



MIT KENDALL SQUARE NOMA
BUILDING 1
ONE BROADWAY

DESIGN SUBMISSION
MARCH 3, 2017

ELKUS MANFREDI ARCHITECTS
LANDWORKS STUDIO

TABLE OF CONTENTS

MIT KENDALL SQUARE NOMA

BUILDING 1
ONE BROADWAY

1. Design Review Narrative
2. Design Review Graphic Material
 - Site Plan
 - Building Plans and Section
 - Building Views and Elevations
 - Landscape Design
 - Exterior Building Lighting Plans
 - Preliminary Signage Plan
3. Sustainability Narrative / LEED Scorecard
4. Acoustical Narrative
5. Wind Study
6. Shadows Study

NoMa (Building 1 and One Broadway Additions) Design Review

I. Project Summary

A. Overview

The North of Main Street “NoMa” project, which was approved by Planning Board Special Permit No. 302, is approved as a mixed-use development, with residential, office, retail and parking and includes one new building (“Building 1”) and additions to the existing One Broadway building. The project is situated on PUD-5 Development Parcel A and is comprised of two lots including (a) a lot containing the existing One Broadway building and the undeveloped space abutting the One Broadway building directly to the north between the northerly face of the One Broadway building and Broad Canal Way and (b) 199 Main Street, an existing surface parking lot situated to the east of the above-referenced One Broadway parcel. The two lots are depicted on the draft Subdivision Plan attached to this Design Review submission on page 12.

- The Building 1 lot is the site of an existing 114 space surface parking lot and will be the site of Building 1, a 384,050 sf residential apartment building with ground floor retail and two levels of above-grade structured parking at its base.
- The One Broadway lot contains an existing 297,069 sf office building with retail and parking at its base. New construction will include a one-story retail building along the northerly face of the existing One Broadway parking garage, fronting on Broad Canal Way, with retail at grade. The project will also include expanding the retail space at grade level on the southwest and south portions of the building and construction of approximately 16,000 sf of new office space and associated terrace on floors 2 and 3 above the new retail space as well as façade renovations replacing the precast concrete concealing the parking podium that fronts Broadway. Lastly, the project will relocate the office lobby of One Broadway in order to improve retail at the corner of Broadway and Third Street.

One Broadway: Existing and Built Conditions (Non-Exempt and Exempt GFA)

	Existing GFA	Proposed GFA	Net New GFA
Upper Level Office GFA	282,569	282,569	0
OBW Office Add./Terrace GFA	0	15,995	+15,995
Office Lobby GFA	4,420	6,510	+2,090
Retail GFA	10,080	34,395	+24,315
TOTAL GFA	297,069	339,469	+42,400
Parking Spaces	316	293	-23
Long Term Bike Parking	86	95	+9
Short Term Bike Parking	14	33	+19

Building 1: Existing and Built Conditions (Non-Exempt and Exempt GFA)

	Existing	Proposed	Net New
Residential GFA	0	315,400	+315,400
Ground Floor Retail GFA	0	9,600	+9,600
Structured Parking GFA	0	59,050	+59,050
TOTAL	0	384,050	+384,050
Parking Spaces	114	150	+36
Long Term Bike Parking	0	317	+317
Short Term Bike Parking	0	36	+36

Building 1 is proposed as a 24 story, primarily residential, building comprised of the following:

- 20 levels of residential apartments containing between 290 and 300 units; of which 53-54 units will be affordable and 5-10 will be middle income.
- 1 level of residential amenity space and roof terrace space
- 2 levels of parking for residents
- 1 level of retail, residential lobby, and loading space

One Broadway additions and alterations include the following:

- The addition of a one story retail “Liner Building” fronting Broad Canal Way
- The relocation of the office lobby for One Broadway eastward to make way for an expanded retail space at the corner of Broadway and Third Street, in an effort to further activate that corner of the building site
- The expansion of the existing retail fronting Broadway to include a proposed grocery store and associated food prep and storage space in the existing basement
- The addition of two small levels of office above the grocery store in front of the existing parking garage façade
- The addition of a roof terrace above the new office

The proposed active uses in the base of Building 1 and One Broadway additions will greatly expand upon the existing condition. An existing parking lot that prohibits pedestrian passage from Main Street to Broad Canal Way will be replaced with an active retail podium and landscaped spaces that support pedestrian connection.

The existing One Broadway building currently has retail fronting Broadway and a small portion of Third Street, and the proposed condition will maximize retail frontage around the entire site, while completing a double loaded streetscape of active uses on Broad Canal Way.

Relocating the One Broadway office lobby frees up the corner retail space at Third Street and Broadway, a key retail location. The addition of a grocery store to the neighborhood, as well as other food and beverage venues, will work together with the other PUD sites and districts to enliven the street activity during day and night.

