two entries) and Fifth Street (one entry) to facilitate vehicular traffic distribution entering and exiting the Site and to allow for the garage to be built in phases. The

⁴ The parking numbers for the garages may be decreased if parking is located off-site in compliance with Section 13.95.

⁵ The northern portion of the Development Parcel refers to the parcel bounded by Munroe Street, Third Street, Binney Street and Fifth Street (the "North Parcel"). The southern portion of the Development Parcel refers to the parcel bounded by Potter Street, the Loughrey Walkway, Broadway and Third Street (the "South Parcel").

In addition, MIT is currently working with the owners of the existing below-grade parking garage situated below the residential condominium buildings at 285 and 303 Third Street (the "303 Third Parking Garage") to enter into a lease, license or other occupancy agreement to allow up to 250 parking spaces within the 303 Third Parking Garage to be utilized by the Project. In the event that MIT enters into such an arrangement with regard to the 303 Third Parking Garage, MIT proposes that the approved parking supply for the Final Development Plan would be reduced by the number of parking spaces that are the subject of the lease during its term without the need for further review or approval.

north garage includes one garage entry located on Munroe Street.

Limited on-street curb vehicular activity will be allowed as shown on Figure D12: Vehicular Plan -Curb Utilization (in Section D: Connectivity Plan) to support retailers and provide access to those who, due to age or ability, may be unable to walk or bike. The proposed plan can potentially accommodate approximately up to 27 short-term on-street loading/active curb/parking spaces (not including Binney Street, Third Street or Broadway). The plan identifies these spaces as "active curb" and "short-term loading" spaces – not simply "parking" spaces. These spaces are anticipated to be utilized by many different user groups, including those needing handicap-accessible parking, ride hailing services delivery drivers such as "UberEats" vehicles, and others in need of short-term parking for other purposes. These spaces will create an "active" zone as opposed to traditional on-street parking and will provide more inclusive access to the site for all users. The proponent will make final adjustments at the Design Review process for each building/open space. The combined number of vehicle parking spaces in the Project below grade garages and short term on street parking will not exceed the proposed 1,759 space limit.

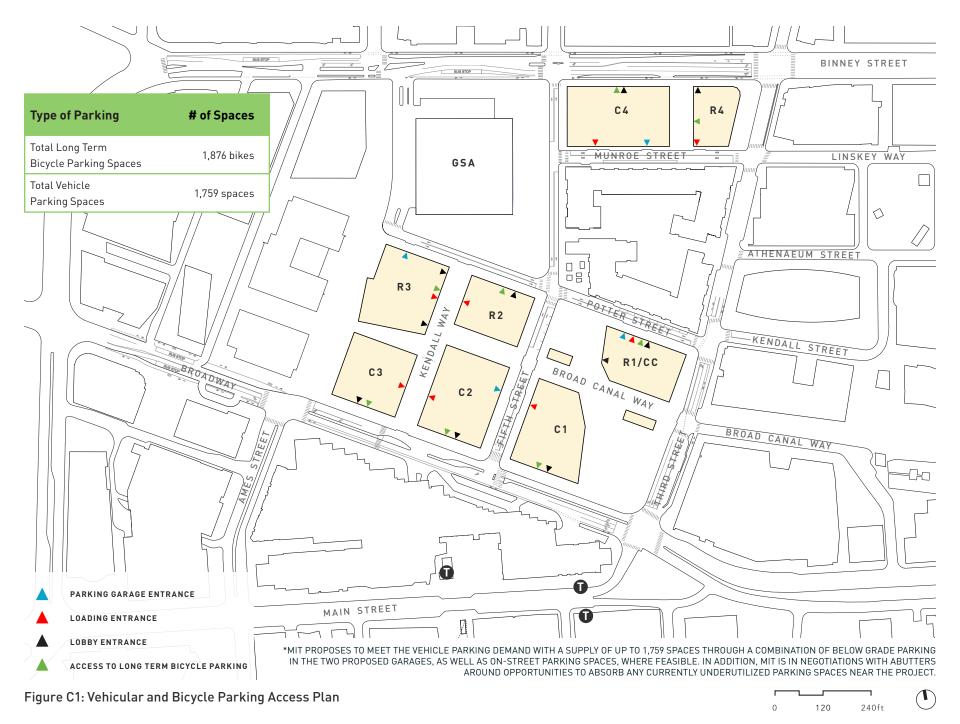
The approximately 1,876 long-term bicycle parking spaces will be distributed across the P1 level of the two parking garages and each building will

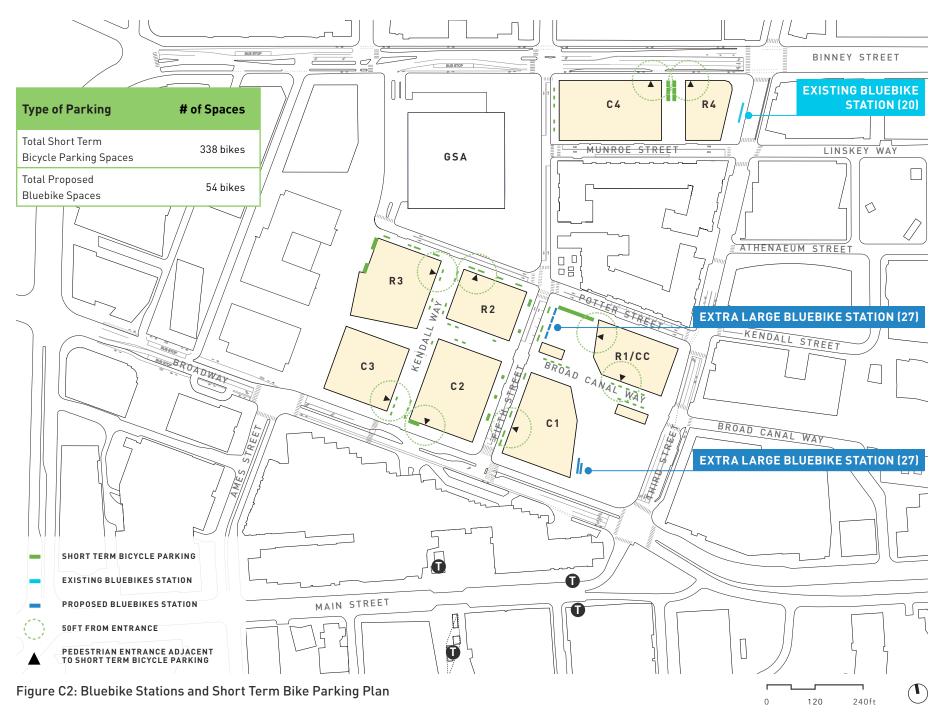
include access to bicycle storage. Signage and other parking management strategies will be implemented to ensure that long-term parking users understand where parking is available within the site. There will also be 338 short-term bicycle parking spaces located near buildings' primary entries consistent with Article 6.100 of the CZO but concentrated in centralized facilities in front of the Community Center, near Sixth Street Park behind R3, in pocket park between C4 and R4 Binney Street to the extent possible. Location of Bicycle Parking is illustrated in **Figure C2: Bluebike Stations and Short Term Bike Parking Plan**.

