PROJECT NOTIFICATION FORM

Kenmore Square Hotels

Submitted to:
Boston Planning and Development Agency
One City Hall Square
Boston, MA 02201

Submitted by:
Mark Kenmore, LLC
57 River Street, Suite 106
Wellesley, MA 02481

And

Buckminster Annex Corporation
645 Beacon Street
Boston, MA 02215

Prepared by:
Epsilon Associates, Inc.
3 Mill & Main Place, Suite 250
Maynard, MA 01754

In Association with:
CBT Architects
Group One Partners
Dalton & Finegold, LLP
Dain, Torpy, Le Ray, Wiest & Garner PC
Nelson\Nygaard Consulting Associates
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Chapter 1.0

Project Description

1.0 PROJECT DESCRIPTION

1.1 Introduction

Mark Kenmore, LLC (an affiliate of Mark Development, LLC) and Buckminster Annex Corporation (together, the Proponents) jointly propose to redevelop their respective properties located directly across Beacon Street from one another, at 560-574 Commonwealth Avenue (the Commonwealth Avenue Site), and 645, 651, and 655 - 665 Beacon Street (the Beacon Street Site) in the Kenmore Square neighborhood of Boston (collectively, the Project Area). The Project will have two components. The existing, one-story bank building at 560-574 Commonwealth Avenue will be replaced by a new, 24-story hotel building containing approximately 382 rooms and ground floor retail space (the Commonwealth Avenue Component). The Buckminster Hotel will remain, while the three existing buildings at 655-665 Beacon Street will be replaced by a new, 19-story hotel at that parcel and the adjacent parcel at 651 Beacon Street featuring approximately 295 hotel rooms, ground-floor retail space, and approximately 145 below-grade parking spaces (the Beacon Street Component).

As part of the Project, the Proponents will make certain streetscape improvements to Beacon Street as reviewed and approved by the relevant governmental agencies. These improvements are meant to create an attractive and safe pedestrian crossing across the Project Area. In addition, the Project will improve the public realm with new street-level retail spaces, a dedicated public passageway creating a new pedestrian connection between Brookline Avenue and Beacon Street, new open spaces, improved sidewalks with street furniture and landscaping, construction and permanent jobs, and increased tax revenues to the City of Boston.

Over the last 20 years, the Kenmore Square neighborhood has experienced slow progress towards the transformation and revitalization seen in many other areas of central Boston. Both the construction of the Hotel Commonwealth and the bus station replacement and its associated pedestrian improvements have had a positive impact on the public realm, specifically the south side of the Square; however, the remainder of the Square remains largely unchanged. The Kenmore Square Hotels Project will continue the Square's transformation, and vastly improve a neighborhood that today features dated retail uses, empty office floors, and an inactive pedestrian realm largely predicated on foot traffic from Fenway Park. A recent change in ownership on the north side of the Square presents further opportunity for redevelopment of existing assets and additional density that will complement the proposed Project.

This Project Notification Form (PNF) is being submitted to the Boston Redevelopment Authority (BRA) doing business as Boston Planning and Development Agency (the BPDA) to initiate review of the Project under Article 80B, Large Project Review, of the Boston Zoning Code.

1.2 Development Team

The Proponents have enlisted a team of professional, Boston-based planners, engineers, attorneys, architects and consultants to assist with the development of the proposed Project. The Project and the Project Team are identified below.

Address/Location:	560-574 Commonwealth Avenue, 645, 651 and 655 - 665 Beacon Street
Proponent– Commonwealth Avenue Component:	Mark Kenmore, LLC 57 River Street, Suite 106 Wellesley, MA 02481 (617) 614-9149 Damien Chaviano David Roache, PE
Proponent – Beacon Street Component	Buckminster Annex Corporation 645 Beacon Street Boston, MA 02215 (617) 807-0870 Jackson Slomiak Vincent Barba
Architect - Commonwealth Avenue Component	CBT Architects 110 Canal Street Boston, MA 02114 (617) 262-4354 Haril Pandya, AIA, LEED AP
Architect – Beacon Street Component	Group One Partners 21 West Third Street Boston, MA 02127 (617) 268-7000 Harry Wheeler, AIA
Legal Counsel - Commonwealth Avenue Component:	Dalton & Finegold, LLP 183 State Street, 5th Floor Boston, MA 02109 (617) 936-7777 Jared Eigerman, Esq.

Legal Counsel – Beacon Street Component	Dain, Torpy, Le Ray, Wiest & Garner PC 745 Atlantic Avenue, 5th Floor Boston, MA 02111 (617) 542-4800 Don Wiest
Permitting Consultant:	Epsilon Associates, Inc. 3 Mill & Main Place, Suite 250 Maynard, MA 01754 (978) 897-7100 Cindy Schlessinger Talya Moked, LEED AP BD+C
Transportation and Parking Consultant:	Nelson\Nygaard Consulting Associates 77 Franklin Street, 10th Floor Boston, MA 02110 (617) 521-9404 Ralph DeNisco Jason Schrieber
Civil Engineer:	Bohler Engineering 75 Federal Street, Suite 620 Boston, MA 02110 (617) 849-8040 Steve Martorano, PE Timothy Hayes, PE
Sustainability Consultant:	New Ecology, Inc. 15 Court Square, #420 Boston, MA 02108 (617) 557-1700 Ashley Wisse, EIT, CEM, LEED AP, Green Rater

1.3 Project Description

1.3.1 Project Area

The approximately 1.07-acre (46,441 sf) Project Area comprises four parcels of private land in the Kenmore Square neighborhood: 645 Beacon Street, 651 Beacon Street, 655 - 665 Beacon Street (the Beacon Street Site, together 40,411 sf), and 560-574 Commonwealth Avenue (the Commonwealth Avenue Site, 6,030 sf) (see Figure 1-1)[1]. The Project Area is bounded by Commonwealth Avenue to the north, Brookline Avenue to the southeast, and the Massachusetts Turnpike to the south. Beacon Street runs between the Beacon Street Site and the Commonwealth Avenue Site. The parcel known as 645 Beacon Street includes the existing Buckminster Hotel. Adjacent to the Hotel is the Hotel Parking Garage (651 Beacon Street) and the Buckminster Professional Building (655-665 Beacon Street). The parcel known as 560 - 574 Commonwealth Avenue includes a one-story building occupied by Citizens Bank. Figure 1-2 presents existing conditions at the Project Area.

The Project Area is benefitted by a wealth of multi-modal options at its front door. Steps away is Kenmore Station, which provides access to five bus routes, as well as the B, C, and D trains of the MBTA's Green Line. Across Brookline Avenue is a twenty-dock Hubway station, and 800-feet up Beacon Street are steps to the MBTA's Worcester Line commuter rail at Yawkey Station. Within a five-minute walk there are six additional bus routes.

1.3.2 Area Context

Kenmore Square represents a confluence of four streets at a busy intersection. To the west, Boston University borders the Project Area; to the east, Back Bay; to the north, Boston University/Storrow Drive and the Charles River; and to the south, Brookline Avenue, the Massachusetts Turnpike and Fenway Park. As it stands today, there is no actual "square" in Kenmore Square, no place to gather other than sidewalks and no vibrant street-level retail that can capture crowds and re-energize the neighborhood.

The high concentration of nearby restaurants, bars, and stores, combined with the number of pedestrians, makes Kenmore Square one of the most highly visited and dense parts of the city. This vibrancy, as well as the Square's proximity to the Longwood Medical and Academic Area, local universities, sports and cultural options and downtown Boston, make the Project Area an ideal location for hotels.

[1] As discussed below, the proposed Project entails designating the private land comprising the Project Area (46,441 sf), as well as the intervening portion of Beacon Street (23,517 sf) as a Planned Development Area. In total, this area consists of approximately 1.6 acres (69,958 sf).

Data Source: Office of Geographic Information (MassGIS), Commonwealth of Massachusetts, Information Technology Division

Kenmore Square Hotels Boston, Massachusetts

Epsilon ASSOCIATES INC.

Figure 1-1
Aerial Locus Map

Kenmore Square Hotels Boston, Massachusetts

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Figure 1-2
Existing Conditions – Views from Beacon Street

1.3.3 Project Description

The Project includes retaining the existing Buckminster Hotel as well as the demolition of the three other existing structures in the Project Area. These structures will be replaced with two new hotel buildings, each described below.

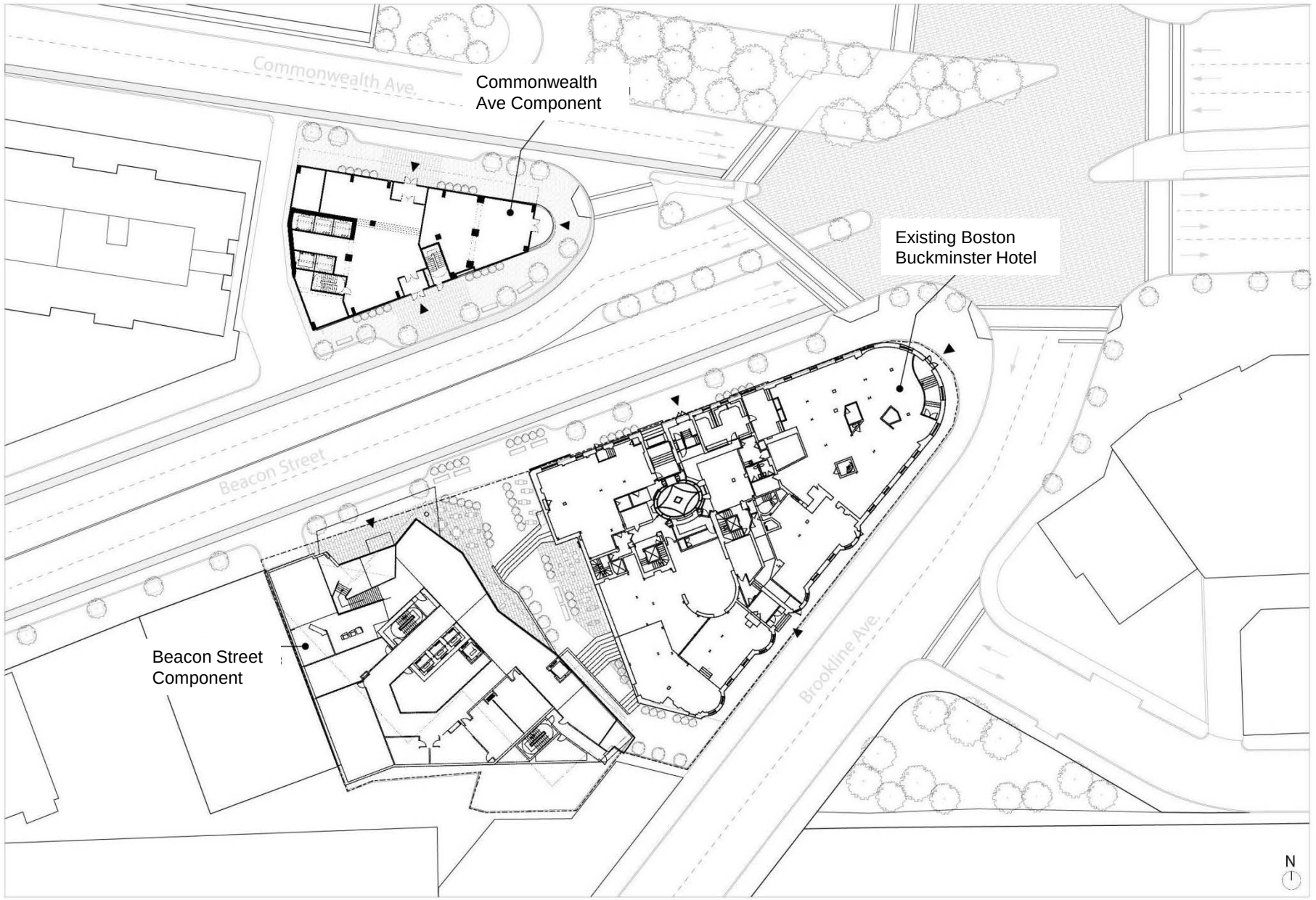
Commonwealth Avenue Component

The Commonwealth Avenue Component is located on a 6,030 square foot parcel at the intersection of Beacon Street and Commonwealth Avenue and currently contains a one-story building occupied by Citizens Bank. The existing building will be demolished in order to construct a new, approximately 161,000 sf, 382-room micro-hotel with ground-floor retail space and rooftop amenity space which will be open to the public. The Citizens Bank will be relocated to a smaller, street-level location within the building. No parking will be provided on-site. Instead, the relatively small number of guests expected to require parking nearby will be accommodated by off-site valet parking. Loading and deliveries will occur on Beacon Street.

Beacon Street Component

The Beacon Street Component is located on three parcels totaling approximately 40,410 square feet, at the intersection of Beacon Street and Brookline Avenue. Development will be limited to the parcels at 655 to 665 Beacon Street, and the existing Buckminster Hotel will be retained. The existing two-level parking structure and adjacent commercial building will be demolished and replaced with a new, approximately 186,000 sf, 295-room hotel containing meeting space, a café/lounge, below-grade parking, and rooftop amenity space open to the public. This building will also include a new pedestrian connector, as described below, between Brookline Avenue and Beacon Street located on the 651 Beacon Street parcel. There will be approximately 145 below-grade valet parking spaces to serve this hotel.

Table 1-1 below provides the Project program. A Project Area plan is presented in Figure 1-3, and a landscape plan is presented in Figure 1-4. Floor plans, sections and elevations are provided in Appendix A.



Kenmore Square Hotels Boston, Massachusetts

Epsilon ASSOCIATES INC.

Figure 1-3
Project Area Plan

Kenmore Square Hotels **Boston, Massachusetts**

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Figure 1-4
Landscape Plan

Table 1-1 Project Program

Project Element	Approximate Dimension – Commonwealth Avenue Component	Approximate Dimension – Beacon Street Component	Project Total
Hotel	382 rooms	295 rooms	677 rooms
Retail	8,500 sf	4,500 sf	13,000 sf
New Gross Floor Area	161,000 sf	186,000 sf	347,000 sf
Existing Buckminster Hotel		95,000 sf/132 rooms	95,000/132 rooms
Parking	No on-site parking is provided	145 spaces (73 net new spaces)	73 net new spaces
Zoning Height	24 stories/260 feet	19 stories/210 feet	
Project Area	46,441 sf		
FAR*	9.5		

* FAR was calculated using the Project Area

The Project is designed to establish a dynamic blend of uses, creating a more vibrant area that augments not only the pedestrian experience in Kenmore Square, but creates meaningful linkages within the Project Area and to adjacent parcels, including other development projects in the neighborhood. The new, accessible pedestrian connector between Brookline Avenue and Beacon Street will improve the pedestrian experience for those traveling between the Fenway neighborhood, Kenmore Square, Boston University, and the Charles River (see Figure 1-5).

The street-level uses, including retail, hotel lobbies, and other amenity spaces will further enhance the pedestrian experience in the Project Area. The design of the public realm on all edges of the Project is intended to strongly enhance the pedestrian experience, with the Beacon Street, Commonwealth Avenue, and Brookline Avenue streetscapes being the predominant public experience. Beacon Street and Commonwealth Avenue are re-envisioned with tree-lined sidewalks, providing ample shade and definition to the pedestrian experience.

1.4 Public Benefits

The Project will provide many public benefits for the surrounding neighborhood and the City of Boston as a whole, both during construction and on an ongoing basis upon its completion.

Kenmore Square Hotels **Boston, Massachusetts**

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Figure 1-5

View Facing Southeast Toward the Pedestrian Connector

Improved Street and Pedestrian Environment

The Project will create a new destination in Kenmore Square by adding new activity at the intersection of three major streets, where there is currently little reason for people to do more than just pass through. From Brookline Avenue to Deerfield Street, new opportunities for retail, an improved pedestrian experience, and a more dynamic public realm will re-invigorate this portion of Kenmore Square. The Project will develop the currently underutilized parcels and improve the streetscape with landscaped sidewalks, street furniture and comfortable and inviting open spaces. As previously described, a new, accessible connector between Brookline Avenue and Beacon Street is also proposed as part of the Project, which will allow the 24/7 flow of pedestrians from Brookline Avenue to Beacon Street and beyond, and will improve the pedestrian experience for those traveling between the Fenway neighborhood, Kenmore Square, Boston University, and the Charles River.

Smart Growth/Transit-oriented Development

The Project is consistent with both smart-growth and transit-oriented development principles. The Project Area is well served by existing public transportation, including Boston's MBTA Green Line, the recently completed regional rapid transit Yawkey Commuter Rail Station and bus lines that provide easy access to the Project Area from the Greater Boston region. The addition of hotel, and restaurant/retail/service uses to an underutilized area that is adjacent to more active uses will support the expansion of the vibrant live, work, and play area started and contemplated by other development projects nearby.

Sustainable Design

The Proponents are committed to building a LEED-certifiable Project with a target of the Silver level, incorporating sustainable design features into the Project to preserve and protect the environment.

Increased Employment

Overall, the Project will create approximately 720 construction-period jobs and approximately 130 permanent jobs once it is occupied.

Increasing Property Tax Revenues

The Project will create new property tax revenues to the City of Boston through significantly increased property values.

1.5 Public Participation

As part of its planning efforts, the Proponents have contacted nearby residents and representatives of numerous neighborhood groups, elected officials, and public agencies. The formal community outreach process begins with the filing of this PNF.

The Proponents will continue to engage the community to ensure public input on the Project. The Proponents look forward to working with the BPDA and city agencies, local officials, neighbors, and others as the design and review processes move forward.

1.6 Schedule

It is anticipated that construction will commence upon final approvals of all permits and financing. Once begun, construction is expected to last approximately 26 months.

Chapter 2.0

Regulatory Context

2.0 REGULATORY CONTEXT

2.1 Regulatory Controls and Permits

2.1.1 B-4 Zoning District / Restricted Parking Overlay District

The entire Project Area is located within an underlying B-4 zoning district, and the overlaying Restricted Parking Overlay District. No portion of the Project Area is located within the Groundwater Conservation Overlay District (GCOD).

PDA Development Plan

The Project Area contains an area of at least one acre, and is therefore eligible for designation as a Planned Development Area (PDA), a type of special purpose zoning overlay district. Moreover, the Project complies with the *Planned Development Area Policy Guidance for Developers*, adopted by the BPDA Board on August 14, 2015. Specifically, the Project is large-scale, complex, incorporates use appropriate to its setting, and provides significant mitigation and public benefits to the immediate area and the Kenmore Square neighborhood.

Pursuant to Section 80C-3.1. of the Code, a PDA Development Plan for the Project will set forth the proposed location and appearance of structures, open spaces and landscaping, proposed uses of the area, densities, proposed traffic circulation, parking and loading facilities, access to public transportation, and proposed dimensions of structures.

The proposed Planned Development Area comprises approximately 69,958 square feet. It consists of approximately 46, 411 square feet of privately-owned land: the Commonwealth Avenue Site at approximately 6,030 square feet, and the Beacon Street Site at approximately 40,411 square feet. In addition, the proposed Planned Development Area encompasses a portion of Beacon Street that has an area of approximately 23,517 square feet. A diagram of the PDA is shown in Figure 2-1.

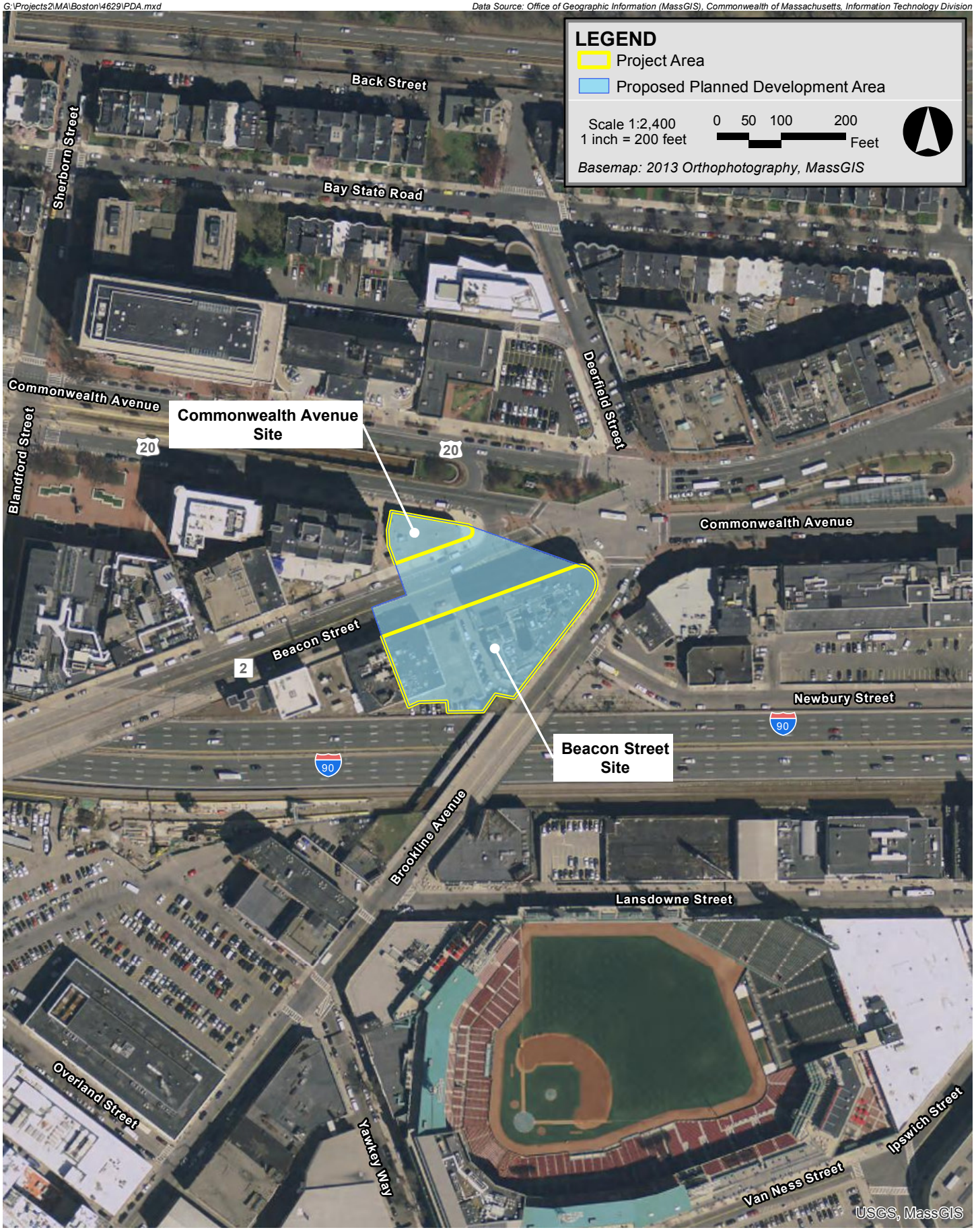
Use Regulations

The uses proposed for the Project include hotel, retail, restaurant, and services, all of which are permitted by right within the underlying B-4 zoning district. All uses at the Project will be described in the PDA Development Plan.

Dimensional Requirements

The Commonwealth Avenue Component will replace the existing building at 560-574 Commonwealth Avenue with a new building with approximately 161,000 sf of Gross Floor Area (GFA). The Beacon Street Component will retain the existing building at 645 Beacon Street, which has a GFA of approximately 95,000 sf, and add a new building with

Data Source: Office of Geographic Information (MassGIS), Commonwealth of Massachusetts, Information Technology Division



Kenmore Square Hotels Boston, Massachusetts

Epsilon Associates Inc.

Figure 2-1

Planned Development Area

approximately 186,000 sf of GFA. The total area of the Commonwealth Avenue Site and Beacon Street Site (excluding public ways) is approximately 46,441 sf, meaning that the Project's net GFA of approximately 442,000 sf would result in an FAR across the entire Project Area of approximately 9.5[1]. Zoning relief to allow the proposed FAR would be approved through the PDA Development Plan. There is no maximum building height established within the B-4 district. The new building at 560-574 Commonwealth Avenue will have a building height of approximately 260 feet, and include 24 levels, and the new building at 655-665 Beacon Street will have a building height of approximately 210 feet, and include 19 levels. These building heights will be set forth in the PDA Development Plan.

There is no requirement to include usable open space for non-dwelling uses within the underlying B-4 district. The Beacon Street Component will, include approximately 8,240 sf of usable open space, and the Commonwealth Avenue Component will include approximately 1,300 sf of usable open space, for a total of 9,540 sf of usable open space in the Project Area. This will be set forth in the PDA Development Plan. The Plan will also provide for relief for certain Project setbacks.

Off-Street Parking

As noted above, the Project Area is located within a Restricted Parking Overlay District, which restricts off-street parking facilities dedicated to any use other than residential and hotel uses. The 145-space garage included as part of the Beacon Street Component will support that hotel. All parking included with the Project will be described and approved through the PDA Development Plan.

Off-Street Loading

Off-street loading for the Project is discussed in Section 3.1.2.6. It will set forth in the PDA Development Plan. (Code sec. 80C-3.1.)

2.1.2 BCDC Schematic Design Review (Article 28)

The Boston Civic Design Commission (BCDC) must review any project exceeding 100,000 sf of gross floor area, or any project determined by BCDC to be of "special urban design significance." (*Id.* sec. 28-5.) As noted above, the Project will have a GFA exceeding 100,000 sf, and so it requires schematic design review by BCDC. The Proponents look forward to working with the BCDC regarding the design of the Project.

[1] The portion of Beacon Street included within the PDA is excluded from the calculation of FAR.

2.1.3 Barrier-Free Access (Article 30)

The purposes of Article 30 of the Boston Zoning Code (Barrier-Free Access) are to ensure that physically handicapped persons have full access to buildings open to the public; to afford such persons the educational, employment, and recreational opportunities necessary to all citizens; and to preserve and increase the supply of living space accessible to physically handicapped persons. (*Id.* sec. 30-1.) The hotel and other uses proposed by the Project are subject to the provisions Article 30. (*Id.* sec. 30-3.) The Project is designed to comply with Article 30.

2.1.4 Groundwater Conservation Overlay District (Article 32)

As noted above, the Project Area is not located within the GCOD. However, the Project will be required to provide stormwater recharge in keeping with current Boston Water and Sewer Commission (BWSC) water quality policies. With both projects abutting the GCOD, the inclusion of stormwater recharge should benefit the abutting GCOD area. Any groundwater monitoring wells that may be installed throughout the course of construction will be turned over to the Boston Groundwater Trust if possible.

2.1.5 Green Buildings (Article 37)

The purposes of Article 37 (Green Buildings) are: to ensure that major building projects are planned, designed, constructed, and managed to minimize adverse environmental impacts; to conserve natural resources; to promote sustainable development; and to enhance the quality of life in Boston. The Project is subject to the requirements of Article 37 because it is subject to Large Project Review. The Project will comply with Article 37. As noted above, the Proponents are committed to developing LEED-certifiable buildings with a target of the Silver level, incorporating sustainable design features into each building to preserve and protect the environment.

2.1.6 Development Impact Project (Article 80)

Under Section 80B-7 of the Boston Zoning Code, a Development Impact Project (DIP) is required to make mitigation payments, or provide equivalent in-kind contributions, to create affordable housing and job-training programs. The Project constitutes a DIP for purposes of Section 80B-7, and will comply by paying a housing exaction of $8.47 and a jobs-creation exaction of $1.67, for each gross square foot of hotel or restaurant-retail-services floor area in excess of 100,000 square feet, minus the Project's accessory parking garage space. As required under Article 80, the obligations of the Proponents regarding DIP payments will be memorialized in written agreements between them and the BPDA.

2.1.7 Demolition Delay (Article 85)

Any proposal to demolish a substantial portion of a "significant building" is subject to a delay of up to 90 days imposed by the Boston Landmarks Commission. (Code sec. 85.) The Commission will determine that a building is "significant" if it: (i) is listed or recommended for listing on the National Register of Historic Places; (ii) is the subject of a petition as a Boston Landmark; (iii) meets certain criteria for historic or architectural significance; (iv) has an important association with historical persons or events or with the broader history of Boston; or (v) is one whose loss would have a significant negative impact on the historic or architectural integrity or urban design character of the neighborhood. (*Id.* sec. 85-5.3.) The Commonwealth Avenue Component of the Project entails demolition of the existing building at 560-574 Commonwealth Avenue, which was constructed in approximately 1954. The building is not listed or recommended for listing on any registers of historic places, but BLC staff will determine whether it otherwise qualifies as a "significant building" under Article 85, and so will be subject to the demolition-delay procedure.

2.1.8 Inclusionary Affordable Housing

Because the Project is for hotel uses, it is not subject to the Mayor's Executive Order regarding inclusionary affordable housing, nor to the BPDA's Inclusionary Development Policy (IDP). Together, the two Components of the Project will include approximately 677 new hotel rooms, but no dwelling units per the IDP.

2.1.9 Boston Water and Sewer Commission

The Boston Water and Sewer Commission (BWSC) approval of the Project is required due to the proposed improvements. Each Component of the Project will be reviewed and approved by the BWSC through the BWSC's Site Plan Approval process. Once the Project is approved, the general contractor will coordinate obtaining and executing the General Service Application (GSA) with the BWSC for any proposed improvements.

2.2 List of Anticipated Permits and Approvals

Table 2-1 presents a preliminary list of permits and approvals from governmental agencies that are expected to be required for the Project, based on currently available information. It is possible that only some of these permits or actions will be required, or that additional permits or actions will be required.

Table 2-1 Anticipated Permits and Approvals

Agency	Permit, Review or Approval
State Agencies	
Massachusetts Water Resources Authority	Construction Dewatering Permit
Department of Environmental Protection, Division of Air Quality Control	Notification prior to construction
City Agencies	
Boston Civic Design Commission	Schematic Design Review
Boston Committee on Licenses/Public Safety Commission	Parking Garage Permit Flammable Storage License (parking garage)
Boston Fire Department	Approval of Fire Safety Equipment
Boston Inspectional Services Department	Building and Occupancy Permits
Boston Planning & Development Agency	Large Project Review (Section 80B) Cooperation Agreement Boston Residents Construction Employment Plan Development Impact Project (DIP) Agreement
Boston Public Improvement Commission	Vertical Discontinuances (cantilevered levels) Grant of Location (utility equipment) Projection License (canopies) Specific Repairs (sidewalks) License, Maintenance, and Indemnification Agreement
Boston Transportation Department	Transportation Access Plan Agreement Construction Management Plan Street and Sidewalk Occupant Permits
Boston Water and Sewer Commission	Water and Sewer Connection Permits General Service Application Site Plan Review Infiltration and Inflow (I&I) Fee
Boston Zoning Commission	Zoning Map Amendment PDA Development Plan

2.3 Legal Information

2.3.1 Legal Judgements Adverse to the Proposed Project

The Proponents are not aware of any legal judgments in effect or legal actions pending that would prevent the Proponents from undertaking the Project.

2.3.2 History of Tax Arrears on Property owned in Boston by the Proponent

No properties owned in the City of Boston by the Proponents are in tax arrears to the City of Boston.

2.3.3 Site Control/Public Easements

The Proponents hold fee simple title to the four parcels comprising the Project Area.

A survey is provided in Appendix B.

Chapter 3.0

Assessment of Development Review Components

3.0 ASSESSMENT OF DEVELOPMENT REVIEW COMPONENTS

This chapter provides detailed transportation and air quality analyses, as well as discussions and qualitative analyses of other environmental impacts related to the Project.

3.1 Transportation

3.1.1 Introduction

This section outlines the proposed methodological approach to assessing the transportation impacts of the Kenmore Square Hotels Project. An initial evaluation was conducted of the proposed Project's likely impacts on vehicle flow, parking, loading, site access, transit loads, and walking and biking safety. Due to the type of use and Kenmore Square's multi-modal transportation assets, the Project's vehicular traffic impacts will be limited. However, some traffic impacts during peak hours may be possible, warranting the evaluation of nearby intersections. The Project's anticipated improvements to the nearby walking and biking environment minimize potential non-motorized conflicts, and access to nearby transit stops is also not impacted by the Project.

3.1.1.1 Development Program

As described in Chapter 1, the Project includes two hotel Components. The Commonwealth Avenue Component will be approximately 24 stories high with 382 hotel rooms and 8,500 sf of retail space for a total GFA of 161,000 sf. No on-site parking will be provided for this Component. The Beacon Street Component will be approximately 19 stories high with 295 hotel rooms and 4,500 sf of retail. A 145-space below-grade parking garage will be included (73 net new spaces).

The Commonwealth Avenue Component will preserve the wide sidewalks on Commonwealth Avenue and Beacon Street surrounding it. The Beacon Street Component will have a smaller footprint than the existing building, allowing for the creation of a wider pedestrian connection to Brookline Avenue than the alley that currently exists between the garage and the Buckminster Hotel. The connection will also include stairs with an accessible elevator that connects directly to the sidewalk on Brookline Avenue, creating a valuable new pedestrian connection between Brookline Avenue and Beacon Street. This new connection will provide a pedestrian improvement, reducing the walking distance between these key Kenmore Square streets by the distance of an average city block (from over 500-feet to only 175-feet.)

Short-term bicycle parking will be provided, and there are several Hubway stations nearby for hotel guests. Short-term bicycle parking can also be added on City sidewalks as requested by the City. Valet parking for the Beacon Street Component's guests' vehicles and some employees will be provided at market rates in the three-level below-grade

parking garage in the Beacon Street Component. The first and second levels of the garage park 54 cars each, with another 37 on the lowest level. The Commonwealth Avenue Component will valet park guests in an off-site garage to the west of Kenmore Square.

3.1.1.2 Existing Transportation Networks

The Project Area is benefitted by a wealth of multi-modal options at its front door (see Figure 3.1-1). In addition to wide sidewalks along all abutting and nearby streets, both Commonwealth Avenue and Beacon Street have bike lanes that provide continuous connections for miles in each direction. Steps away is Kenmore Station, which provides access to five bus routes, as well as the B, C, and D trains of the MBTA's Green Line. Across Brookline Avenue is a twenty-dock Hubway station, and 800-feet up Beacon Street are steps to the MBTA's Worcester Line commuter rail at Yawkey Station. Within a five-minute walk there are six additional bus routes, as well as the Paul Dudley White bicycle paths on the Charles River, which allow continuous off-street bicycling between downtown Boston and as far away as Newton. For motorists, Beacon Street connects to the regional highway system within less than ¾ mile at either Storrow Drive via Charlesgate or at the B.U. Bridge and Memorial Drive via Park Drive.

These nearby multi-modal assets have the potential to carry the vast majority of Project-generated trips, with very few new vehicular trips anticipated. Nonetheless, in order to be conservative and anticipate a worst-case scenario of vehicle trips impacting local streets, any assumptions about diversions to non-auto modes will be supported by careful assessments of the connectivity value and carrying capacity of nearby walking, biking and transit assets. In addition to distributing trips according to conventional methods that reflect local travel patterns, the likely desire lines of guests connecting to regional highways, Logan airport, South Station, and other key points of arrival will be assessed for the comparative value of traveling by each available mode.

3.1.1.3 Potential Trip Generation

According to the latest edition (7th Edition) of the Trip Generation Manual produced by the Institute of Transportation Engineers (ITE), each room in a hotel generates 0.6 trips during the p.m. peak hour of adjacent traffic on a weekday, with substantially fewer trips during the a.m. peak hour. With a combined 677 rooms, the Project will generate 406 person trips in the p.m. peak hour (359 in the a.m. peak hour), according to ITE. It can be expected that this location would at the very least have a similar use of available modes of travel as the surrounding residential neighborhoods nearest Kenmore Square, which would result in 150 trips by car, 20 by transit, and 236 on foot (see Table 3.1-1). It is likely that a tourist-oriented hotel near Boston University and Fenway Park would experience substantially lower auto shares, especially during the p.m. peak hour when guests are not likely to want

Kenmore Square Hotels Boston, Massachusetts

NELSON NYGAARD

Figure 3.1-1
Transportation Networks

to travel through regional congestion, so this assumption is conservative. Meanwhile, typical hotel employee work shifts demand full staffing during p.m. commuting hours due to their customer service nature, so most employees are commuting off-peak during early morning, mid-afternoon, or late-night shift changes.

Table 3.1-1 ITE Projected Trip-Generation with BTD Approved Mode Shares

Mode of Travel	Percent	Daily	a.m.	p.m.
Auto	37%	2,047	133	150
Transit	5%	277	18	20
Walk	58%	3,208	208	236

Although the Project may produce fewer personal vehicle trips than ITE estimates and BTD approved mode shares suggest, the full 150 vehicle trips present a worst-case scenario. If these trips are mostly by taxi or rideshare, each trip represents two vehicle movements: a drop-off and a pick-up (in either order). Therefore, if only one-third of the projected p.m. vehicle trips are by private automobile (50 vehicle trips), the remaining two-thirds (100 vehicle trips) could be by taxi or rideshare, which equals 200 vehicle trips. The resulting two-way worst-case vehicle volume to or from the site would total 250 trips (125 in and 125 out). Using these numbers will provide a conservative approach to understand the greatest potential impact the Project could have on area traffic.