Long-term bicycle parking for Building 1 is proposed on levels one and four and is connected with a dedicated elevator for bicycles. The entrance to the long term bike parking is located along the pedestrian passage (the east side of the building) and is connected to the residential lobby. Bike users that park on level four have convenient access to a residential elevator to proceed directly to their apartment level. Short-term bicycle parking for Building 1 is proposed to occur along the north and east sides of the building, as shown on page 65 of this submission. A bike repair station is proposed along the pedestrian passage, fulfilling a requirement of the Special Permit.

Long-term bicycle parking for One Broadway’s office and retail will be located on parking level one near the entrance to the office lobby from the parking garage. Short-term bicycle parking for One Broadway’s new office and existing and proposed retail will occur along the north, south and west sides of the building, as shown on page 65 of this submission.

An existing Hubway station on the south side of One Broadway is proposed to be expanded, and a new Hubway station on the north side of One Broadway is proposed, as shown on page 65 of this submission.

Assigned parking for the proposed residential apartments includes 150 spaces on two flat levels of enclosed mechanically-ventilated garage in Building 1. Access to this parking will be accomplished through the existing parking entrance of One Broadway on Third Street. The parking space count associated with the uses at One Broadway will be reduced from 430 to approximately 293. This results from the removal of the 114 existing parking spaces on the Building 1 surface lot, as well as changes to the structured parking at One Broadway to allow for connection to the new residential building, the reconfiguration of the One Broadway loading area, and the need to make One Broadway a mechanically ventilated garage.

The loading space proposed in Building 1 will serve the residences and retail as well as the adjacent proposed grocery store in One Broadway. The existing loading dock in One Broadway will be reconfigured to have three bays plus a dumpster space and will serve the office building and retail tenants in the Liner Building and southwest retail spaces.

While not part of the PUD, the proponent has gained the rights from the owner of the property adjacent to the northeast corner of Building 1 to design a publicly accessible open space in order to provide a destination outdoor space adjacent to the Broad Canal, expanding on the network of parks and plazas to the north of Building 1 and helping to improve connections to Broad Canal, the areas South of Main and the Charles River.

B. Consistency with Special Permit

One Broadway Program Comparison			
	Special Permit Approved	Design Review Program	Change from Special Permit
Upper Level Office GFA	282,569	282,569	0
OBW Office Addition/Terrace GFA	0	15,995	+15,995
Office Lobby GFA	6,400	6,510	+110
Ground Floor Retail GFA	27,350	34,395	+7,045
TOTAL GFA	316,319	339,469	+23,150
Exempt GFA	13,675	17,197	+3,522
Non-Exempt GFA	302,644	322,032	+19,388
Parking Spaces	316	293	-23
Long Term Bike Parking (net new)	5	9	+4
Short Term Bike Parking (net new)	18	19	+1
Height	230'	230'	0

Building 1 Program Comparison			
	Special Permit Approved	Design Review Program	Change from Special Permit
Residential GFA	285,000	315,400	+30,400
Ground Floor Retail GFA	9,450	9,600	+150
Structured Parking GFA	83,000	59,050	-23,950
TOTAL GFA	377,450	384,050	+6,600
Exempt GFA	4,725	4,800	+75
Non-Exempt GFA	372,725	379,250	+6,525
Parking Spaces	175	150	-25
Long Term Bike Parking	317	317	0
Short Term Bike Parking	36	36	0
Height	250'	274' 11"	24' 11"

The approved Special Permit #302 for NoMa included a height limit of 250' feet as well as a net new GFA of 411,200. The project included in this submission shows a proposed height of the residential building at 274'-11" and a proposed net new GFA of approximately 426,450. Both height and net new GFA represent less than a ten percent (10%) increase from development program approved in the Special Permit. Consistent with the underlying PUD-5 zoning requirements, the residential GFA to be constructed with a height of over 250' includes the addition of middle income units, using 25% of the total GFA for the 2 residential floors that exceed 250' in height. Currently, this comprises a range of 5-10 middle income units. MIT will work with the Cambridge Community Development Department to determine which units will satisfy this Middle Income unit requirement.

C. Planning Board Review

In connection with the Planning Board's Design Review approval of the additions to One Broadway and to Building 1, the Owner is also requesting that the Planning Board approve the following Minor Amendments to the Final Development Plan approved in Planning Board Special Permit No. 302:

- An increase in height for Building 1 from the 250 feet approved in the Final Development Plan to 274.9 feet, which is an increase of less than 10% of the approved height of said Building 1. The Planning Board is authorized to approve this change as a Minor Amendment, pursuant to the provisions of Section 1.c.vii of the Special Permit Decision. The maximum zoning height for residential buildings in this district is 300'.
- An increase in the total GFA for the existing One Broadway Building from 316,319 square feet approved in the Final Development Plan to 339,469 square feet to take into account an additional 16,105 square feet of Office Space and 7,045 of retail/Active Use square footage. This increase of 23,150 square feet is less than 10% of the GFA for the Final Development Plan. The Planning Board is authorized to approve this change as a Minor Amendment, pursuant to the provisions of Sections 1.a.vi. and 1.c.vii. of the Special Permit Decision.
- An increase in the total GFA for Building 1 from 377,450 square feet approved in the Special Permit to 384,050 square feet to take into account the increased residential program on the Site. This increase of 6,600 square feet is less than 10% of the GFA approved in the Final Development Plan. The Planning Board is authorized to approve this change as a Minor Amendment, pursuant to the provisions of Sections 1.a.vi. and 1.c.vii. of the Special Permit Decision.
- The Special Permit approved a total of 693,769 square feet of total GFA for Development Parcel A. The proposed increase in total GFA of 29,750 square feet for One Broadway and Building 1 is only approximately 4.3% of the total approved GFA for Development Parcel A.
- The reduction in parking spaces at One Broadway from the special permit approved 316 to 293 (a reduction of 23 spaces) to allow for the connection to the Building 1 garage and the integration of the dumpster and recycling facilities that currently are located outdoors along Broad Canal Way. The Planning Board is authorized to approve this change as a Minor Amendment, pursuant to the provisions of Section 1.a.viii of the Special Permit Decision.

- The reduction of parking spaces at Building 1 from the special permit approved 175 to 150 (a reduction of 25 spaces) as a result of changes to the parking garage design to accommodate parking on two flat floors. The Planning Board is authorized to approve this change as a Minor Amendment, pursuant to the provisions of Section 1.a.viii of the Special Permit Decision.
- The relocation of the loading entrance from Main Street to Broad Canal Way, as approved by Traffic, Parking and Transportation and pursuant to an Easement Agreement with the owner of the right of way. Consolidation of the parking garage entrance from Main Street to the existing parking garage entrance on Third Street, thereby eliminating the need for a new curb cut. These changes do not alter the concept of the PUD in terms of floor area ratio, land usage, height, or the general physical relationship of elements of the development, and are permitted and may be approved as Minor Amendments, pursuant to Section 12.37.2 of the Zoning Ordinance.

D. Status of Mitigation and Commitments

Housing Contribution

As the new commercial (office and retail) square footage added to the One Broadway building will be considered an Incentive Project pursuant to Section 11.201 of the Zoning Ordinance, the new commercial GFA included in the NoMa Project will require the payment of a Housing Contribution pursuant to Section 11.203.1 of the Ordinance. One Broadway and Building 1 combined will contain approximately 52,000, square feet of new commercial GFA. That commercial GFA will result in a Housing Contribution of approximately \$676,000 (based on current rate), which will be payable, pursuant to the requirements of Section 11.203.1.3. of the Zoning Ordinance at the time that the space receives its Certificate of Occupancy.

Traffic

Appendix B of Special Permit #302 enumerates certain transportation mitigation and monitoring requirements that may be triggered at Certificate of Occupancy of the Building 1 project components. MIT will work with the City's Traffic, Parking and Transportation department on the design and timing of required items.

Community Fund Payments and Community Benefit Organization Contributions

As required by Section 13.810.2 of the Ordinance and Paragraph G of the Commitment Letter, respectively, the first and second Community Fund Payments and Community Benefit Organization Contributions have been made by MIT to the City, with the first being paid in July 2013, and the second being paid in April 2016. As a result of the above, MIT has satisfied its payment and contribution obligations relative to each of these items until such time as MIT applies for a building permit for new commercial square footage in excess of 500,000 square feet. As the commercial space contained in Building 1 and the addition of One Broadway does not result in the aggregate new commercial square footage exceeding 500,000 square feet, no

Community Fund Payment or Community Benefit Organization Contribution is expected to be required in connection with the construction and occupancy of Building 1 or the addition of One Broadway.

Other April 8, 2013 Commitments

All other commitments contained in the Commitment Letter from MIT to the City of Cambridge dated April 8, 2013, have been and continue to be satisfied by MIT to the extent implicated by the proposed development on NoMa.

E. Dimensional Form

Standard Cambridge Forms as modified for PUD-5 projects are included in this submission.

Dimensional Form for NoMa Building 1

	Allowed/ Required	Existing*	Removed **	Proposed Building 1	Total
Land Area	41,536	41,536	0	0	41,536
Total Non-Exempt GFA ***	372,725	0	0	379,250	379,250
Residential	285,000	0	0	315,400	315,400
Commercial	4,725	0	0	4,800	4,800
<i>Office</i>	0	0	0	0	0
<i>Lab</i>	0	0	0	0	0
<i>Innovation</i>	0	0	0	0	0
<i>Retail</i>	4,725	0	0	4,800	4,800
Academic (all types)	N/A	0	0	0	0
Non-Exempt Dormitory	N/A	0	0	0	0
Structured Parking	83,000	0	0	59,050	59,050
Total Non-Exempt FAR	Max. 3.9 across PUD-5	0	0	9.13	9.13
Total Exempt GFA ***	4,725	0	0	4,800	4,800
Ground-Floor Retail	4,725	0	0	4,800	4,800
Public Transportation	N/A	0	0	0	0
Residential/ Dormitory	N/A	0	0	0	0
Innovation	N/A	0	0	0	0
Total Dwelling Units	290-300	0	0	290-300	290-300
Market Rate Units	237 - 246	0	0	233-236	233-236
Middle Income	0	0	0	5-10	5-10
Affordable Units	53-54	0	0	53-54	53-54
Dormitory Beds/Units	N/A	0	0	0	0
Publicly Beneficial Open Space (SF) ****	17,441 (Total NoMa)	1,106	1,106	9,667	9,667
Max Height *****	250'/300'	N/A	N/A	274'11" ft.	274'11" ft.
Min Side Setback (E)	20'	0	0	20'	20'
Off Street Parking	175	114	114	150	150
Loading Bays	N/A	0	0	5	5
Bicycle Parking	353	0	0	353	353