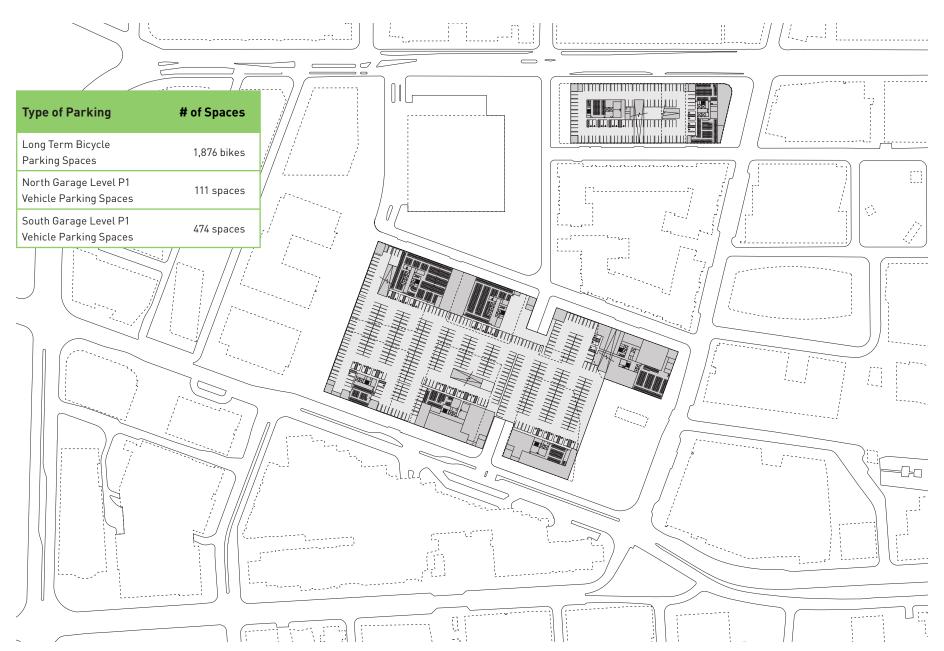
Loading facilities for Buildings C4 and R4 are located on Munroe Street while loading facilities serving Building C1 are located on Fifth Street. Servicing for Buildings C2/C3 and R2/R3 is proposed off Kendall Way, with residential loading accessing Kendall Way loading docks from Potter Street (north) and commercial loading accessing Kendall Way from Broadway (south), as illustrated in Figure C6: Loading Route Plan. Kendall Way does not allow through travel for vehicles between Potter Street and Broadway and is limited to loading access and usage south of Broad Canal Way, with the goal of reducing cut-through travel on this pedestrian/bicycle focused space and keeping heavier commercial loading activity away from Potter Street and the 303 Third residences. The final location of loading facilities will be reviewed

and defined during the Design Review process for each site.

MIT studied locating the loading below grade but, in addition to being extremely costly, this strategy was found to be undesirable because, due to the long length of the ramp and truck maneuvering requirements, it would require Buildings C2 and C3 to be the first two commercial buildings to be constructed. This would lead to a front-loading of those buildings and a subsequent delay of the construction of the R1/Community Center buildings, the Third Street Park and the Community Center Park currently planned to be prominent in the first construction phase.



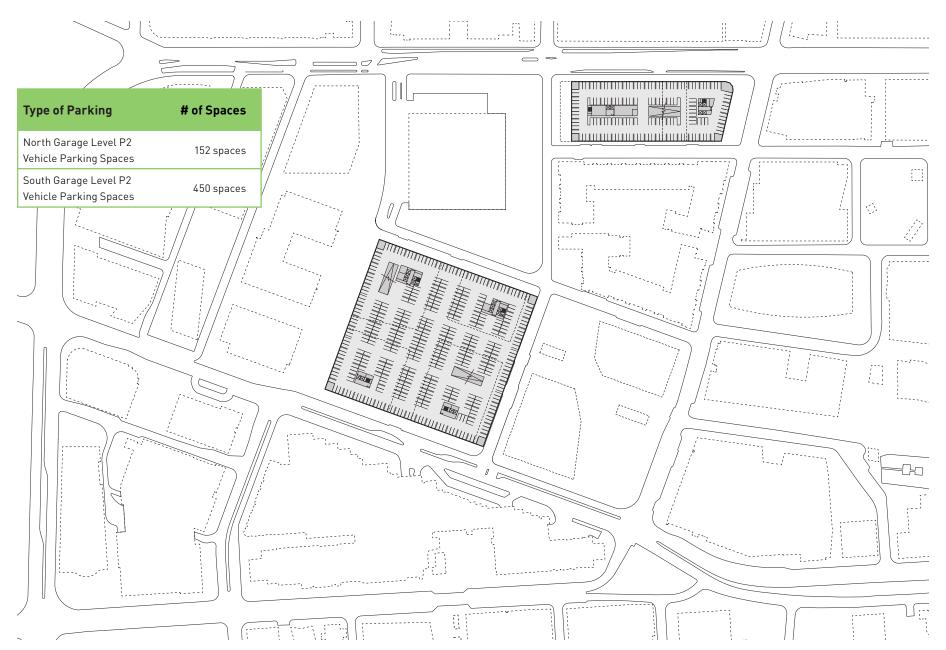




*MIT PROPOSES TO MEET THE VEHICLE PARKING DEMAND WITH A SUPPLY OF UP TO 1,759 SPACES THROUGH A COMBINATION OF BELOW GRADE PARKING IN THE TWO PROPOSED GARAGES, AS WELL AS ON-STREET PARKING SPACES, WHERE FEASIBLE. IN ADDITION, MIT IS IN NEGOTIATIONS WITH ABUTTERS AROUND OPPORTUNITIES TO ABSORB ANY CURRENTLY UNDERUTILIZED PARKING SPACES NEAR THE PROJECT.

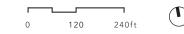
Figure C3: Parking Facilities - P1 Plan

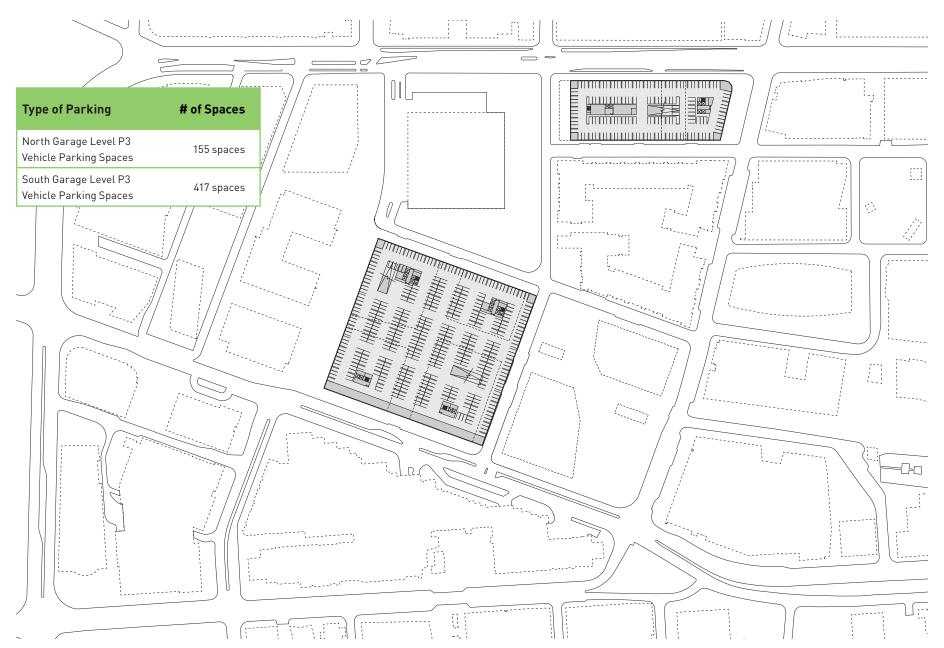




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Figure C4: Parking Facilities - P2 Plan





*MIT PROPOSES TO MEET THE VEHICLE PARKING DEMAND WITH A SUPPLY OF UP TO 1,759 SPACES THROUGH A COMBINATION OF BELOW GRADE PARKING IN THE TWO PROPOSED GARAGES, AS WELL AS ON-STREET PARKING SPACES, WHERE FEASIBLE. IN ADDITION, MIT IS IN NEGOTIATIONS WITH ABUTTERS AROUND OPPORTUNITIES TO ABSORB ANY CURRENTLY UNDERUTILIZED PARKING SPACES NEAR THE PROJECT.