3.1.1.4 Trip Distribution

It is anticipated that the majority of trips arriving at and departing from the Project Area will be on foot from and towards the east, with guests heading to and from Kenmore Station, Fenway Park, the Hubway station, Kenmore Square's plentiful commercial destinations, and Back Bay and beyond. Both Project Components will maintain the existing wide sidewalks along Commonwealth Avenue and Beacon Street, and will provide substantial streetscape improvements that correspond to City guidelines, including the Complete Streets Guidelines. Biking will be encouraged, with easy biking access to adjacent bike lanes on Commonwealth Avenue and Beacon Street planned via raised driveway aprons at each Component which prioritize pedestrians and provide an easy transition for bicyclists between hotel entries and the street.

For vehicle trips to and from the Project Area, a traditional approach which reflects existing travel patterns in Kenmore Square may not be appropriate, given the high degree of through traffic and the non-hotel nature of most development in and near the Square. Instead it is anticipated that any hotel guests that need to drive during peak hours are more oriented towards a reverse-commute in the p.m. peak, heading to and from downtown Boston, Back Bay, Logan Airport, and South Station. Given this likely eastward orientation, it is appropriate to look at potential impacts on intersections to the east more than intersections

towards the west and to assign vehicle trips to the guests' desire lines that are least served by the robust modal alternatives in Kenmore Square. Therefore, a multi-modal comparison of each desire line will be performed in the Draft PIR before final vehicle trip distributions are made.

3.1.1.5 Proposed Study Area

Based on the above assessment, the following intersections will be studied for future analysis due to their likely accommodation of many trips on foot, by transit, via bike, and by car:

- Beacon Street Component garage driveway & Beacon Street;
- Commonwealth Avenue Component & Beacon Street;
- Commonwealth Avenue/Beacon Street/Brookline Avenue/Deerfield Street;
- Commonwealth Avenue & Kenmore Street;
- Beacon Street & Raleigh Street;
- Commonwealth Avenue & Charlesgate West; and
- Beacon Street & Charlesgate West.

The study area will comprise the public right-of-way and important transportation elements of each intersection for all modes of travel.

3.1.2 Existing Conditions Analysis

To evaluate the potential impact of the Project on the proposed study area, a detailed evaluation of existing transportation conditions will be conducted to establish a baseline. For planning purposes, the base year will be 2017, which is the latest year for which current conditions data is available, including the period when local observations will be made.

3.1.2.1 Transit Evaluation

An evaluation of nearby service (mode and closest stops) and service characteristics (frequency and destinations) will be made for each of the five MBTA bus routes and three MBTA Green Line routes servicing Kenmore Station and the adjacent streets, as well as the Worcester Commuter Rail Line servicing Yawkee Station and any local shuttles that are open to hotel guests, such as the LMA Shuttles.

3.1.2.2 Pedestrian Analysis

An evaluation of walking accommodations will be conducted at and between all study area intersections, including within 300-feet of the Project Area boundaries along all public rights of way. This will include an assessment of the Brookline Avenue sidewalk where the new pedestrian connection will be located.

The evaluation will include prevailing sidewalk overall and clear widths, amenities, lighting, and driveway conditions. At intersections, these characteristics plus the presence of any pedestrian signalization, actuation, and signing also will be recorded, including walk phase lengths as a percentage of total cycle length. Pedestrian delay calculations will be performed at each intersection on each approach. Peak period pedestrian counts will be performed and mapped at the study area intersections closest to the site.

3.1.2.3 Bicycle Evaluation

Bicycle counts will be conducted during peak hours at the study area intersections closest to the site, and utilization data will be collected for the Hubway station, either through observation or from official Hubway records.

3.1.2.4 Intersection Analysis

The number, width, and designated use of all travel lanes between every study area intersection and at least 300-feet from the site boundaries will be observed and mapped. Turning movement counts will be collected for a minimum of two hours in the a.m. and p.m. peak periods, with the highest single peak hour reported and mapped for all movements at all intersections.

Using the City of Boston's Synchro model, the vehicular level-of-service for each intersection in each peak hour will be reported, including letter grade, average delay, and average queue length.

3.1.2.5 Parking Evaluation

The quantity and regulation of on-street parking and other curb regulations adjacent to and within 300-feet of the site will be observed and mapped. Limited occupancy counts will be conducted to determine hours of peak use and space utilization.

3.1.2.6 Loading and Service Evaluation

Current loading and service operations for the Buckminster Hotel and Citizens Bank will be documented, based on observations or interviews with building representatives. Documentation will include peak delivery hours, frequency, size of vehicle(s), and maps of access points and loading spaces/docks.

3.1.3 Project Impact Assessment

Drawing upon the existing conditions, the projected number of generated trips for each mode will be added onto the nearby transportation networks according to the following recommended distribution and assignment methodologies.

3.1.3.1 Multi-modal Trip Distribution and Assignment

As recommended above, person trip distribution will not solely rely on existing traffic and Census patterns due to the tourist nature of hotels. An assessment of key origin-destination pairs and their modal options also will be conducted as outlined below.

Traditional Distribution Method: Utilizing observed vehicle turning movements, bicycle volumes, directional transit ridership, pedestrian counts, and Census commute flows, site-generated trips will be assigned to the local transportation networks.

Desire-Line Distribution Method: Major likely origins and destinations for hotel guests will be determined, including Logan Airport, South Station, Back Bay, Fenway Park, and North Station. For each location, all available modal options will be assessed and recorded for travel times to and from the Project Area during peak and off-peak hours. Significant differences in travel times by mode will be noted and compared to BTD mode splits and/or Census commute flow data.

Distribution Comparison and Determination: A comparative matrix of each approach above will be made with recommended adjustments to the site's trip distribution presented to BTD for approval. Where the desire-line method varies significantly from the traditional method, the Draft PIR will emphasize the importance of likely hotel guest destinations compared to other patterns. Where non-driving modal travel times provide significant advantage over driving times, adjustments to vehicle trip distribution will be made and noted.

3.1.3.2 Future Analysis Year

The impact of the Project will be assessed for a future year scenario of 2022. All known pipeline and permitted projects with person trips distributed on any study area link or intersection will be determined in coordination with BTD and documented for all modal networks. Background growth rates for each modal network will be applied, with recommended rates noted in each modal section below.

3.1.2.3 Future Pedestrian Capacity Evaluation

Base walking trips in the study area will be increased fifteen-percent for the future evaluation year of 2022 to accommodate projected walk share growth expected as described in Go Boston 2030. Kenmore Square Hotels walk trips will be assigned to the

walking network and added to its future volumes. Future intersection delay results will be adjusted if any intersection cycle lengths are proposed to be adjusted as a result of the future vehicle capacity evaluation, with any negative impacts on walk delay highlighted.

3.1.2.4 Future Vehicle Capacity Evaluation

Base vehicle trips in the study area will be increased 0.5-percent per year for the future evaluation year of 2022 to represent a worst-case traffic condition. While both Go Boston 2030 and CTPS projections do not anticipate this growth and foresee declines in driving associated with increased use of other modes, the analysis will provide a worst-case approach to traffic. In particular, this methodological approach can help highlight where continued vehicular capacity improvements work in direct conflict with walking and biking delays identified in the above evaluations, helping the City and the Kenmore Square Hotels focus on solutions that will minimize vehicle trip generation.

Using BTD's Synchro model, new Project-generated vehicle trips will be added to the future trips in the study area, with resulting level-of-service results reported alongside each result from the existing conditions evaluation. Recommended signal timing/phasing changes will be described, if applicable, with resulting LOS for cars and pedestrians, as well as bicycle queue impacts.

3.1.2.5 Future Parking Demand Evaluation

Drawing upon likely trip generation by mode for all Project guests and employees, a parking demand evaluation will be completed using shared parking methodologies of the Urban Land Institute and the latest edition of the ITE Parking Generation Handbook. Peak periods of demand across a typical weekday and weekend day will be noted and compared to the proposed garage capacity of 145 spaces (net new 73 spaces) for the Beacon Street Component and available off-site supplies for the Commonwealth Avenue Component. While the Project is not expected to generate any on-street parking demand, given the highly-utilized condition of existing on-street parking spaces within a reasonable walk of the site, the impact of removing spaces for hotel loading or valet operations will be evaluated against the existing conditions observations.

3.1.2.6 Future Loading and Service Evaluation

Utilizing the existing conditions analysis as a reference point, the potential loading and service needs for each hotel will be estimated, as well as estimates of valet parking needs. Based on this estimation, loading scenarios for trucks, service vehicles, and valet operators will be developed in coordination with BTD. These will include options such as the use of on-site driveways and/or on-street zones.

3.2 Environmental Protection

3.2.1 Wind

The Project will have heights of approximately 210 feet for the Beacon Street Component and 260 feet for the Commonwealth Avenue Component. A quantitative wind analysis will be conducted, including a wind tunnel test, as required by the BPDA for buildings over 150 feet. Results of the wind analysis will be included in the Draft PIR.

3.2.2 Shadow

Although the Project will replace low-rise buildings, and some, new shadow will be created in the surrounding area, preliminary studies of the Project indicate that net new shadows to public open spaces will be limited. A preliminary shadow study is provided in Appendix C. During the time periods studied, no new shadow will be cast onto Fenway Park or the Commonwealth Avenue Mall.

3.2.3 Daylight

The purpose of a daylight analysis is to estimate the extent to which a proposed project affects the amount of daylight reaching public streets in the immediate vicinity of a project site. The daylight obstruction related to the Project is anticipated to be similar to daylight obstruction already common on streets in the surrounding area. The extent of daylight obstruction resulting from the Project, and measures to mitigate any adverse impacts, will be studied in the Draft PIR, as necessary.

3.2.4 Solar Glare

It is not anticipated that the Project will include extensive use of reflective glass or other reflective materials on the building facades that would result in adverse impacts from reflected solar glare from the Project.

3.2.5 Air Quality

Potential long-term air quality impacts will be limited to emissions from Project-related mechanical equipment and pollutant emissions from vehicular traffic generated by the development of the Project. If changes in traffic operations are substantial, the potential air quality impacts will be modeled for both existing and future conditions in the Draft PIR to demonstrate conformance with the National Ambient Air Quality Standards (NAAQS).

Construction-period air quality impacts and mitigation are discussed below in Section 3.2.11.1

3.2.6 Stormwater/Water Quality

Please see Section 3.7.3 for a discussion of the proposed stormwater system.

3.2.7 Flood Hazard Zones/Wetlands

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) for the Project Area - Community Panel Number 25025C0076G – effective September 25, 2009, indicates the FEMA Flood Zone Designations for the Project Area. The FIRMs show that the Project Area is located entirely outside of the 500-year flood zone.

The Project Area is developed and does not contain wetlands.

3.2.8 Geotechnical/Groundwater

This section describes existing conditions, subsurface soil and groundwater conditions, and planned below-grade construction for the Project.

3.2.8.1 Subsurface Soil and Bedrock Conditions

Based on historical information available for the area, it is anticipated that a generations subsurface profile may consist of approximately 10 to 20 feet of granular, urban fill. The fill is underlain by approximately four to six feet of organic deposits, 10 to 20 feet of marine sand/silt, and about 160 feet of marine clay (Boston Blue Clay). Beneath the marine clay is a thin layer glacial till over bedrock which is 200 feet below the ground surface.

3.2.8.2. Groundwater

Groundwater levels are anticipated to be at depths of approximately 10 to 20 feet below ground surface. Variations in groundwater level are possible because groundwater levels are influenced by precipitation, local construction activities, and leakage into and out of utilities and other below-grade structures.

The Project Area is not located within the Groundwater Conservation Overlay District, however, it is immediately adjacent to the GCOD boundary.

3.2.8.3 Foundation Considerations

It is expected that the proposed structures will have deep foundations extending approximately 150-200 feet down to the bedrock layer. As the Project design progresses, the exact type of foundation system will be determined.

3.2.9 Solid and Hazardous Waste

3.2.9.1 Existing Hazardous Waste Conditions

Characterization of the environmental soil and groundwater quality at the Project Area has not been conducted to date. Chemical testing of soil and groundwater to be generated as a result of construction activity will be conducted at the appropriate stage of the design

process to further evaluate Project Area environmental conditions. Management, transport and disposal of soil and groundwater will be in accordance with all applicable local, state, and federal laws and regulations.

3.2.9.2 Operational Solid and Hazardous Waste

The Project will generate solid waste typical of hotel uses. Solid waste is expected to include wastepaper, cardboard, glass bottles and food. Recyclable materials will be recycled through a program implemented by building management.

With the exception of hazardous wastes typical of hotel developments (e.g., cleaning fluids and paint), the Project will not involve the generation, use, transportation, storage, release, or disposal of potentially hazardous materials. Typical waste generated by the uses will be handled in compliance with all local, state and federal regulations.

The Project will include recycling areas for items such as paper, plastic, glass, and cans.

3.2.10 Noise

The mechanical equipment for the Project will be similar to that used on similarly sized hotel buildings. Rooftop equipment will be screened, and acoustic screening will be included if necessary to meet local noise standards. The Project team will ensure that the buildings' mechanical equipment will meet the City of Boston Noise Standards.

Construction-period noise impacts and mitigation are discussed below in Section 3.2.11.2.

3.2.11 Construction Impacts

The proximity of city streets and abutting commercial properties to the Project Area will require careful scheduling of material removal and delivery. Planning with the City and neighborhood will be essential to the successful development of the Project.

A Construction Management Plan (CMP) will be submitted to the BTD for review and approval prior to issuance of a building permit. The CMP will define truck routes which will help in minimizing the impact of trucks on local streets.

Construction methodologies that ensure public safety and protect nearby businesses will be employed. Techniques such as barricades, walkways, painted lines, and signage will be used as necessary. Construction management and scheduling—including plans for construction worker commuting and parking, routing plans and scheduling for trucking and deliveries, protection of existing utilities, maintenance of fire access, and control of noise and dust—will minimize impacts on the surrounding environment.

Throughout Project construction, a secure perimeter will be maintained to protect the public from construction activities.

3.2.11.1 Construction Air Quality

Short-term air quality impacts from fugitive dust may be expected during demolition, excavation and the early phases of construction. Plans for controlling fugitive dust during demolition, excavation and construction include mechanical street sweeping, wetting portions of the Project Area during periods of high wind, and careful removal of debris by covered trucks. The construction contract will provide for a number of strictly enforced measures to be used by contractors to reduce potential emissions and minimize impacts. These measures are expected to include:

- Using wetting agents on areas of exposed soil on a scheduled basis;
- Using covered trucks;
- Minimizing spoils on the construction site;
- Monitoring of actual construction practices to ensure that unnecessary transfers and mechanical disturbances of loose materials are minimized;
- Minimizing storage of debris on the site; and
- Periodic street and sidewalk cleaning with water to minimize dust accumulations.

3.2.11.2 Construction Noise

The Proponents are committed to mitigating noise impacts from the construction of the Project. Construction work will comply with the requirements of the City of Boston Noise Ordinance. Every reasonable effort will be made to minimize the noise impact of construction activities, including:

- Instituting a proactive program to ensure compliance with the City of Boston noise limitation policy;
- Using appropriate mufflers on all equipment and ongoing maintenance of intake and exhaust mufflers;
- Muffling enclosures on continuously running equipment, such as air compressors and welding generators;
- Replacing specific construction operations and techniques by less noisy ones where feasible;
- Selecting the quietest of alternative items of equipment where feasible;

- Scheduling equipment operations to keep average noise levels low, to synchronize the noisiest operations with times of highest ambient levels, and to maintain relatively uniform noise levels;

- Turning off idling equipment; and

- Locating noisy equipment at locations that protect sensitive locations by shielding or distance.

3.2.11.3 Construction Waste Management

Demolition and construction materials will be reused or recycled to the greatest extent feasible. Construction procedures will allow for the segregation, reuse, and recycling of materials. Materials that cannot be reused or recycled will be transported in covered trucks by a contract hauler to a licensed facility.

3.2.12 Rodent Control

A rodent extermination certificate will be filed with the building permit application to the City. Rodent inspection monitoring and treatment will be carried out before, during, and at the completion of all construction work for the Project, in compliance with the City's requirements. Rodent extermination prior to work commencement will consist of treatment of areas throughout the Project Area.

3.2.13 Wildlife Habitat

The Project Area is currently developed and within a fully developed urban area and, consequently, the Project will not impact wildlife habitats as designated on the National Heritage and Endangered Species Priority Habitats of Rare Species and Estimated Habitats of Rare Wildlife maps.

3.3 Sustainable Design and Green Buildings

To measure the results of their sustainability initiatives and to comply with Article 37, the Proponents intend to use the framework of the Leadership in Energy and Environmental Design (LEED) rating system promulgated by the US Green Building Council (USGBC). The Project will use LEED for New Construction (LEED v4 for BD+C) as the rating system to demonstrate compliance with Article 37 for both buildings. The LEED rating system tracks the sustainable features of a project by achieving points in the following categories:

Location and Transportation, Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality, Innovation and Design Process, and Regional Priority Credits.

A LEED checklist for each building is included at the end of this section, and details the credits the Project anticipates achieving. This is a preliminary evaluation of the LEED checklists, and applicable credits may change as the building designs advance.

The following is a detailed credit-by-credit analysis of the Project team's approach to achieving LEED certifiability at the Silver level for each Component. Points that are still being studied and marked as "maybe" on the LEED checklist are italicized below.

3.3.1 Commonwealth Avenue Component

Integrative Process

IP Integrative Process: In compliance with credit requirements, the team will complete the following tasks:

1. A preliminary "Box" Energy Model: during the schematic design phase, the team will model the building's design and assess potential strategies associated with the limited site conditions, the extensive massing and required building orientation, the basic envelope design, lighting levels within the regularly occupied spaces, the thermal comfort ranges of the occupants, the plug and process load needs, and the programmatic and operational parameters of the building. All iterations and results will be documented and shared with the design team prior to final design decisions.

2. A preliminary Water-Use Systems Analysis: during the schematic design phase, the team will also explore methods of reducing potable water loads within the building as well as any potable water required for irrigation of the building site and process water necessary for equipment within the building.

Location and Transportation

LT Sensitive Land Protection: The Commonwealth Avenue Site is located on a previously developed lot, located in downtown Boston, satisfying the credit conditions.

LT High Priority Site: The Commonwealth Avenue Site is in a documented HUD qualified census tract.

LT Surrounding Density and Diverse Uses: The building will meet the criteria for both Option 1 and Option 2. The building is a hotel development located in downtown Boston, and the surrounding ¼-mile radius will meet, and exceed, the credit thresholds for Option 1 – Surrounding Density. The building is located in the Kenmore Square area of Boston, and has significant access to community resources. The building easily meets the credit requirement of eight uses within a ½-mile walking distance of the main entrance. These resources include, but are not limited to:

- Santander Bank ATM – 0.5 mile;
- Eastern Standard Restaurant – 0.2 mile;
- United States Postal Service – 0.1 mile;
- Fenway Park – 0.3 mile;
- Barnes and Noble – 0.1 mile;
- The Boston Language Institute – 0. 2 mile;
- T-Mobile – 200 feet; and
- City Convenience – 174 feet.

LT Access to Quality Transit: The Commonwealth Avenue Site is located within a short walk (0.2 miles) of the Kenmore MBTA underground subway and bus station. This station provides at least 360 weekday trips and 216 weekend trips.

LT Bicycle Facilities: Due to the small footprint of the building, the design may not provide enough space for locked and protected storage of bicycles. The team will explore options for meeting the credit requirements.

LT Reduced Parking Footprint: The building will not include on-site parking, inherently meeting the LEED requirements for reduction in parking footprint.

Sustainable Sites

SS Prerequisite – Construction Activity Pollution Prevention: The construction documents will include a Soil Erosion and Sedimentation Control Plan to be developed in accordance with the EPA Construction General Permit of the NPDES. A Stormwater Pollution Prevention Plan (SWPPP) will also be developed for the building in accordance with the requirements for the US EPA's National Pollutant Discharge Elimination System Construction General Permit. These documents will be used to document compliance with this prerequisite.

SS Site Assessment: The team will complete and document an assessment of the following information:

1. Topography – contours and sloping,
2. Hydrology – flood hazards and existing water bodies,
3. Climate – solar exposure and sun angles,
4. Vegetation – vegetation types and greenfield spaces,
5. Soils – soils delineation, prime farmland, and disturbed soils,
6. Human Use – enhanced views, availability of transportation, and future building potential, and
7. Human Health Effects – population assessment, physical fitness, and existing air pollution sources.

SS Rainwater Management: The building will provide an extensive network of stormwater storage and infiltration equipment below the ground surface. This system will hold up to 1-inch of rainfall, which is equivalent to a 90% rainfall event. Since this building is a high-density development, it meets all three available points.

SS Heat Island Reduction: The building will utilize high albedo materials for all hardscapes, including both nonroof and roof installations. All installed materials will meet LEED requirements for either initial or three-year Solar Reflectance Index values.

Water Efficiency

WE Prerequisite – Outdoor Water Use Reduction: Due to the small building area, the design will not include a permanent irrigation system, thereby satisfying the requirements of this credit.

WE Prerequisite – Indoor Water Use Reduction: The building will reduce demand for potable water through high efficiency fixtures within the hotel rooms – this design will surpass the prerequisite requirement for 20% reduction with a goal of 35% reduction. The design will specify WaterSense labeled fixtures and the following flow rates:

- Shower: 1.75 GPM;
- Bath Lavatory: 1.0 GPM;
- Toilet: 1.28 GPF; and
- Energy Star Certified clothes washers.

WE Prerequisite – Building Level Water Metering: A water meter will be installed for the building.

WE Indoor Water Use: The building will reduce demand for potable water through high efficiency fixtures within the hotel rooms – this design will surpass the prerequisite requirement for 20% reduction with a goal of 35% reduction. The design will specify WaterSense labeled fixtures and the following flow rates:

- Shower: 1.75 GPM;
- Bath Lavatory: 1.0 GPM;
- Toilet: 1.28 GPF; and
- Energy Star Certified clothes washers.

WE Cooling Tower Water Use: The building will include a cooling tower. The design will maximize the number of water cycles through filtration and strict concentration control of calcium, alkalinity, silica, chlorine, and the overall conductivity.

WE Water Metering: The team is considering inclusion of additional water meters for the following systems: indoor plumbing, domestic hot water, and boiler use.

Energy and Atmosphere

EA Prerequisite – Fundamental Commissioning and Verification: The team will include an experienced Commissioning (Cx) Agent - this person will be hired before the end of the design development phase and will provide review services for the project Basis of Design and Owner's Project Requirements as well as a thorough review of both the Design Development and Construction Documents plan and specification set, observation of all start-up testing and balancing procedures, and confirmation of installation and operation according to the design parameters.

EA Prerequisite – Minimum Energy Performance: The building will meet this prerequisite, as well as the Massachusetts Stretch Energy Code, through the following design approaches, resulting in an ASHRAE 90.1 Appendix G model demonstrating a minimum Energy Use Reduction of at least 16% by cost, below ASHRAE 90.1-2010 (LEED) and at least 10% by energy use, below ASHRAE 90.1-2013 (Stretch Code):

1. Above code levels of insulation within the cavity as well as continuous exterior of the sheathing;
2. Very high efficiency equipment mechanical systems;
3. LED lighting and sophisticated, automated controls;
4. Energy Star appliances; and
5. Energy Recovery for all ventilation.

EA Prerequisite – Building Level Energy Metering: The building will include a building-level energy meter for all energy consumption including electricity and natural gas.

EA Prerequisite – Fundamental Refrigerant Management: The building's HVAC systems will not include any chlorofluorocarbon (CFC)-based refrigerants.

EA Enhanced Commissioning: The team will include an experienced Commissioning (Cx) Agent. This person will be hired before the end of the design development phase and will provide review services for the project Basis of Design and Owner's Project Requirements as well as a thorough review of both the Design Development and Construction Documents plan and specification set, observation of all start-up testing and balancing procedures, and confirmation of installation and operation according to the design parameters.

EA Optimize Energy Use: The building will meet this credit, as well as the Massachusetts Stretch Energy Code, through the following design approaches, resulting in an ASHRAE 90.1 Appendix G model demonstrating a minimum Energy Use Reduction of at least 16% by cost, below ASHRAE 90.1-2010 (LEED) and at least 10% by energy use, below ASHRAE 90.1-2013 (Stretch Code):

1. Above code levels of insulation within the cavity as well as continuous exterior of the sheathing;

2. Very high efficiency equipment mechanical systems;
3. LED lighting and sophisticated, automated controls;
4. Energy Star appliances; and
5. Energy Recovery for all ventilation.

EA Enhanced Refrigerant Management: The team will calculate the total impact of all refrigerant-using equipment and ensure that it does not exceed the LEED limits for Global Warming Impact and Ozone Depletion.

EA Green Power: The team will explore options for Green Power and Carbon Offset purchasing to counteract the environmental toll of fossil fuel production for creation of building energy.

Materials and Resources

MR Prerequisite – Storage and Collection of Recyclables: The building will provide a designated storage point for recyclable materials; management will then move all refuse to the street for city collection. Collected materials will include the following:

- Mixed paper;
- Corrugated cardboard;
- Glass;
- Plastics;
- Metals;
- Batteries; and
- Mercury Containing Lamps.

MR Prerequisite – Construction and Demolition Waste Management Planning: The team will implement a construction waste management plan with a diversion goal of 75% of the site-generated waste from the landfill. The construction team will provide monthly reports of waste diversion.

MR Building Product Disclosure and Optimization – Environmental Product Declarations: The team will document the use of at least 20 different permanently installed products, sourced from at least five different manufacturers, that include confirmed environmental product declaration documents.

MR Building Product Disclosure and Optimization – Sourcing of Raw Materials: The team will document the use of at least 20 different permanently installed products, sourced from at least five different manufacturers, that include third-party corporate sustainability reports with information on extraction operations.

MR Building Product Disclosure and Optimization – Material Ingredients: The team will document the use of at least 20 different permanently installed products, sourced from at least five different manufacturers, that include manufacturer's inventory of all contents, Health Product Declarations, and/or Cradle-to-Cradle certification.

MR Construction and Demolition Waste Management: The team is committed to reducing construction waste through at least 50% diversion of three material streams; if possible, the team will strive to increase the reduction to 75% diversion and four material streams.

Indoor Environmental Quality

IEQ Prerequisite – Minimum Indoor Air Quality Performance: The team will ensure that all ventilation systems meet the minimum requirements of Sections 4 through 7 of the ASHRAE 62.1-2007 standard for Acceptable Indoor Air Quality. Each unit will have kitchen and bath exhaust as required by the Standard. In addition, fresh air will be mechanically supplied directly to each unit.

IEQ Prerequisite – Environmental Tobacco Smoke Control: Smoking will be prohibited inside the building and within 25-feet of all entries, outdoor air intakes, and operable windows; these prohibitions will be incited in all leasing agreements and will be displayed via on-site signage.

IEQ Enhanced Indoor Air Quality Strategies: The team will consider inclusion of the following:

- *A permanent entryway system at least 10-feet long in the primary direction of travel;*
- *Direct exhaust of all housekeeping and laundry areas to prevent cross-contamination; and*
- *MERV 13 filtration on all ventilation systems.*

IEQ Low Emitting Materials: The team will specify paints, coatings, flooring, adhesives, and sealants that comply with California Department of Public Health Standard Method V1.1–2010, using CA Section 01350, Appendix B, New Single-Family Residence Scenario.

IEQ Construction Indoor Air Quality Management Plan: The general contractor will ensure that all installed ductwork is adequately protected throughout the construction phase. This protection will be verified by site inspections.

IEQ Thermal Comfort: The building will provide individual thermal controls for all hotel rooms. Additionally, all shared spaces will include controls for adjustment per group needs.

EQ Interior Lighting: The building will meet the criteria for both Option 1 and Option 2:

Option 1 - Lighting Control. The building will provide individual lighting controls for all building occupants within all hotel rooms. Additionally, all shared spaces will include controls for adjustment per group needs.

Option 2 - Lighting Quality. The building will include the following lighting strategies:

1. All light sources will have a CRI of 80, or higher,
2. At least 75% of the total connected lighting load will use lights with a rated light of at least 24,000 hours,
3. All regularly occupied spaces will use light fixtures with a luminance of less than 2,500 cd/m2, and
4. 90% of the regularly occupied floor area will meet the thresholds for LEED requirements for area-weighted average surface reflectance.

EQ Daylight: The team will complete a computer simulation demonstrating that at least 55% daylight autonomy is achieved throughout the building. Additionally, the simulation will confirm an annual sunlight exposure of no more than 10%.

EQ Quality Views: The team will seek to maximize the views available to occupants in all regularly occupied spaces. At least 75% of the applicable floor area will achieve a direct line of sight to the outdoors.

EQ Acoustic Performance: The team will strive to reduce transfer of HVAC background noise, isolate sounds according to their sound transmission class, and meet the LEED required reverberation time for all applicable room times within the building.

Innovation in Design

The team will seek to achieve at least three Innovation points; potential credits include: Green Education, Reduction of Mercury in Lighting, and Local Purchasing.

ID LEED Accredited Professional: Ashley Wisse, LEED AP, is coordinating the Article 37 Compliance process and LEED certifiability for this building.

Regional Priority

Regional Priority Credits (RPCs) are established LEED credits designated by the USGBC to have priority for a particular area of the country. When a Project team achieves one of the designated RPCs, an additional credit is awarded to the Project. RPCs applicable to the site include: SS Rainwater Management, WE Indoor Water Use Reduction, and EA Optimize Energy Performance.

3.3.2 Beacon Street Component

Integrative Process

IP Integrative Process: In compliance with credit requirements, the team will complete the following tasks:

3. A preliminary "Box" Energy Model: during the schematic design phase, the team will model the building's design and assess potential strategies associated with the limited site conditions, the extensive massing and required building orientation, the basic envelope design, lighting levels within the regularly occupied spaces, the thermal comfort ranges of the occupants, the plug and process load needs, and the programmatic and operational parameters of the building. All iterations and results will be documented and shared with the design team prior to final design decisions.

4. A preliminary Water-Use Systems Analysis: during the schematic design phase, the team will also explore methods of reducing potable water loads within the building as well as any potable water required for irrigation of the building site and process water necessary for equipment within the building.

Location and Transportation

LT Sensitive Land Protection: The Beacon Street Site is located on a previously developed lot, located in downtown Boston, satisfying the credit conditions.

LT High Priority Site: The Beacon Street Site is in a documented HUD qualified census tract.

LT Surrounding Density and Diverse Uses: The building will meet the criteria for both Option 1 and Option 2. The building is a hotel development located in downtown Boston, and the surrounding ¼-mile radius will meet, and exceed, the credit thresholds for Option 1 – Surrounding Density. The building is located in the Kenmore Square area of Boston, and has significant access to community resources. The building easily meets the credit requirement of eight uses within a ½-mile walking distance of the main entrance. These resources include, but are not limited to:

- Citizens Bank – 331 feet;
- Eastern Standard Restaurant – 0.1 mile;
- United States Postal Service – 472 feet;
- Fenway Park – 0.2 mile;
- Barnes and Noble – 449 feet;
- The Boston Language Institute – 0. 1 mile;
- T-Mobile – 223 feet; and
- City Convenience – 215 feet.

LT Access to Quality Transit: The Beacon Street Site is located within a short walk (0.2 miles) of the Kenmore MBTA underground subway and bus station. This station provides at least 360 weekday trips and 216 weekend trips.

LT Bicycle Facilities: The team will ensure that the LEED requirements for protected and covered bike storage are supplied within the building.

Sustainable Sites

SS Prerequisite – Construction Activity Pollution Prevention: The construction documents will include a Soil Erosion and Sedimentation Control Plan to be developed in accordance with the EPA Construction General Permit of the NPDES. A Stormwater Pollution Prevention Plan (SWPPP) will also be developed for the building in accordance with the requirements for the US EPA's National Pollutant Discharge Elimination System Construction General Permit. These documents will be used to document compliance with this prerequisite.

SS Site Assessment: The team will complete and document an assessment of the following information:

1. Topography – contours and sloping,
2. Hydrology – flood hazards and existing water bodies,
3. Climate – solar exposure and sun angles,
4. Vegetation – vegetation types and greenfield spaces,
5. Soils – soils delineation, prime farmland, and disturbed soils,
6. Human Use – enhanced views, availability of transportation, and future building potential, and
7. Human Health Effects – population assessment, physical fitness, and existing air pollution sources.

SS Rainwater Management: The building will provide an extensive network of stormwater storage and infiltration equipment below the ground surface. This system will hold up to 1-inch of rainfall, which is equivalent to a 90% rainfall event. Since this building is a high-density development, it meets all three available points.

SS Heat Island Reduction: The building will utilize high albedo materials for all hardscapes, including both nonroof and roof installations. All installed materials will meet LEED requirements for either initial or three-year Solar Reflectance Index values.

SS Light Pollution: The team will ensure that all exterior lighting fixtures are full cutoff and meet the LEED dark sky requirements. No up lighting will be utilized and fixtures will be dimmed at night to keep the site safe while minimizing light pollution.

Water Efficiency

WE Prerequisite – Outdoor Water Use Reduction: The design will not include a permanent irrigation system, thereby satisfying the requirements of this credit.

WE Prerequisite – Indoor Water Use Reduction: The building will reduce demand for potable water through high efficiency fixtures within the hotel rooms – this design will surpass the prerequisite requirement for 20% reduction with a goal of 35% reduction. The design will specify WaterSense labeled fixtures and the following flow rates:

- Shower: 1.75 GPM;
- Bath Lavatory: 1.0 GPM;
- Toilet: 1.28 GPF; and
- Energy Star Certified clothes washers.

WE Prerequisite – Building Level Water Metering: A water meter will be installed for the building.

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Energy and Atmosphere

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EA Prerequisite – Minimum Energy Performance: The building will meet this prerequisite, as well as the Massachusetts Stretch Energy Code, through the following design approaches, resulting in an ASHRAE 90.1 Appendix G model demonstrating a minimum Energy Use Reduction of at least 16% by cost, below ASHRAE 90.1-2010 (LEED) and at least 10% by energy use, below ASHRAE 90.1-2013 (Stretch Code):

1. Above code levels of insulation within the cavity as well as continuous exterior of the sheathing;
2. Very high efficiency equipment mechanical systems;
3. LED lighting and sophisticated, automated controls;
4. Energy Star appliances; and
5. Energy Recovery for all ventilation.

EA Prerequisite – Building Level Energy Metering: The building will include a building-level energy meter for all energy consumption including electricity and natural gas.

EA Prerequisite – Fundamental Refrigerant Management: The building's HVAC systems will not include any chlorofluorocarbon (CFC)-based refrigerants.

EA Enhanced Commissioning: The team will include an experienced Commissioning (Cx) Agent. This person will be hired before the end of the design development phase and will provide review services for the project Basis of Design and Owner's Project Requirements as well as a thorough review of both the Design Development and Construction Documents plan and specification set, observation of all start-up testing and balancing procedures, and confirmation of installation and operation according to the design parameters.

EA Optimize Energy Use: The building will meet this credit, as well as the Massachusetts Stretch Energy Code, through the following design approaches, resulting in an ASHRAE 90.1 Appendix G model demonstrating a minimum Energy Use Reduction of at least 16% by cost, below ASHRAE 90.1-2010 (LEED) and at least 10% by energy use, below ASHRAE 90.1-2013 (Stretch Code):

1. Above code levels of insulation within the cavity as well as continuous exterior of the sheathing;
2. Very high efficiency equipment mechanical systems;
3. LED lighting and sophisticated, automated controls;
4. Energy Star appliances; and
5. Energy Recovery for all ventilation.

EA Enhanced Refrigerant Management: The team will calculate the total impact of all refrigerant-using equipment and ensure that it does not exceed the LEED limits for Global Warming Impact and Ozone Depletion.

EA Green Power: The team will explore options for Green Power and Carbon Offset purchasing to counteract the environmental toll of fossil fuel production for creation of building energy.

Materials and Resources

MR Prerequisite – Storage and Collection of Recyclables: The building will provide a designated storage point for recyclable materials; management will then move all refuse to the street for city collection. Collected materials will include the following:

- Mixed paper;
- Corrugated cardboard;
- Glass;
- Plastics;
- Metals;
- Batteries; and
- Mercury Containing Lamps.

MR Prerequisite – Construction and Demolition Waste Management Planning: The team will implement a construction waste management plan with a diversion goal of 75% of the site-generated waste from the landfill. The construction team will provide monthly reports of waste diversion.

MR Building Product Disclosure and Optimization – Environmental Product Declarations: The team will document the use of at least 20 different permanently installed products, sourced from at least five different manufacturers, that include confirmed environmental product declaration documents.

MR Building Product Disclosure and Optimization – Sourcing of Raw Materials: The team will document the use of at least 20 different permanently installed products, sourced from at least five different manufacturers, that include third-party corporate sustainability reports with information on extraction operations.

MR Building Product Disclosure and Optimization – Material Ingredients: The team will document the use of at least 20 different permanently installed products, sourced from at least five different manufacturers, that include manufacturer's inventory of all contents, Health Product Declarations, and/or Cradle-to-Cradle certification.

MR Construction and Demolition Waste Management: The team is committed to reducing construction waste through at least 50% diversion of three material streams; if possible, the team will strive to increase the reduction to 75% diversion and four material streams.

Indoor Environmental Quality

IEQ Prerequisite – Minimum Indoor Air Quality Performance: The team will ensure that all ventilation systems meet the minimum requirements of Sections 4 through 7 of the ASHRAE 62.1-2007 standard for Acceptable Indoor Air Quality. Each unit will have kitchen and bath exhaust as required by the Standard. In addition, fresh air will be mechanically supplied directly to each unit.