*GFA that is existing on Building Site 1 as of January 1, 2013.

**Building Site GFA that is demolished or renovated.

*** Proposed retail GFA is conceptually estimated at 50% exempt. Actual exemption will be known at building occupancy.

**** Condition 1(a)(xi) of Special Permit #302 requires a total of no less than 17,441 sf of publicly beneficial open space on the Total Development Parcel. The plans submitted for design review for One Broadway and Building 1 illustrate 21,503 SF of combined publicly beneficial open space.

***** Section 13.X.X of the Ordinance allows height of 300 feet for residential buildings with the inclusion of middle income units.

Dimensional Form for NoMa One Broadway Building (OBW)

	Allowed/ Required	Existing*	Removed **	Proposed OBW	Total
Land Area	74,736	74,736	0	0	74,736
Total Non-Exempt GFA ***	302,644	297,069	14,500	39,703	322,272
Residential	N/A	0	0	0	0
Commercial	302,644	297,069	14,500	39,703	322,272
Office	288,969	286,989	4,420	22,505	305,074
Lab	0	0	0	0	0
Retail	13,675	10,080	10,080	17,198	17,198
Academic (all types)	N/A	0	0	0	0
Non-Exempt Dormitory	N/A	0	0	0	0
Structured Parking	N/A	0	0	0	0
Total Non-Exempt FAR	Max. 3.9 across PUD-5	3.97	.19	.53	4.31
Total Exempt GFA ***	13,675	0	0	17,197	17,197
Ground-Floor Retail	13,675	0	0	17,197	17,197
Public Transportation	N/A	0	0	0	0
Residential/Dormitory	N/A	0	0	0	0
Innovation	0	0	0	0	0
Total Dwelling Units	N/A	0	0	0	0
Market Rate Units	N/A	0	0	0	0
Affordable Units	N/A	0	0	0	0
Dormitory Beds/Units	N/A	0	0	0	0
Publicly Beneficial Open Space (SF) ****	17,441 (Total NoMa)	15,544	15,544	11,836	11,836
Max Height	Not to Exceed Existing	230'	0	0	230'
Off Street Parking	316	316	23	0	293
Loading Bays	N/A	4	1	0	3
Bicycle Parking	23 New	100	0	28	128

*GFA that is existing on Building Site 1 as of January 1, 2013. This includes 30,000 sf of innovation space as required by section 13.89.3 of the Ordinance is provided in PUD-5 as described in Special Permits #303 and #302. The existing GFA does not include the floor area of the existing garage at One Broadway. The garage was

constructed prior to September 15, 2000 and pursuant to Section 5.25.3 of the Ordinance does not count toward FAR limitations contained in the Ordinance.

**Building Site GFA that is demolished or substantially renovated.

*** Proposed retail GFA is conceptually estimated at 50% exempt. Actual exemption will be known at building occupancy.

**** Condition 1(a)(xi) of Special Permit #302 requires a total of no less than 17,441 sf of publicly beneficial open space on the Total Development Parcel. The plans submitted for design review for One Broadway and Building 1 illustrate 21,503 SF of combined publicly beneficial open space.

II. NoMa Urban Design Objectives/Design Intent

The proposed design is consistent with the goals of the Building 1 design guidelines as described in the Kendall Square PUD-5 Design Guidelines. The primary urban design goals include reducing the perceived mass of the residential building and creating a streetscape sensitive to the historic Luke Building.

The proposed massing includes a podium that is separate from the residential tower, which reduces the visual impact of the tower from the sidewalk. The mechanical penthouse of the residential tower steps back, which aids in perceived bulk. In addition to the inset mass at the base of the podium and base of the tower, balconies help to break up the massing. A simple tower shape that is set back entirely from Main Street minimizes the length of the tower.

Sensitivity to the historic Luke Building is achieved by several means. The podium of the residential building is similar in height to the front façade of the Luke Building. Punched openings at the enclosed garage space on levels two and three create a recognizable scale for pedestrians while relating to the punched window openings of the Luke Building. The frit pattern in the garage windows is colored to relate to the color of the Luke Building façade. The pedestrian passage between the residential building and the Luke Building has a landscaped zone adjacent to the Luke building, and the pedestrian passage opens up to a new park space to the north of the Luke Building.