Figure C5: Parking Facilities - P3 Plan



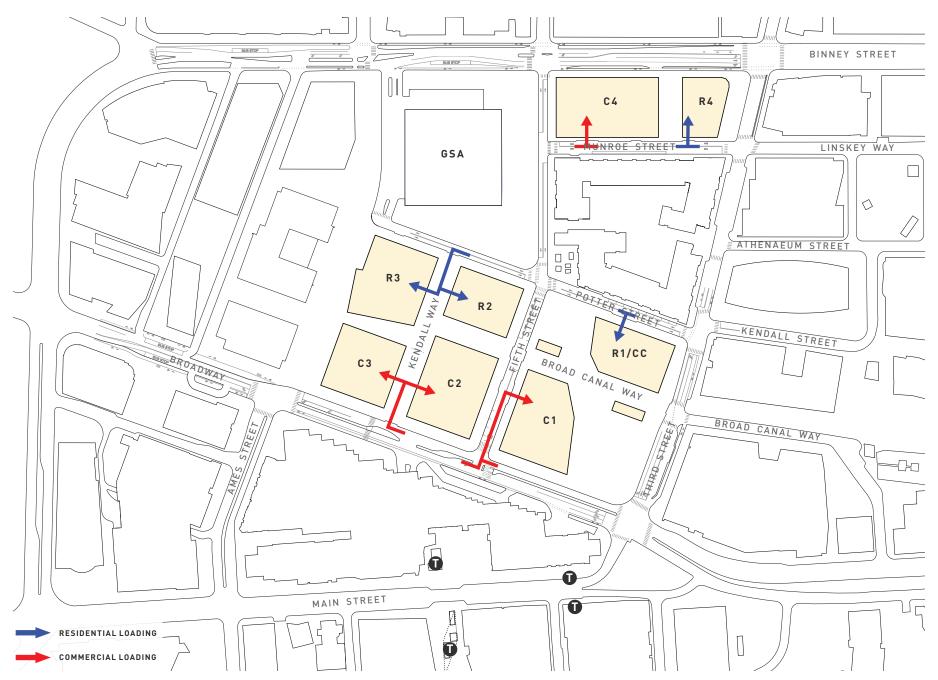


Figure C6: Loading Route Plan

D. CONNECTIVITY PLAN

D. Connectivity Plan

Illustrate all pedestrian, bicycle and vehicular circulation routes within the Master Plan Area, their connections to nearby public circulation routes and destinations outside the Master Plan Area, and approximate locations of access and egress points on each building and parking facility within the Master Plan Area.

The Project provides the opportunity to create or complete pedestrian, bicycle and vehicular connections between and among the neighborhoods of East Cambridge, Wellington-Harrington, The Port, MIT and Kendall Square. It maximizes permeability and enhances access to transit for pedestrians, cyclists, workers, residents and neighbors.

Figure D1: Illustrative Connections Plan and Figure D2: Connections to Surrounding Context **Plan** show how the basic site organization of the Project will complete connections between the East Cambridge community to the north with Kendall Square and the Charles River to the south and enhances the connections between The Port and Central Square to the west with the amenities and recreation along the Broad Canal and Broad Canal Way to the east.

As shown on the Figure D4: Pedestrian Connectivity Plan - Existing Conditions, the Project's immediate surroundings are characterized by small blocks and permeability. However, the existing Site is currently a superblock with little or no public access and acts as a barrier to pedestrian movement. Figure D5: Pedestrian Connectivity Plan - Proposed illustrates how the Project will create a Fifth Street connection that will include generous sidewalks on both sides and provide improved access for pedestrians from Binney Street through to the Marriott hotel,

Kendall Square and the Kendall/MIT MBTA Red Line Station as shown on Figure D3: Connections to Transit Routes. The Project will also create a connection via Kendall Way for pedestrians and cyclists to connect from Potter Street to Broadway, while limiting vehicle activity.

The proposed Project streets must meet the needs of all kinds of users, including bicyclists, pedestrians and vehicles, as they perform daily activities appropriate to an urban context including recreational strolling, walking to/from lunch or striding to/from public transit; bicycling for transportation, pleasure or exercise; and dropping off/picking up users of the Community Center or office, retail and restaurant workers all while maintaining the Project goals of vibrancy, connectivity and inclusivity. The streets will be fully integrated with the existing surrounding streets and with the City's Bike Plans. The City has proposed separated bike facilities along Binney Street and is developing plans for similar facilities on Third Street and Broadway, all of which provide connections to the regional bike network. Broadway and Binney Street provide connection to the Kittie Knox Bike Path. As part of the mitigation for this project, MIT will contribute to the design and construction of these facilities in collaboration with the City, and the improvements to the surrounding streets will be incorporated into the site design.

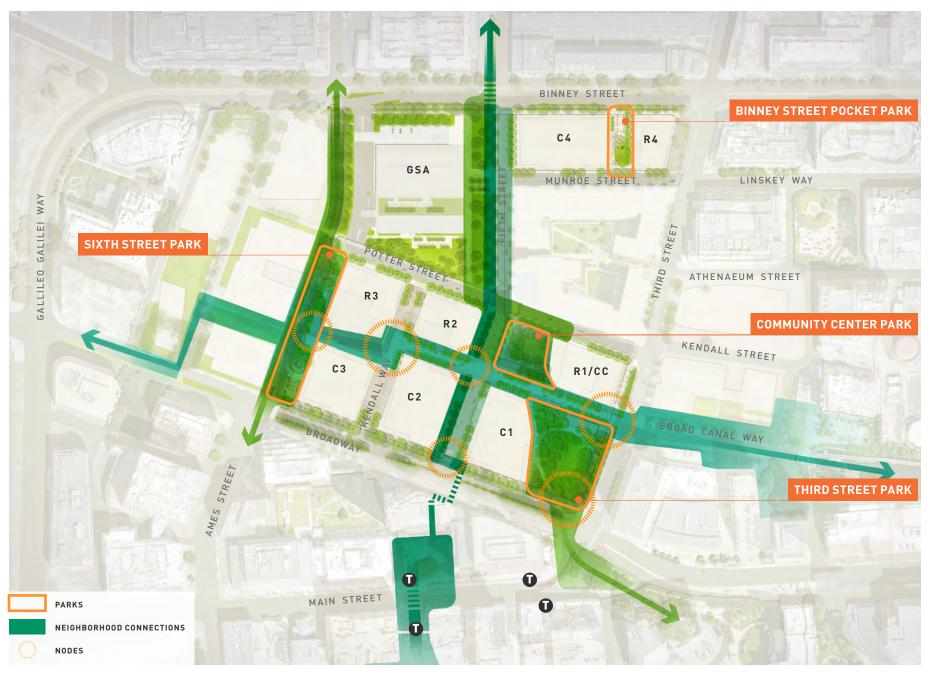


Figure D1: Illustrative Connections Plan

Of the internal Project streets, cycle tracks are also proposed on Potter Street and Fifth Street, while Broad Canal Way and Kendall Way are planned as shared streets with low vehicle volumes as described below.6