IEQ Prerequisite – Environmental Tobacco Smoke Control: Smoking will be prohibited inside the building and within 25-feet of all entries, outdoor air intakes, and operable windows; these prohibitions will be incited in all leasing agreements and will be displayed via on-site signage.

IEQ Enhanced Indoor Air Quality Strategies: The team will consider inclusion of the following:

- *A permanent entryway system at least 10-feet long in the primary direction of travel;*
- *Direct exhaust of all housekeeping and laundry areas to prevent cross-contamination; and*
- *MERV 13 filtration on all ventilation systems.*

IEQ Low Emitting Materials: The team will specify paints, coatings, flooring, adhesives, and sealants that comply with California Department of Public Health Standard Method V1.1–2010, using CA Section 01350, Appendix B, New Single-Family Residence Scenario.

IEQ Construction Indoor Air Quality Management Plan: The general contractor will ensure that all installed ductwork is adequately protected throughout the construction phase. This protection will be verified by site inspections.

IEQ Thermal Comfort: The building will provide individual thermal controls for all hotel rooms. Additionally, all shared spaces will include controls for adjustment per group needs.

EQ Interior Lighting: The building will meet the criteria for both Option 1 and Option 2:

Option 1 - Lighting Control. The building will provide individual lighting controls for all building occupants within all hotel rooms. Additionally, all shared spaces will include controls for adjustment per group needs.

Option 2 - Lighting Quality. The building will include the following lighting strategies:

1. All light sources will have a CRI of 80, or higher,
2. At least 75% of the total connected lighting load will use lights with a rated light of at least 24,000 hours,
3. All regularly occupied spaces will use light fixtures with a luminance of less than 2,500 cd/m2, and

4. 90% of the regularly occupied floor area will meet the thresholds for LEED requirements for area-weighted average surface reflectance.

EQ Daylight: The team will complete a computer simulation demonstrating that at least 55% daylight autonomy is achieved throughout the building. Additionally, the simulation will confirm an annual sunlight exposure of no more than 10%.

EQ Quality Views: The team will seek to maximize the views available to occupants in all regularly occupied spaces. At least 75% of the applicable floor area will achieve a direct line of sight to the outdoors.

EQ Acoustic Performance: The team will strive to reduce transfer of HVAC background noise, isolate sounds according to their sound transmission class, and meet the LEED required reverberation time for all applicable room times within the building.

Innovation in Design

The team will seek to achieve at least three Innovation points; potential credits include: Green Education, Reduction of Mercury in Lighting, and Local Purchasing.

ID LEED Accredited Professional: Ashley Wisse, LEED AP, is coordinating the Article 37 Compliance process and LEED certifiability for this building.

Regional Priority

Regional Priority Credits (RPCs) are established LEED credits designated by the USGBC to have priority for a particular area of the country. When a Project team achieves one of the designated RPCs, an additional credit is awarded to the Project. RPCs applicable to the site include: SS Rainwater Management, WE Indoor Water Use Reduction, and EA Optimize Energy Performance.

3.4 Climate Change Resilience

3.4.1 Introduction

Climate change conditions considered by the Project team include higher maximum and mean temperatures, more frequent and longer extreme heat events, more frequent and longer droughts, more severe freezing rain and heavy rainfall events, and increased wind gusts.

The expected life of the Project is anticipated to be approximately 50 years. Therefore, the Proponents planned for climate-related conditions projected 50 years into the future. A copy of a completed Checklist for each building is included in Appendix D. Given the preliminary level of design, the responses are also preliminary and may be updated as the Project design progresses.

LEED v4 for BD+C: New Construction and Major Renovation

Project Checklist

Project Name: 560 Commonwealth Ave
Date: 11-Oct-17

Y	?	N			
1			Credit	Integrative Process	1

13	1	2	Location and Transportation	16
			Credit LEED for Neighborhood Development Location	16
1			Credit Sensitive Land Protection	1
1		1	Credit High Priority Site	2
5			Credit Surrounding Density and Diverse Uses	5
5			Credit Access to Quality Transit	5
	1		Credit Bicycle Facilities	1
1			Credit Reduced Parking Footprint	1
		1	Credit Green Vehicles	1

6	0	4	Sustainable Sites	10
Y			Prereq Construction Activity Pollution Prevention	Required
1			Credit Site Assessment	1
		2	Credit Site Development - Protect or Restore Habitat	2
		1	Credit Open Space	1
3			Credit Rainwater Management	3
2			Credit Heat Island Reduction	2
		1	Credit Light Pollution Reduction	1

3	2	6	Water Efficiency	11
Y			Prereq Outdoor Water Use Reduction	Required
Y			Prereq Indoor Water Use Reduction	Required
Y			Prereq Building-Level Water Metering	Required
		2	Credit Outdoor Water Use Reduction	2
3		3	Credit Indoor Water Use Reduction	6
	1	1	Credit Cooling Tower Water Use	2
	1		Credit Water Metering	1

10	6	17	Energy and Atmosphere	33
Y			Prereq Fundamental Commissioning and Verification	Required
Y			Prereq Minimum Energy Performance	Required
Y			Prereq Building-Level Energy Metering	Required
Y			Prereq Fundamental Refrigerant Management	Required
3		3	Credit Enhanced Commissioning	6
6	4	8	Credit Optimize Energy Performance	18
		1	Credit Advanced Energy Metering	1
		2	Credit Demand Response	2
		3	Credit Renewable Energy Production	3
1			Credit Enhanced Refrigerant Management	1
	2		Credit Green Power and Carbon Offsets	2

4	1	8	Materials and Resources	13
Y			Prereq Storage and Collection of Recyclables	Required
Y			Prereq Construction and Demolition Waste Management Planning	Required
		5	Credit Building Life-Cycle Impact Reduction	5
1		1	Credit Building Product Disclosure and Optimization - Environmental Product Declarations	2
1		1	Credit Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
1		1	Credit Building Product Disclosure and Optimization - Material Ingredients	2
1	1		Credit Construction and Demolition Waste Management	2

8	4	4	Indoor Environmental Quality	16
Y			Prereq Minimum Indoor Air Quality Performance	Required
Y			Prereq Environmental Tobacco Smoke Control	Required
	2		Credit Enhanced Indoor Air Quality Strategies	2
2		1	Credit Low-Emitting Materials	3
1			Credit Construction Indoor Air Quality Management Plan	1
		2	Credit Indoor Air Quality Assessment	2
1			Credit Thermal Comfort	1
2			Credit Interior Lighting	2
2		1	Credit Daylight	3
	1		Credit Quality Views	1
	1		Credit Acoustic Performance	1

4	2	0	Innovation	6
3	2		Credit Innovation	5
1			Credit LEED Accredited Professional	1

1	2	1	Regional Priority	4
	1		Credit EA Optimize Energy Performance; Threshold = 8 pts	1
1			Credit SS Rainwater Management; Threshold = 2 pts	1
	1		Credit WE Indoor Water Use Reduction; Threshold = 4 pts	1
		1	Credit LT High Priority Site; Threshold = 2 points	1

50	18	42	TOTALS	Possible Points:	110

Certified: 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

LEED v4 for BD+C: Hospitality

Project Checklist

Project Name: Beacon Street
Date: 11-Oct-17

Y	?	N			
1			Credit	Integrative Process	1

13	0	3	**Location and Transportation**		16
			Credit	LEED for Neighborhood Development Location	16
1			Credit	Sensitive Land Protection	1
1		1	Credit	High Priority Site	2
5			Credit	Surrounding Density and Diverse Uses	5
5			Credit	Access to Quality Transit	5
1			Credit	Bicycle Facilities	1
		1	Credit	Reduced Parking Footprint	1
		1	Credit	Green Vehicles	1

8	0	2	**Sustainable Sites**		10
Y			Prereq	Construction Activity Pollution Prevention	Required
1			Credit	Site Assessment	1
		2	Credit	Site Development - Protect or Restore Habitat	2
1			Credit	Open Space	1
3			Credit	Rainwater Management	3
2			Credit	Heat Island Reduction	2
1			Credit	Light Pollution Reduction	1

3	2	6	**Water Efficiency**		11
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
		2	Credit	Outdoor Water Use Reduction	2
3		3	Credit	Indoor Water Use Reduction	6
	1	1	Credit	Cooling Tower Water Use	2
	1		Credit	Water Metering	1

10	6	17	**Energy and Atmosphere**		33
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
3		3	Credit	Enhanced Commissioning	6
6	4	8	Credit	Optimize Energy Performance	18
		1	Credit	Advanced Energy Metering	1
		2	Credit	Demand Response	2
		3	Credit	Renewable Energy Production	3
1			Credit	Enhanced Refrigerant Management	1
	2		Credit	Green Power and Carbon Offsets	2

4	1	8	**Materials and Resources**		13
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
		5	Credit	Building Life-Cycle Impact Reduction	5
1		1	Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
1		1	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
1		1	Credit	Building Product Disclosure and Optimization - Material Ingredients	2
1	1		Credit	Construction and Demolition Waste Management	2

8	4	4	**Indoor Environmental Quality**		16
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
	2		Credit	Enhanced Indoor Air Quality Strategies	2
2		1	Credit	Low-Emitting Materials	3
1			Credit	Construction Indoor Air Quality Management Plan	1
		2	Credit	Indoor Air Quality Assessment	2
1			Credit	Thermal Comfort	1
2			Credit	Interior Lighting	2
2		1	Credit	Daylight	3
	1		Credit	Quality Views	1
	1		Credit	Acoustic Performance	1

4	2	0	**Innovation**		6
3	2		Credit	Innovation	5
1			Credit	LEED Accredited Professional	1

1	2	1	**Regional Priority**		4
	1		Credit	EA Optimize Energy Performance; Threshold = 8 pts	1
1			Credit	SS Rainwater Management; Threshold = 2 pts	1
	1		Credit	WE Indoor Water Use Reduction; Threshold = 4 pts	1
		1	Credit	LT High Priority Site; Threshold = 2 points	1

52	17	41	**TOTALS**	Possible Points:	**110**

Certified: 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

3.4.2 Extreme Heat Events

The *Climate Ready Boston* report predicts that in Boston, there may be between 25 to 90 days over 90 degrees by 2070, compared to an average of 11 days per year over 90 degrees between 1971 to 2000. The Project design will include measures to adapt to these conditions, including installing high performance HVAC equipment, energy recovery ventilation systems, and new landscaping to reduce the urban heat island effect.

3.4.3 Rain Events

As a result of climate change, the Northeast is expected to experience more frequent and intense storms. To mitigate this, the Proponents will take measures to minimize stormwater runoff and protect the Project's mechanical equipment, as necessary. The Project will be designed to reduce the existing peak rates and volumes of stormwater runoff from the site, and promote runoff recharge to the greatest extent practicable.

3.4.4 Drought Conditions

Although more intense rain storms are predicted, extended periods of drought are also predicted due to climate change. Under the high emissions scenario, the occurrence of droughts lasting one to three months could go up by as much as 75% over existing conditions by the end of the century. To minimize the Project's susceptibility to drought conditions, the landscape design is anticipated to incorporate native and adaptive plant materials. Aeration fixtures and appliances will be chosen for water conservation qualities, conserving potable water supplies.

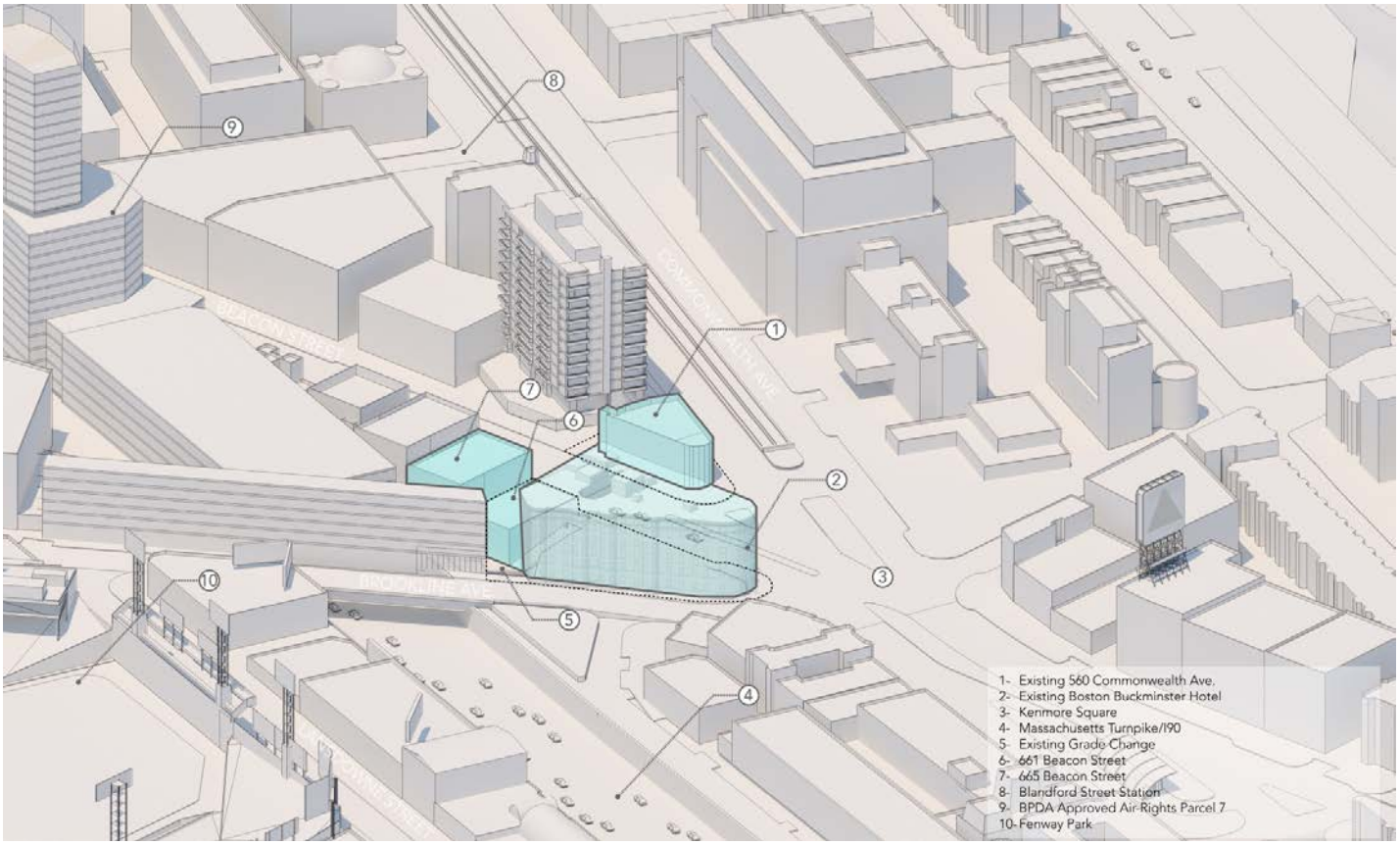
3.5 Urban Design

The Project aims to create a distinctive and unified new destination in Kenmore Square. The intention is to develop two hotel buildings with a variety of commercial/retail space, energized street level activity, new dining opportunities and an increased, 24/7 level of activity.

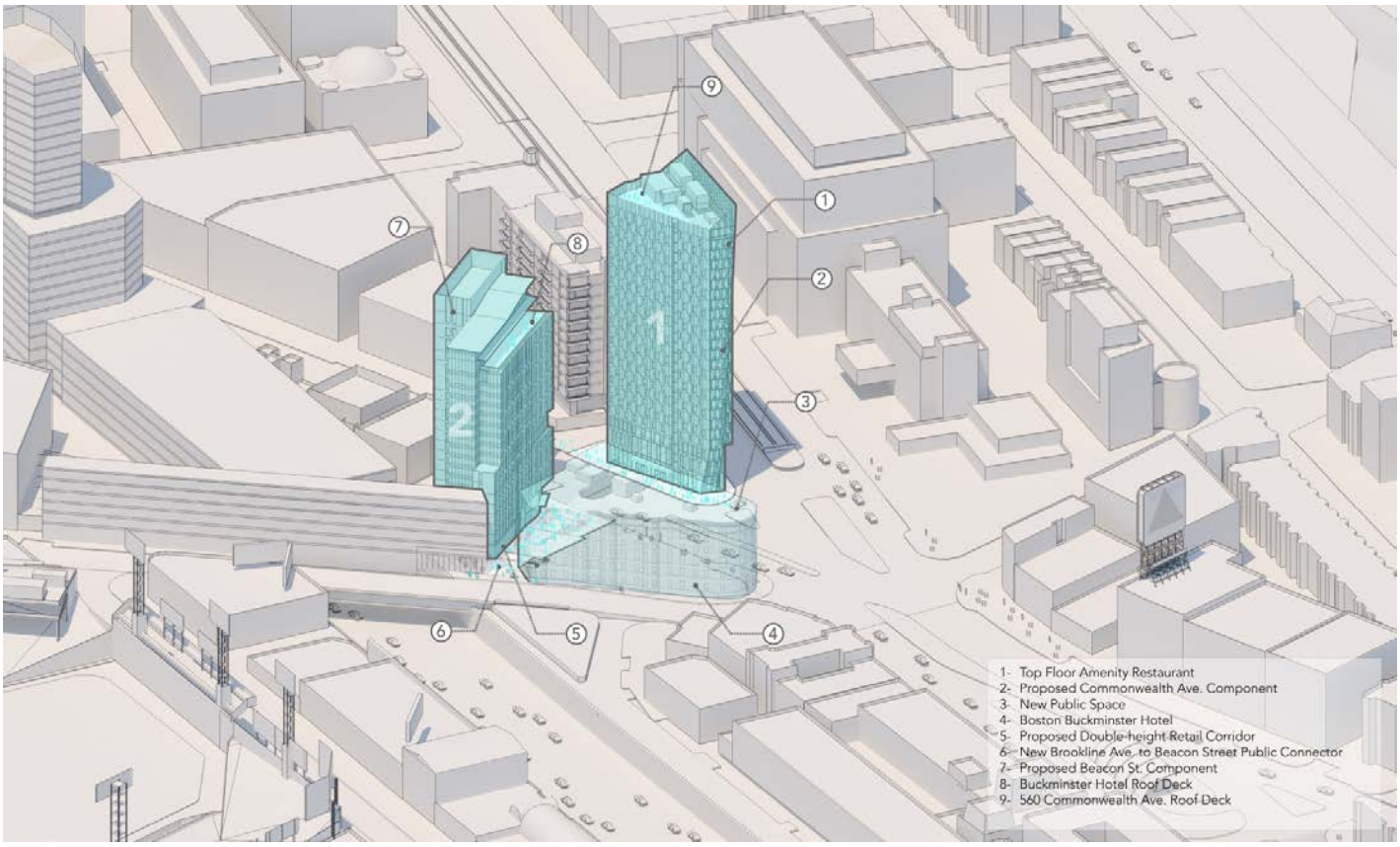
Early design schemes explored a variety of massing options, including multiple heights, densities, and public realm improvements. In both buildings, the current five to seven story street wall height represented by most of the buildings nearby in Kenmore Square was maintained and additional stories were added above. This way, the existing fabric of Kenmore Square and its urban integrity is maintained while enhancing the skyline and creating more activity in the new and improved square (see Figure 3.5-1 and 3.5-2).

The Project Area commands direct sightlines along the long vistas of Beacon Street and Commonwealth Avenue. This location creates a unique opportunity for highly visible buildings that will mark Kenmore Square. The geometry of the Commonwealth Avenue

Existing Massing



Proposed Massing



Kenmore Square Hotels Boston, Massachusetts

Figure 3.5-1
Existing and Proposed Massing

Kenmore Square Hotels **Boston, Massachusetts**

Epsilon ASSOCIATES INC.

Figure 3.5-2
View Facing Southeast Toward the Pedestrian Connector

Component results in a rare wedge-shaped building form that arises from its triangular footprint. This form can play a large role in completing and shaping the "Kenmore Room" by anchoring the two Project buildings—the Commonwealth Avenue Component and the Beacon Street Component–to form the boundary of the square (see Figures 3.5-3 and 3.5-4).

Both buildings will be constructed with steel and concrete and will use non-reflective glass curtainwall or window wall systems. The Commonwealth Avenue Component will include metal panel cladding, and will have signage for the hotel name as well as the Citizens Bank branch. The Beacon Street Component will include materials that complement the adjacent Buckminster Hotel, and will include masonry cladding at the lower levels and metal panel and precast concrete cladding on the upper levels.

3.6 Historic and Archaeological Resources

This section describes the historic and archaeological resources located on the Project site and within the Project's vicinity.

3.6.1 Historic Resources in the Project Area

The Project Area consists of the six-story Buckminster Hotel at 645 Beacon Street, a two-story parking structure at 651 Beacon Street, a four-story commercial office building at 655-665 Beacon Street, and a single-story commercial building at 560-574 Commonwealth Avenue. The existing Buckminster Hotel will be retained while the other buildings within the Project Area will be demolished to accommodate the Project's new construction. None of the structures to be demolished appear to possess any historic or architectural significance.

3.6.1.1 645 Beacon Street

Built in two stages between 1895 and 1902, the Buckminster Hotel occupies a flatiron site at the intersection of Beacon Street and Brookline Avenue. Reflecting elements of both the Renaissance Revival and Beaux-Arts styles, its two-story base of heavily rusticated limestone is surmounted by four additional floors of limestone-trimmed red brick. The composition is crowned by a heavy modillioned cornice; this was originally surmounted by bronze cresting of which only segments remain.

Although the curved portion of the façade addressing the southwest approach to Kenmore Square has suffered a succession of unsympathetic storefront alterations, the symmetrical Beacon Street elevation is largely intact. This features arched window openings of round and segmental profile as well as ornamental balustrades of limestone and wrought iron; aediculated window surrounds and an ornamental cartouche centered above the principal entrance add further richness of detail.

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Figure 3.5-3
View From Commonwealth Avenue Facing Southwest

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Figure 3.5-4
Aerial View

3.6.1.2 651, 655-665 Beacon Street

Based on available permit records, it appears that the office building located at 651, 655-665 Beacon Street was erected circa 1922; the parking structure appears to have been built as recently as 1971.

If the office building was erected in the first quarter of the 20th century, this is evident only from the concrete framing visible at an exposed segment of its east party wall whereas the street façade suggests a 1970s origin. This is characterized by the regularity of its fenestration at the first through third floors; the openings are filled with modern, unequally divided aluminum windows.

The sparse fenestration of the fourth floor suggests that this level may be a later addition. Possibly the fourth floor and altered façade were undertaken concurrently with the parking structure. The latter's completely unadorned cast-in-place concrete structure and utilitarian appearance gives no indication of its period.

3.6.1.3 560-574 Commonwealth Avenue

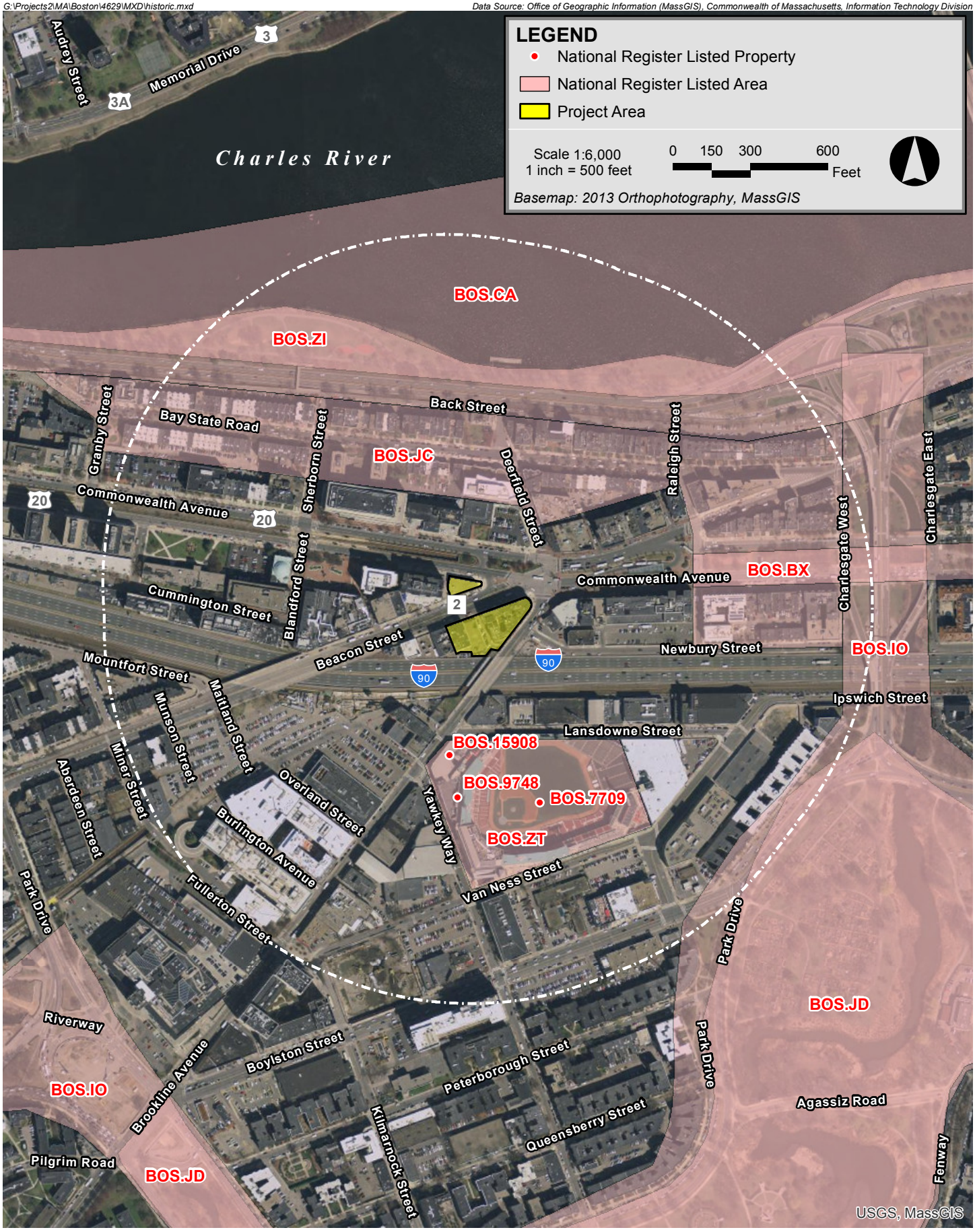
The single-story commercial building at 560-574 Commonwealth Avenue was built in 1954 as the Kenmore Square branch of the First National Bank of Boston. The simple, undistinguished design is the work of the noted architectural firm of Perry, Shaw & Hepburn. Although the building has been leased to a succession of financial institutions since its construction, it remains in use as a retail banking facility.

Its flatiron footprint filling the point of land defined by the crossing of Commonwealth Avenue and Beacon Street at Kenmore Square, the building is organized as a single-story structure veneered in buff limestone on a slightly darker polished granite base. Both the Commonwealth Avenue and Beacon Street elevations feature a single wide window opening subdivided by mill-finished aluminum mullions. Addressing Kenmore Square, the entry bay occupies the apex of the site; while its glazing modules are larger and more vertical in proportion, the opening itself is detailed similarly. Low granite benches integral with the building's base flank the central door.

3.6.2 Historic Resources in the vicinity

Numerous properties and districts included in the State and National Registers of Historic Places are within proximity to the Project Area. In the vicinity is the National Register-listed Fenway Park, Back Bay Fens, Charles River Esplanade and Charles River Basin Historic District, Olmsted Park System and the Commonwealth Avenue Mall (which is also a locally designated landmark). The locally designated Bay State Road/Back Bay West Architectural Conservation District is within this radius as well.

Table 3.6-1 identifies the resources within one-quarter mile of the Project Area, and corresponds to resources depicted in Figure 3.6-1.



Kenmore Square Hotels Boston, Massachusetts

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Figure 3.6-1
Historic Resources

Table 3.6-1 State and National Register-Listed Properties in the Vicinity of the Project Area

Historic Resource	Address	Designation
1. Fenway Park	24 Yawkey Way	NR
2. Fenway Park Rooftop Structures	24 Yawkey Way	NR
3. John B. Smith Building	64-78 Brookline Avenue	NR
A. Commonwealth Avenue Mall	Commonwealth Avenue between Arlington St. and Charlesgate West	NR, LL
B. Back Bay Fens	The Fenway, Park Drive, Boylston Street	NRDIS
C. Charles River Esplanade	The south bank of the Charles River from Route 28 to the Boston University Bridge	NRDIS
D. Charles River Basin Historic District	Charles River Dam southwesterly to Longfellow Bridge, then westerly to Eliot Bridge, then crossing river and continuing westerly to western edge of Memorial Drive Extension then northeasterly along western edge of Memorial Drive	NRDIS
E. Olmsted Park System	The parklands of the Riverway, Olmsted Park and Jamaica Pond, and their associated parkways	NRDIS
F. Bay State Road/Back Bay West Architectural Conservation District	Bay State Road between Raleigh & Granby streets; Commonwealth Avenue between Charlesgate West and Kenmore Street; Newbury Street between Charlesgate West and Kenmore Street	LHD

Designation Legend

NR	Individually listed in the National Register of Historic Places
NRDIS	National Register of Historic Places Historic District
LHD	Local Historic District
LL	Local Landmark

The Draft PIR will include an assessment of potential Project-related impacts to the historic resources listed above.

3.6.3 Archaeological Resources Within the Project Area

A review of the Inventory of Historic and Archaeological Assets of the Commonwealth and the State and National Registers revealed no known archaeological resources. Due to previous site disturbance activities, the Project Area is unlikely to yield significant archaeological potential.

3.7 Infrastructure Systems

The existing infrastructure surrounding the Project Area is anticipated to be of adequate capacity to service the needs of the Project. There are existing sanitary sewer, storm drainage, water, gas, electric, and telecommunications lines in the vicinity of the Project Area.

Approval of Site Plans and a General Service Application are required from Boston Water and Sewer Commission (BWSC) for construction and activation of sewer, water, and storm drainage service connections. The final sewer and water connections, as well as the Project's stormwater management system, will be designed in conformance with BWSC's design standards, Requirements for Site Plans, Regulations Governing the Use of Sanitary and Combined Sewers and Storm Drains, and Regulations Governing the Use of the Water Distribution Facilities of the Boston Water and Sewer Commission. A Drainage Discharge Permit Application will be submitted to BWSC for any required construction dewatering.

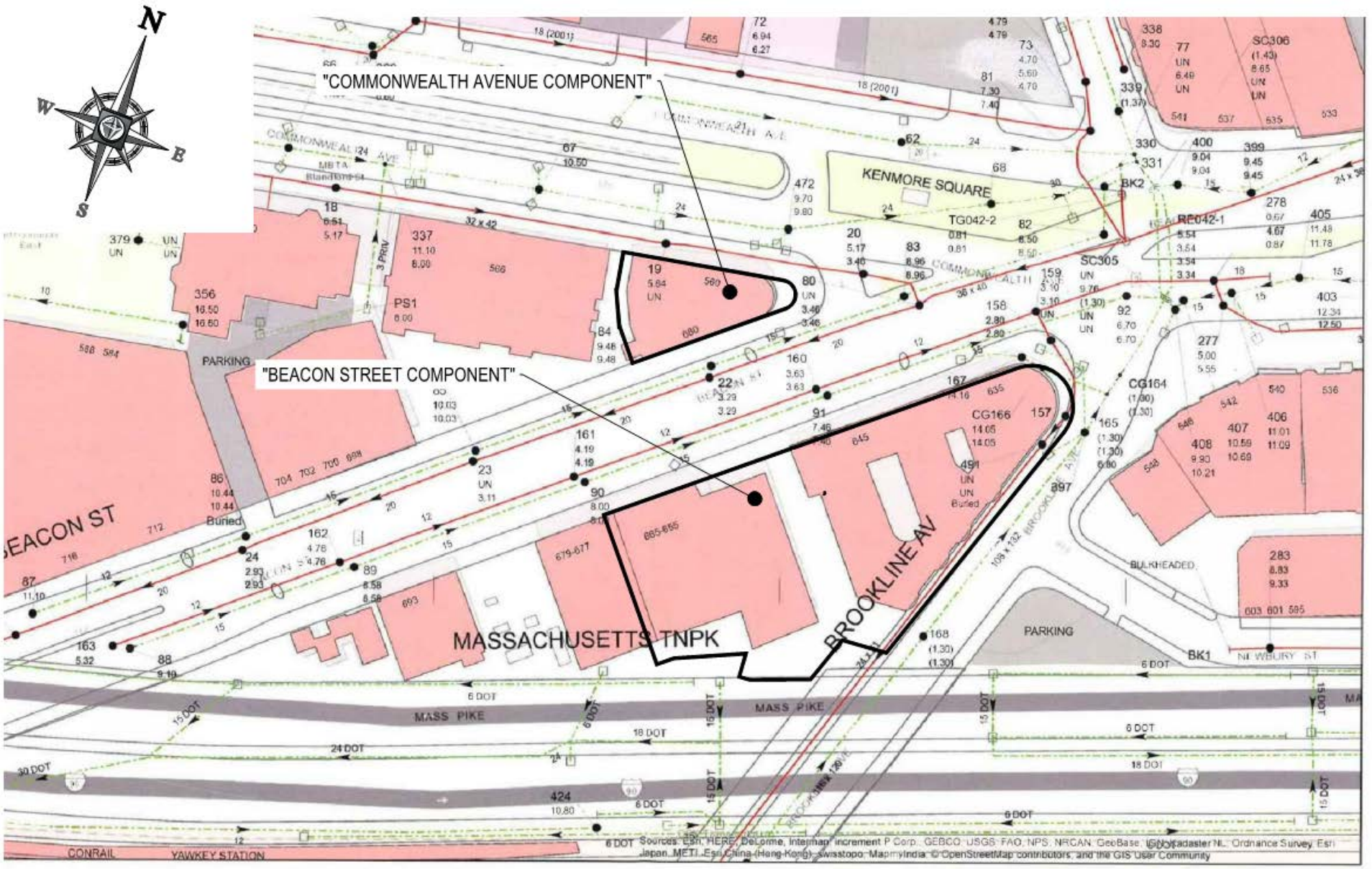
Prior to demolition, the existing storm drain will be cut and capped, sanitary sewer and water services that are not proposed for reuse on the Project Area. A Termination Verification Approval Form for a Demolition Permit will be completed and submitted to the City of Boston Inspectional Services Department (ISD) as required.

3.7.1 Sanitary Sewer System

3.7.1.1 Existing Sanitary Sewer System

BWSC owns, operates, and maintains the sanitary sewer mains in the vicinity of the Project Area.

Per BWSC record mapping (See Figure 3.7-1), there is a 24-inch x 31-inch separated main within Brookline Avenue, a 12-inch main along the southern side of Beacon Street, a 20–inch main along the northern side of Beacon Street, a 32 x 42-inch main along the southern side of Commonwealth Avenue and an 18-inch main running along the northern side of Commonwealth Avenue.



Kenmore Square Hotels **Boston, Massachusetts**

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Figure 3.7-1
Existing Sewer Drain Map

The existing sanitary sewer services to the buildings being demolished will be cut and capped prior to demolition, as required by BWSC.

3.7.1.2 Estimated Proposed Sanitary Flow

The Massachusetts Department of Environmental Protection (MassDEP) establishes sewer generation rates for various types of establishments in a section of the State Environmental Code Title 5 (Title 5), 310 CMR 15.203. Based on an estimate of the Project's building program, Tables 3.7-1 and 3.7-2 provide the estimated existing and proposed sanitary sewer flows. The proposed sewer generation rate is approximately 87,945 gallons per day (gpd). The number of hotel rooms in the existing Buckminster Hotel will remain unchanged and will not result in a change in the existing sewage flow on that parcel. The proposed sewer generation calculation will be refined as the building tenants are confirmed and final sewer generation flows will be coordinated with BWSC.

Table 3.7-1 Estimated Existing Sewer Flows

Unit Type	Program	Sewer Generation Rate	Sewer Flow (gpd)
Existing Bank*	5,957 sf	75 gallons/day/1,000 sf	447
Existing Office*	25,601 sf	75 gallons/day/1,000 sf	1,920
Total Sewer Generation			**2,367**

* Existing building areas are based on the City of Boston Assessors map.

Table 3.7-2 Estimated Proposed Sewer Flows

Unit Type	Program	Sewer Generation Rate	Sewer Flow (gpd)
Hotel	677 rooms	110 gallons/day/room	74,470
Restaurant**	385 seats	35 gallons/day/seat	13,475
Parking Garage	145 spaces	-	-
Total Sewer Generation			**87,945**

** For initial planning purposes, it is conservatively assumed that all retail space will be restaurant uses.

Based on preliminary calculations and discussions with BWSC, there are no sewer capacity problems in the vicinity of the Project Area. The Project's engineers will coordinate final, proposed sewer flows and available capacity with BWSC during the Site Plan review process to ensure the Project needs are met without disruption of service to the surrounding area.