The orientation and shape of the residential building are situated to create a visual terminus when viewed from the Sloan School oval.

The street wall fronting Broadway/Main Street is proposed to include four separate podium facades of similar height. The expansion of retail at the southwest corner and its existing office podium above, the new grocery and office addition which mask the existing parking garage, the residential building podium, and the existing Luke Building will share a commonality in height and vary in façade treatment. This will create a composition that organizes the street wall into appropriately scaled portions and allows for visual interest. The service entry for the residential building is on the north side of the building, allowing for a more continuous active use frontage and safer pedestrian conditions on Broadway/Main Street.

The street wall fronting Broad Canal Way is composed of the Liner Building (a 40' deep retail addition to One Broadway), a small open space or "pocket park", and the podium of the residential tower, as well as the proposed open space located across from Broad Canal. This series of building massings and open space complete a double loaded retail street on Broad Canal Way and create a sidewalk that gradually expands in width closer to the canal. The open space on this portion of the site satisfies a Chapter 91 requirement, and building mass and required open space have been situated to maximize retail/ restaurant space at the northwest and northeast corner and create other restaurant seating opportunities mid-block.

The residential tower is composed of terra cotta with two-story punched openings on the east and west facades, and glazing with horizontal aluminum banding at each floor level at

the south and north facades. The two-story punched openings are intended to create a personal/ domestic scale for the tower. They are framed with aluminum projections that add texture to the façade and provide solar shading. The window to wall ratio is approximately 60%: 40%, comparable to other market-rate residential buildings. The primary glass facades on the north and south portions of the building provide views to the Charles River. Balconies on the south portion of the facade reinforce a residential typology.

III. NoMa Public Realm and Landscape Urban Design Objectives/Design Intent

NoMa is bounded by Main Street, Broadway, Third Street, Broad Canal Way and the pedestrian corridor between the site and the Red Cross building to the east. The site is pivotal in Kendall Square, surrounded on all four sides by important pedestrian and bicycle connections: This network of current and planned paths has shaped the public realm plan:

- north/south connecting SOMA to East Cambridge;
- north/south on Third with new retail corners;
- east/west on Broad Canal Way to the River with a new retail liner;
- east/west on Broadway with important new retail that includes an urban grocer.

The open space consists of public streetscapes and a pedestrian corridor. Collectively these areas will serve to make all facades of the building active and integrated with the surrounding neighborhood. The design of the public realm is a collective attempt in both architecture and landscape architecture to produce seamlessness between first floor interior and exterior open space. The open space facilities are designed to enhance and expand existing facilities, as well as, to expand networks of pedestrian and bicycle movement within the vicinity of the development. Pedestrian and bicycle amenities shall be extended throughout the Site as will lighting, provided for safety yet being cognizant of the surrounding building use and "night sky" objectives.

The pedestrian corridor, located between the new architecture, the historic Luke building, and a small residual green space, provides an active north-south connection to Broad Canal, with its very popular kayak rental, and beyond. This passage will provide connectivity to and from MIT and East Cambridge designed with a dual purpose and scale of expedited circulation and enhanced retail experiences. The highlighted connection to the historic Broad Canal is unique to NoMa.

Multiple unique opportunities to gather allow many users to congregate for dining, seating, and public interaction along Broad Canal Way. An intricate system of paving, seating, bicycle parking, lighting and planting, strengthens the pedestrian Broad Canal Way streetscape and flexible sidewalk seating and produces a vibrant urban realm. Wood benches and decks make direct reference to the boardwalk at the canal while, bicycle racks and lighting reference the surrounding urbanity. An integrated planting system parallels the street, referencing the historic Broad Canal and providing areas to absorb water runoff.

The landscape integrates existing buildings and streets and their connections to the urban campus, weaving the open space into the city fabric, enhancing the existing urban network of East Cambridge.

Architectural Design of Landscape

The design of the open space public realm for this area of NoMa is predicated upon the very same core MIT principles and objectives that have been guiding the development for the entire east campus development plans.

Accordingly, our design goals for this block have focused upon the following objectives:

1. to achieve a dynamic and seamless neighborhood/public realm feel: an experience or series of experiences that properly weaves and balances public, private and academic activities and programs.
2. to achieve meaningful, larger urban connections via a careful articulation of active and lively extensions of existing and proposed cross-site pedestrian connections.
3. to achieve the MIT imperative to innovate and to establish progressive, memorable and resilient place-making. In our case this is achieved via tautly calibrated interactions between public program and existing and proposed site infrastructures. By teasing out such synergies the experience of the user of the new urban spaces will be energized and made more interesting. We are also confident that in so doing, a stronger, more positive and memorable urban experience for people moving through and along our site will also have been created.

From an urban public realm point of view, or from the point of view of 'landscape', the site is defined subtly differently. In fact, the perceived public realm expands outward from the face of buildings to the face of the curb along both the south and west boundaries of the block – Main Street and Third Street to the west. One must also contend, for the sake of urban continuity, that the site extends itself along the southern edge to the goings on at SoMa and will build on that momentum as well.