Broad Canal Way

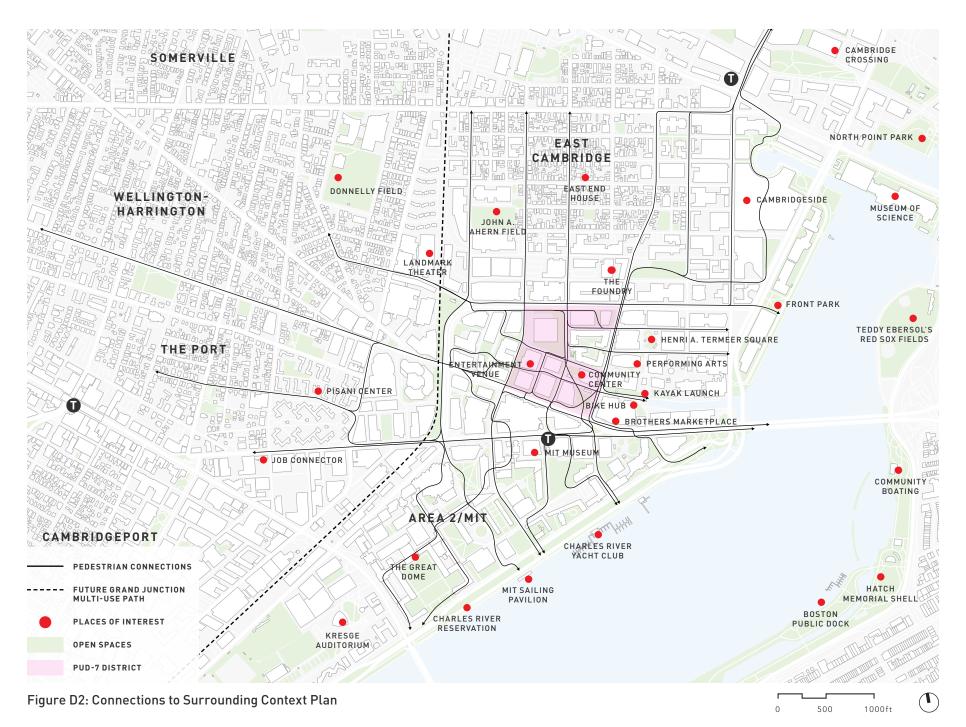
Broad Canal Way is a pedestrian-scaled street at the center of the Project that serves to connect to and bring the existing activity along Broad Canal Way east of Third Street into and through the Project site to connect to the Loughrey Walkway and Kittie Knox Bike path to the west. Broad Canal Way is envisioned to be a curbless street that will utilize high quality streetscape materials, textures and signage to guide pedestrians, bicycles and limited vehicles along the way. It is a street akin to what we might find in classic European communities where pedestrians and bicycles are given priority, easily able to cross from side to side as they make their way to local retailers lining each side. This is a welcoming, social street, full of vibrancy and bustling with activity. An Entertainment Venue will be prominently located at the west end of the street, a visual anchor that acts as a magnet to draw people from all directions. A 170-foot-long passage adjacent to the Entertainment Venue will allow pedestrians and bicyclists to connect through to Loughrey Walkway and Kittie Knox Bike Path and beyond into the MXD district. The Entertainment Venue will also be a beacon from the west, inviting pedestrians and bicyclists into the vibrancy of Broad Canal Way and its amenities, including the Community Center.

Broad Canal Way will be unlike any other shared street in Cambridge; it will be not only identifiable, but iconic. It will be characterized by many entrances to ground floor retail and will not include parking garage or loading dock entries. While pedestrians and bicycles will be given priority on this shared, curbless street, the design also accommodates limited vehicular traffic, zones of short-term on-street parking and pick up/drop off areas to support retail and its viability. This is compatible with the design intent as the best and most strollable retail streets have parallel parking. In addition, short-term on-street parking and pick up/drop off areas will provide access to those who, due to age or ability, may be unable to walk or bike. The Project is estimating that approximately 20 vehicles in the AM and PM peak hours will be traversing this street, indicating that this street can more than support bicycle pedestrian and vehicular access simultaneously.

Potter Street

Potter Street is also envisioned as a residential street, with sidewalks and a two-way cycle track on the southern side (enabled by the elimination of the proposed on-street parking along the south

⁶ As noted in Volume I, providing public easements in identified segments of Potter Street and Fifth Street will be subject to obtaining rights from the owners of the 303 Third Street Condominium, as necessary. MIT will undertake commercially reasonable efforts to secure easements for improvements to and public use of the portions of the above Streets owned by 303 Third Street. If, despite these efforts, MIT is unable to secure such rights from 303 Third, it will (a) provide written notice to the DPW and the Planning Board of such failure and (b) notwithstanding anything in the Final Development Plan to the contrary, coordinate modifications to the cycle tracks on Fifth Street and the layouts of Fifth Street and Potter Street with Cambridge DPW and will file the modified plan agreed to by MIT and DPW with the Planning Board as an update to the Final Development Plan, which modification shall be deemed part of the Final Development Plan without the need for any action by the Planning Board with regard to the same.



side of the Street). Existing on-street parking on the north side of the street that is controlled by 303 Third Street will remain. Potter Street will be characterized by residential buildings and their entrances and related public amenities and active uses on the ground floors on the south side. The uses will complement the 303 Third residential building and the US DOT Volpe Exchange Project open space on the north side. The Community Center will also be an important presence along this street at the ground floor of Building R1 with Community Center Park at the corner of Fifth Street. Vehicular access on Potter Street will terminate at the connection to the GSA driveway, while bicycle and pedestrian connection will continue to the Sixth Street Park, Loughrey Way and the Kittie Knox Bike Path.

With an estimated future peak hour volume of approximately 300-400 vehicles, the street will be primarily serving the adjacent land use activity. The two-way cycle track proposed on the southern side of Potter Street will create a safe connection for cyclists traveling east-west from Third Street to the Kittie Knox Bike path.