3.7.1.3 Proposed Sanitary Sewer Connections

Based on an initial discussion with BWSC, it is anticipated that the Commonwealth Avenue Component will likely connect to BWSC's sewer main in Commonwealth Avenue. The Beacon Street Component will likely connect to the BWSC's main within the south side of Beacon Street. Incidental runoff from interior parking decks for the Beacon Street Component will be routed through a gas and oil separator prior to being piped to the sanitary sewer service. The gas and oil separator will conform to BWSC and MWRA standards.

All sewer connections will be constructed so as to minimize effects on adjacent streets, sidewalks, and other areas within the public right-of-way. All sewer service connections will be kept separate from storm drain connections in accordance with BWSC requirements. Per current BWSC records and the initial discussion with BWSC, it appears that all storm and sewer drains within Brookline Avenue, Beacon Street and Commonwealth Avenue are separated.

3.7.1.4 Sewer System Mitigation

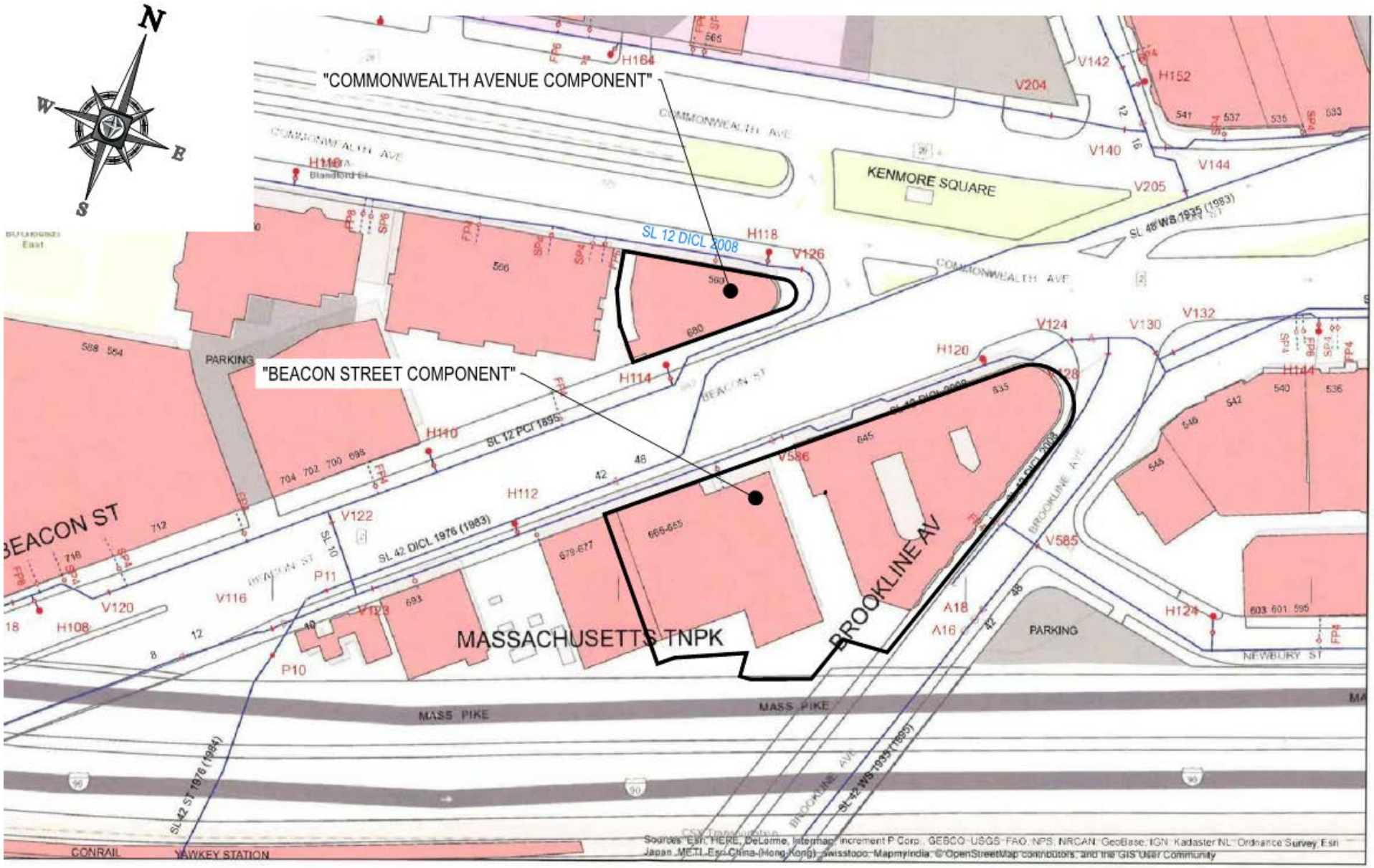
The sanitary sewer connections are subject to approval by the municipal sewer system owner, BWSC, as part of the Site Plan approval process. Based on the proposed sanitary system flow, which is greater than 15,000 gpd, the Project will be required to mitigate inflow and infiltration (I/I) into the BWSC sewer system, and ultimately the MWRA regional wastewater system, at a rate of 4-gallons for every 1-gallon of new sewer flow. The Proponents will continue to work with BWSC as the building program is finalized to identify the I/I payment to be made.

Additionally, as further discussed in Section 3.7.2.4, various measures for water use reduction, which translates directly into wastewater reduction, are being implemented into the design which will also benefit the overall goal of reducing the volume of flows being sent to the MWRA wastewater treatment facility.

3.7.2 Water System

3.7.2.1 Existing Water Service

BWSC owns, operates, and maintains the water distribution systems in the vicinity of the Project Area. Per BWSC record mapping (See Figure 3.7-2) there is an existing 42-inch water transmission main built in 1935 and improved in 1995 located within Brookline Avenue, a 12-inch cement lined ductile iron low service main built in 2008 located within the northern side of Brookline Avenue, a 12-inch ductile iron cement-lined low service main built in 2008 located in Beacon Street, a 42-inch ductile iron cement lined transmission main built in 1976 and improved in 1983 located in Beacon Street, a 12-inch low service pit cast iron main built in 1895 in Beacon Street, and a 12-inch ductile iron cement lined low service main built in 2008 in Commonwealth Avenue.



Kenmore Square Hotels **Boston, Massachusetts**

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Figure 3.7-2
Existing Water Map

The vicinity is well served by fire hydrants located on Commonwealth Avenue and on the north and south sides of Beacon Street.

The existing water services to the buildings to be demolished will be cut and capped prior to demolition, as required by BWSC. If necessary, existing hydrants will be removed and relocated in coordination with Boston Fire Department (BFD) service needs.

3.7.2.2 Estimated Proposed Water Demand

The estimated water demand for the Project is based on the estimated sanitary sewer flow (see Table 3.7-2), with a factor of 1.1 applied to account for consumption and other losses. Based on this formula, the Project's estimated peak water demand for domestic use is 96,740 gallons per day. The domestic and fire protection water services will be supplied by the BWSC water system. More detailed water use and meter sizing calculations for each building will be provided as a part of the Site Plan approval process.

Based on an initial discussion with BWSC, there are no expected water capacity issues in the vicinity of the Project Area. Prior to full design, this will be confirmed by hydrant flow testing performed for each main to be connected to by BWSC. The Project's engineer will coordinate water demand and availability with BWSC during Project design to ensure the Project needs are met while maintaining adequate water flows to the surrounding neighborhood.

3.7.2.3 Proposed Water Service

Based on initial discussion with BWSC, it is anticipated that the Commonwealth Avenue Component will likely be serviced via the 12-inch water main in Commonwealth Avenue. Separate domestic water and redundant fire protection services will be required. The Beacon Street Component will likely be serviced via the 12-inch DICL water main in Beacon Street, similar on Commonwealth Avenue, separate domestic water and redundant fire protection services will be required. At this time, it is assumed that each building will include internal booster pumps to ensure adequate water pressure to all standpipes and sprinkler systems. However, as previously noted, hydrant flow tests will be performed on the mains in the vicinity of the Project Area as the design progresses.

Metering for both buildings will be conducted in accordance with BWSC requirements including the installation of meter transmission units (MTU's) to comply with BWSC's automatic meter reading system. Appropriate gate valves and backflow prevention devices will also be installed on each domestic and fire protection service to allow individual services to be shut off and to prevent potential backflow of non-potable water or other contaminants into the public water supply.

At this point in the design it is not anticipated that additional fire hydrants will necessary as the vicinity is well served by fire hydrants. A Project Area plan will be submitted to the Boston Fire Department to confirm the Project Area has adequate fire protection access and coverage.

3.7.2.4 Water Supply Conservation and Mitigation

Various water conservation measures will be investigated as the design progresses such as low-flow toilets and urinals, restricted flow faucets, and sensor operated sinks, toilets, and urinals. Specific water conservation measures to be included in the Project will be more fully described as the building designs develop.

3.7.3 Storm Drainage System

3.7.3.1 Existing Storm Drainage System

BWSC owns, operates, and maintains the sanitary sewer mains in the vicinity of the Project Area.

The Project Area consists of existing buildings which collect storm water through a roof drain system and discharge directly into BWSC's existing drainage infrastructure in the surrounding streets. Stormwater run-off from the sidewalks discharges directly to BWSC's systems as well.

The existing storm drainage services for buildings to be demolished will be cut and capped prior to demolition, as required by BWSC.

3.7.3.2 Proposed Storm Drainage System

The proposed stormwater management system will be designed to comply with BWSC requirements. Stormwater runoff will be collected and treated on-site, as necessary, and will be routed to subsurface infiltration systems to the maximum extent practicable in an effort to reduce the impact on the BWSC drainage system. The Project will not impact the water quality of nearby water bodies. At a minimum, on-site systems will be designed with a capacity of 1-inch throughout the Project Area. Overflow connections from the stormwater management system will be designed to handle larger, less frequent storm events and will discharge to the BWSC drain system.

A pollution prevention plan will be prepared for use during demolition and construction specifying appropriate erosion and sedimentation (E&S) controls to be installed to prevent sediment laden stormwater runoff from leaving the Project Area and entering the BWSC drainage system. E&S controls may include structural methods such as catch basin inlet controls, hay bales, silt fence, and silt socks as well as non-structural methods such as minimizing the extent and duration of exposed soils. The contractor will be responsible for controlling dust using street sweeping and watering as necessary. E&S controls will be

maintained as necessary until all disturbed areas have been stabilized through the placement of pavement, structure, or established vegetative cover and will conform to the Water Quality section of the City of Boston Environment Department Guidelines for Construction.

A long-term operations and maintenance plan will be used to assist the Property Manager in maintaining the stormwater BMP's in appropriate operational condition.

3.7.3.3 City of Boston Groundwater Overlay District

The Project Area is not located within the City of Boston Groundwater Conservation Overlay District.

3.7.4 Electrical and Telecommunications Systems

Eversource owns and maintains the electrical infrastructure and Verizon, Comcast and RCN provide cable and telephone services within the Project Area's general vicinity. All electrical and telecommunications connections will be coordinated with the appropriate utility companies. Final service and appropriate connection points will be coordinated with the private utility providers as the Project design progresses.

3.7.5 Natural Gas System

National Grid provides natural gas service in the Project area. Final service and appropriate connection points will be coordinated with National Grid as the Project design progresses.

3.7.6 Utility Protection During Construction

The contractor will notify utility companies and call "Dig-Safe" prior to excavation. During construction, infrastructure will be protected using sheeting and shoring, temporary relocations and construction staging as required. The construction contractor will be required to coordinate all protection measures, temporary supports, and temporary shutdowns of all utilities with the appropriate utility owners and/or agencies. The construction contractor will also be required to provide adequate notification to the utility owner prior to any work commencing on their utility. Also, in the event a utility cannot be maintained in service during switch over to a temporary or permanent system, the construction contractor will be required to coordinate the shutdown with the utility owners and Project abutters to minimize impacts and inconveniences. The Proponents will continue to work with BWSC and utility companies to ensure safe and coordinated utility operations in connection with the Project.

Chapter 4.0

Coordination with other Governmental Agencies

4.0 COORDINATION WITH OTHER GOVERNMENTAL AGENCIES

4.1 Architectural Access Board Requirements

The Project will comply with the requirements of the Architectural Access Board and the standards of the Americans with Disabilities Act. An Accessibility Checklist for each building is included in Appendix E.

4.2 Massachusetts Environmental Policy Act (MEPA)

The Project is not subject to review under the Massachusetts Environmental Policy Act (MEPA), which is codified at Sections 62 through 62I of Massachusetts General Laws (MGL) Chapter 30, and implemented under the "MEPA Regulations" at Section 11 of Chapter 301 of the Code of Massachusetts Regulations (CMR). MEPA and the MEPA Regulations apply to: (a) projects undertaken by a state agency; (b) those aspects of a project that are within the subject matter of any required state permit; (c) projects involving state financial assistance; and (d) those aspects of a project within the area of any real property acquired from a state agency. (301 CMR 11.01(2)(a).) MEPA review is triggered when one or more of the reasons set forth above apply, and when the proposed project exceeds one or more review thresholds set forth in the MEPA Regulations. (301 CMR 11.03.) As noted above, the Project does not appear to require state action.

4.3 Massachusetts Historical Commission State Register Review

The Massachusetts Historical Commission (MHC) has review authority over projects requiring state funding, licensing, permitting, and/or approvals that may have direct or indirect impacts to properties listed in the State Register of Historic Places. The Project does not require state action that triggers MHC review under Sections 27-27c of Chapter 9 of the Massachusetts General Laws, as amended by Chapter 254 of the Acts of 1988. Should this change, MHC's review of the Project under the State Register Review process would be initiated through the filing of an MHC Project Notification Form.

4.4 Other Permits and Approvals

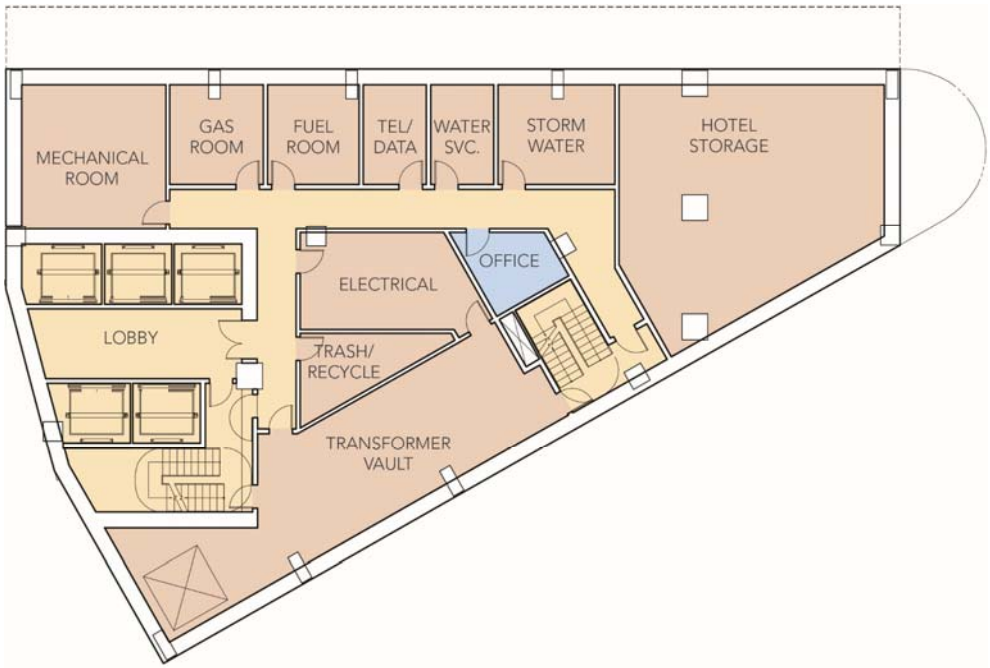
Section 2.2 provides a list of agencies from which it is anticipated that permits and approvals for the Project will be sought.

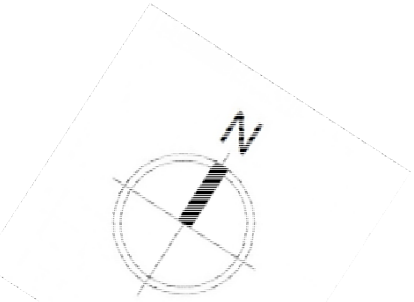
Appendix A

Floor Plans, Sections and Elevations

BUILDING LEGEND

- PUBLIC
- GUESTROOMS
- CIRCULATION
- BACK OF HOUSE
- RETAIL
- PARKING
- EXISTING TO REMAIN





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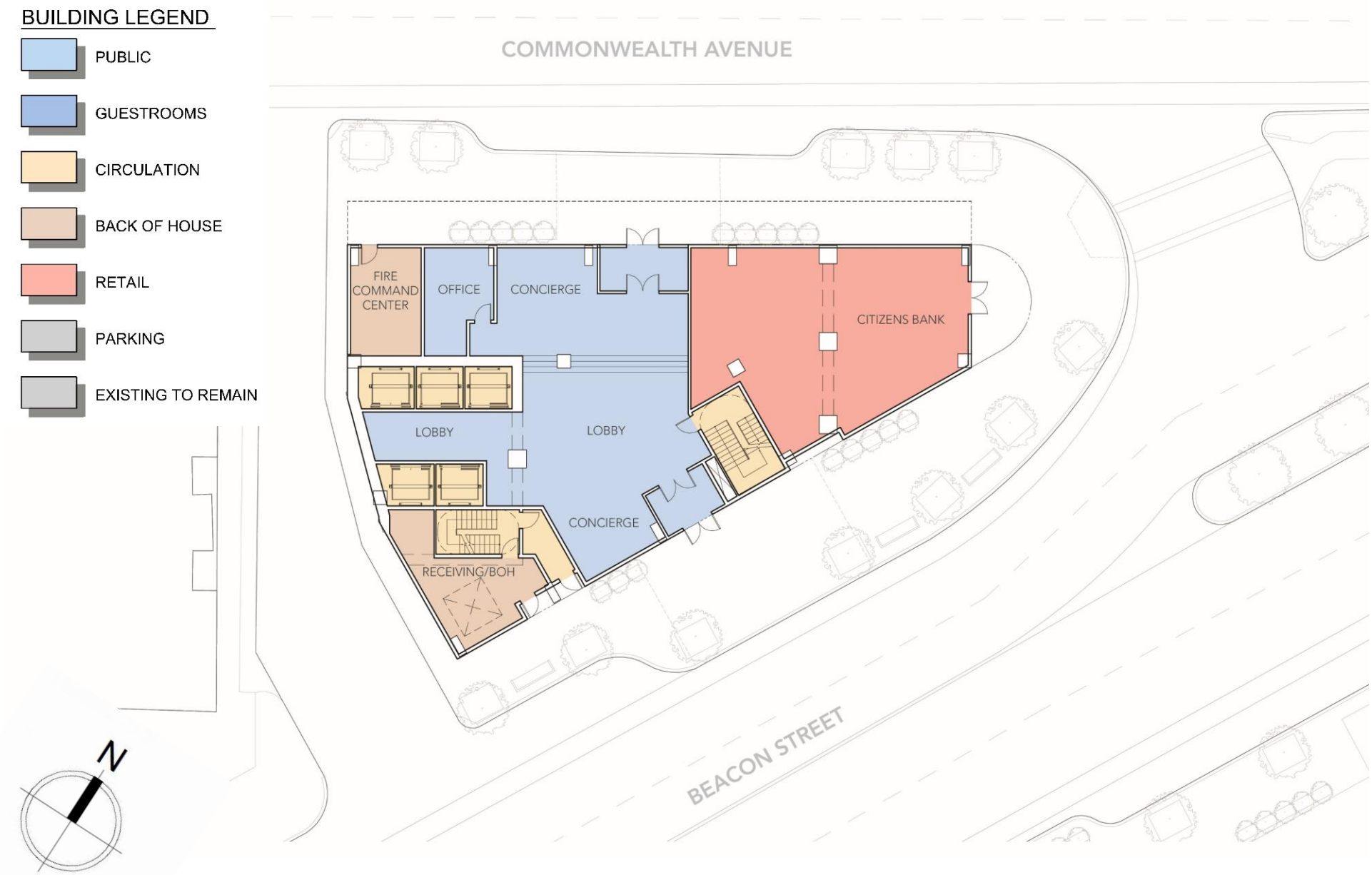
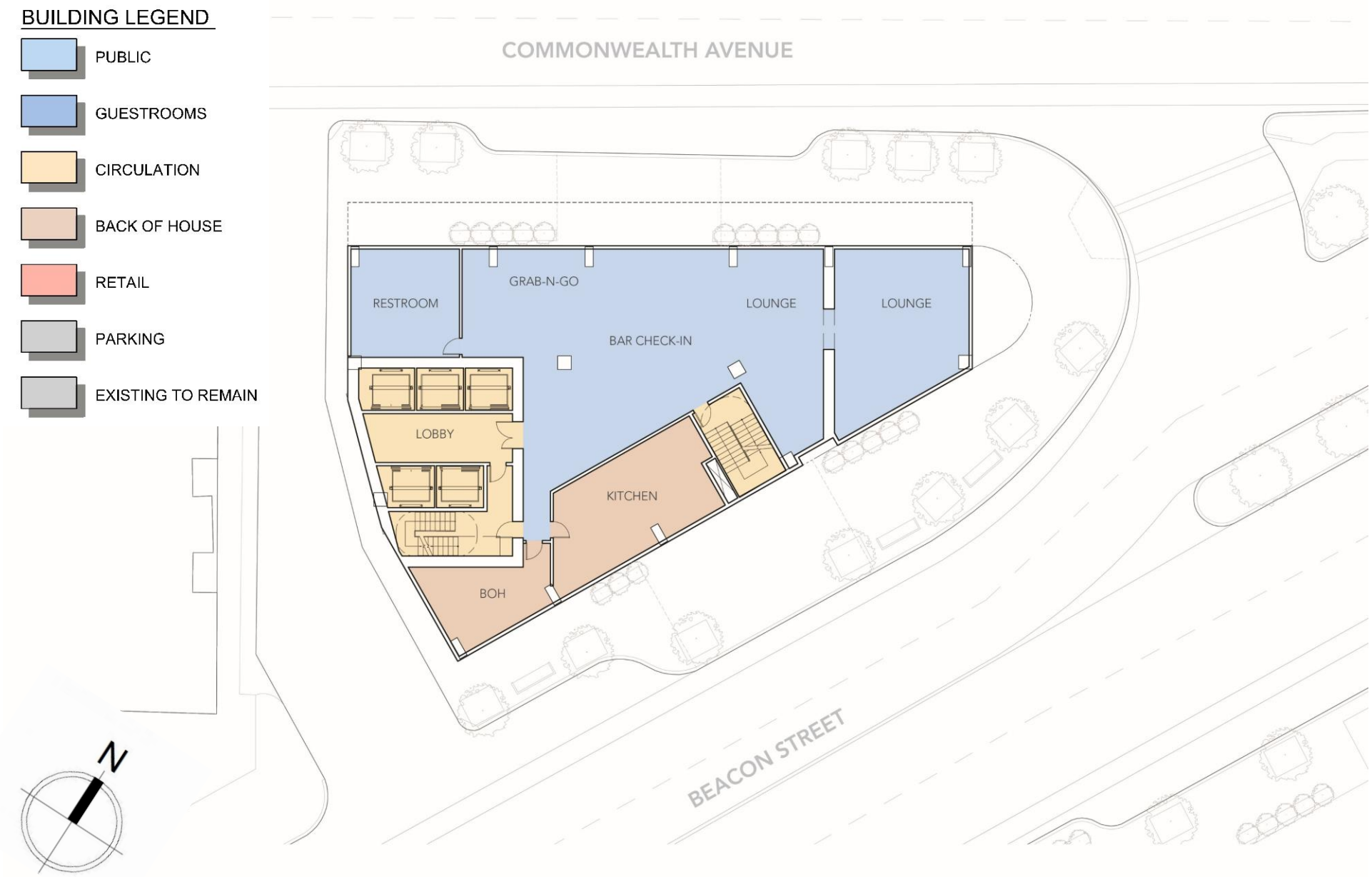
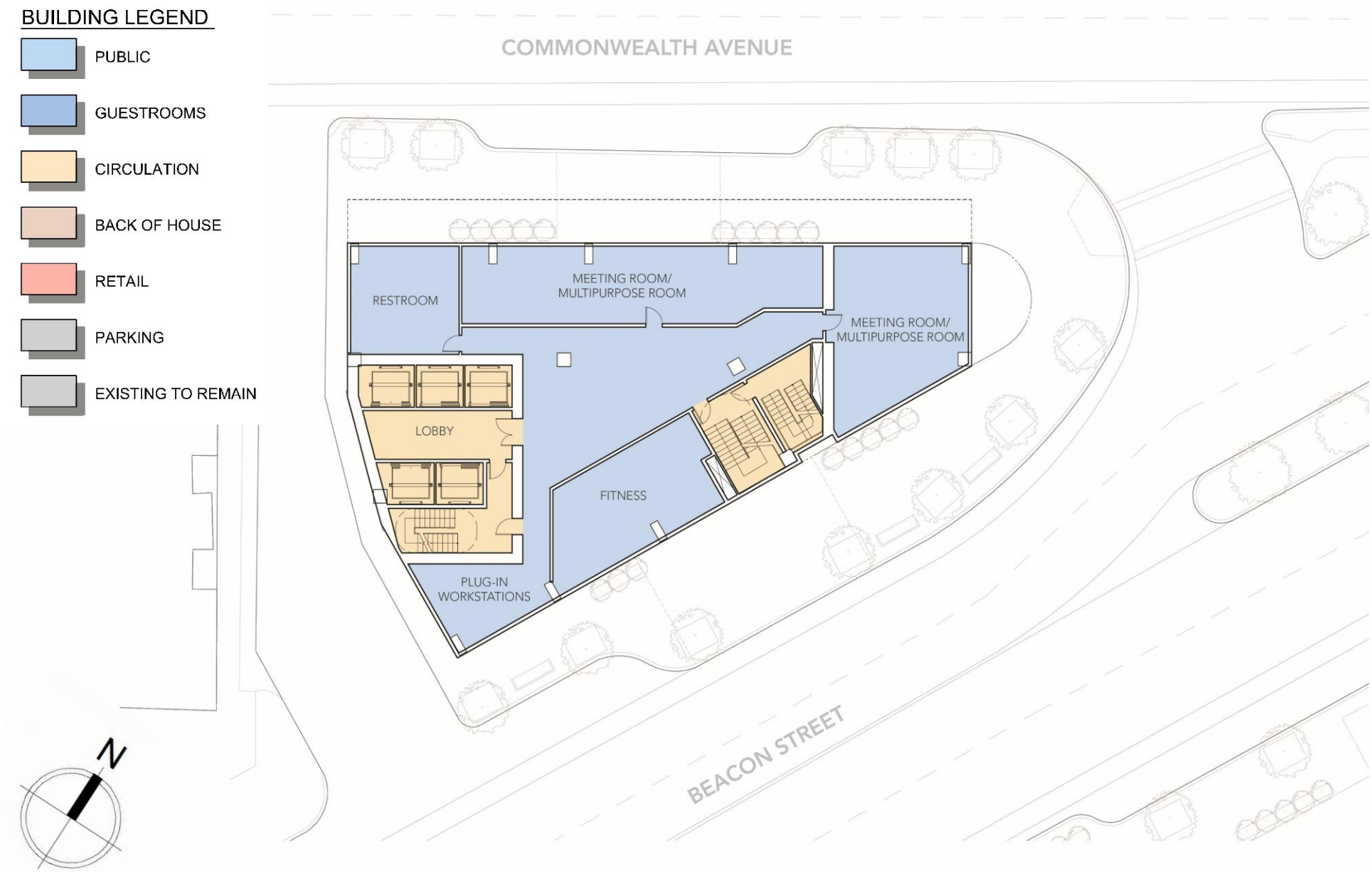


Kenmore Square Hotels **Boston, Massachusetts**



Kenmore Square Hotels **Boston, Massachusetts**



Kenmore Square Hotels **Boston, Massachusetts**

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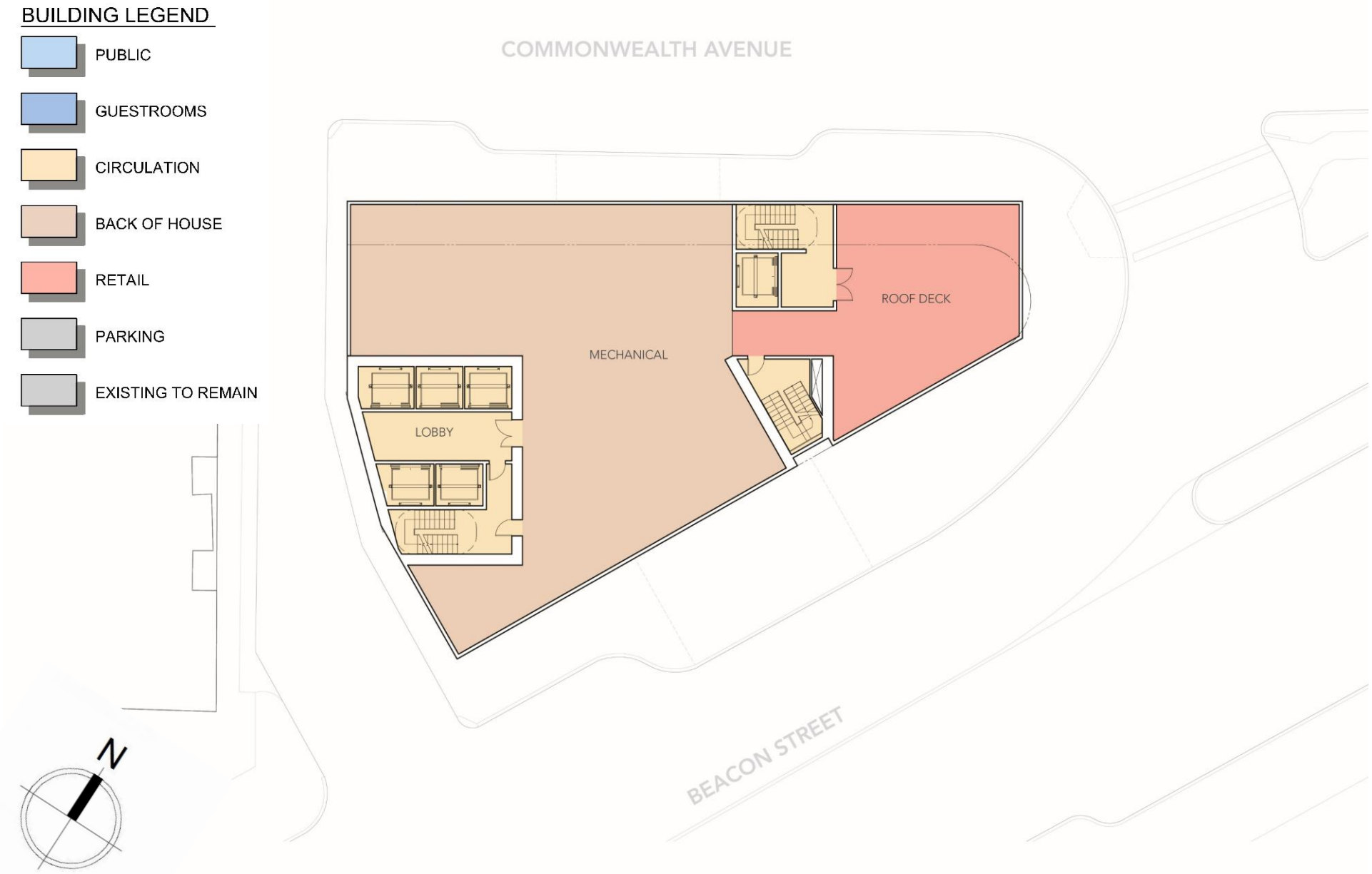

Kenmore Square Hotels **Boston, Massachusetts**

BUILDING LEGEND

- PUBLIC
- GUESTROOMS
- CIRCULATION
- BACK OF HOUSE
- RETAIL
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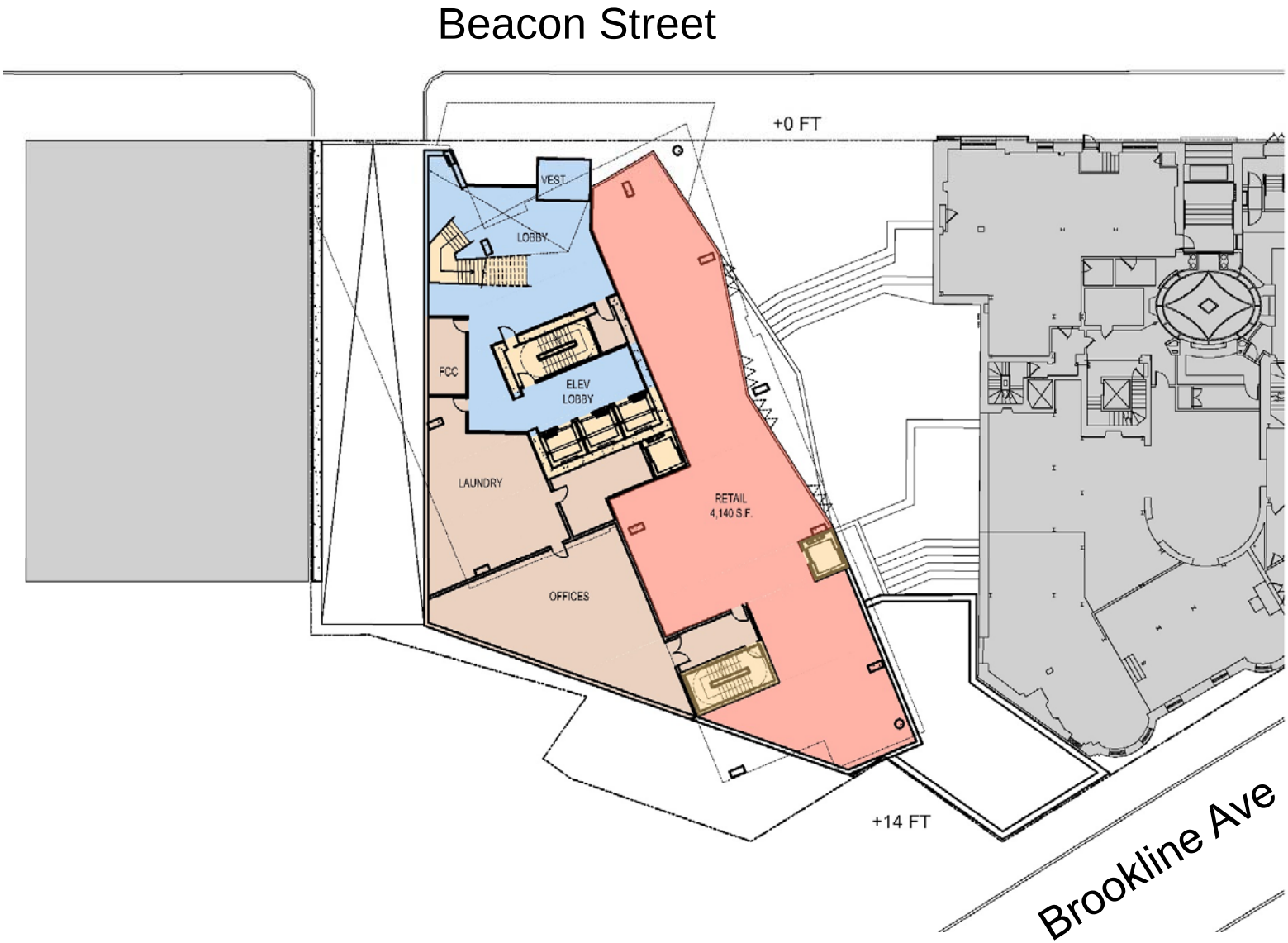

Kenmore Square Hotels **Boston, Massachusetts**

Epsilon ASSOCIATES INC.