To the east – between the proposed building and the existing Luke building – a landscaped pathway will play a pivotal role in establishing larger pedestrian connections through the urban fabric of this area of Cambridge. In this case, the corridor has been conceptualized as a linear park and will provide an active and safe public passage. This new passage will tie together into a larger cohesive pedestrian system at the threshold at Main Street, the highly popular kayak landing, an open green, the public spaces farther to the north and ultimately to the neighborhoods farther up the line. This linear park will also contribute to the anticipated active ground floor program being planned along this edge of the building.

Broad Canal Way along the north of the site is the east/west connection to Broad Canal. The design approach for Broad Canal Way is predicated upon establishing for Broad Canal Way a full and robust, double-loaded urban street experience. Accordingly, to us, the context for Broad Canal Way extends all the way to the face of the retail along the opposite side of this street.

The project takes into account and utilizes both tree species and tree spacing already defining the northern side of Broad Canal Way. In this way, a more stable and balanced urban corridor is established and the urban experience and urban character clarified and strengthened.

Because the southern edge of Broad Canal Way is narrower than that to the north, much attention has been placed upon creating for the pedestrian zone sufficient spatial variation and programmatic interest between Third Street and the Canal itself. Consequently, a series of 3 mini-urban spaces strategically spaced along the way will provide a plurality of urban spaces, fostering and enhancing the urban experience moving along the east/west direction:

First, the intersection at Third and Broad Canal Way is defined by an outdoor dining area which will bring activity and interest to this important corner. When one is standing at the corner of Main and Third, the view to this active corner will announce the threshold to this newly energized area.

Next, the open space at mid-block has been conceived of as a mini-pocket park. Similar to Paley Park in New York: a simple respite, shaded by canopy trees, a landscape feature along the southern edge and the other two sides animated by active retail and spill-out.

Last, the designated open space along the eastern edge of the site provides an active interface between the building entry, the adjacent green (Triangle Green), the kayak landing and, of course, thru-site connections to the north. We see this as a key nexus centered at the intersection of north/south/east/west axis.

It is also very important that Broad Canal Way create a meaningful public connection between Third Street and the Canal and the connection to the Charles River. Therefore, to that end and along the southern edge of Broad Canal Way, the urban street-side character has been further articulated via a linear collection of street and storefront program and elements. The iconography of the kayak landing and pedestrian way, in this case referenced by a linear cadence of wood benches and decks sets the rhythm for the street side. Into this alternating rhythm of benches and decks has been woven a series of bike racks, light fixtures, canopy trees and storm water collection gardens as a means of creating a fresh, cohesive and contemporary take on side walk urbanism.

Pedestrian and Bicycle Accommodations

The upgraded streetscapes connect to adjacent properties and neighborhoods. Pedestrian circulation is broadly facilitated to and from various locations – serving students, workers, neighbors, and visitors.

On-street bicycle facilities include sharrows and bike lanes. Cyclists will be encouraged to walk their bikes through any open space, recognizing that mixing cyclists and pedestrians will require both to be attentive to density and speed of movement. Signs will alert bicyclists to ride slowly, yielding to pedestrians; they will also provide direction to the nearest on-street bicycle route.

Ample and well-distributed bike storage integrate this project into the greater bike infrastructure of Cambridge. Short-term bike racks are provided at buildings as required near entrances. Significantly expanded long-term bike storage is provided in the garage, with clear signage to direct users. Proposed locations for two Hubway bike rental stations further encourage biking as a preferred and convenient mode of transportation.

Lighting and Signage Strategies

As a vibrant urban destination in Cambridge, the landscape will include appropriate vehicular and pedestrian lighting to ensure a safe, public environment, 24-hours a day. Lighting levels will achieve the standards required for safety and comfort, while remaining below levels that will contribute to light pollution for adjacent properties or users or produce unnecessary energy consumption. Simple vehicular lighting is provided along the streets and within the surface parking lot.

Feature lighting of the landscape will also importantly contribute to wayfinding, district identity, and public realm activation. Linear accent lights highlight the seating platforms at tree surrounds.

All exterior lighting will comply with the requirements of the proposed City of Cambridge Lighting Ordinance, which stipulates that projects in Lighting Zone 3 (“LZ3”) achieve LEED v4.0 BD+C Light Pollution Reduction .

The wayfinding strategy for the site focuses on providing clear orientation for pedestrians, bikers, and drivers, while keeping the signage minimal and simple. Signs are located at key decision points, with a mix of pedestrian wayfinding and vehicular wayfinding to clarify shared street conditions and parking or loading locations.

All signage complies with the City of Cambridge Signs and Illumination Ordinance.

IV. Environmental Impact

The building has been designed to mitigate adverse environmental impacts upon its neighbors. An updated shadow study is included in this submission to reflect changes to the project since the granting of the Special Permit. In addition, since the granting of the Special Permit the team has continued to test wind conditions in NoMa to reflect planting, landscape and other design changes. An update on wind study tests is included in this submission. The addition of the office space above the Broadway/Main retail and the ground floor configuration has been analyzed in a traffic memo that is included in this submission.