Fifth Street

Fifth Street will reestablish a neighborhood connection between Binney Street and Broadway. It will provide continuity for pedestrians using the US DOT Volpe Exchange Project's wide sidewalks, open space and Art Lawn on its west side between Binney and Potter Street. The plan includes separated one-way cycle track on each side of Fifth Street between Binney Street and Broadway which will be completely consistent with City standards as to be indistinguishable from surrounding public streets.7

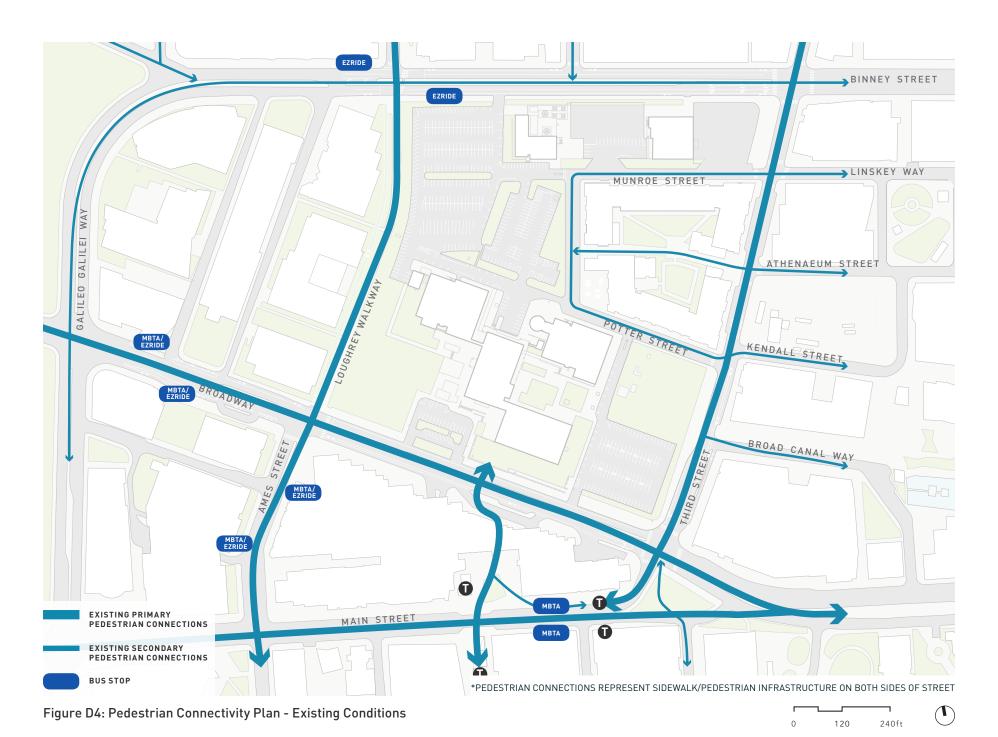
Kendall Way

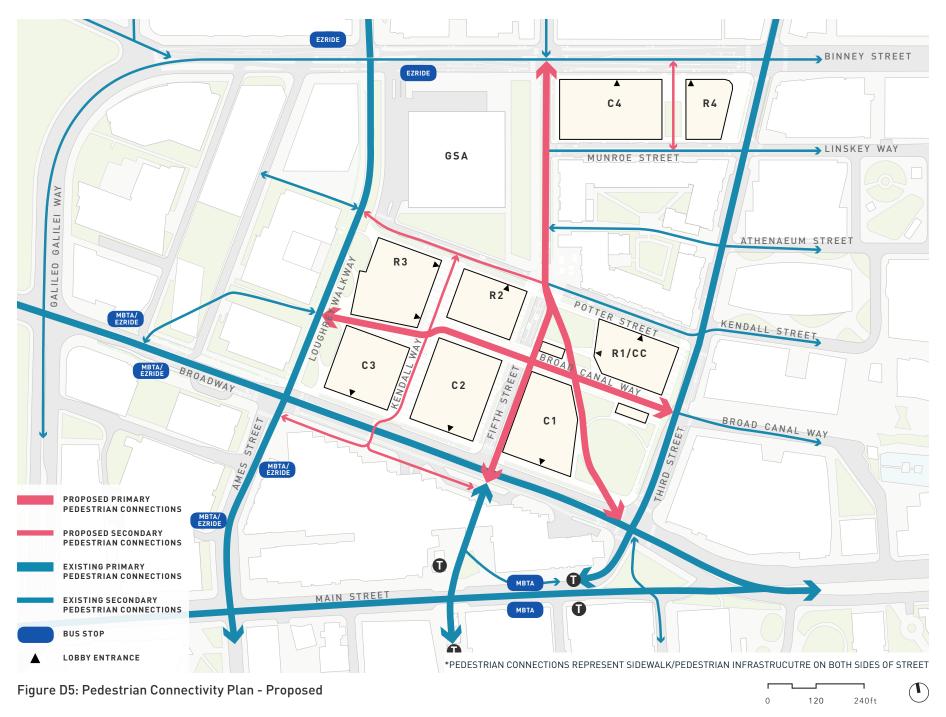
Kendall Way will be a shared street that prioritizes cyclist and pedestrian activity and allows for occasional managed building service access, without looking like a conventional street. It will be designed to ensure bicyclist and pedestrian safety at all times, but this space is imagined to be a curbless, continuously paved space that can be closed to vehicle traffic and enlivened by programmed events related to the Entertainment Venue or other active uses. Special lighting and temporary staging would make this space very engaging for evening activities. Kendall Way allows for pedestrian and bicycle connection between Potter Street and Broadway, which service vehicles can only access from Broadway or from Potter Street (without a through connection).

The surrounding area has a significant network of existing and planned bicycle routes as shown on Figure D6: 2015 Cambridge Bicycle Network Vision and Figure D7: Bicycle Connectivity Plan - Existing Conditions. As shown on Figure D8:

⁷ As noted in Volume I, the northbound cycle track is proposed on land owned by 303 Third Street over which MIT has an easement for access and travel serving the Development Parcel. That said, construction and implementation of the cycle track on the easterly side of Fifth Street will be subject to entering into appropriate easement agreements.







Bicycle Connectivity Plan - Proposed, the Project will extend that network into the Development Parcel with access on all Project streets including separated bicycle lanes (or cycle tracks) on Fifth Street between Binney Street and Broadway, and Potter Street between Third Street and Kittie Knox. Broad Canal Way will be designed as a shared street with low vehicular volume where bicycles will be able to utilize the entire street width. Short-term bicycle parking facilities will be accessed from multiple directions and new BlueBike Stations are preliminarily proposed along Broadway at the new Third Street Park and along Fifth Street at the new Community Center Park. Bicycle access facilities are shown on the Project Street Sections (Figures D13-D191.

Given the volume of bicycle activity we anticipate in, around and through the site, MIT proposes two extra-large (27-dock) BlueBike stations, a Bluebike valet as well as over 2,200 Project shortand long-term bicycle parking spaces. Location of Bicycle Parking is illustrated in Figure C2: Bluebike Stations and Short Term Bike Parking Plan and Figure C3: Parking Facilities - P1 Plan, while Bluebike station locations are highlighted in Figure C2: Bluebike Stations and Short Term Bike Parking Plan.

As shown on Figures D9-D11, the vehicular movements at the Project are designed to restore access from Binney Street to Broadway via Fifth

Street and provide appropriate access to the building activities and Project amenities. Broad Canal Way is designed as an active pedestrian and bicyclist spine with vehicular activity primarily associated with short-term on street parking and drop-off and pick-up associated with groundlevel activation, including the Community Center. To further reduce speeds and vehicle cut-through activity, Broad Canal Way has been designed as two one-way segments, westbound from Third Street to Fifth Street and eastbound from Kendall Way to Fifth Street. Although parking and curb use will be finalized during Design Review, the Figure D12: Vehicular Plan - Curb Utilization shows preliminary locations for approximately up to 27 short-term on-street loading/active curb/parking spaces to support the active uses at the Project. The plan identifies these spaces as "active curb" and "short-term loading" spaces – not simply "parking" spaces. These spaces are anticipated to be utilized by many different user groups, including those needing handicap-accessible parking, ride hailing services delivery drivers such as "UberEats" vehicles, and others in need of short-term parking for other purposes. These spaces will create an "active" zone as opposed to traditional on-street parking and will provide more inclusive access to the site for all users.