BUILDING LEGEND

- PUBLIC
- GUESTROOMS
- CIRCULATION
- BACK OF HOUSE
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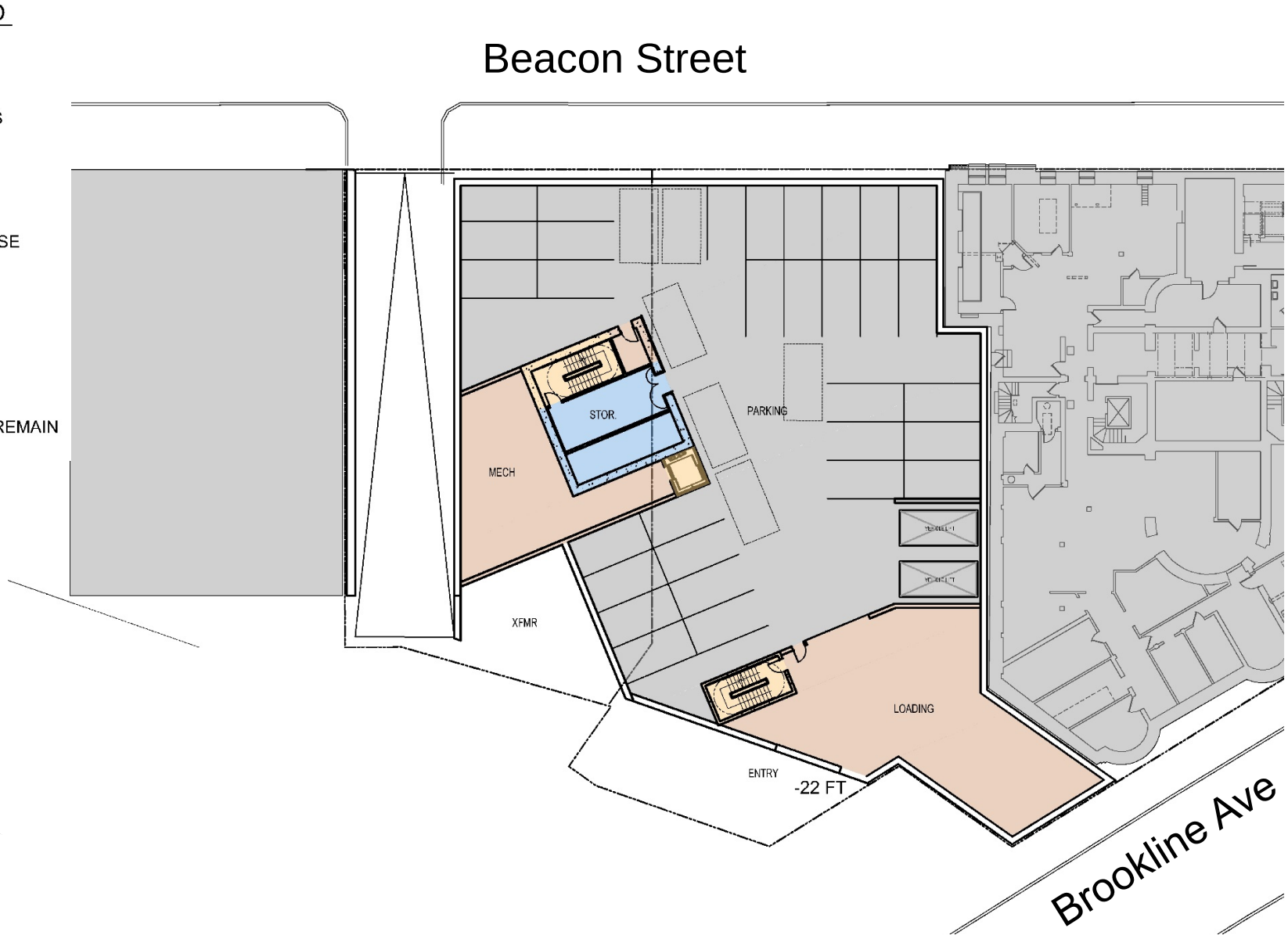

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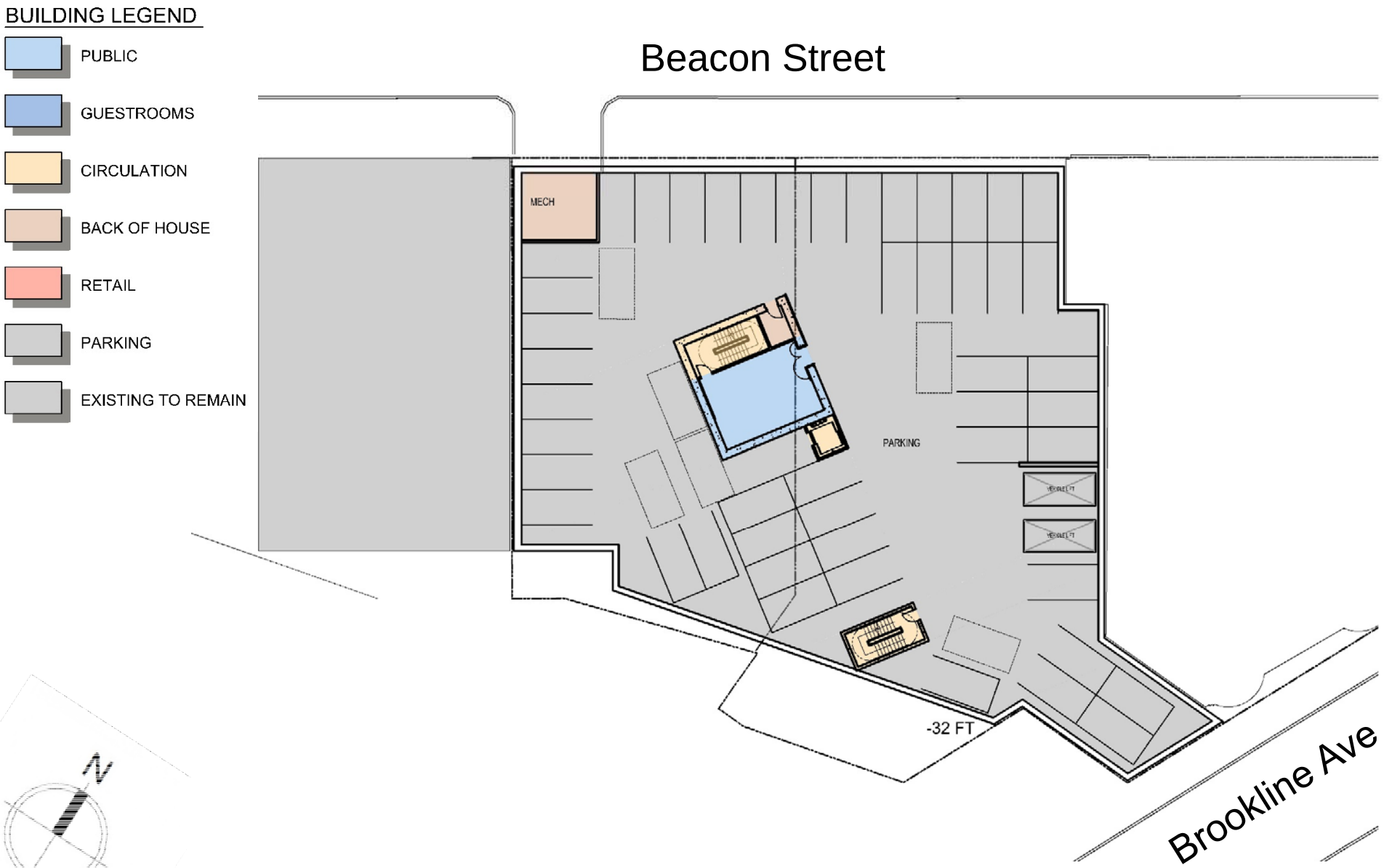

Kenmore Square Hotels **Boston, Massachusetts**

BUILDING LEGEND

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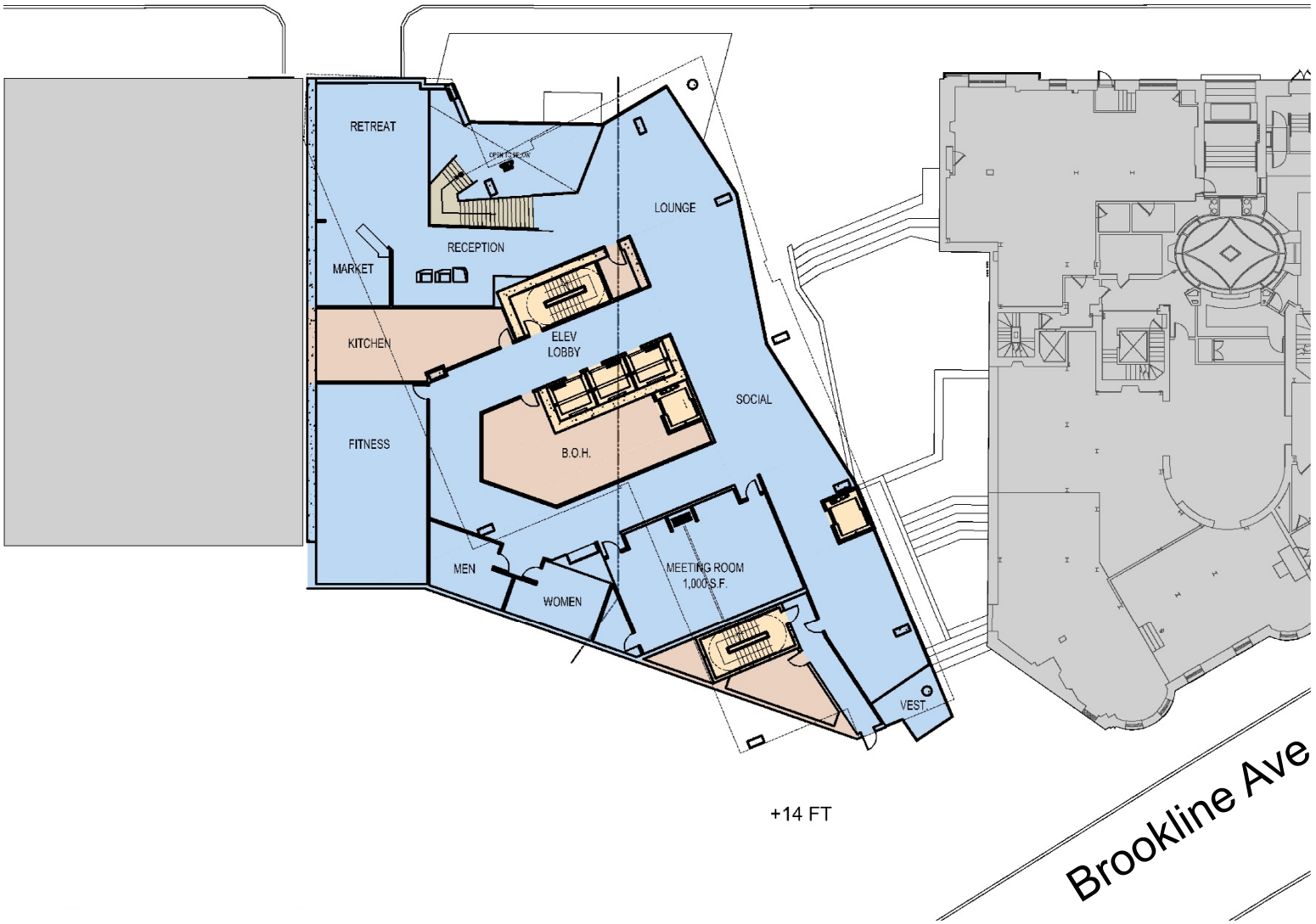

Kenmore Square Hotels **Boston, Massachusetts**

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BUILDING LEGEND

- PUBLIC
- GUESTROOMS
- CIRCULATION
- BACK OF HOUSE
- RETAIL
- PARKING
- EXISTING TO REMAIN

Kenmore Square Hotels **Boston, Massachusetts**

BUILDING LEGEND

- PUBLIC
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- CIRCULATION
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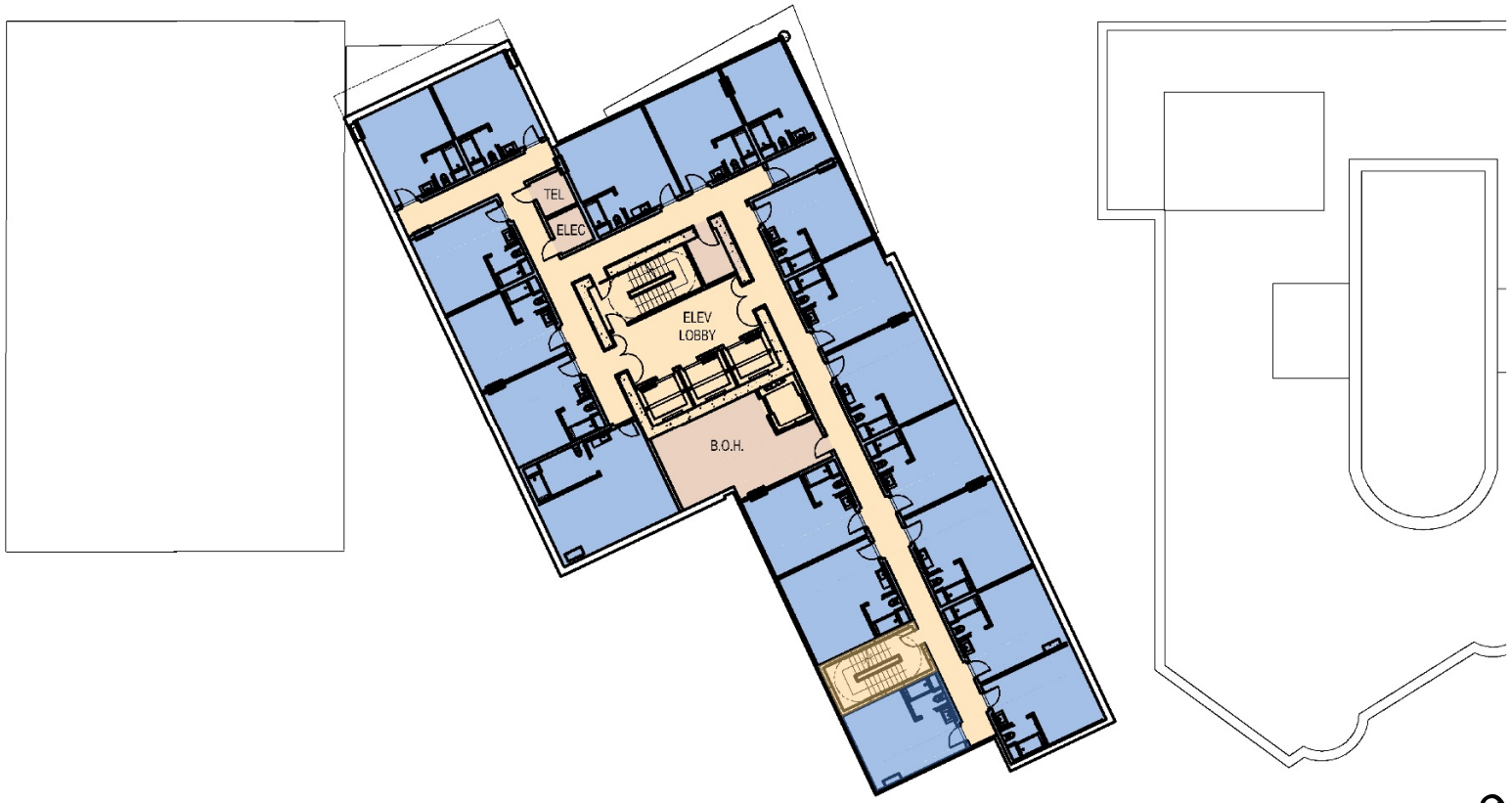
Beacon Street



Brookline Ave

Kenmore Square Hotels **Boston, Massachusetts**

BUILDING LEGEND

- PUBLIC
- GUESTROOMS
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Kenmore Square Hotels **Boston, Massachusetts**

BUILDING LEGEND

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Beacon Street

Brookline Ave

Kenmore Square Hotels **Boston, Massachusetts**

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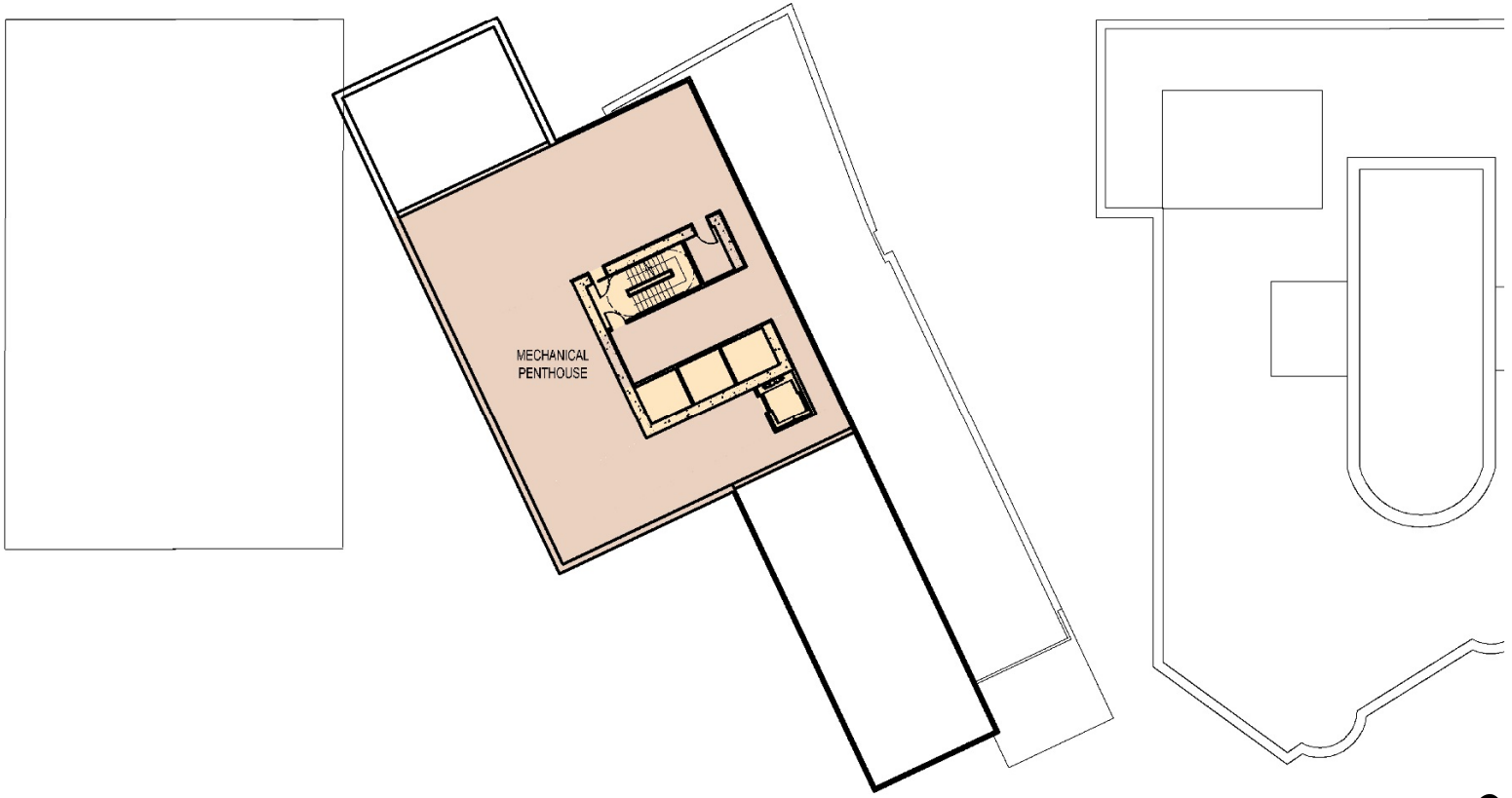
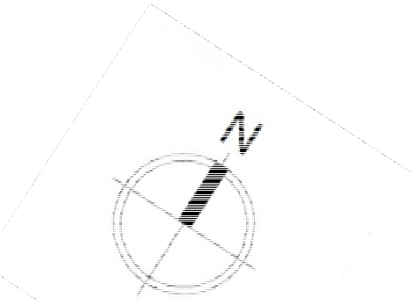
- RETAIL
- PARKING
- EXISTING TO REMAIN

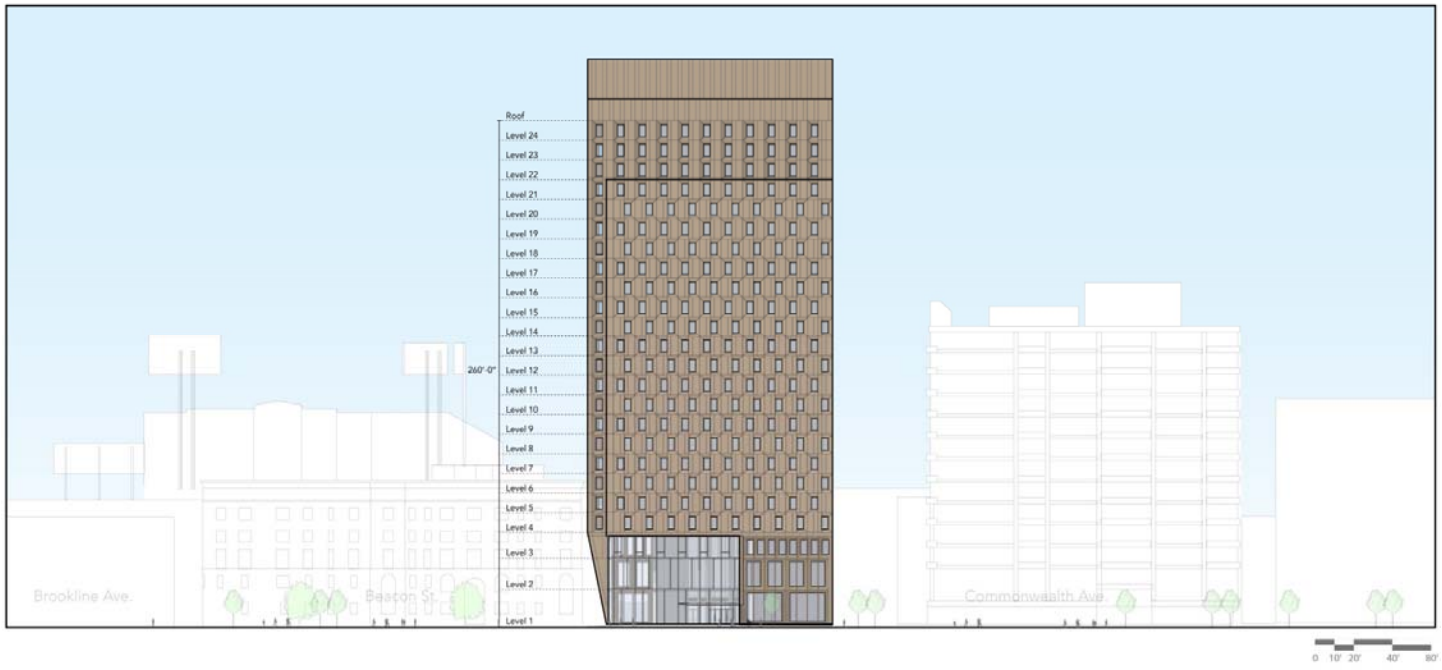




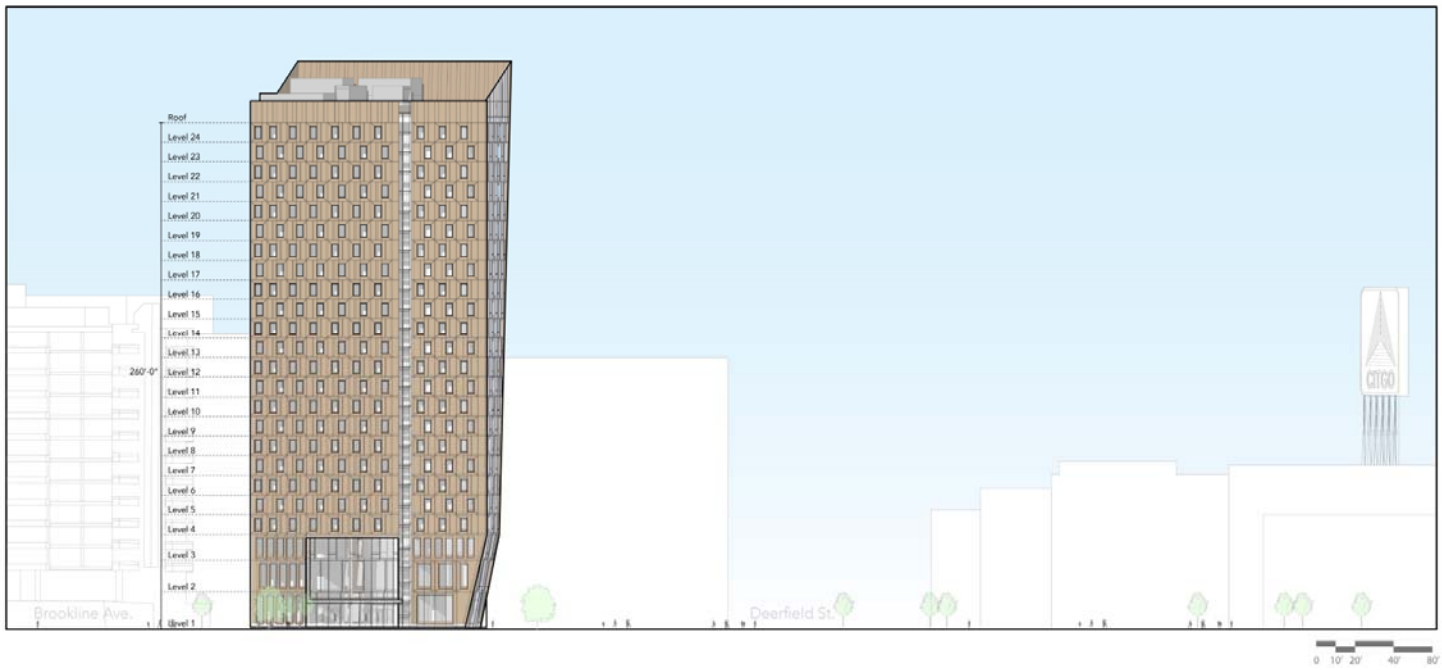
Kenmore Square Hotels **Boston, Massachusetts**