Mechanical equipment will be carefully designed to minimize noise and exhaust. Roof top mechanical equipment is designed with a balance between keeping the bulk of the building at an appropriate height while screening the majority of mechanical equipment from pedestrian viewpoints.

Building 1’s emergency generator and cooling towers are located at the north portion of the tower roof, in a screened enclosure. Mechanical equipment on the roof of the tower’s

mechanical penthouse (including flues, fans, and satellites) are positioned away from the perimeter of the roof to minimize visibility from the street. The garage on levels 2 and 3 is mechanically ventilated, with passive intake through louvers on the east façade of the podium, and exhaust collected on the west portion of the garage and ventilated via enclosed fans to the exterior at level 4 just north of the bike parking. Building 1’s loading dock is enclosed and serves the residential tower and retailers as well as the One Broadway Grocery.

One Broadway work will include a new emergency generator, to be located in a screened area at the southwest portion of the podium. Mechanical equipment associated with the new south office addition and retail will also be located in the screened area on the podium roof. Mechanical equipment associated with the new north retail addition to One Broadway will be located in a screened area on the roof. The existing compactor currently located in the parking lot in the northwest corner of the lot will be relocated to the interior of the One Broadway loading area.

An acoustic report for both One Broadway and Building 1 is included in this submission.

V. Sustainability

MIT’s Kendall Square Initiative is designed to be a leader in urban sustainability revitalization and renewal. MIT has made sustainability an integral part of the Kendall Square design process and is committed to developing a district that is sustainably designed, energy efficient, environmentally conscious and healthy for the occupants and visitors.

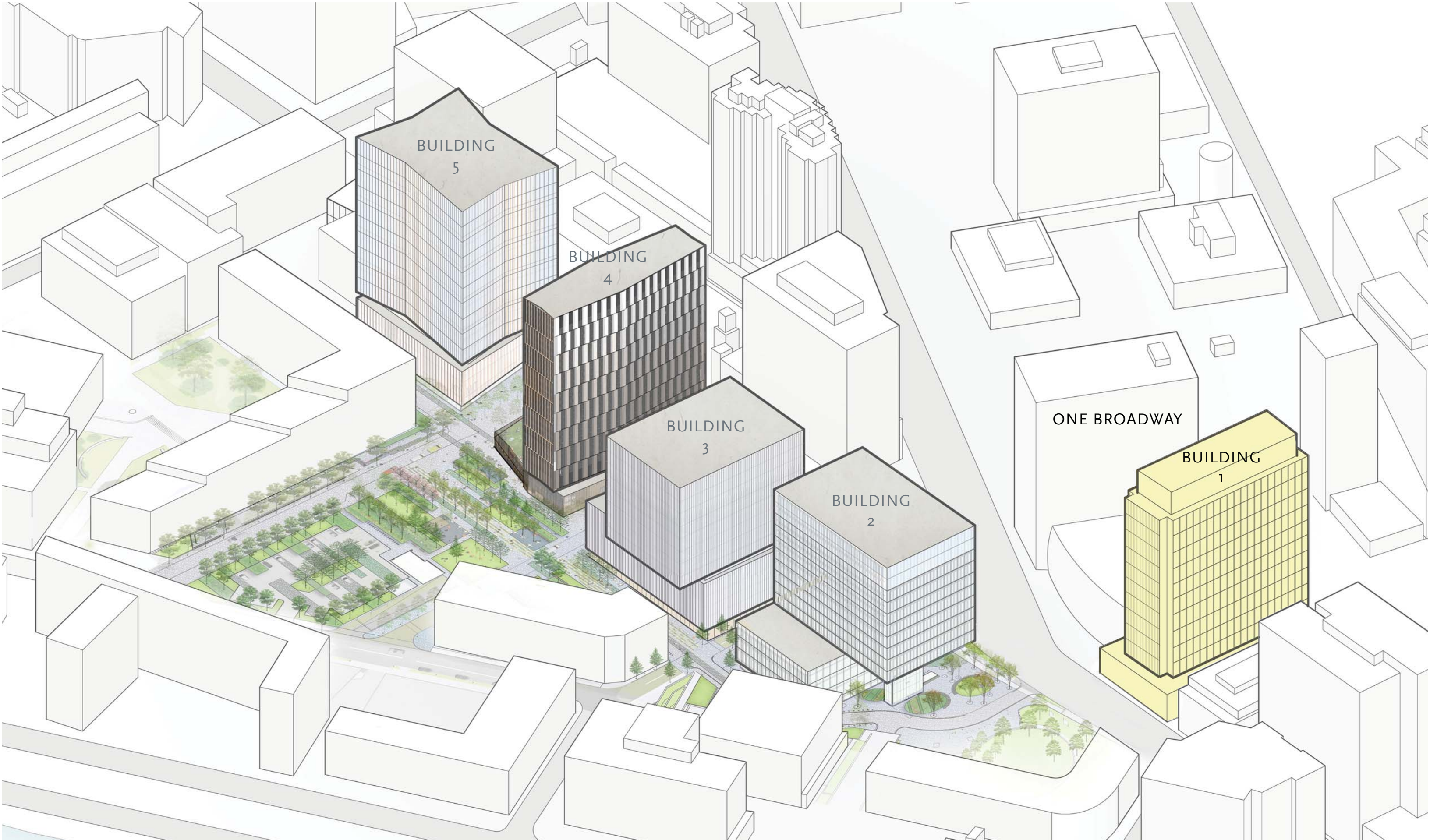
MIT has led an integrated process that includes technical experts who are actively engaged in the design process of overall NoMa District. This comprehensive view allows the development to incorporate sustainability best practices in design and operation, stormwater capture and reuse, transportation and landscape strategies.