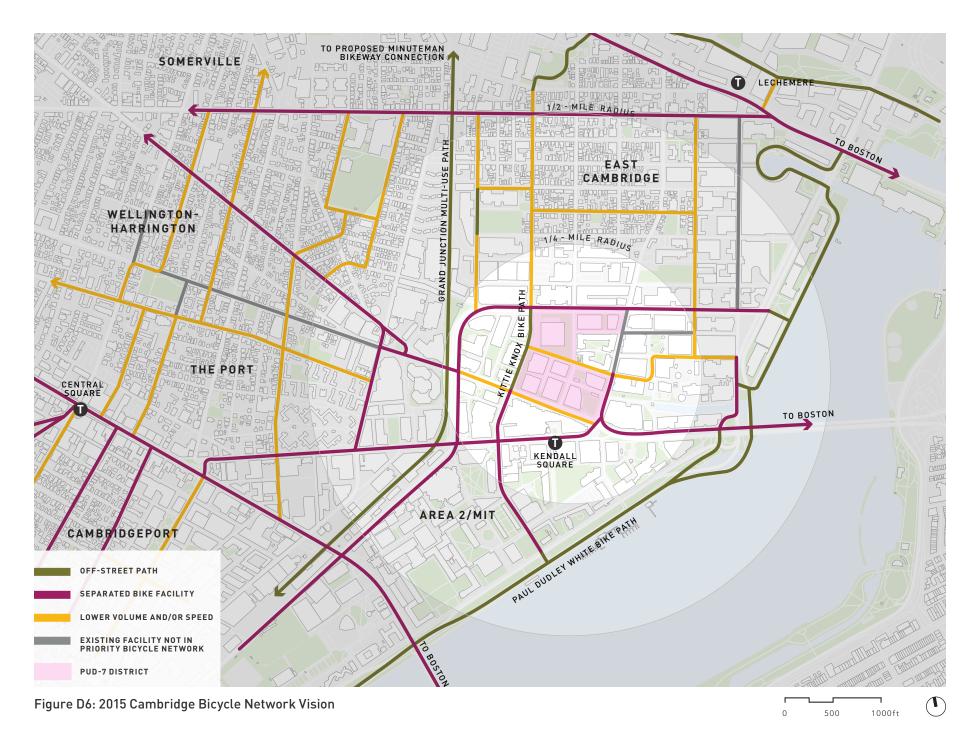
Broadway

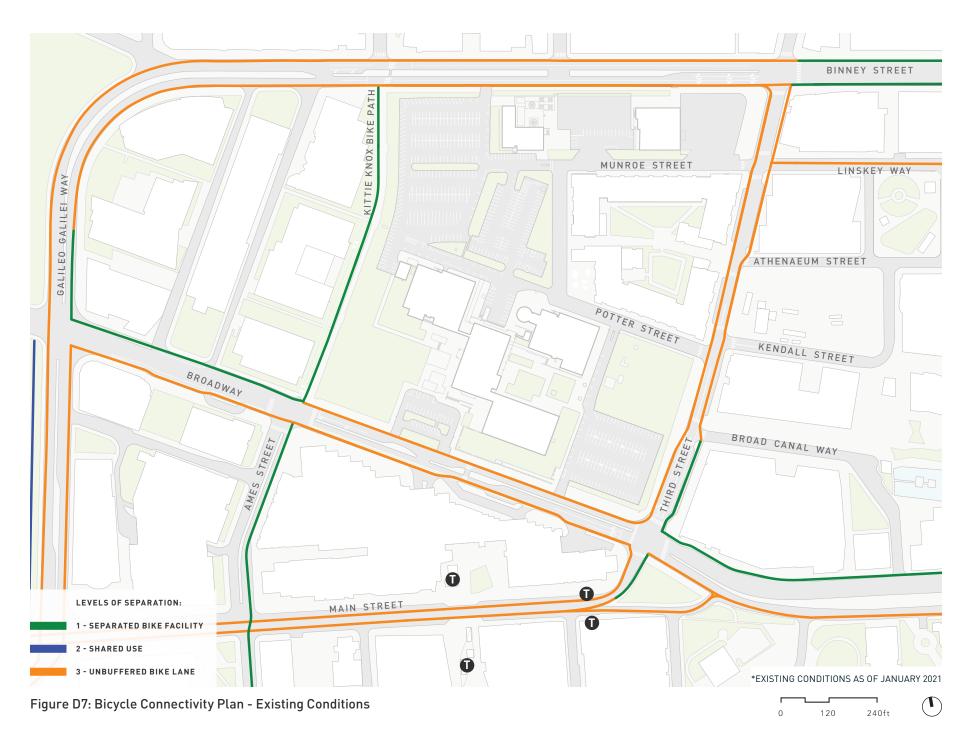
Broadway's boulevard configuration and limited activity on the south side makes it a challenging street to activate. The Project will extend new retail frontage along each building parcel on Broadway's north side. Building floor plates will be raised in response to the City's flood risk guidelines, resulting in the opportunity for the Broadway buildings to have elevated porches that provide compelling retail premises, particularly for food and beverage uses, with heightened sight lines, robust outdoor seating and display areas.

The porches, raised approximately 18 inches above sidewalk level, will help define clear zones for diners and pedestrians while allowing them to be a part of and observe one another's activities.

MIT will continue to work with the City, the Cambridge Redevelopment Authority (CRA) and adjacent landowners to develop the appropriate cross section for Broadway between Third Street and Ames Street with a focus on improving connectivity and safety for pedestrians and bicyclists.

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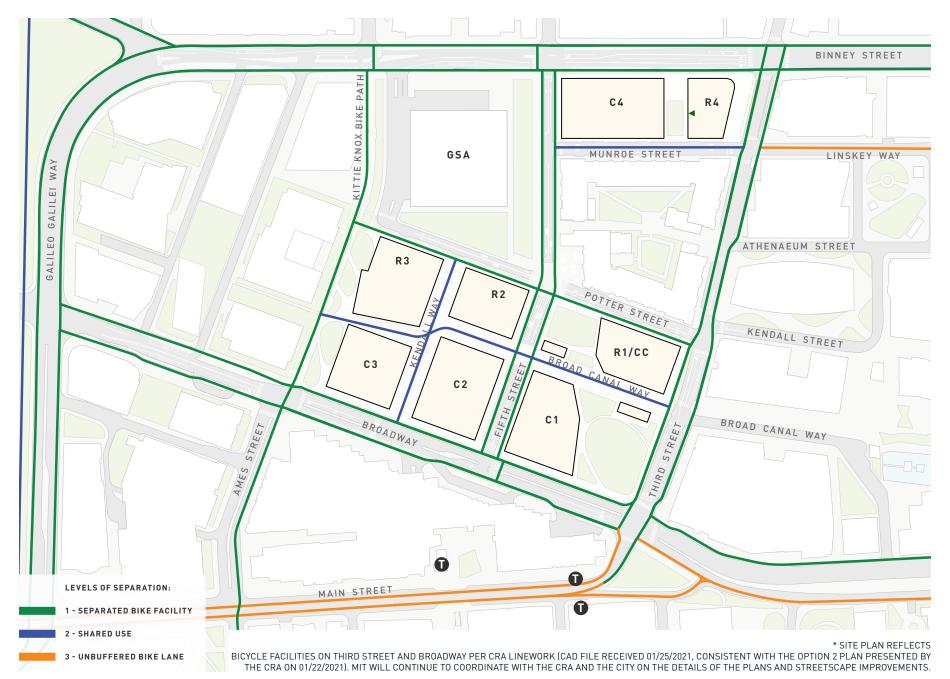