West Elevation

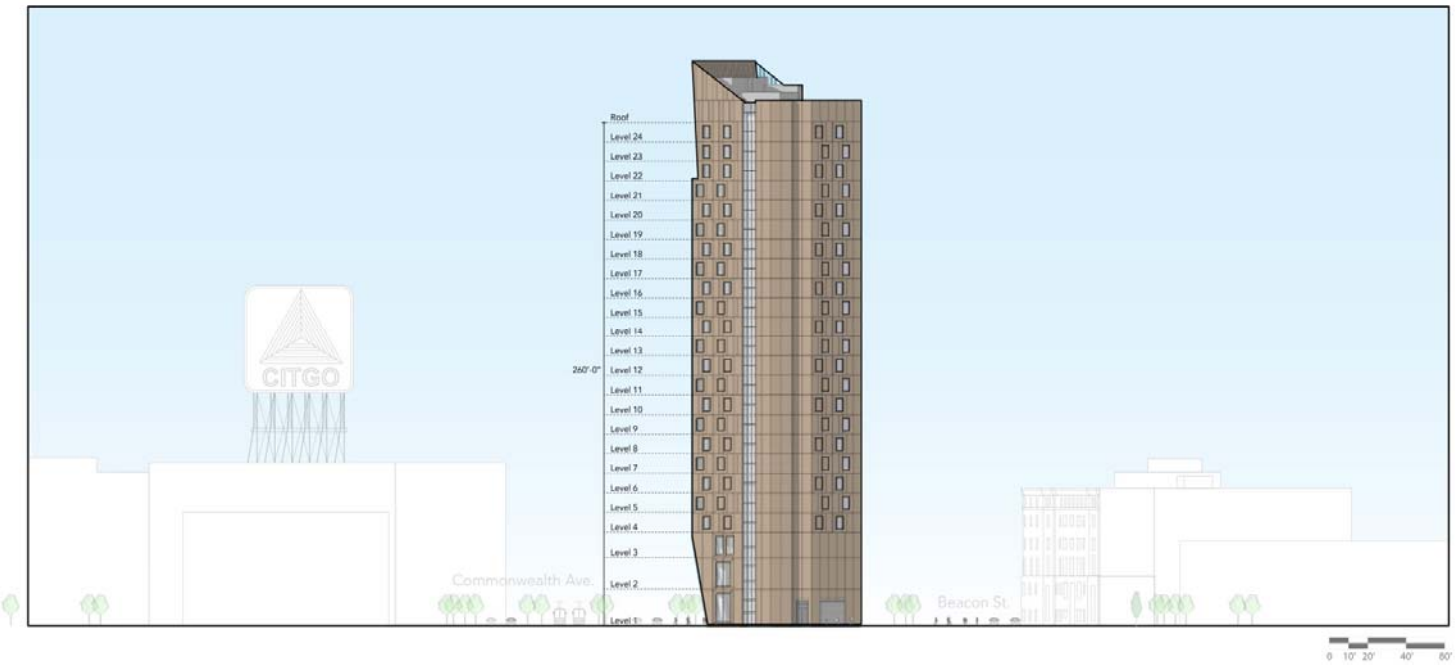
North Elevation

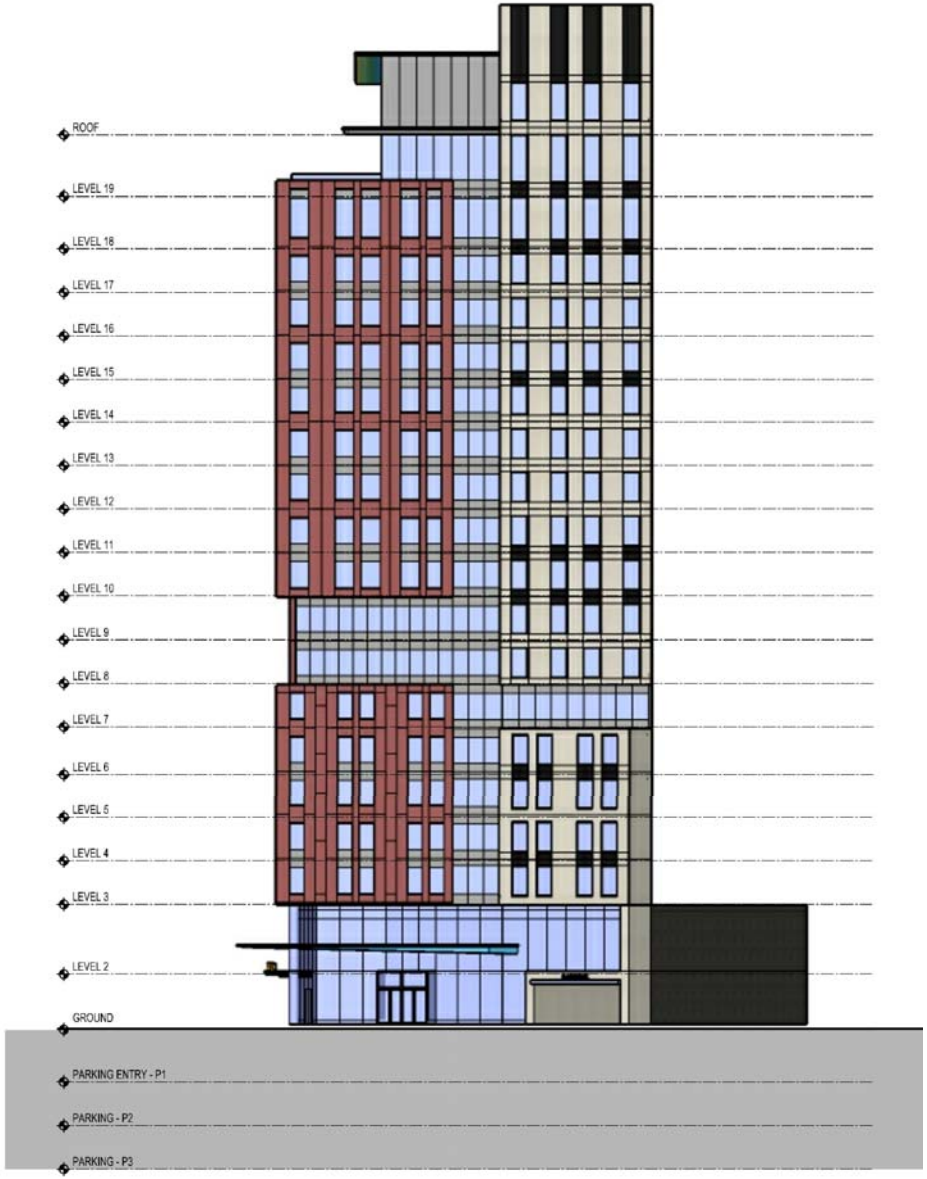


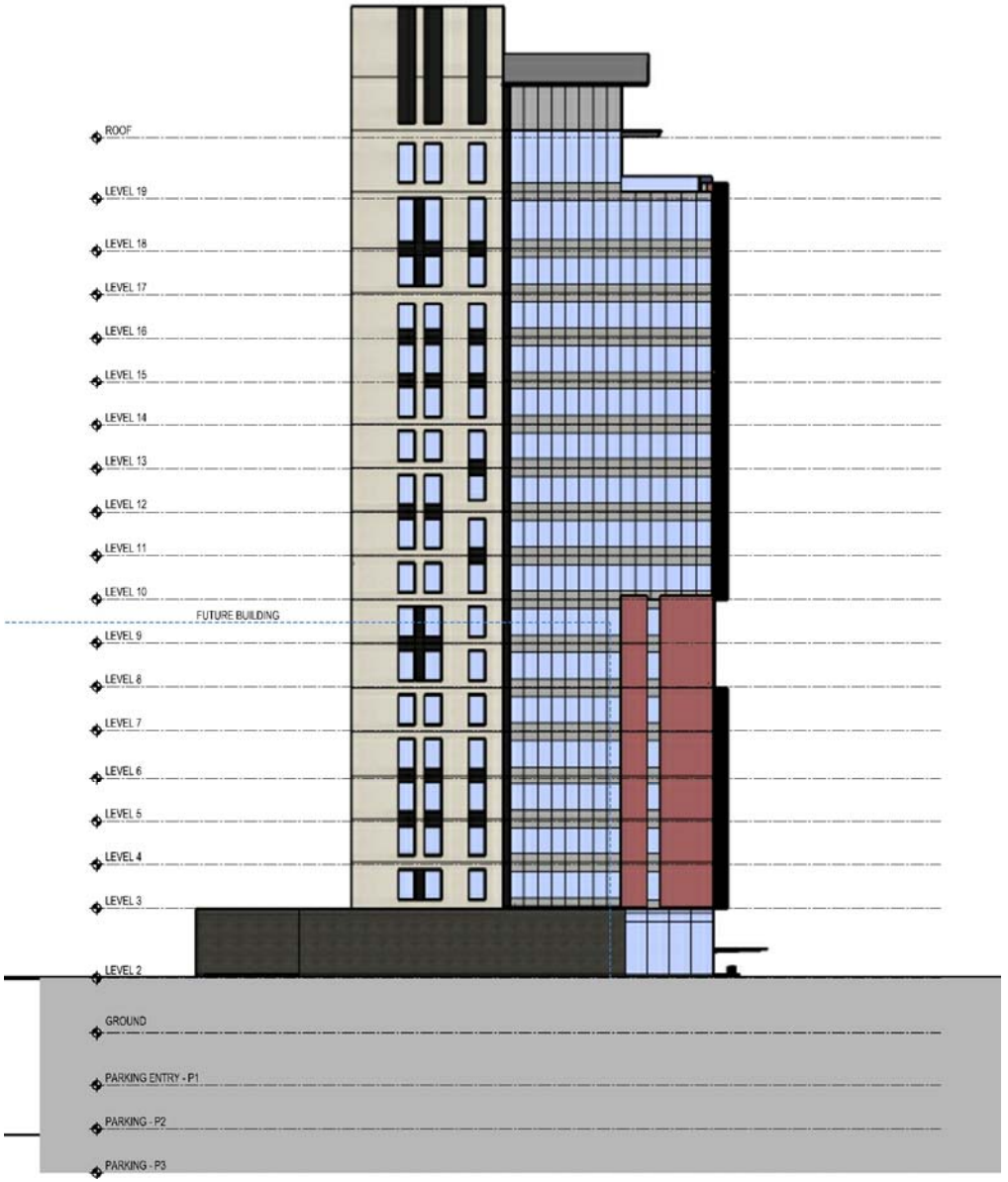
East Elevation



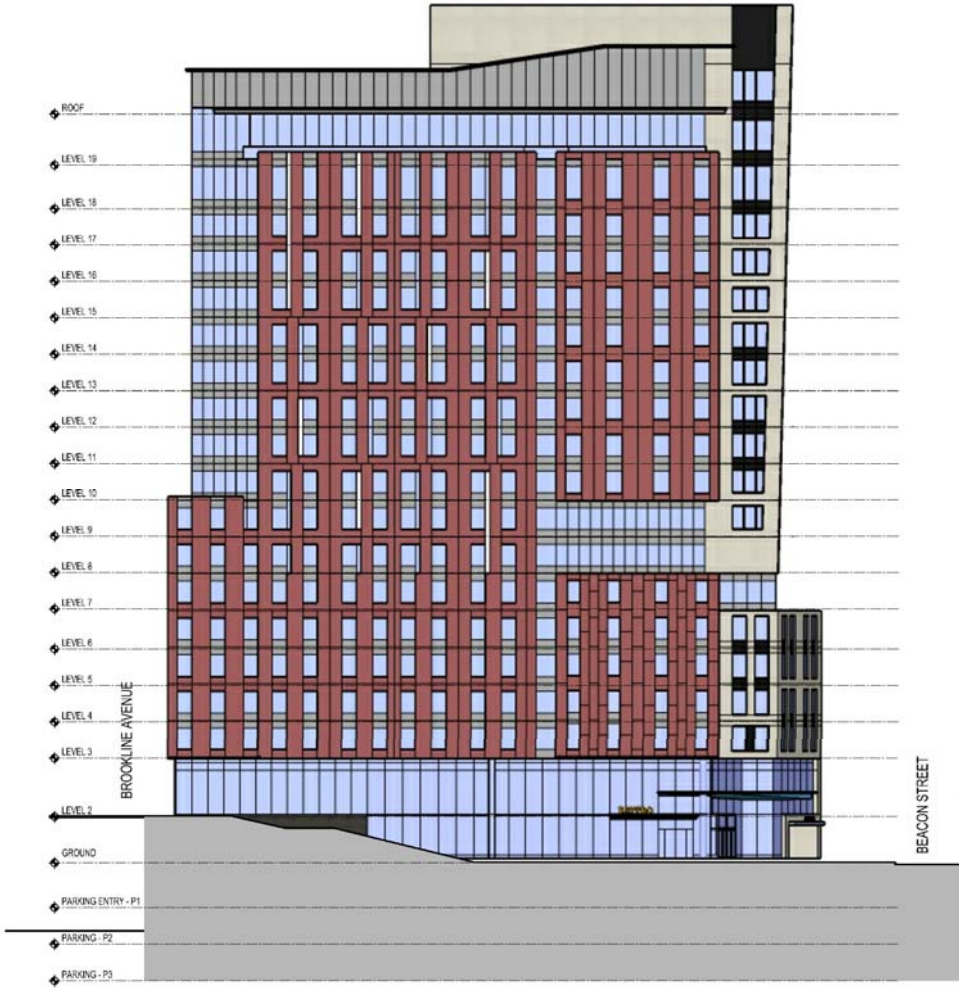
South Elevation

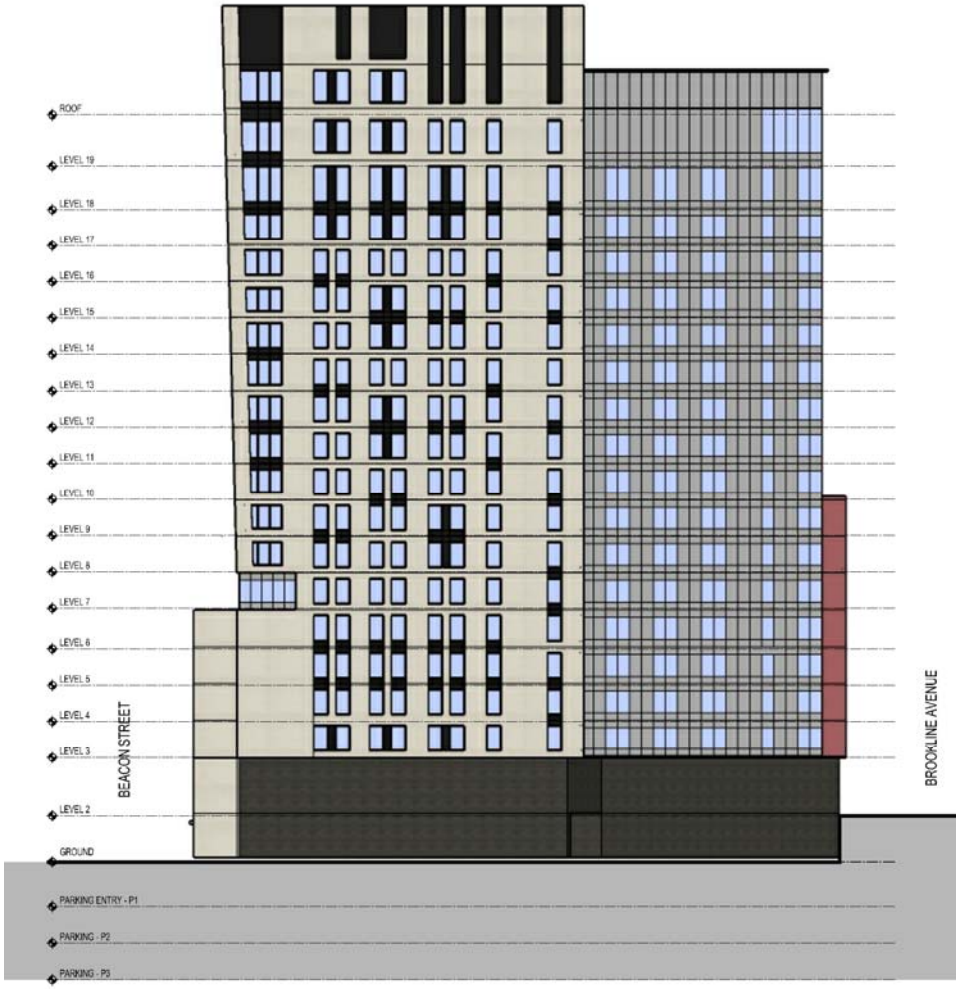




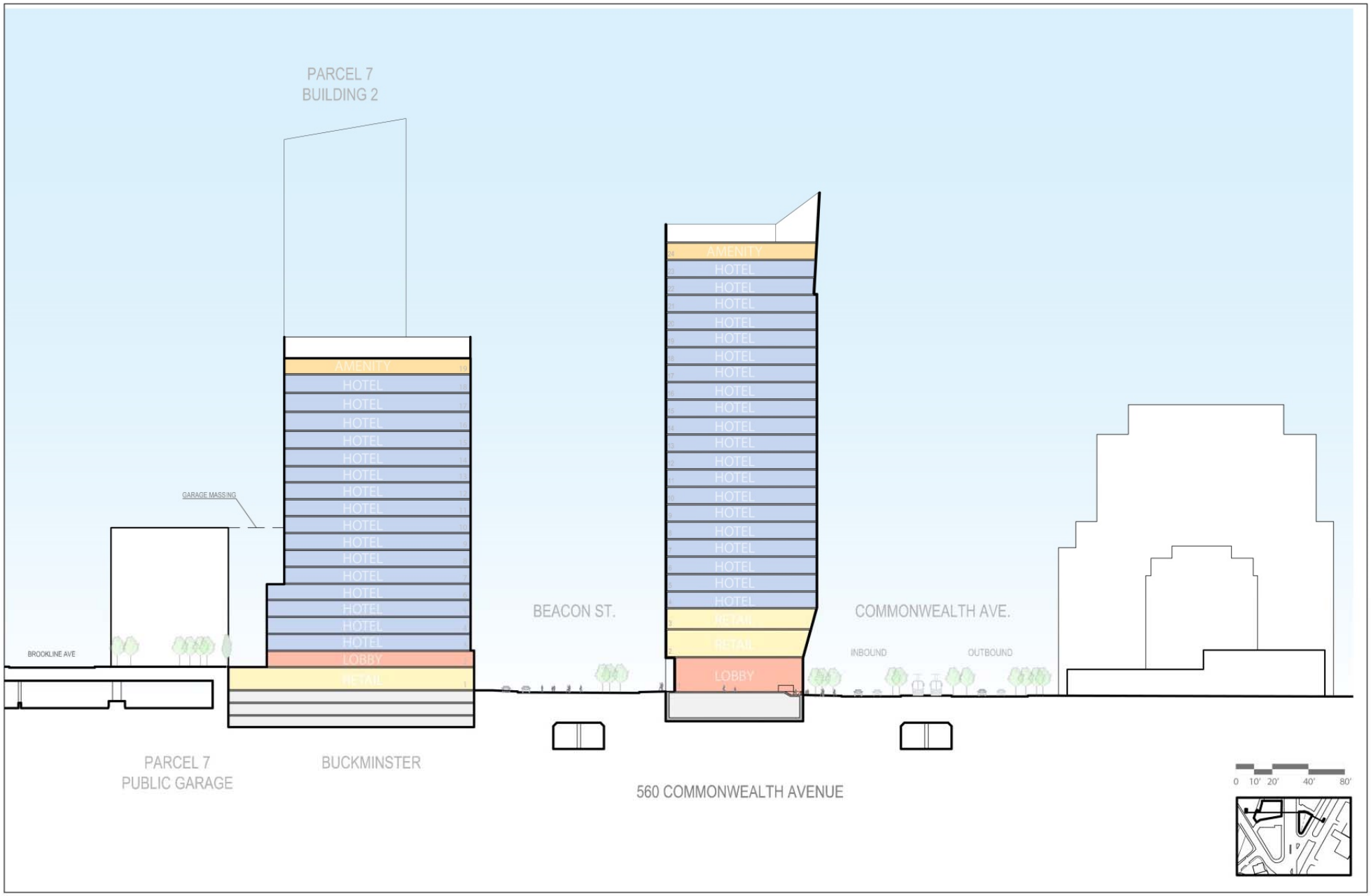


Kenmore Square Hotels Boston, Massachusetts





Kenmore Square Hotels Boston, Massachusetts



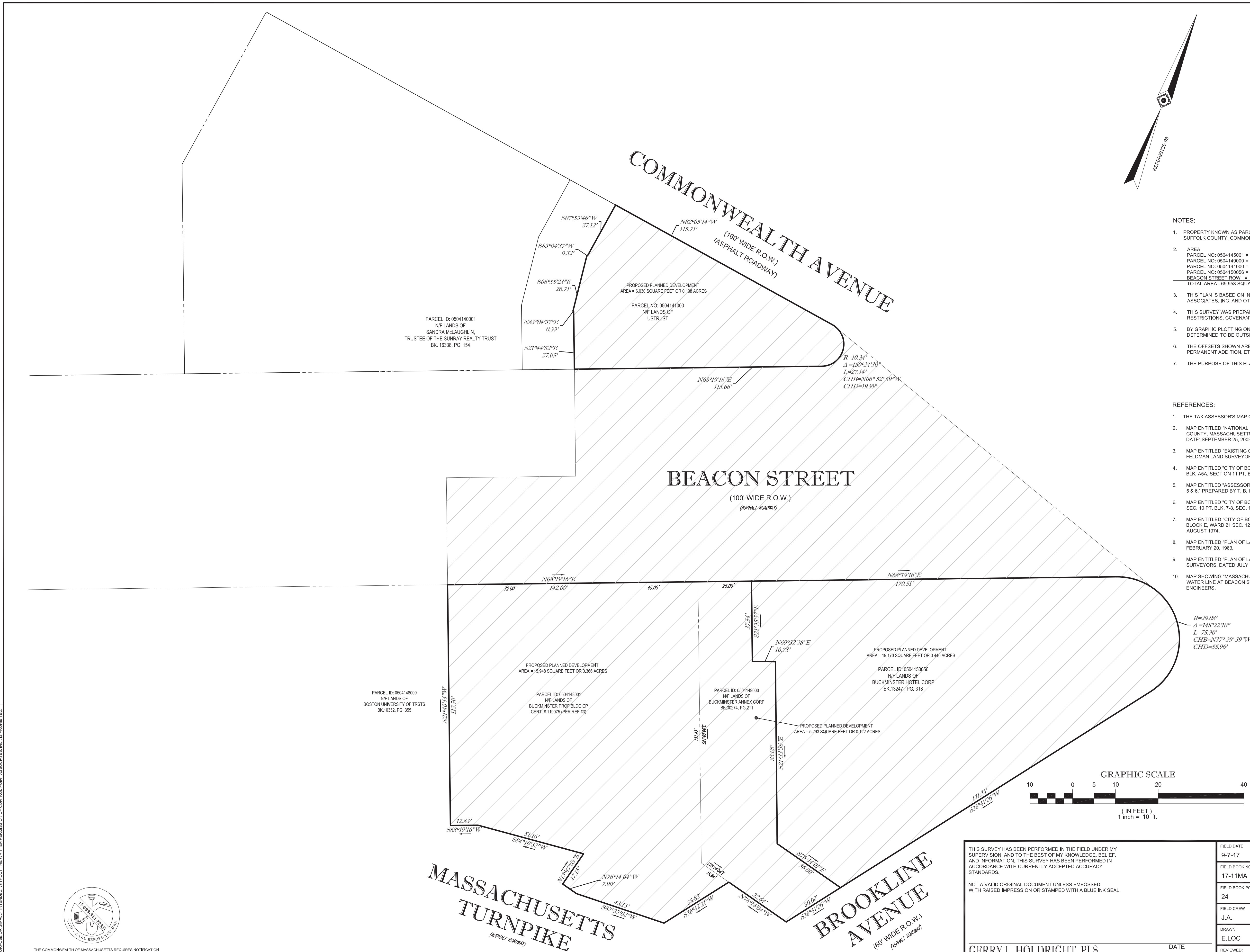
Kenmore Square Hotels **Boston, Massachusetts**

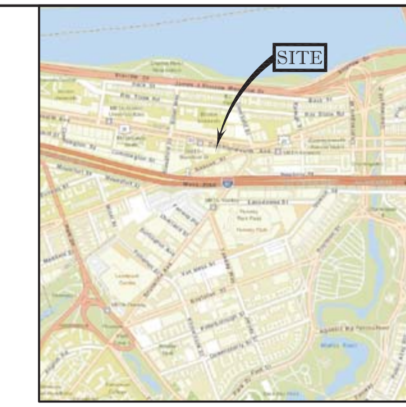
Epsilon ASSOCIATES INC.

Section

Appendix B

Site Survey





LOCUS MAP
©2013 ESRI WORLD STREET MAPS

NOTES:

1. PROPERTY KNOWN AS PARCELS 0504149000, 0504148001 & 0504141000 AS SHOWN ON THE CITY OF BOSTON, SUFFOLK COUNTY, COMMONWEALTH OF MASSACHUSETTS; PARCEL VIEWER

2. AREA
PARCEL NO: 0504145001 = 15,948 SQUARE FEET OR 0.366 ACRES
PARCEL NO: 0504149000 = 5,293 SQUARE FEET OR 0.122 ACRES
PARCEL NO: 0504141000 = 6,030 SQUARE FEET OR 0.138 ACRES
PARCEL NO: 0504150056 = 19,170 SQUARE FEET OR 0.440 ACRES
BEACON STREET ROW = 23,517 SQUARE FEET OR 0.540 ACRES
TOTAL AREA= 69,958 SQUARE FEET OR 1.606 ACRES

3. THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON.

4. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO THE RESTRICTIONS, COVENANTS AND/OR EASEMENTS THAT MAY BE CONTAINED THEREIN.

5. BY GRAPHIC PLOTTING ONLY PROPERTY IS LOCATED IN FLOOD HAZARD ZONE X- UNSHADED (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER REF. #2

6. THE OFFSETS SHOWN ARE NOT TO BE USED FOR THE CONSTRUCTION OF ANY STRUCTURE, FENCE, PERMANENT ADDITION, ETC.

7. THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED PLANNED DEVELOPMENT AREA.

REFERENCES:

1. THE TAX ASSESSOR'S MAP OF BOSTON, SUFFOLK COUNTY, PARCEL VIEWER.

2. MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, SUFFOLK COUNTY, MASSACHUSETTS (ALL JURISDICTIONS) PANEL 76 OF 151," MAP NUMBER 25025C0076G , EFFECTIVE DATE: SEPTEMBER 25, 2009.

3. MAP ENTITLED "EXISTING CONDITIONS PLAN 651-665 BEACON STREET BOSTON, MASS.," PREPARED BY FELDMAN LAND SURVEYORS" DATED MARCH 6, 20014

4. MAP ENTITLED "CITY OF BOSTON, ASSESSORS PLAN WARD 5032 SEC. 11 BLK. 7, SEC. 11 BLK. 8, SECTION 11 PT. BLK. A5A, SECTION 11 PT. BLK. 5," PREPARED BY E. CORSANO C.E., DATED OCTOBER 1974.

5. MAP ENTITLED "ASSESSORS PLAN WARD 5033 SEC. 10 BLOCK 5 PART 6 & 7, SEC. 11 BLOCKS 3 & 4 PART BLOCK 5 & 6," PREPARED BY T. B. KENNEY C.E., DATED OCTOBER 1930.

6. MAP ENTITLED "CITY OF BOSTON ASSESSORS PLAN WARD 5039 SECTION 9 BLOCK G1A, SEC. 9 PT. BLK. G3, SEC. 10 PT. BLK. 7-8, SEC. 11 PT. BLK. E," PREPARED BY E. CORSANO C.E., DATED OCTOBER 1974.

7. MAP ENTITLED "CITY OF BOSTON ASSESSORS PLAN WARD 5211 SECTION 11 BLOCK D3, SECTION 11 PART BLOCK E, WARD 21 SEC. 12 PT. BLK. 8 SEC. 13 PT. BLK 1, 2, 3, 4 & 5" PREPARED BY E. CORSANO C.E., DATED AUGUST 1974.

8. MAP ENTITLED "PLAN OF LAND IN BOSTON-MASS.," PREPARED BY WILLIAM S. CROCKER, INC., DATED FEBRUARY 20, 1963.

9. MAP ENTITLED "PLAN OF LAND 560 COMMONWEALTH AVENUE BOSTON, MASS.," PREPARED BY FELDMAN LAND SURVEYORS, DATED JULY 30, 2014.

10. MAP SHOWING "MASSACHUSETTS TURNPIKE AUTHORITY BOSTON EXTENSION SECTION NO. C-4 PROFILE 42" WATER LINE AT BEACON STREET," PREPARED BY HOWARD, NEEDLES, TAMMEN & BERGENDOFF CONSULTING ENGINEERS.

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

THIS SURVEY HAS BEEN PERFORMED IN THE FIELD UNDER MY SUPERVISION, AND TO THE BEST OF MY KNOWLEDGE, BELIEF, AND INFORMATION, THIS SURVEY HAS BEEN PERFORMED IN ACCORDANCE WITH CURRENTLY ACCEPTED ACCURACY STANDARDS.

NOT A VALID ORIGINAL DOCUMENT UNLESS EMBOSSED WITH RAISED IMPRESSION OR STAMPED WITH A BLUE INK SEAL

GERRY L. HOLDRIGHT, PLS — DATE
MASSACHUSETTS PROFESSIONAL LAND SURVEYOR #49211

FIELD DATE	9-7-17
FIELD BOOK NO.	17-11MA
FIELD BOOK PG.	24
FIELD CREW	J.A.
DRAWN:	E.LOC

PLANNED DEVELOPMENT AREA PLAN
MARK KENMORE, LLC
BUCKMINISTER ANNEX CORPORATION
651, 655-665 BEACON STREET & 560-574 COMMONWEALTH AVE
PARCELS 0504148001, 0504149000, 0504141000
CITY OF BOSTON, SUFFOLK COUNTY
COMMONWEALTH OF MASSACHUSETTS

CONTROL POINT ASSOCIATES, INC.
352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
508.948.3000 - 508.948.3003 FAX

ALBANY, NY 5182175010
CHALFONT, PA 2157129800
MANHATTAN, NY 6467800411
MT LAUREL, NJ 6098572099
WARREN, NJ 9086680099

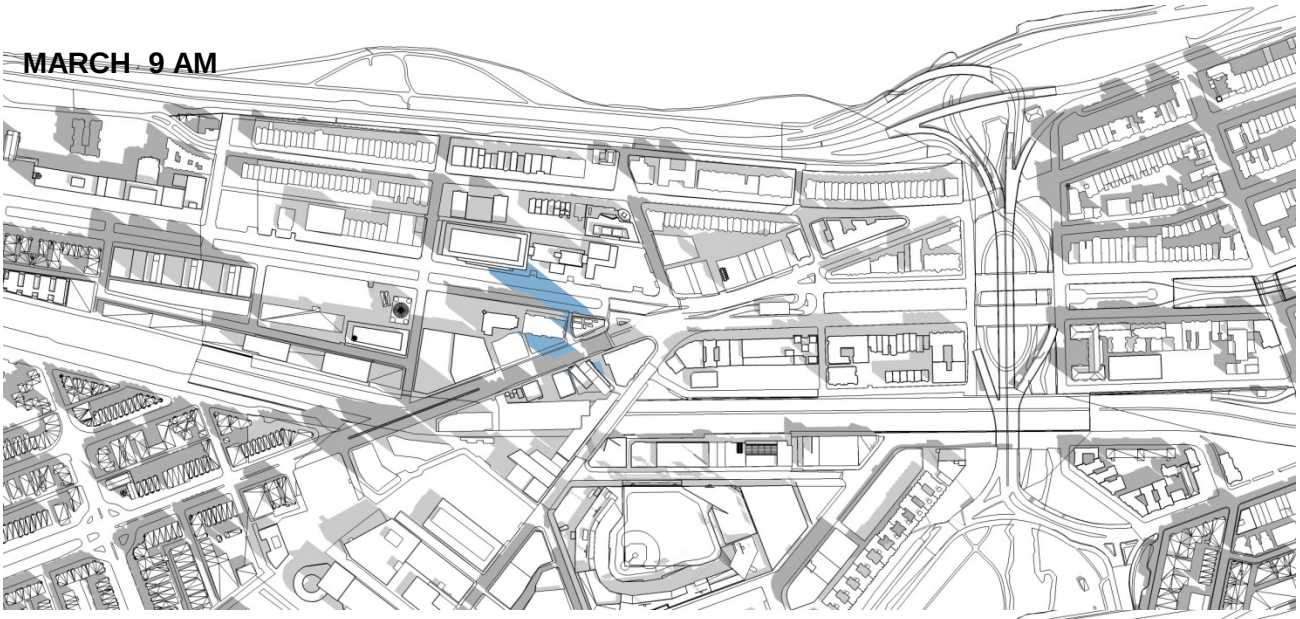
REVIEWED:	APPROVED:	DATE	SCALE	FILE NO.	DWG. NO.
J.M.R.	G.L.H.	9-18-17	1"=10'	06-170057	1 OF 1

THE COMMONWEALTH OF MASSACHUSETTS REQUIRES NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE COMMONWEALTH.

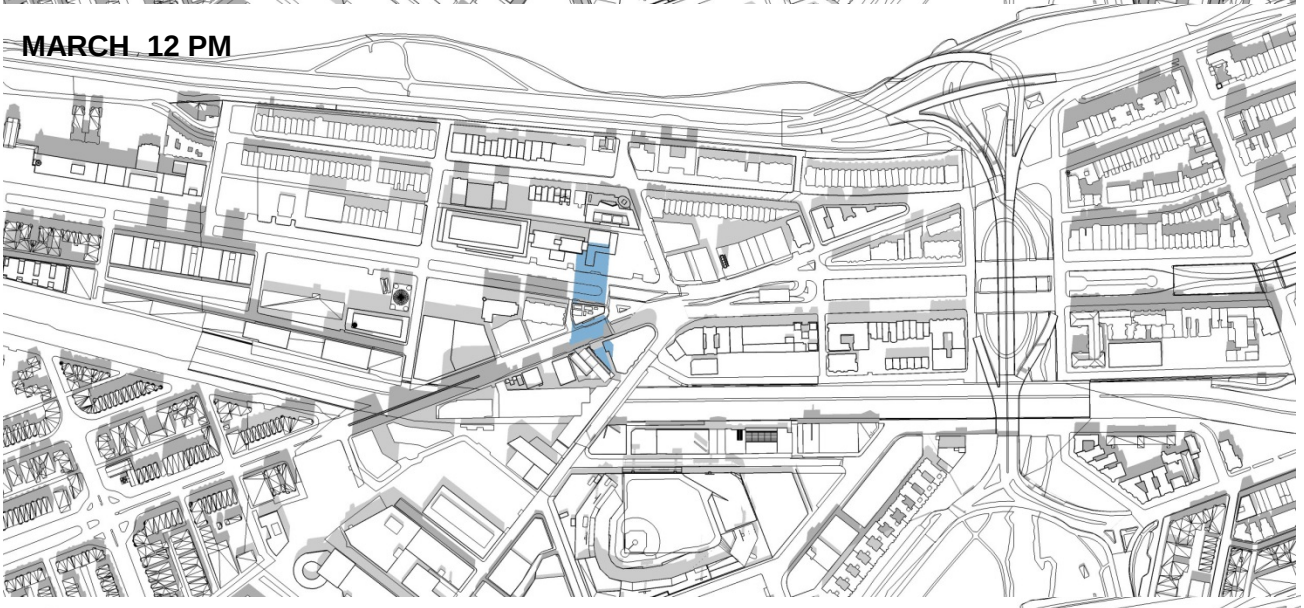
Appendix C

Shadow

MARCH 9 AM



MARCH 12 PM



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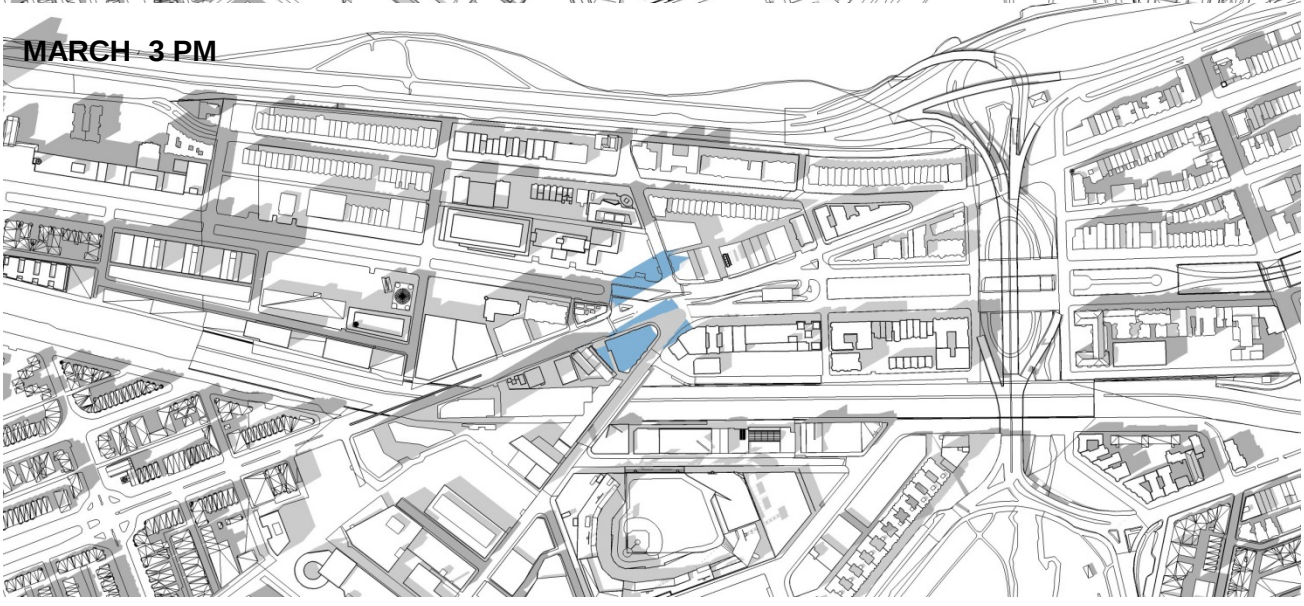
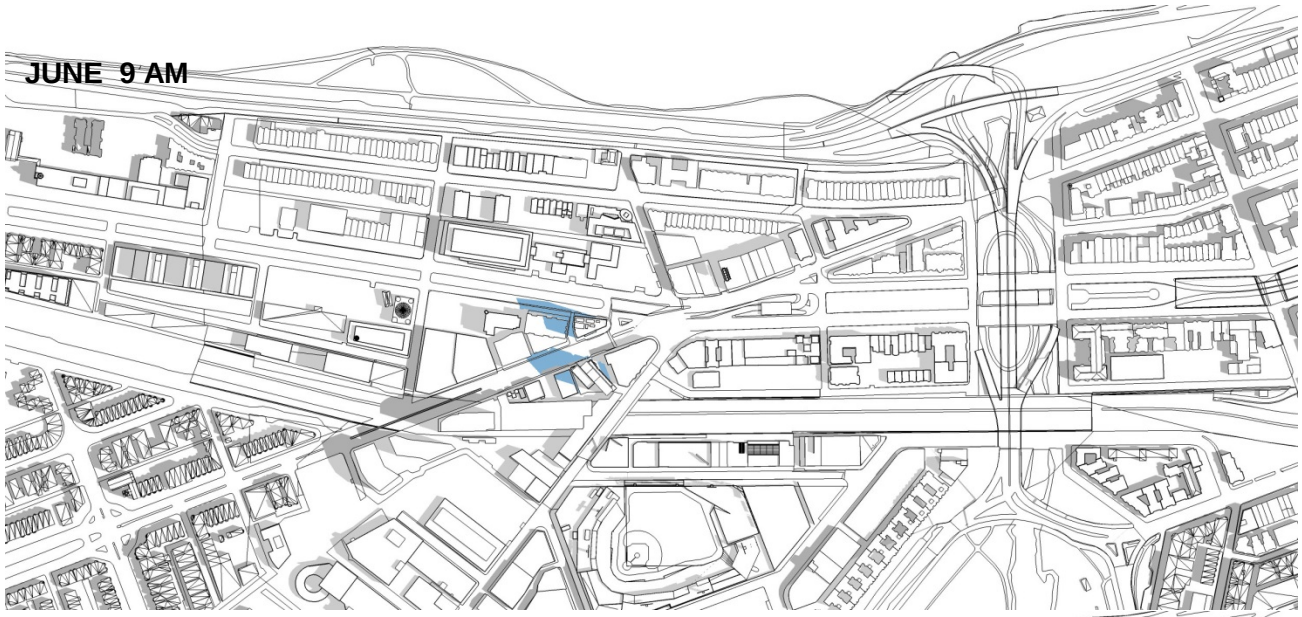
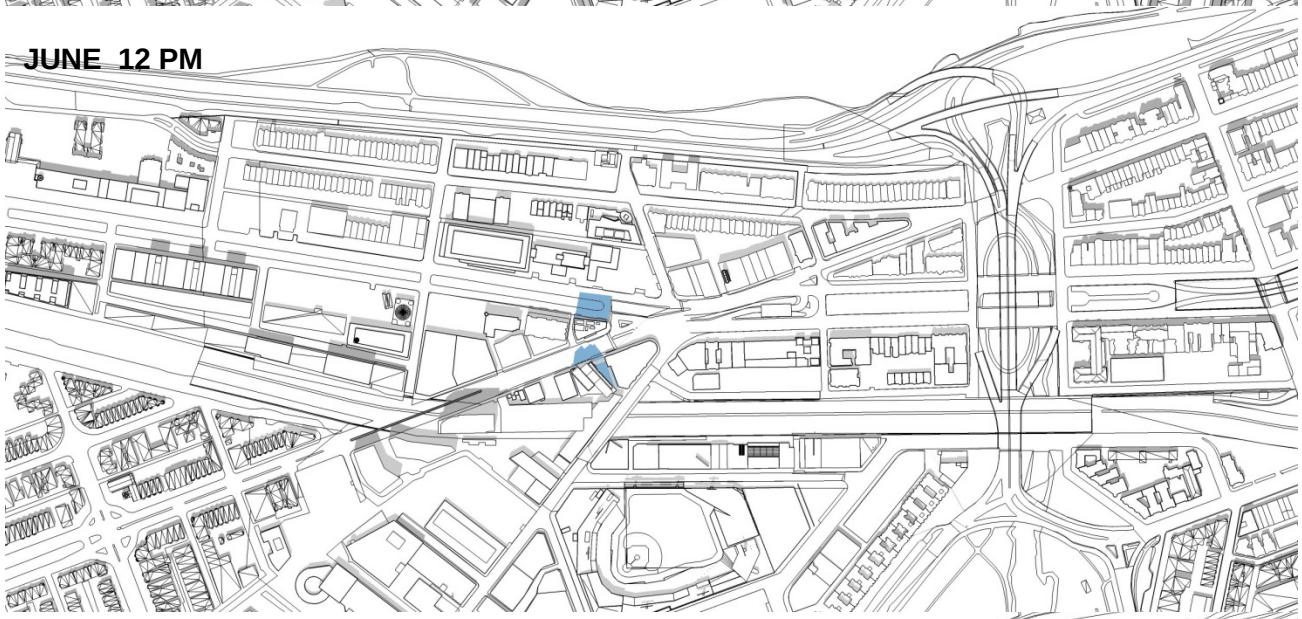


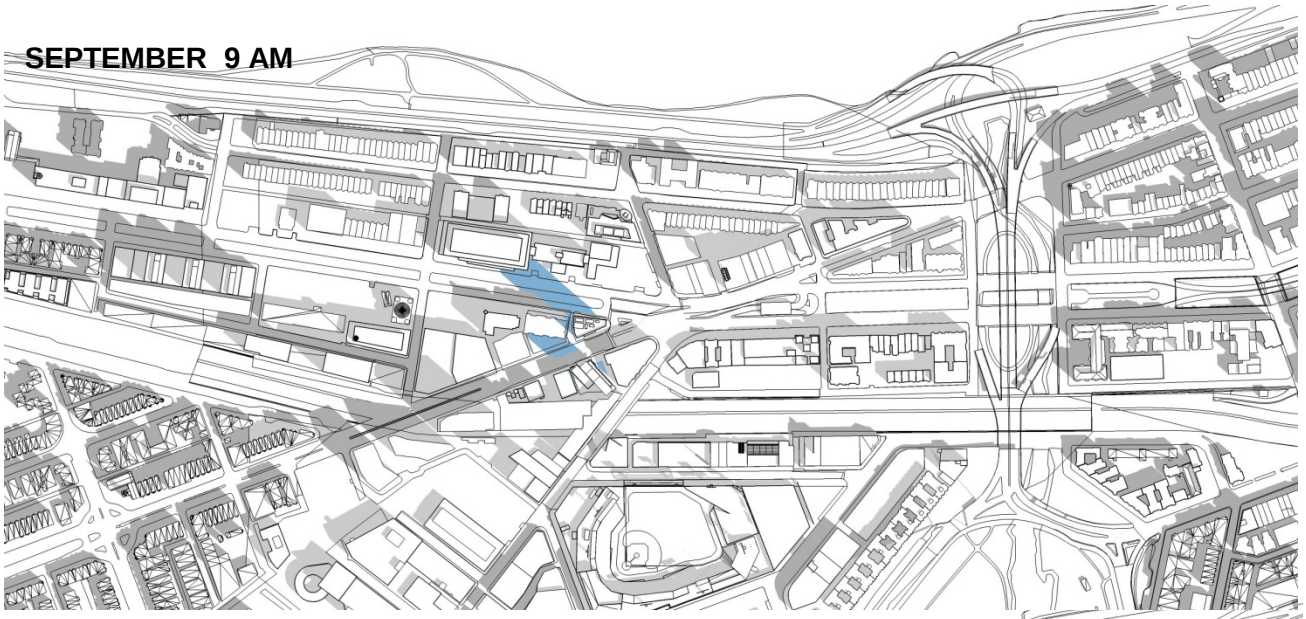
Kenmore Square Hotels Boston, Massachusetts





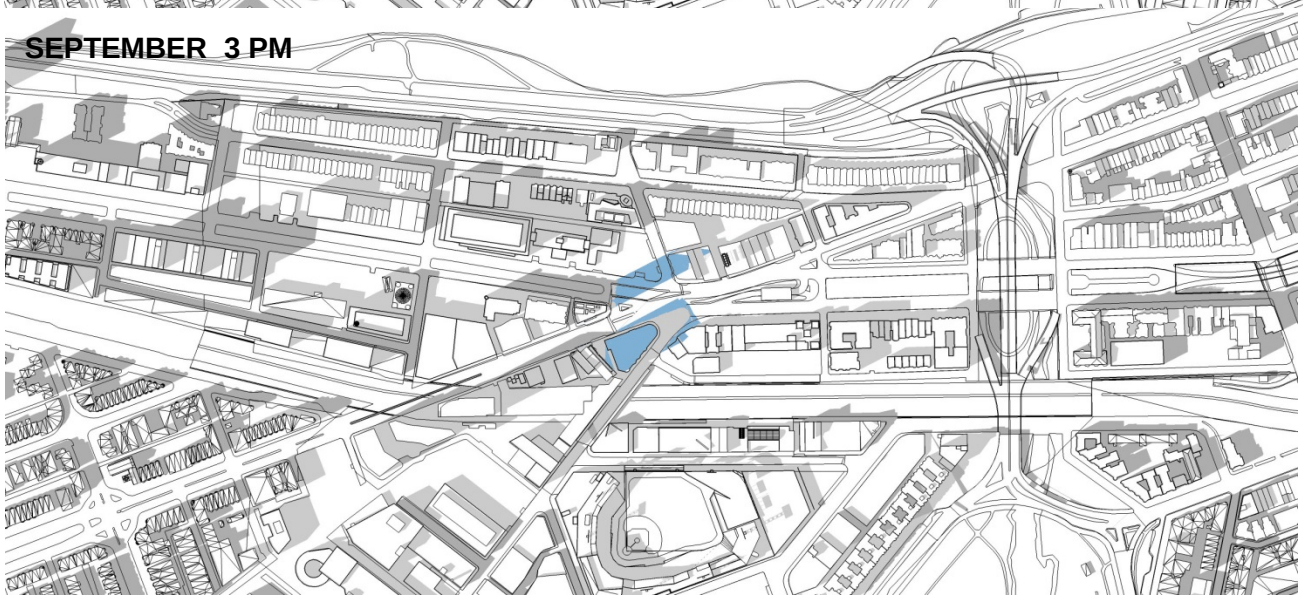
Kenmore Square Hotels Boston, Massachusetts