Figure D8: Bicycle Connectivity Plan - Proposed

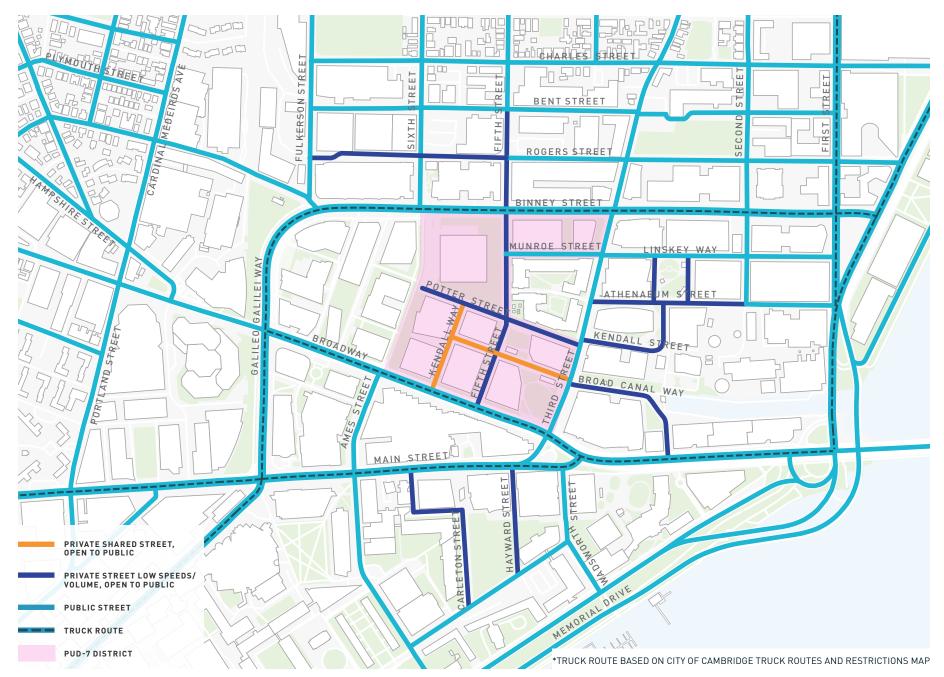
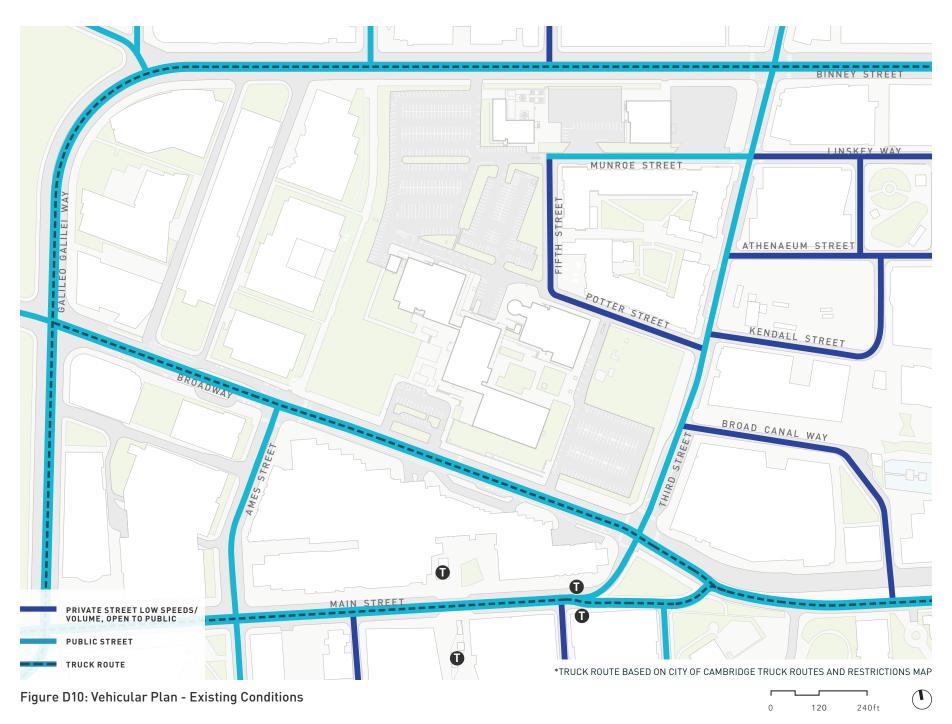
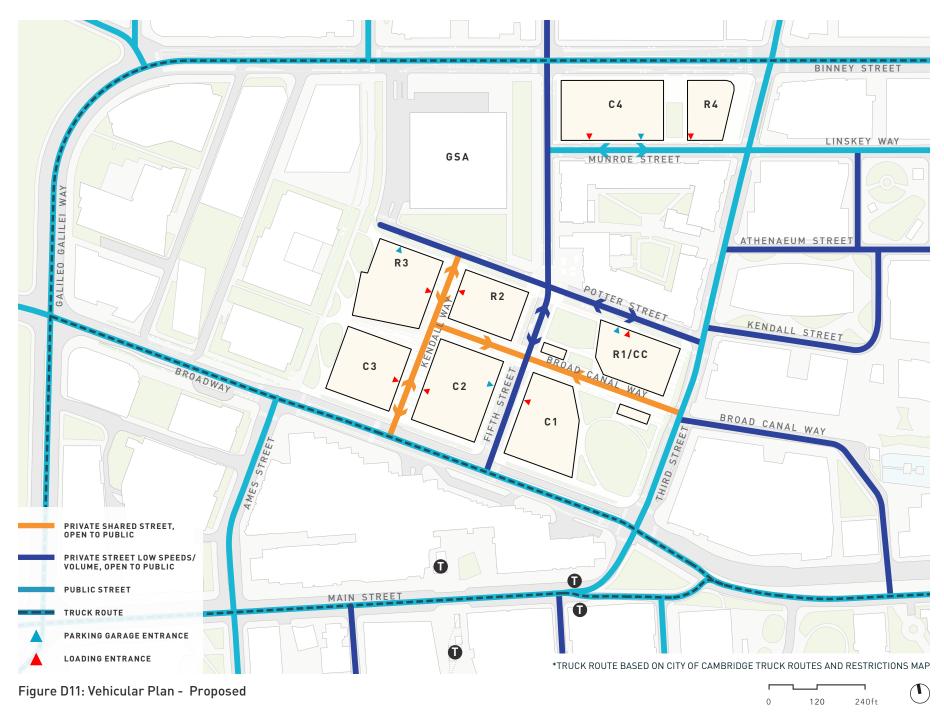
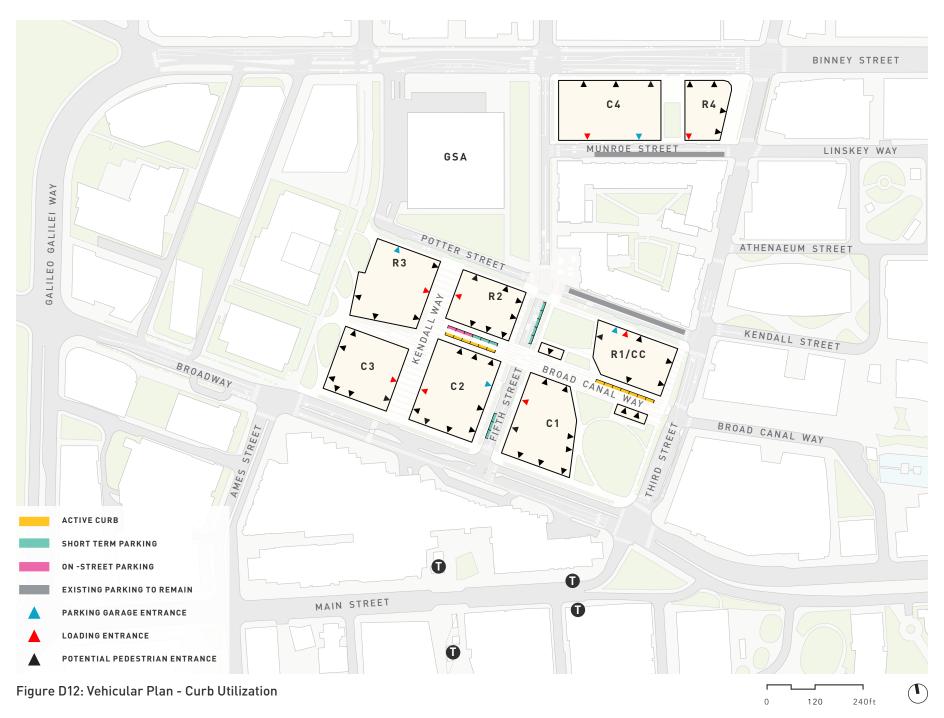


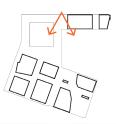
Figure D9: Connections to Vehicular Routes











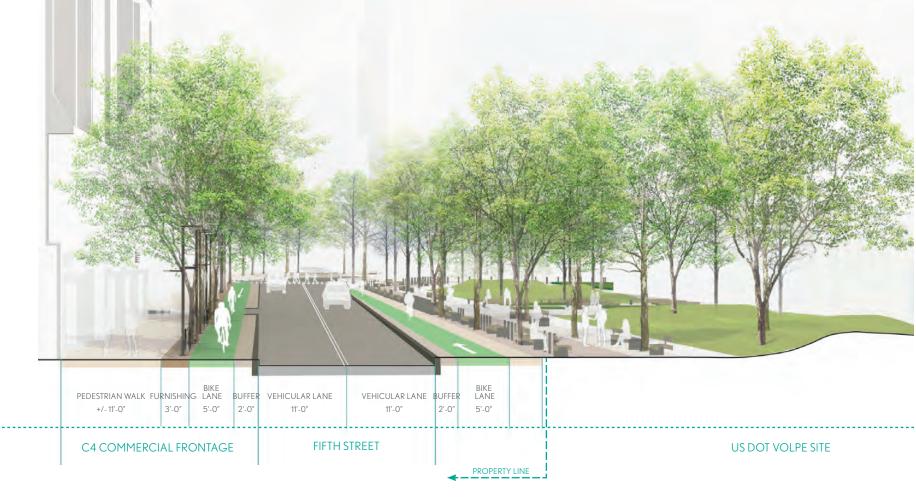
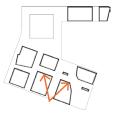


Figure D13: Street Section - Fifth Street at Binney





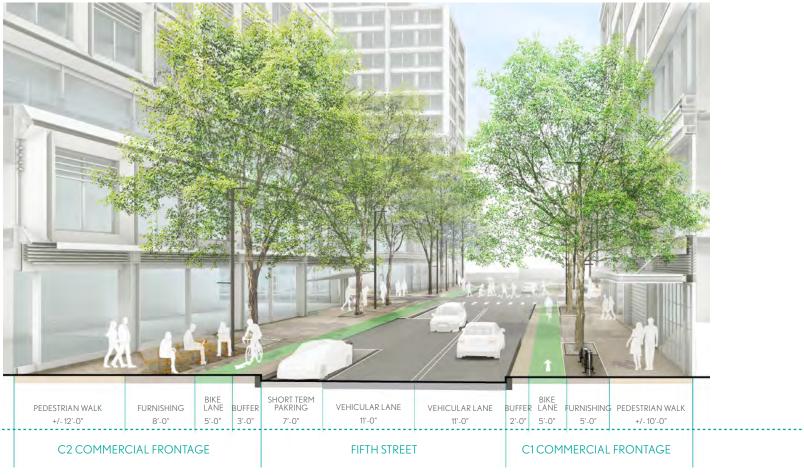
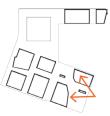


Figure D14: Street Section - Fifth Street South of Potter











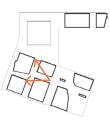




Figure D16: Street Section - Broad Canal Way West



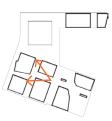




Figure D17: Street Section - Broad Canal Way West Alternative Layout







Figure D18: Street Section - Kendall Way

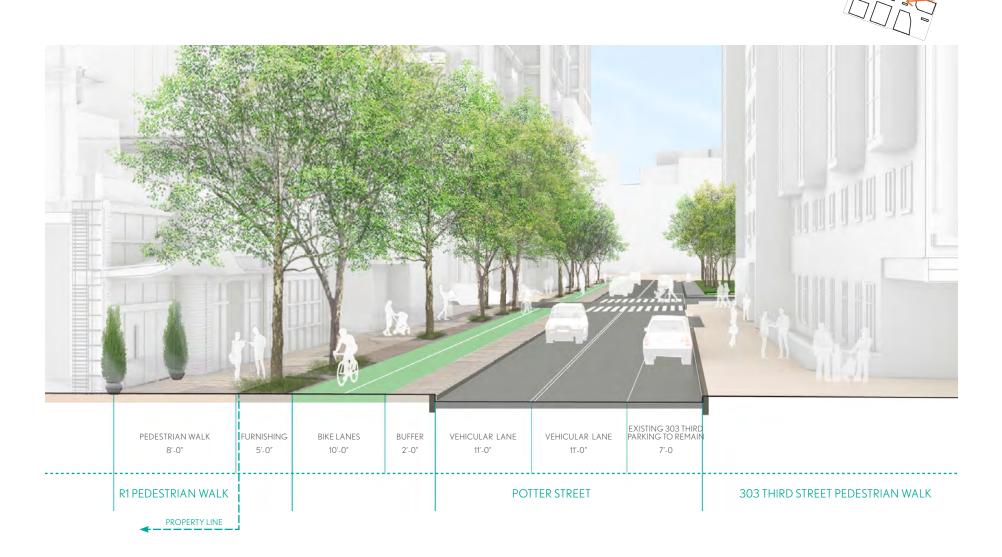


Figure D19: Street Section - Potter Street

*DIMENSIONS ARE APPROXIMATE