SEPTEMBER 9 AM



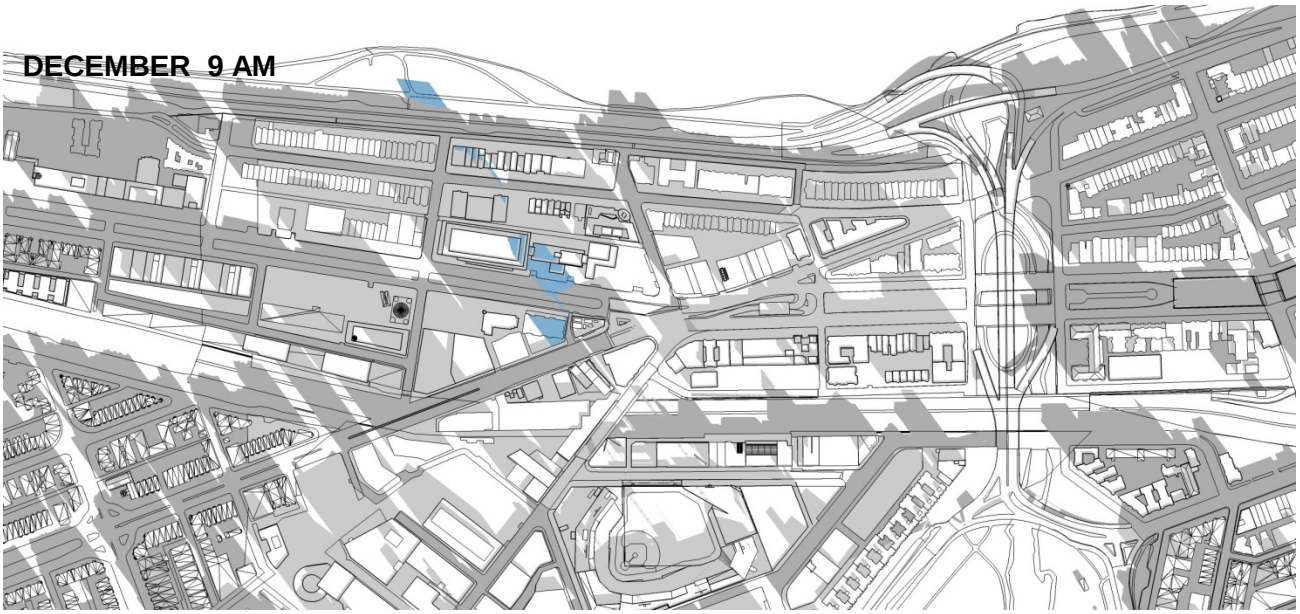
SEPTEMBER 12 PM

SEPTEMBER 3 PM



Kenmore Square Hotels Boston, Massachusetts

DECEMBER 9 AM



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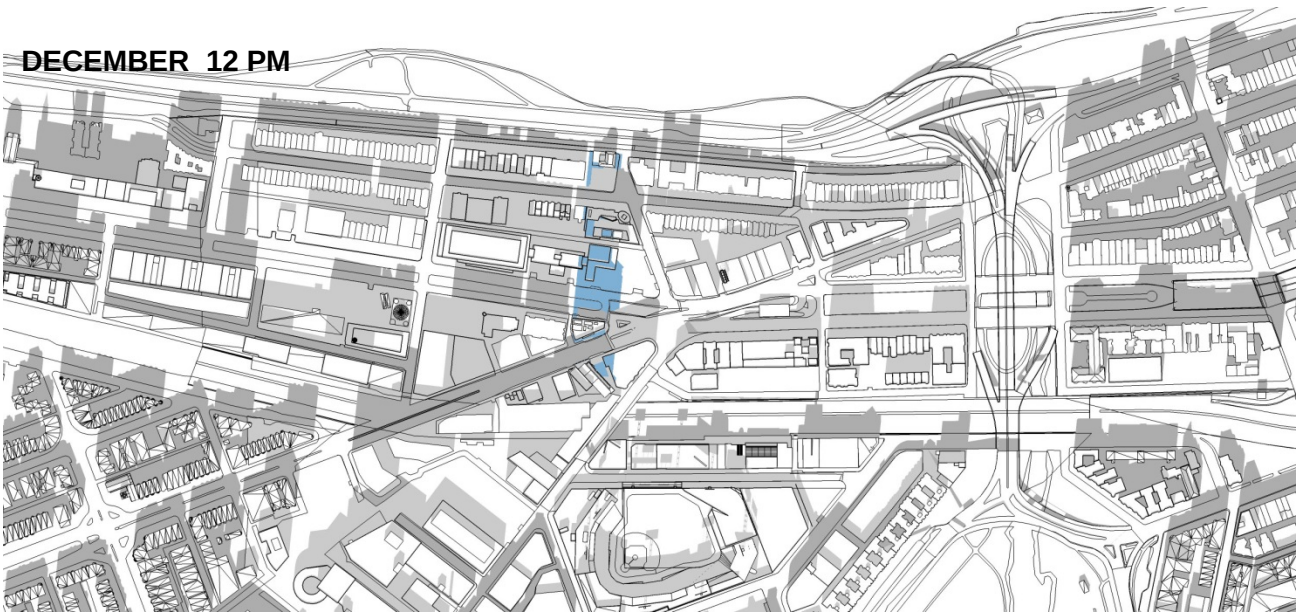

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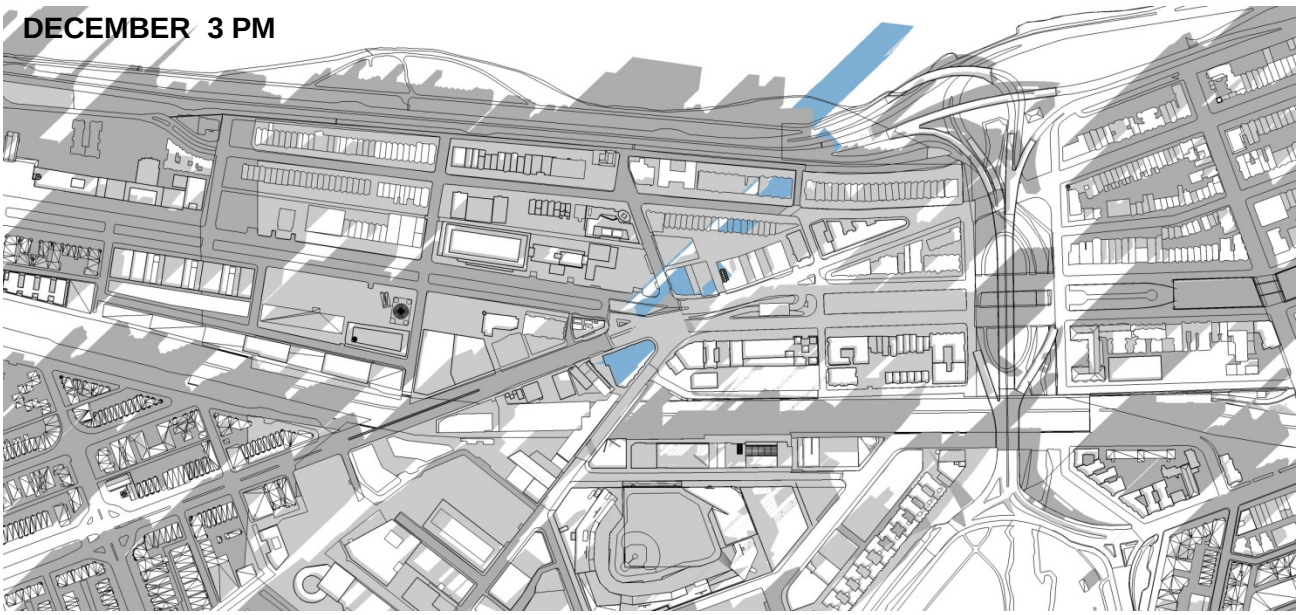

Kenmore Square Hotels Boston, Massachusetts

Appendix D

Climate Change Preparedness Checklists

Climate Change Preparedness Checklist – Commonwealth Avenue Component

Boston Planning & Development Agency
Climate Resiliency Report Summary

boston planning & development agency

Submitted: 03/07/2018 15:18:20

A.1 - Project Information

Project Name:	Kenmore Square Hotels			
Project Address:	560-574 Commonwealth Avenue			
Filing Type:	Initial (PNF, EPNF, NPC or other substantial filing)			
Filing Contact:	Talya Moked	Epsilon Associates	tmoked@epsilonassociates.com	(978) 461-6223
Is MEPA approval required?	No	MEPA date:		

A.2 - Project Team

Owner / Developer:	Mark Kenmore, LLC
Architect:	CBT Architects
Engineer:	Vanderweil Engineers
Sustainability / LEED:	New Ecology, Inc
Permitting:	Epsilon Associates, Inc
Construction Management:	

A.3 - Project Description and Design Conditions

List the principal Building Uses:	Hotel
List the First Floor Uses:	Hotel lobby, bank branch
List any Critical Site Infrastructure and or Building Uses:	

Site and Building:

Site Area (SF):	6030	Building Area (SF):	161000
Building Height (Ft):	260	Building Height (Stories):	24
Existing Site Elevation – Low (Ft BCB):	22	Existing Site Elevation – High (Ft BCB):	22
Proposed Site Elevation – Low (Ft BCB):	22	Proposed Site Elevation – High (Ft BCB):	22
Proposed First Floor Elevation (Ft BCB):	22	Below grade spaces/levels (#):	1

Article 37 Green Building:

LEED Version - Rating System:	LEED v4 for BD+C	LEED Certification:	
Proposed LEED rating:	Silver	Proposed LEED point score (Pts.):	50

Boston Planning & Development Agency
Climate Resiliency Report Summary

boston planning & development agency

Building Envelope:

When reporting R values, differentiate between R discontinuous and R continuous. For example, use "R13" to show R13 discontinuous and use R10c.i. to show R10 continuous. When reporting U value, report total assembly U value including supports and structural elements.

Roof:		Exposed Floor :	
Foundation Wall:		Slab Edge (at or below grade):	

Vertical Above-grade Assemblies (%'s are of total vertical area and together should total 100%):

Area of Opaque Curtain Wall & Spandrel Assembly:		Wall & Spandrel Assembly Value:	
Area of Framed & Insulated / Standard Wall:		Wall Value:	
Area of Vision Window:		Window Glazing Assembly Value:	
		Window Glazing SHGC:	
Area of Doors:		Door Assembly Value :	

Energy Loads and Performance

For this filing – describe how energy loads & performance were determined			
Annual Electric (kWh):		Peak Electric (kW):	
Annual Heating (MMbtu/hr):		Peak Heating (MMbtu):	
Annual Cooling (Tons/hr):		Peak Cooling (Tons):	
Energy Use - Below ASHRAE 90.1 - 2013 (%):		Have the local utilities reviewed the building energy performance?:	
Energy Use - Below Mass. Code (%):		Energy Use Intensity (kBtu/SF):	

Back-up / Emergency Power System

Electrical Generation Output (kW):	650	Number of Power Units:	
System Type (kW):	Combustion Engine	Fuel Source:	Diesel

Emergency and Critical System Loads (in the event of a service interruption)

Electric (kW):		Heating (MMbtu/hr):	
		Cooling (Tons/hr):	

B – Greenhouse Gas Reduction and Net Zero / Net Positive Carbon Building Performance

Reducing greenhouse gas emissions is critical to avoiding more extreme climate change conditions. To achieve the City's goal of carbon-neutrality by 2050 the performance of new buildings will need to progressively improve to carbon net zero and net positive.

B.1 – GHG Emissions - Design Conditions

For this filing - Annual Building GHG Emissions (Tons):

For this filing - describe how building energy performance has been integrated into project planning, design, and engineering and any supporting analysis or modeling:

The team has had a meeting to discuss performance targets for the building, and supporting analysis will be completed as the design progresses.

Describe building specific passive energy efficiency measures including orientation, massing, building envelop, and systems:

The building will include a high performance building envelope.

Describe building specific active energy efficiency measures including high performance equipment, controls, fixtures, and systems:

The building will include high performance: HVAC equipment, lighting and controls, and domestic hot water systems. It will also include energy recovery ventilation and EnergyStar equipment.

Describe building specific load reduction strategies including on-site renewable energy, clean energy, and storage systems:

Describe any area or district scale emission reduction strategies including renewable energy, central energy plants, distributed energy systems, and smart grid infrastructure:

Describe any energy efficiency assistance or support provided or to be provided to the project:

B.2 - GHG Reduction - Adaptation Strategies

Describe how the building and its systems will evolve to further reduce GHG emissions and achieve annual carbon net zero and net positive performance (e.g. added efficiency measures, renewable energy, energy storage, etc.) and the timeline for meeting that goal (by 2050):

It is anticipated that the power grid will become more sustainable and less carbon intensive over time, and as the building requires system upgrades, the building could migrate to all electric systems.

C - Extreme Heat Events

Annual average temperature in Boston increased by about 2˚F in the past hundred years and will continue to rise due to climate change. By the end of the century, the average annual temperature could be 56° (compared to 46° now) and the number of days above 90° (currently about 10 a year) could rise to 90.

C.1 – Extreme Heat - Design Conditions

Temperature Range - Low (Deg.):	8	Temperature Range - High (Deg.):	91
Annual Heating Degree Days:	5512	Annual Cooling Degree Days	776

What Extreme Heat Event characteristics will be / have been used for project planning

Days - Above 90° (#):	60	Days - Above 100° (#):	30
Number of Heatwaves / Year (#):	6	Average Duration of Heatwave (Days):	5

Describe all building and site measures to reduce heat-island effect at the site and in the surrounding area:

The building will use high reflective paving materials.

C.2 - Extreme Heat – Adaptation Strategies

Describe how the building and its systems will be adapted to efficiently manage future higher average temperatures, higher extreme temperatures, additional annual heatwaves, and longer heatwaves:

The building will include high performance HVAC equipment, energy recovery ventilation systems, and new landscaping to reduce the heat island effect.

Describe all mechanical and non-mechanical strategies that will support building functionality and use during extended interruptions of utility services and infrastructure including proposed and future adaptations:

The building will include a generator for life safety systems

D - Extreme Precipitation Events

From 1958 to 2010, there was a 70 percent increase in the amount of precipitation that fell on the days with the heaviest precipitation. Currently, the 10-Year, 24-Hour Design Storm precipitation level is 5.25”. There is a significant probability that this will increase to at least 6” by the end of the century. Additionally, fewer, larger storms are likely to be accompanied by more frequent droughts.

D.1 – Extreme Precipitation - Design Conditions

boston planning & development agency

What is the project design precipitation level? (In. / 24 Hours)	6

Describe all building and site measures for reducing storm water run-off:

The building will include an infiltration system for the first one inch of run-off.

D.2 - Extreme Precipitation - Adaptation Strategies

Describe how site and building systems will be adapted to efficiently accommodate future more significant rain events (e.g. rainwater harvesting, on-site storm water retention, bio swales, green roofs):

E – Sea Level Rise and Storms

Under any plausible greenhouse gas emissions scenario, the sea level in Boston will continue to rise throughout the century. This will increase the number of buildings in Boston susceptible to coastal flooding and the likely frequency of flooding for those already in the floodplain.

Is any portion of the site in a FEMA Special Flood Hazard Area?	No	What Zone:	
What is the current FEMA SFHA Zone Base Flood Elevation for the site (Ft BCB)?			
Is any portion of the site in the BPDA Sea Level Rise Flood Hazard Area (see SLR-FHA online map)?	No		

If you answered YES to either of the above questions, please complete the following questions.
Otherwise you have completed the questionnaire; thank you!

E.1 – Sea Level Rise and Storms – Design Conditions

Proposed projects should identify immediate and future adaptation strategies for managing the flooding scenario represented by the Sea Level Rise Flood Hazard Area (SLR-FHA), which includes 3.2' of sea level rise above 2013 tide levels, an additional 2.5" to account for subsidence, and the 1% Annual Chance Flood. After using the SLR-FHA to identify a project's Sea Level Rise Base Flood Elevation, proponents should calculate the Sea Level Rise Design Flood Elevation by adding 12" of freeboard for buildings, and 24" of freeboard for critical facilities and infrastructure and any ground floor residential units.

Boston Planning & Development Agency

Climate Resiliency Report Summary

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What is the Sea Level Rise - Base Flood Elevation for the site (Ft BCB)?

What is the Sea Level Rise - Design Flood Elevation for the site (Ft BCB)?

What are the Site Elevations at Building (Ft BCB)?

First Floor Elevation (Ft BCB):

What is the Accessible Route Elevation (Ft BCB)?

Describe site design strategies for adapting to sea level rise including building access during flood events, elevated site areas, hard and soft barriers, wave / velocity breaks, storm water systems, utility services, etc.:

Describe how the proposed Building Design Flood Elevation will be achieved including dry / wet flood proofing, critical systems protection, utility service protection, temporary flood barriers, waste and drain water back flow prevention, etc.:

Describe how occupants might shelter in place during a flooding event including any emergency power, water, and waste water provisions and the expected availability of any such measures:

Describe any strategies that would support rapid recovery after a weather event:

E.2 – Sea Level Rise and Storms – Adaptation Strategies

Describe future site design and or infrastructure adaptation strategies for responding to sea level rise including future elevating of site areas and access routes, barriers, wave / velocity breaks, storm water systems, utility services, etc.:

Describe future building adaptation strategies for raising the Sea Level Rise Design Flood Elevation and further protecting critical systems, including permanent and temporary measures:

Thank you for completing the Boston Climate Change Checklist!

For questions or comments about this checklist or Climate Change best practices, please contact: John.Dalzell@boston.gov

Climate Change Preparedness Checklist – Beacon Street Component

Boston Planning & Development Agency
Climate Resiliency Report Summary

Submitted: 03/07/2018 15:24:35

A.1 - Project Information

Project Name:	Kenmore Square Hotels			
Project Address:	651, 655-665 Beacon Street			
Filing Type:	Initial (PNF, EPNF, NPC or other substantial filing)			
Filing Contact:	Talya Moked	Epsilon Associates	tmoked@epsilonassociates.com	(978) 461-6223
Is MEPA approval required?	No	MEPA date:		

A.2 - Project Team

Owner / Developer:	Buckminster Annex Corporation
Architect:	Group One Partners
Engineer:	Vanderweil Engineers
Sustainability / LEED:	New Ecology, Inc
Permitting:	Epsilon Associates, Inc
Construction Management:	

A.3 - Project Description and Design Conditions

List the principal Building Uses:	Hotel
List the First Floor Uses:	Retail, hotel lobby
List any Critical Site Infrastructure and or Building Uses:	

Site and Building:

Site Area (SF):	40410	Building Area (SF):	186000
Building Height (Ft):	210	Building Height (Stories):	19
Existing Site Elevation – Low (Ft BCB):	22	Existing Site Elevation – High (Ft BCB):	24
Proposed Site Elevation – Low (Ft BCB):	22	Proposed Site Elevation – High (Ft BCB):	24
Proposed First Floor Elevation (Ft BCB):	24	Below grade spaces/levels (#):	3

Article 37 Green Building:

LEED Version - Rating System:	LEED v4 BD+C	LEED Certification:	
Proposed LEED rating:	Silver	Proposed LEED point score (Pts.):	52

Boston Planning & Development Agency
Climate Resiliency Report Summary

boston planning & development agency

Building Envelope:

When reporting R values, differentiate between R discontinuous and R continuous. For example, use "R13" to show R13 discontinuous and use R10c.i. to show R10 continuous. When reporting U value, report total assembly U value including supports and structural elements.

Roof:		Exposed Floor :	
Foundation Wall:		Slab Edge (at or below grade):	

Vertical Above-grade Assemblies (%'s are of total vertical area and together should total 100%):

Area of Opaque Curtain Wall & Spandrel Assembly:		Wall & Spandrel Assembly Value:	
Area of Framed & Insulated / Standard Wall:		Wall Value:	
Area of Vision Window:		Window Glazing Assembly Value:	
		Window Glazing SHGC:	
Area of Doors:		Door Assembly Value :	

Energy Loads and Performance

For this filing – describe how energy loads & performance were determined			
Annual Electric (kWh):		Peak Electric (kW):	
Annual Heating (MMbtu/hr):		Peak Heating (MMbtu):	
Annual Cooling (Tons/hr):		Peak Cooling (Tons):	
Energy Use - Below ASHRAE 90.1 - 2013 (%):		Have the local utilities reviewed the building energy performance?:	
Energy Use - Below Mass. Code (%):		Energy Use Intensity (kBtu/SF):	

Back-up / Emergency Power System

Electrical Generation Output (kW):	650	Number of Power Units:	
System Type (kW):	Combustion Engine	Fuel Source:	Diesel

Emergency and Critical System Loads (in the event of a service interruption)

Electric (kW):		Heating (MMbtu/hr):	
		Cooling (Tons/hr):	

B – Greenhouse Gas Reduction and Net Zero / Net Positive Carbon Building Performance

Reducing greenhouse gas emissions is critical to avoiding more extreme climate change conditions. To achieve the City's goal of carbon-neutrality by 2050 the performance of new buildings will need to progressively improve to carbon net zero and net positive.

B.1 – GHG Emissions - Design Conditions

For this filing - Annual Building GHG Emissions (Tons):

For this filing - describe how building energy performance has been integrated into project planning, design, and engineering and any supporting analysis or modeling:

The team has had a meeting to discuss performance targets for the building, and supporting analysis will be completed as the design progresses

Describe building specific passive energy efficiency measures including orientation, massing, building envelop, and systems:

The building will include a high-performance building envelope.

Describe building specific active energy efficiency measures including high performance equipment, controls, fixtures, and systems:

The building will include high performance: HVAC equipment, lighting and controls, and domestic hot water systems. It will also include energy recovery ventilation and EnergyStar equipment.

Describe building specific load reduction strategies including on-site renewable energy, clean energy, and storage systems:

Describe any area or district scale emission reduction strategies including renewable energy, central energy plants, distributed energy systems, and smart grid infrastructure:

Describe any energy efficiency assistance or support provided or to be provided to the project:

B.2 - GHG Reduction - Adaptation Strategies

Describe how the building and its systems will evolve to further reduce GHG emissions and achieve annual carbon net zero and net positive performance (e.g. added efficiency measures, renewable energy, energy storage, etc.) and the timeline for meeting that goal (by 2050):

It is anticipated that the power grid will become more sustainable and less carbon intensive over time, and as the building requires system upgrades, the building could migrate to all electric systems.

C - Extreme Heat Events

Annual average temperature in Boston increased by about 2˚F in the past hundred years and will continue to rise due to climate change. By the end of the century, the average annual temperature could be 56° (compared to 46° now) and the number of days above 90° (currently about 10 a year) could rise to 90.

C.1 – Extreme Heat - Design Conditions

Temperature Range - Low (Deg.):	8	Temperature Range - High (Deg.):	91
Annual Heating Degree Days:	5512	Annual Cooling Degree Days	776

What Extreme Heat Event characteristics will be / have been used for project planning

Days - Above 90° (#):	60	Days - Above 100° (#):	30
Number of Heatwaves / Year (#):	6	Average Duration of Heatwave (Days):	5

Describe all building and site measures to reduce heat-island effect at the site and in the surrounding area:

The building will use high reflective paving materials, and the lower roof will be lightly vegetated.

C.2 - Extreme Heat – Adaptation Strategies

Describe how the building and its systems will be adapted to efficiently manage future higher average temperatures, higher extreme temperatures, additional annual heatwaves, and longer heatwaves:

The building will include high performance HVAC equipment, energy recovery ventilation systems, and new landscaping to reduce the heat island effect.

Describe all mechanical and non-mechanical strategies that will support building functionality and use during extended interruptions of utility services and infrastructure including proposed and future adaptations:

The building will include a generator for life safety systems.

D - Extreme Precipitation Events

From 1958 to 2010, there was a 70 percent increase in the amount of precipitation that fell on the days with the heaviest precipitation. Currently, the 10-Year, 24-Hour Design Storm precipitation level is 5.25”. There is a significant probability that this will increase to at least 6” by the end of the century. Additionally, fewer, larger storms are likely to be accompanied by more frequent droughts.

D.1 – Extreme Precipitation - Design Conditions

Boston Planning & Development Agency
Climate Resiliency Report Summary

boston planning & development agency

What is the project design precipitation level? (In. / 24 Hours)	6

Describe all building and site measures for reducing storm water run-off:

The building will include an infiltration system for the first one inch of run-off. The lower roof will be lightly vegetated.

D.2 - Extreme Precipitation - Adaptation Strategies

Describe how site and building systems will be adapted to efficiently accommodate future more significant rain events (e.g. rainwater harvesting, on-site storm water retention, bio swales, green roofs):

E – Sea Level Rise and Storms

Under any plausible greenhouse gas emissions scenario, the sea level in Boston will continue to rise throughout the century. This will increase the number of buildings in Boston susceptible to coastal flooding and the likely frequency of flooding for those already in the floodplain.

Is any portion of the site in a FEMA Special Flood Hazard Area?	No	What Zone:	
What is the current FEMA SFHA Zone Base Flood Elevation for the site (Ft BCB)?			
Is any portion of the site in the BPDA Sea Level Rise Flood Hazard Area (see SLR-FHA online map)?	No		

If you answered YES to either of the above questions, please complete the following questions.
Otherwise you have completed the questionnaire; thank you!

E.1 – Sea Level Rise and Storms – Design Conditions

Proposed projects should identify immediate and future adaptation strategies for managing the flooding scenario represented by the Sea Level Rise Flood Hazard Area (SLR-FHA), which includes 3.2' of sea level rise above 2013 tide levels, an additional 2.5" to account for subsidence, and the 1% Annual Chance Flood. After using the SLR-FHA to identify a project's Sea Level Rise Base Flood Elevation, proponents should calculate the Sea Level Rise Design Flood Elevation by adding 12" of freeboard for buildings, and 24" of freeboard for critical facilities and infrastructure and any ground floor residential units.

Boston Planning & Development Agency

Climate Resiliency Report Summary

boston planning & development agency

What is the Sea Level Rise - Base Flood Elevation for the site (Ft BCB)?

What is the Sea Level Rise - Design Flood Elevation for the site (Ft BCB)?

What are the Site Elevations at Building (Ft BCB)?

First Floor Elevation (Ft BCB):

What is the Accessible Route Elevation (Ft BCB)?

Describe site design strategies for adapting to sea level rise including building access during flood events, elevated site areas, hard and soft barriers, wave / velocity breaks, storm water systems, utility services, etc.:

Describe how the proposed Building Design Flood Elevation will be achieved including dry / wet flood proofing, critical systems protection, utility service protection, temporary flood barriers, waste and drain water back flow prevention, etc.:

Describe how occupants might shelter in place during a flooding event including any emergency power, water, and waste water provisions and the expected availability of any such measures:

Describe any strategies that would support rapid recovery after a weather event:

E.2 – Sea Level Rise and Storms – Adaptation Strategies

Describe future site design and or infrastructure adaptation strategies for responding to sea level rise including future elevating of site areas and access routes, barriers, wave / velocity breaks, storm water systems, utility services, etc.:

Describe future building adaptation strategies for raising the Sea Level Rise Design Flood Elevation and further protecting critical systems, including permanent and temporary measures:

Thank you for completing the Boston Climate Change Checklist!

For questions or comments about this checklist or Climate Change best practices, please contact: John.Dalzell@boston.gov

Appendix E

Accessibility Checklists

Accessibility Checklist – Commonwealth Avenue Component

Article 80 – Accessibility Checklist

A requirement of the Boston Planning & Development Agency (BPDA)
Article 80 Development Review Process

The Mayor's Commission for Persons with Disabilities strives to reduce architectural, procedural, attitudinal, and communication barriers that affect persons with disabilities in the City of Boston. In 2009, a Disability Advisory Board was appointed by the Mayor to work alongside the Commission in creating universal access throughout the city's built environment. The Disability Advisory Board is made up of 13 volunteer Boston residents with disabilities who have been tasked with representing the accessibility needs of their neighborhoods and increasing inclusion of people with disabilities.

In conformance with this directive, the BDPA has instituted this Accessibility Checklist as a tool to encourage developers to begin thinking about access and inclusion at the beginning of development projects, and strive to go beyond meeting only minimum MAAB / ADAAG compliance requirements. Instead, our goal is for developers to create ideal design for accessibility which will ensure that the built environment provides equitable experiences for all people, regardless of their abilities. As such, any project subject to Boston Zoning Article 80 Small or Large Project Review, including Institutional Master Plan modifications and updates, must complete this Accessibility Checklist thoroughly to provide specific detail about accessibility and inclusion, including descriptions, diagrams, and data.

For more information on compliance requirements, advancing best practices, and learning about progressive approaches to expand accessibility throughout Boston's built environment. Proponents are highly encouraged to meet with Commission staff, prior to filing.

Accessibility Analysis Information Sources:

1. Americans with Disabilities Act – 2010 ADA Standards for Accessible Design
   http://www.ada.gov/2010ADAstandards_index.htm
2. Massachusetts Architectural Access Board 521 CMR
   http://www.mass.gov/eopss/consumer-prot-and-bus-lic/license-type/aab/aab-rules-and-regulations-pdf.html
3. Massachusetts State Building Code 780 CMR
   http://www.mass.gov/eopss/consumer-prot-and-bus-lic/license-type/csl/building-codebbrs.html
4. Massachusetts Office of Disability – Disabled Parking Regulations
   http://www.mass.gov/anf/docs/mod/hp-parking-regulations-summary-mod.pdf
5. MBTA Fixed Route Accessible Transit Stations
   http://www.mbta.com/riding_the_t/accessible_services/
6. City of Boston – Complete Street Guidelines
   http://bostoncompletestreets.org/
7. City of Boston – Mayor's Commission for Persons with Disabilities Advisory Board
   www.boston.gov/disability
8. City of Boston – Public Works Sidewalk Reconstruction Policy
   http://www.cityofboston.gov/images_documents/sidewalk%20policy%200114_tcm3-41668.pdf
9. City of Boston – Public Improvement Commission Sidewalk Café Policy
   http://www.cityofboston.gov/images_documents/Sidewalk_cafes_tcm3-1845.pdf

Glossary of Terms:

1. ***Accessible Route*** – A continuous and unobstructed path of travel that meets or exceeds the dimensional and inclusionary requirements set forth by MAAB 521 CMR: Section 20
2. ***Accessible Group 2 Units*** – Residential units with additional floor space that meet or exceed the dimensional and inclusionary requirements set forth by MAAB 521 CMR: Section 9.4
3. ***Accessible Guestrooms*** – Guestrooms with additional floor space, that meet or exceed the dimensional and inclusionary requirements set forth by MAAB 521 CMR: Section 8.4
4. ***Inclusionary Development Policy (IDP)*** – Program run by the BPDA that preserves access to affordable housing opportunities, in the City. For more information visit: http://www.bostonplans.org/housing/overview
5. ***Public Improvement Commission (PIC)*** – The regulatory body in charge of managing the public right of way. For more information visit: https://www.boston.gov/pic
6. ***Visitability*** – A place's ability to be accessed and visited by persons with disabilities that cause functional limitations; where architectural barriers do not inhibit access to entrances/doors and bathrooms.

1. Project Information: Commonwealth Avenue Component

If this is a multi-phased or multi-building project, fill out a separate Checklist for each phase/building.

Project Name:	**Kenmore Square Hotels**
Primary Project Address:	**560-574 Commonwealth Avenue**
Total Number of Phases/Buildings:	**Two Buildings**
Primary Contact (Name / Title / Company / Email / Phone):	**Damien B. Chaviano/Mark Kenmore LLC/Dchaviano@markdevllc.com**
Owner / Developer:	**Mark Kenmore LLC**
Architect:	**CBT Architects**
Civil Engineer:	**Bohler Engineering**
Landscape Architect:	**TBD**
Permitting:	**Epsilon Associates, Inc.**
Construction Management:	**Mark Development LLC**

At what stage is the project at time of this questionnaire? Select below:

	☑PNF / Expanded PNF Submitted	Draft / Final Project Impact Report Submitted	BPDA Board Approved
	BPDA Design Approved	Under Construction	Construction Completed:

Do you anticipate filing for any variances with the Massachusetts Architectural Access Board (MAAB)? ***If yes,*** identify and explain.	No

2. Building Classification and Description:

This section identifies preliminary construction information about the project including size and uses.

What are the dimensions of the project?

Component Area:	*6,030 SF*	Building Area:	*161,000 GSF*
Building Height:	*260 FT.*	Number of Stories:	*24 Flrs.*
First Floor Elevation:	23' BCB	Is there below grade space:	*Yes*

What is the Construction Type? (Select most appropriate type)

	Wood Frame	Masonry	Steel Frame	☑Concrete

What are the principal building uses? (IBC definitions are below – select all appropriate that apply)

	Residential – One - Three Unit	Residential - Multi-unit, Four +	Institutional	Educational
	Business	☑Mercantile	Factory	☑Hospitality

	Laboratory / Medical	Storage, Utility and Other	
List street-level uses of the building:	*Hotel Lobby, Bank Branch*		

3. Assessment of Existing Infrastructure for Accessibility:

This section explores the proximity to accessible transit lines and institutions, such as (but not limited to) hospitals, elderly & disabled housing, and general neighborhood resources. Identify how the area surrounding the development is accessible for people with mobility impairments and analyze the existing condition of the accessible routes through sidewalk and pedestrian ramp reports.

Provide a description of the neighborhood where this development is located and its identifying topographical characteristics:	The Commonwealth Avenue Component is on west side of Kenmore Square on a pie shaped site between Commonwealth Avenue and Beacon Street. The site of this Component is relatively flat with a 30" overall grade change.
List the surrounding accessible MBTA transit lines and their proximity to development site: commuter rail / subway stations, bus stops:	MBTA Green Lines B, C,&D & MBTA Bus Lines 8,19,57,57A,60, & 65 @ Kenmore Station 400' MBTA Green Line B @ Blandford St (not accessible) 415' MBTA Commuter Rail Framingham/Worcester @ Yawkey Station 460' MBTA Bus Lines 9,8,19,60, & 65 @ Brookline Ave & Newbury St. 205' MBTA Bus Line @ Commonwealth Ave. 282'
List the surrounding institutions: hospitals, public housing, elderly and disabled housing developments, educational facilities, others:	Boston University, US Vets Outreach Center, Peterborough Senior Center, Boston Language Institute
List the surrounding government buildings: libraries, community centers, recreational facilities, and other related facilities:	US Postal Service, Fenway Park, Charles River, Boston University

4. Surrounding Site Conditions – Existing:

This section identifies current condition of the sidewalks and pedestrian ramps at the development site.

Is the development site within a historic district? ***If yes,*** identify which district:	No
Are there sidewalks and pedestrian ramps existing at the development site? ***If yes***, list the existing sidewalk and pedestrian ramp dimensions, slopes, materials, and physical condition at the development site:	Yes. The Beacon Street sidewalk is 22' wide and an average slope of 1.86%. The Commonwealth Avenue sidewalk is 21' wide and an average slope of 1.29%. Both sidewalks are all concrete with granite curbs, all in good condition.
Are the sidewalks and pedestrian ramps existing-to-remain? ***If yes,*** have they been verified as ADA / MAAB compliant (with yellow composite detectable warning surfaces, cast in concrete)? ***If yes,*** provide description and photos:	No

5. Surrounding Site Conditions – Proposed

This section identifies the proposed condition of the walkways and pedestrian ramps around the development site. Sidewalk width contributes to the degree of comfort walking along a street. Narrow sidewalks do not support lively pedestrian activity, and may create dangerous conditions that force people to walk in the street. Wider sidewalks allow people to walk side by side and pass each other comfortably walking alone, walking in pairs, or using a wheelchair.

Are the proposed sidewalks consistent with the Boston Complete Street Guidelines? ***If yes***, choose which Street Type was applied: Downtown Commercial, Downtown Mixed-use, Neighborhood Main, Connector, Residential, Industrial, Shared Street, Parkway, or Boulevard.	Yes "Downtown Commercial" along Commonwealth Avenue and "Downtown Mixed Use" along Beacon Street.
What are the total dimensions and slopes of the proposed sidewalks? List the widths of the proposed zones: Frontage, Pedestrian and Furnishing Zone:	Commonwealth Ave. 21' wide & Beacon St. sidewalk is 22' wide. Comm. Ave. has 3' frontage, 12' pedestrian, & 6' greenscape/furnishing zones. Beacon St. has 4' frontage, 12' pedestrian, & 6' greenscape/furnishing zones. The cross sidewalk slope is less than 2%.
List the proposed materials for each Zone. Will the proposed materials be on private property or will the proposed materials be on the City of Boston pedestrian right-of-way?	All Frontage Zones & Pedestrian Zones are concrete. Greenscape and Furnishing Zones are permeable stone pavers and planted with street trees. All sidewalks are on City of Boston property.
Will sidewalk cafes or other furnishings be programmed for the pedestrian right-of-way? ***If yes,*** what are the proposed dimensions of the sidewalk café or furnishings and what will the remaining right-of-way clearance be?	No
If the pedestrian right-of-way is on private property, will the proponent seek a pedestrian easement with the Public Improvement Commission (PIC)?	NA
Will any portion of the Project be going through the PIC? ***If yes,*** identify PIC actions and provide details.	Yes. This Component requires an 8'deep, full-building height cantilever, along Commonwealth Ave. which emerges 47' above the sidewalk.

6. Accessible Parking:

See Massachusetts Architectural Access Board Rules and Regulations 521 CMR Section 23.00 regarding accessible parking requirement counts and the Massachusetts Office of Disability – Disabled Parking Regulations.

What is the total number of parking spaces provided at the development site? Will these be in a parking lot or garage?	There will be no parking spaces on-site. A valet parking system will be implemented with spaces to be leased at nearby properties.
What is the total number of accessible spaces provided at the development site? How many of these are "Van Accessible" spaces with an 8 foot access aisle?	None, but there will be valet parking.
Will any on-street accessible parking spaces be required? ***If yes,*** has the proponent contacted the Commission for Persons with Disabilities regarding this need?	No on-street spaces will be required. An accessible Van loading area will be provided on Beacon St. at the hotel entry.
Where is the accessible visitor parking located?	NA
Has a drop-off area been identified? ***If yes,*** will it be accessible?	Yes, there will be a drop-off area on Beacon Street.
7. Circulation and Accessible Routes: *The primary objective in designing smooth and continuous paths of travel is to create universal access to entryways and common spaces, which accommodates persons of all abilities and allows for visitability with neighbors*.	
Describe accessibility at each entryway: Example: Flush Condition, Stairs, Ramp, Lift or Elevator:	Commonwealth Ave. Hotel Entry – flush Through Interior Lobby has elevator & stair up 30" to the Beacon St. Hotel entry. Beacon St. Hotel Entry – flush Branch Bank Entry at intersection - flush
Are the accessible entrances and standard entrance integrated? ***If yes,*** *describe.* ***If no,*** what is the reason?	Yes. Accessible entries will be button activated with power assist.
If project is subject to Large Project Review/Institutional Master Plan, describe the accessible routes way-finding / signage package.	All proposed pedestrian circulation will be accessible.
8. Accessible Units (Group 2) and Guestrooms: (If applicable) *In order to facilitate access to housing and hospitality, this section addresses the number of accessible units that are proposed for the development site that remove barriers to housing and hotel rooms.*	

What is the total number of proposed housing units or hotel rooms for the development?	382 hotel guest rooms.
If a residential development, how many units are for sale? How many are for rent? What is the breakdown of market value units vs. IDP (Inclusionary Development Policy) units?	
If a residential development, how many accessible Group 2 units are being proposed?	
If a residential development, how many accessible Group 2 units will also be IDP units? ***If none***, describe reason.	
If a hospitality development, how many accessible units will feature a wheel-in shower? Will accessible equipment be provided as well? ***If yes,*** provide amount and location of equipment.	20 accessible guestrooms will be provided, 4 of which will have accessible showers, equivalently distributed up through the building. 8 guestrooms will accommodate the deaf and visually impaired.
Do standard units have architectural barriers that would prevent entry or use of common space for persons with mobility impairments? Example: stairs / thresholds at entry, step to balcony, others. ***If yes***, provide reason.	No.
Are there interior elevators, ramps or lifts located in the development for access around architectural barriers and/or to separate floors? ***If yes***, describe:	Yes. The through hotel lobby will have a double sided passenger elevator to accommodate the 30" difference between the Comm. Ave and Beacon St. entries.
9. Community Impact: *Accessibility and inclusion extend past required compliance with building codes. Providing an overall scheme that allows full and equal participation of persons with disabilities makes the development an asset to the surrounding community.*	
Is this project providing any funding or improvements to the surrounding	Yes. Additional street trees will be added. With the free-right turn lane being eliminated at the intersection in Kenmore Square, additional

neighborhood? Examples: adding extra street trees, building or refurbishing a local park, or supporting other community-based initiatives?	pedestrian area is gained at this prominent point.
What inclusion elements does this development provide for persons with disabilities in common social and open spaces? Example: Indoor seating and TVs in common rooms; outdoor seating and barbeque grills in yard. Will all of these spaces and features provide accessibility?	All common areas will be accessible.
Are any restrooms planned in common public spaces? ***If yes,*** will any be single-stall, ADA compliant and designated as "Family"/ "Companion" restrooms? ***If no***, explain why not.	Yes.
Has the proponent reviewed the proposed plan with the City of Boston Disability Commissioner or with their Architectural Access staff? ***If yes,*** did they approve? ***If no,*** what were their comments?	No
Has the proponent presented the proposed plan to the Disability Advisory Board at one of their monthly meetings? Did the Advisory Board vote to support this project? ***If no,*** what recommendations did the Advisory Board give to make this project more accessible?	Not at this time

10. Attachments

Include a list of all documents you are submitting with this Checklist. This may include drawings, diagrams, photos, or any other material that describes the accessible and inclusive elements of this project.

Provide a diagram of the accessible routes to and from the accessible parking lot/garage and drop-off areas to the development entry locations, including route distances.
Provide a diagram of the accessible route connections through the site, including distances.
Provide a diagram the accessible route to any roof decks or outdoor courtyard space? (if applicable)
Provide a plan and diagram of the accessible Group 2 units, including locations and route from accessible entry.
Provide any additional drawings, diagrams, photos, or any other material that describes the inclusive and accessible

elements of this project.

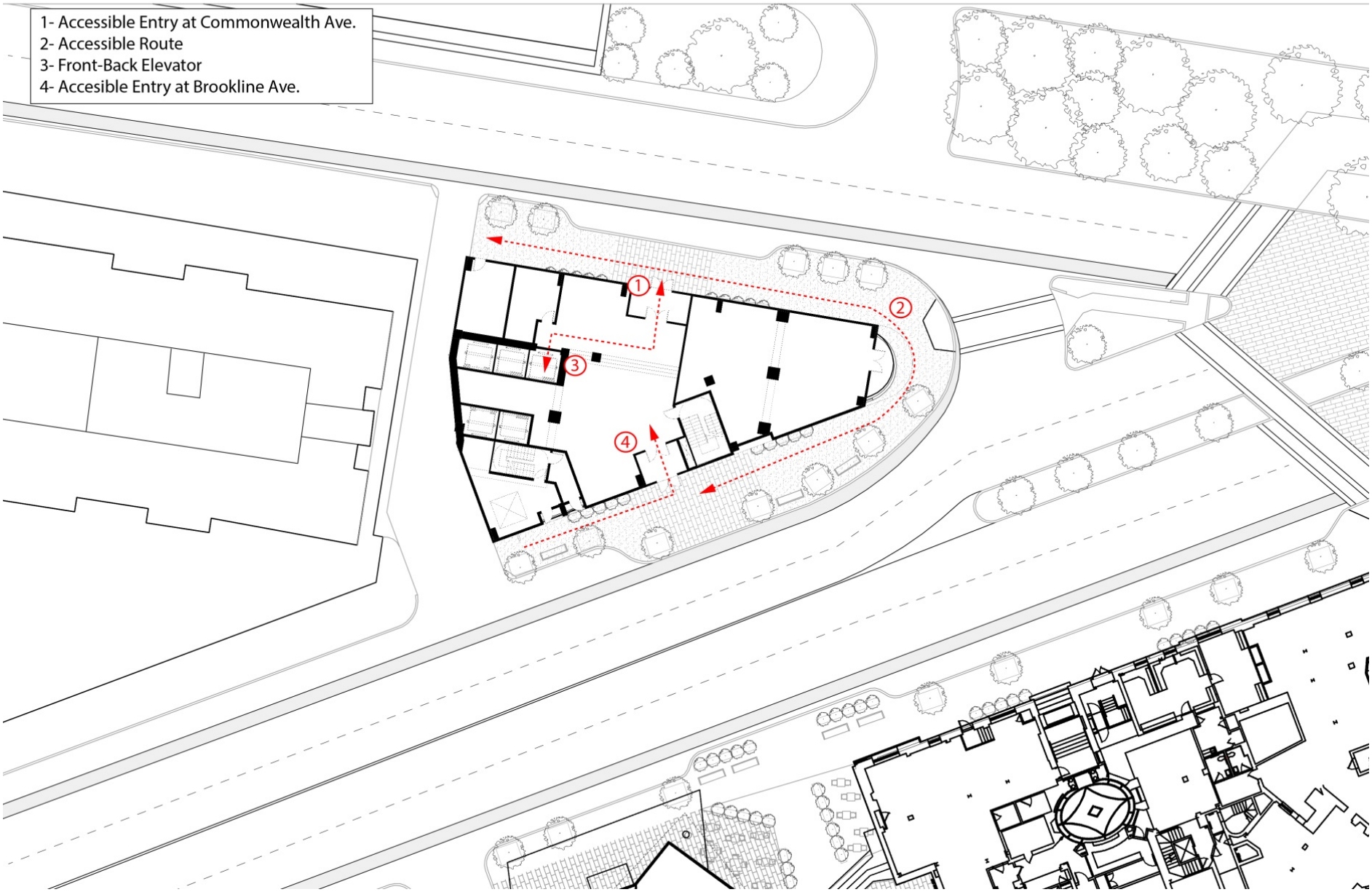
This completes the Article 80 Accessibility Checklist required for your project. Prior to and during the review process, Commission staff are able to provide technical assistance and design review, in order to help achieve ideal accessibility and to ensure that all buildings, sidewalks, parks, and open spaces are usable and welcoming to Boston's diverse residents and visitors, including those with physical, sensory, and other disabilities.

For questions or comments about this checklist, or for more information on best practices for improving accessibility and inclusion, visit www.boston.gov/disability, or our office:

The Mayor's Commission for Persons with Disabilities
1 City Hall Square, Room 967,
Boston MA 02201.

Architectural Access staff can be reached at:

accessibility@boston.gov | patricia.mendez@boston.gov | sarah.leung@boston.gov | 617-635-3682



Kenmore Square Hotels **Boston, Massachusetts**

Accessibility Checklist – Beacon Street Component

Article 80 – Accessibility Checklist

A requirement of the Boston Planning & Development Agency (BPDA)
Article 80 Development Review Process

The Mayor's Commission for Persons with Disabilities strives to reduce architectural, procedural, attitudinal, and communication barriers that affect persons with disabilities in the City of Boston. In 2009, a Disability Advisory Board was appointed by the Mayor to work alongside the Commission in creating universal access throughout the city's built environment. The Disability Advisory Board is made up of 13 volunteer Boston residents with disabilities who have been tasked with representing the accessibility needs of their neighborhoods and increasing inclusion of people with disabilities.

In conformance with this directive, the BDPA has instituted this Accessibility Checklist as a tool to encourage developers to begin thinking about access and inclusion at the beginning of development projects, and strive to go beyond meeting only minimum MAAB / ADAAG compliance requirements. Instead, our goal is for developers to create ideal design for accessibility which will ensure that the built environment provides equitable experiences for all people, regardless of their abilities. As such, any project subject to Boston Zoning Article 80 Small or Large Project Review, including Institutional Master Plan modifications and updates, must complete this Accessibility Checklist thoroughly to provide specific detail about accessibility and inclusion, including descriptions, diagrams, and data.

For more information on compliance requirements, advancing best practices, and learning about progressive approaches to expand accessibility throughout Boston's built environment. Proponents are highly encouraged to meet with Commission staff, prior to filing.

Accessibility Analysis Information Sources:

1. Americans with Disabilities Act – 2010 ADA Standards for Accessible Design
   http://www.ada.gov/2010ADAstandards_index.htm
2. Massachusetts Architectural Access Board 521 CMR
   http://www.mass.gov/eopss/consumer-prot-and-bus-lic/license-type/aab/aab-rules-and-regulations-pdf.html
3. Massachusetts State Building Code 780 CMR
   http://www.mass.gov/eopss/consumer-prot-and-bus-lic/license-type/csl/building-codebbrs.html
4. Massachusetts Office of Disability – Disabled Parking Regulations
   http://www.mass.gov/anf/docs/mod/hp-parking-regulations-summary-mod.pdf
5. MBTA Fixed Route Accessible Transit Stations
   http://www.mbta.com/riding_the_t/accessible_services/
6. City of Boston – Complete Street Guidelines
   http://bostoncompletestreets.org/
7. City of Boston – Mayor's Commission for Persons with Disabilities Advisory Board
   www.boston.gov/disability
8. City of Boston – Public Works Sidewalk Reconstruction Policy
   http://www.cityofboston.gov/images_documents/sidewalk%20policy%200114_tcm3-41668.pdf
9. City of Boston – Public Improvement Commission Sidewalk Café Policy
   http://www.cityofboston.gov/images_documents/Sidewalk_cafes_tcm3-1845.pdf

Glossary of Terms:

1. ***Accessible Route*** – A continuous and unobstructed path of travel that meets or exceeds the dimensional and inclusionary requirements set forth by MAAB 521 CMR: Section 20
2. ***Accessible Group 2 Units*** – Residential units with additional floor space that meet or exceed the dimensional and inclusionary requirements set forth by MAAB 521 CMR: Section 9.4
3. ***Accessible Guestrooms*** – Guestrooms with additional floor space, that meet or exceed the dimensional and inclusionary requirements set forth by MAAB 521 CMR: Section 8.4
4. ***Inclusionary Development Policy (IDP)*** – Program run by the BPDA that preserves access to affordable housing opportunities, in the City. For more information visit: http://www.bostonplans.org/housing/overview
5. ***Public Improvement Commission (PIC)*** – The regulatory body in charge of managing the public right of way. For more information visit: https://www.boston.gov/pic
6. ***Visitability*** – A place's ability to be accessed and visited by persons with disabilities that cause functional limitations; where architectural barriers do not inhibit access to entrances/doors and bathrooms.

1. Project Information: Beacon Street Component

If this is a multi-phased or multi-building project, fill out a separate Checklist for each phase/building.

Project Name:	**Kenmore Square Hotels**
Primary Project Address:	**651, 655-665 Beacon Street**
Total Number of Phases/Buildings:	**Two Buildings**
Primary Contact (Name / Title / Company / Email / Phone):	**Jackson Slomiak/Buckminster Annex Corporation/** jackson@bluridgemgmt.com
Owner / Developer:	**The Buckminster Annex, LLC**
Architect:	**Group One Partners, Inc.**
Civil Engineer:	**Bohler Engineering**
Landscape Architect:	**TBD**
Permitting:	**Epsilon Associatates**
Construction Management:	**TBD**

At what stage is the project at time of this questionnaire? Select below:

☑PNF / Expanded PNF Submitted	Draft / Final Project Impact Report Submitted	BPDA Board Approved
BPDA Design Approved	Under Construction	Construction Completed:

Do you anticipate filing for any variances with the Massachusetts Architectural Access Board (MAAB)? ***If yes,*** identify and explain.	No

2. Building Classification and Description:

This section identifies preliminary construction information about the project including size and uses.

What are the dimensions of the project?

Site Area:	*40,408SF*	Building Area:	*186,000 GSF*
Building Height:	*210 FT.*	Number of Stories:	*19Flrs.*
First Floor Elevation:	24' BCB	Is there below grade space:	Yes

What is the Construction Type? (Select most appropriate type)

Wood Frame	Masonry	☑Steel Frame	Concrete

What are the principal building uses? (IBC definitions are below – select all appropriate that apply)

Residential – One - Three Unit	Residential - Multi-unit, Four +	Institutional	Educational

	Business	Mercantile	Factory	☑Hospitality
	Laboratory / Medical	Storage, Utility and Other		
List street-level uses of the building:	*Retail, hotel lobby*			

3. Assessment of Existing Infrastructure for Accessibility:

This section explores the proximity to accessible transit lines and institutions, such as (but not limited to) hospitals, elderly & disabled housing, and general neighborhood resources. Identify how the area surrounding the development is accessible for people with mobility impairments and analyze the existing condition of the accessible routes through sidewalk and pedestrian ramp reports.

Provide a description of the neighborhood where this development is located and its identifying topographical characteristics:	The Beacon Street Component is bounded by Commonwealth Avenue to the North, Beacon Street and Brookline Avenue to the South in the Fenway / Kenmore Square neighborhood of Boston. The site has a large grade change of approximately 12 feet between Beacon Street and Brookline Ave.
List the surrounding accessible MBTA transit lines and their proximity to development site: commuter rail / subway stations, bus stops:	MBTA Green Lines B, C,&D & MBTA Bus Lines 8,19,57,57A,60, & 65 @ Kenmore Station 400' MBTA Green Line B @ Blandford St (not accessible) 415' MBTA Commuter Rail Framingham/Worcester @ Yawkey Station 460' MBTA Bus Lines 9,8,19,60, & 65 @ Brookline Ave & Newbury St. 205' MBTA Bus Line @ Commonwealth Ave. 282'
List the surrounding institutions: hospitals, public housing, elderly and disabled housing developments, educational facilities, others:	Boston University, US Vets Outreach Center, Peterborough Senior Center, Boston Language Institute
List the surrounding government buildings: libraries, community centers, recreational facilities, and other related facilities:	US Postal Service, Fenway Park, Charles River, Boston University

4. Surrounding Site Conditions – Existing:

This section identifies current condition of the sidewalks and pedestrian ramps at the development site.

Is the development site within a historic district? ***If yes,*** identify which district:	No
Are there sidewalks and pedestrian ramps existing at the development site? ***If yes***, list the existing sidewalk and pedestrian ramp dimensions, slopes, materials, and physical condition at the development site:	Yes Dimensions and slopes vary.
Are the sidewalks and pedestrian ramps existing-to-remain? ***If yes,*** have they been verified as ADA / MAAB compliant	No

(with yellow composite detectable warning surfaces, cast in concrete)? ***If yes,*** provide description and photos:	
5. Surrounding Site Conditions – Proposed *This section identifies the proposed condition of the walkways and pedestrian ramps around the development site. Sidewalk width contributes to the degree of comfort walking along a street. Narrow sidewalks do not support lively pedestrian activity, and may create dangerous conditions that force people to walk in the street. Wider sidewalks allow people to walk side by side and pass each other comfortably walking alone, walking in pairs, or using a wheelchair.*	
Are the proposed sidewalks consistent with the Boston Complete Street Guidelines? ***If yes***, choose which Street Type was applied: Downtown Commercial, Downtown Mixed-use, Neighborhood Main, Connector, Residential, Industrial, Shared Street, Parkway, or Boulevard.	Yes "Downtown Commercial" along Commonwealth Avenue and "Downtown Mixed Use" along Beacon Street.
What are the total dimensions and slopes of the proposed sidewalks? List the widths of the proposed zones: Frontage, Pedestrian and Furnishing Zone:	Commonwealth Ave. 21' wide & Beacon St. sidewalk is 22' wide. Comm. Ave. has 3' frontage, 12' pedestrian, & 6' greenscape/furnishing zones. Beacon St. has 4' frontage, 12' pedestrian, & 6' greenscape/furnishing zones. The cross sidewalk slope is less than 2%.
List the proposed materials for each Zone. Will the proposed materials be on private property or will the proposed materials be on the City of Boston pedestrian right-of-way?	All Frontage Zones & Pedestrian Zones are concrete. Greenscape and Furnishing Zones are permeable stone pavers and planted with street trees. All sidewalks are on City of Boston property.
Will sidewalk cafes or other furnishings be programmed for the pedestrian right-of-way? ***If yes,*** what are the proposed dimensions of the sidewalk café or furnishings and what will the remaining right-of-way clearance be?	No
If the pedestrian right-of-way is on private property, will the proponent seek a pedestrian easement with the Public Improvement Commission (PIC)?	N/A
Will any portion of the Project be going through the PIC? ***If yes,*** identify PIC actions and provide details.	Yes. The Project requires public street improvements and above grade discontinuances / license agreements.
6. Accessible Parking:	

See Massachusetts Architectural Access Board Rules and Regulations 521 CMR Section 23.00 regarding accessible parking requirement counts and the Massachusetts Office of Disability – Disabled Parking Regulations.	
What is the total number of parking spaces provided at the development site? Will these be in a parking lot or garage?	145
What is the total number of accessible spaces provided at the development site? How many of these are "Van Accessible" spaces with an 8 foot access aisle?	The parking will be valet only, not for self parking use and will be only accessible through operated vehicular lifts.
Will any on-street accessible parking spaces be required? ***If yes,*** has the proponent contacted the Commission for Persons with Disabilities regarding this need?	No
Where is the accessible visitor parking located?	The parking will be valet only, not for self parking use and will be only accessible through operated vehicular lifts.
Has a drop-off area been identified? ***If yes,*** will it be accessible?	Yes, it will be curbside and attended.
7. Circulation and Accessible Routes: *The primary objective in designing smooth and continuous paths of travel is to create universal access to entryways and common spaces, which accommodates persons of all abilities and allows for visitability with neighbors*.	
Describe accessibility at each entryway: Example: Flush Condition, Stairs, Ramp, Lift or Elevator:	All entry doors will have flush entrance conditions and be fully accessible into the hotel.
Are the accessible entrances and standard entrance integrated? ***If yes,*** *describe.* ***If no****,* what is the reason?	Yes, all entry doors will have flush entrance conditions and be fully accessible into the hotel.
If project is subject to Large Project Review/Institutional Master Plan, describe the accessible routes way-	All proposed pedestrian circulation will be accessible.

finding / signage package.	
8. Accessible Units (Group 2) and Guestrooms: (If applicable) *In order to facilitate access to housing and hospitality, this section addresses the number of accessible units that are proposed for the development site that remove barriers to housing and hotel rooms.*	
What is the total number of proposed housing units or hotel rooms for the development?	295 hotel rooms
If a residential development, how many units are for sale? How many are for rent? What is the breakdown of market value units vs. IDP (Inclusionary Development Policy) units?	
If a residential development, how many accessible Group 2 units are being proposed?	
If a residential development, how many accessible Group 2 units will also be IDP units? ***If none***, describe reason.	
If a hospitality development, how many accessible units will feature a wheel-in shower? Will accessible equipment be provided as well? ***If yes,*** provide amount and location of equipment.	The final number of roll in showers and accessible units will depend on the final room count but the project will comply with the requirement set forth in MAAB / ADA.
Do standard units have architectural barriers that would prevent entry or use of common space for persons with mobility impairments? Example: stairs / thresholds at entry, step to balcony, others. ***If yes***, provide reason.	No
Are there interior elevators, ramps or lifts located in the development for access around architectural barriers and/or to separate floors? ***If yes***, describe:	No
9. Community Impact: *Accessibility and inclusion extend past required compliance with building codes. Providing an overall scheme that allows full and equal participation of persons with disabilities makes the development an asset to the surrounding community.*	

Is this project providing any funding or improvements to the surrounding neighborhood? Examples: adding extra street trees, building or refurbishing a local park, or supporting other community-based initiatives?	Yes. Additional street trees will be added. With the free-right turn lane being eliminated at the intersection in Kenmore Square, additional pedestrian area is gained at this prominent point.
What inclusion elements does this development provide for persons with disabilities in common social and open spaces? Example: Indoor seating and TVs in common rooms; outdoor seating and barbeque grills in yard. Will all of these spaces and features provide accessibility?	All common areas will be accessible.
Are any restrooms planned in common public spaces? ***If yes,*** will any be single-stall, ADA compliant and designated as "Family"/ "Companion" restrooms? ***If no***, explain why not.	Yes
Has the proponent reviewed the proposed plan with the City of Boston Disability Commissioner or with their Architectural Access staff? ***If yes,*** did they approve? ***If no,*** what were their comments?	No
Has the proponent presented the proposed plan to the Disability Advisory Board at one of their monthly meetings? Did the Advisory Board vote to support this project? ***If no,*** what recommendations did the Advisory Board give to make this project more accessible?	Not at this time.

10. Attachments

Include a list of all documents you are submitting with this Checklist. This may include drawings, diagrams, photos, or any other material that describes the accessible and inclusive elements of this project.

Provide a diagram of the accessible routes to and from the accessible parking lot/garage and drop-off areas to the development entry locations, including route distances.
Provide a diagram of the accessible route connections through the site, including distances.

Provide a diagram the accessible route to any roof decks or outdoor courtyard space? (if applicable)
Provide a plan and diagram of the accessible Group 2 units, including locations and route from accessible entry.
Provide any additional drawings, diagrams, photos, or any other material that describes the inclusive and accessible elements of this project. • • • •

This completes the Article 80 Accessibility Checklist required for your project. Prior to and during the review process, Commission staff are able to provide technical assistance and design review, in order to help achieve ideal accessibility and to ensure that all buildings, sidewalks, parks, and open spaces are usable and welcoming to Boston's diverse residents and visitors, including those with physical, sensory, and other disabilities.

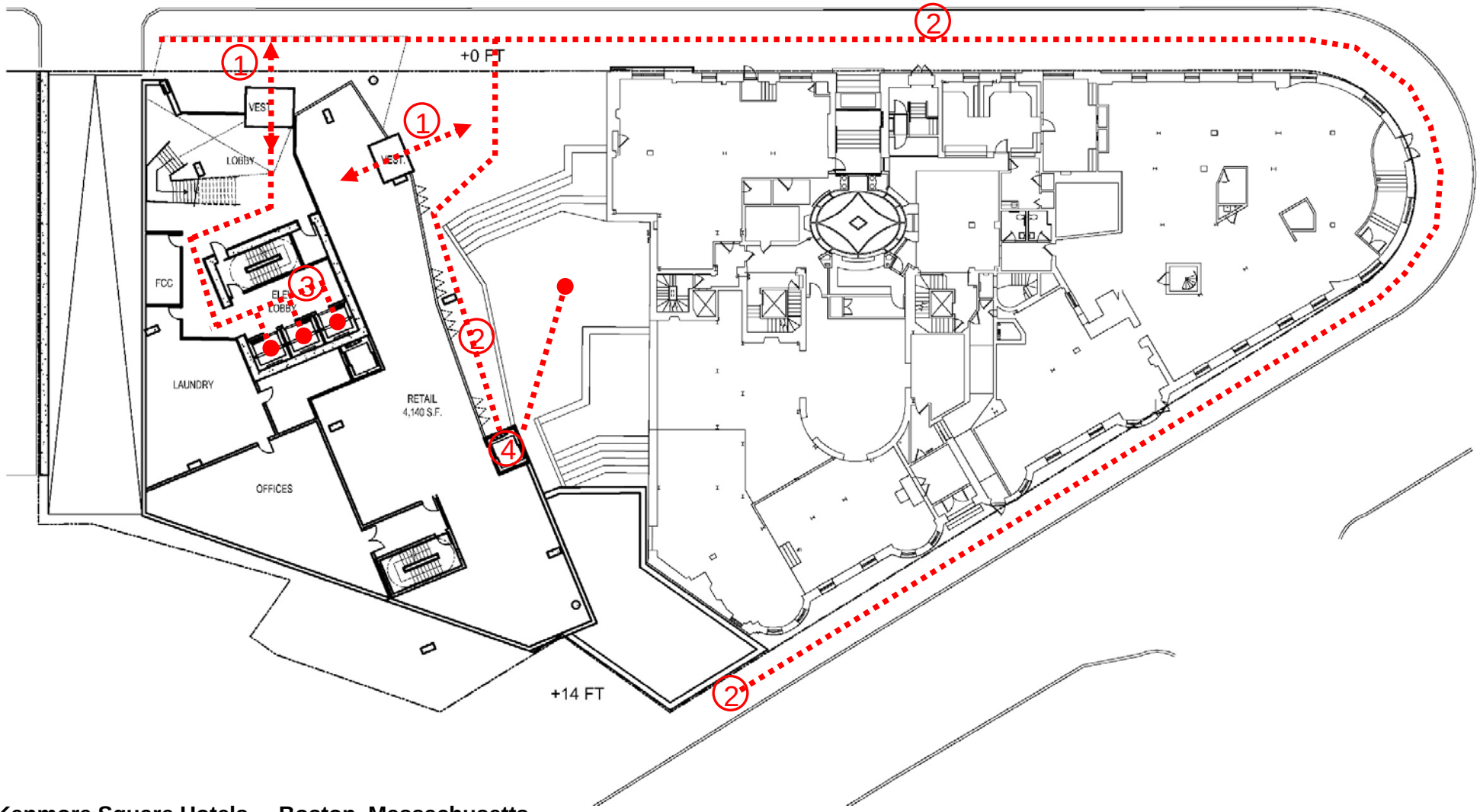
For questions or comments about this checklist, or for more information on best practices for improving accessibility and inclusion, visit www.boston.gov/disability, or our office:

The Mayor's Commission for Persons with Disabilities
1 City Hall Square, Room 967,
Boston MA 02201.

Architectural Access staff can be reached at:

accessibility@boston.gov | patricia.mendez@boston.gov | sarah.leung@boston.gov | 617-635-3682

1 – Accessible Entry at Beacon Street
2 – Accessible Routes
3 – Accessible Elevators
4 – Accessible Elevator for Brookline Ave and Grade Connections

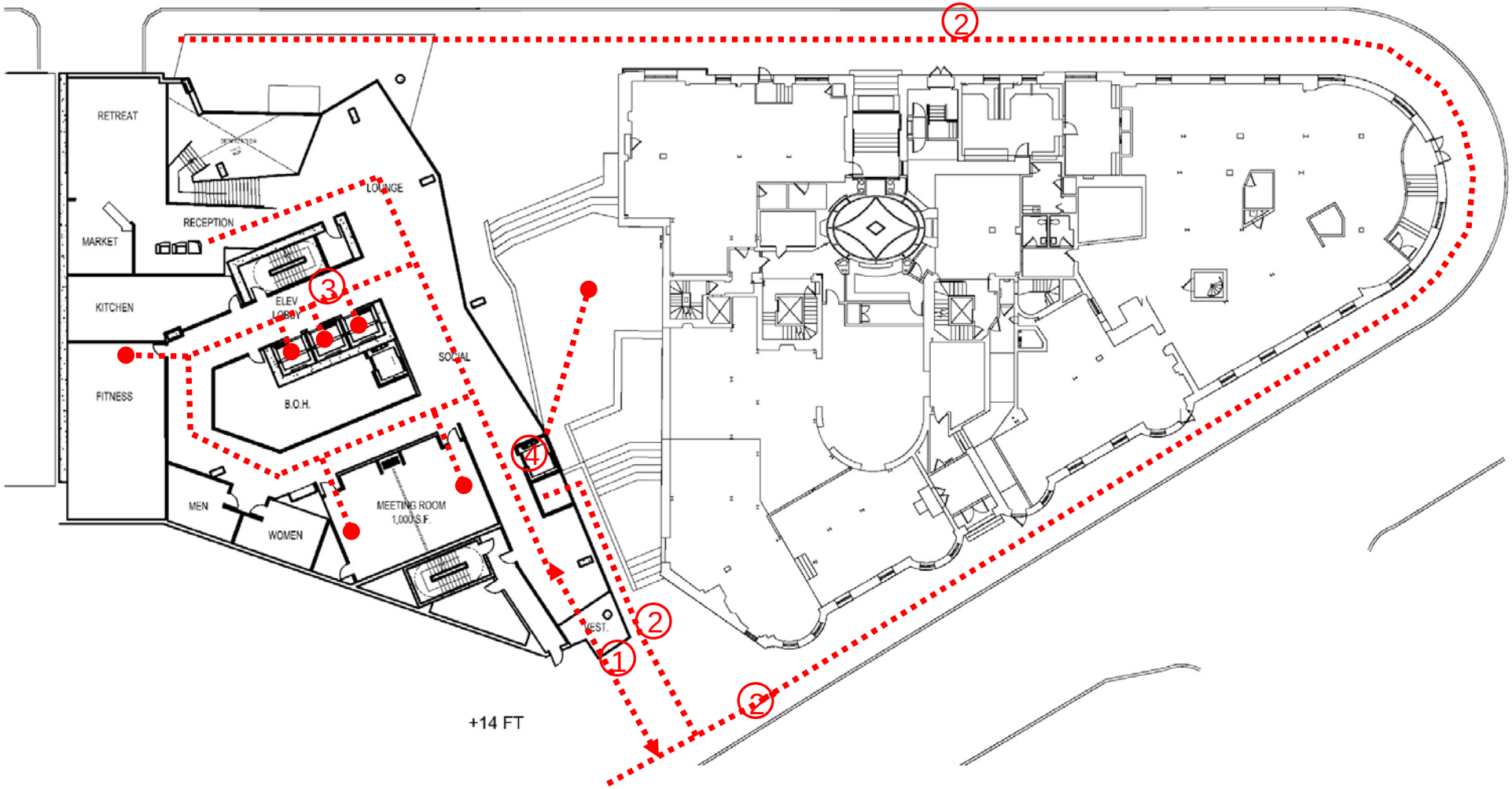


Kenmore Square Hotels **Boston, Massachusetts**

Epsilon ASSOCIATES INC.

Beacon Street Component - Ground Floor Accessibility Plan

1 – Accessible Entry at Beacon Street
2 – Accessible Routes
3 – Accessible Elevators
4 – Accessible Elevator for Brookline Ave and Grade Connections

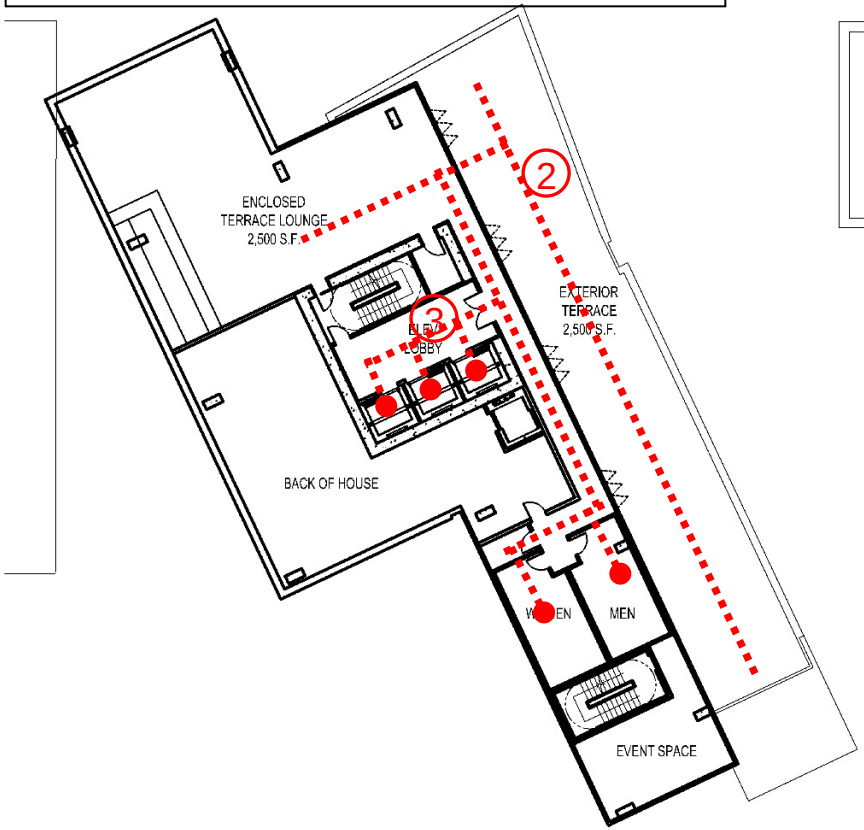


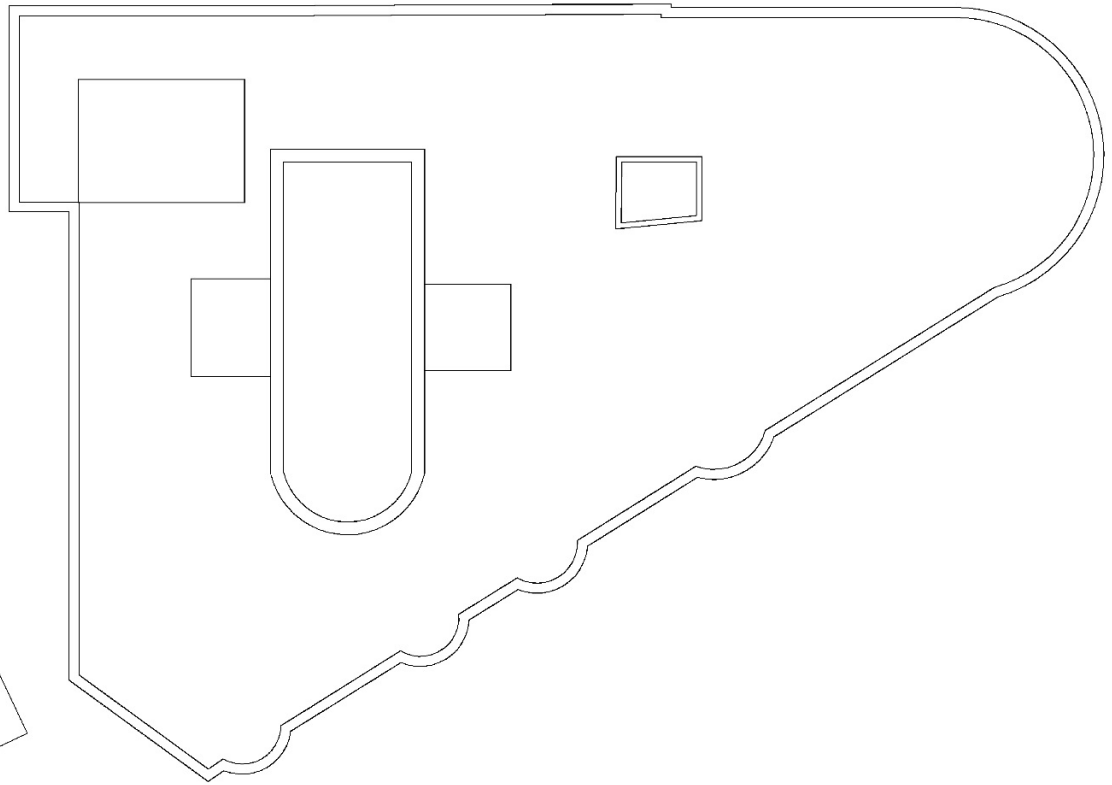
Kenmore Square Hotels **Boston, Massachusetts**

Epsilon ASSOCIATES INC.

Beacon Street Component – Second Floor Accessibility Plan

1 – Accessible Entry at Beacon Street
2 – Accessible Routes
3 – Accessible Elevators
4 – Accessible Elevator for Brookline Ave and Grade Connections





Kenmore Square Hotels **Boston, Massachusetts**