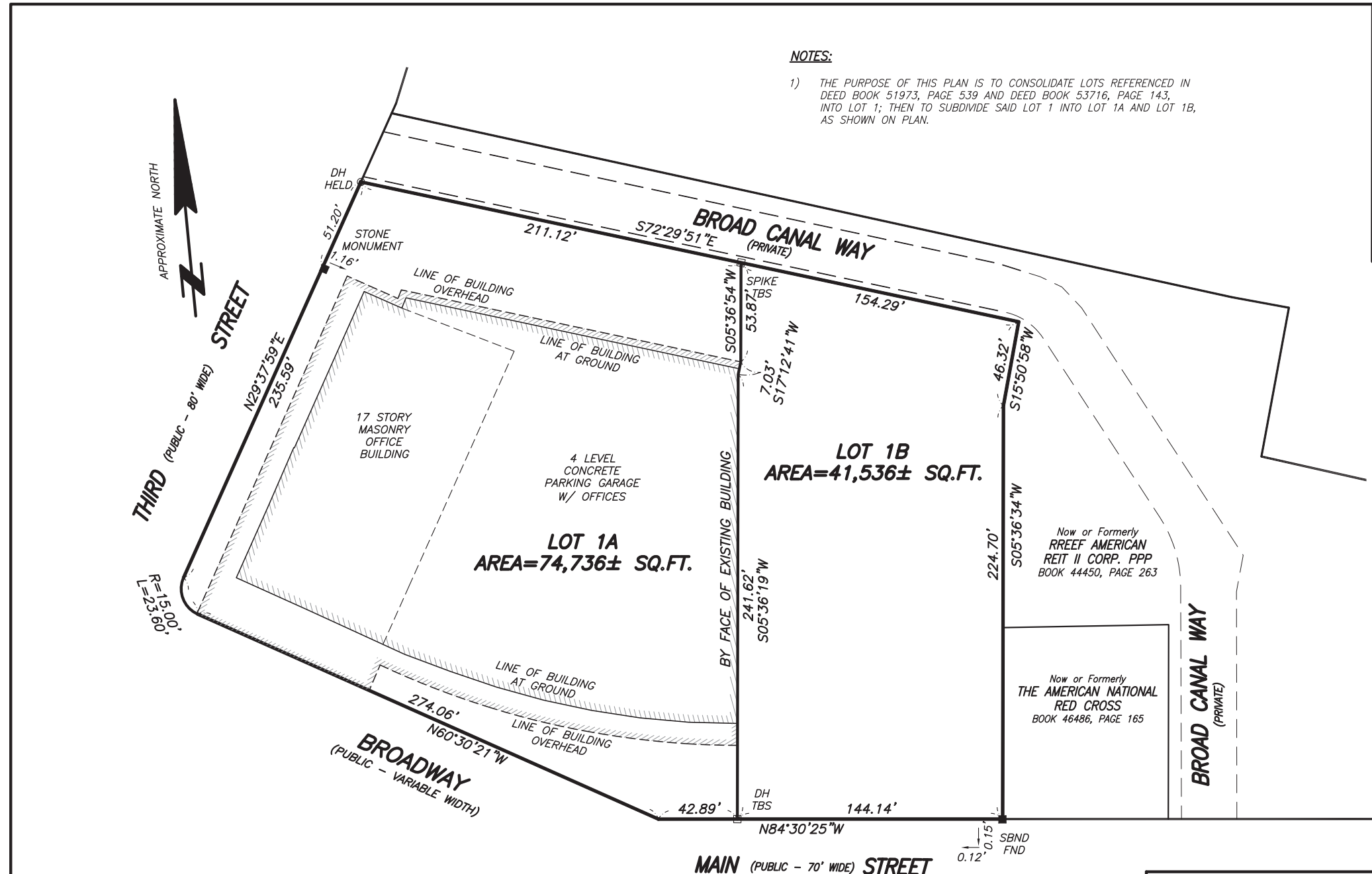
MIT has established a minimum commitment to Leadership in Energy and Environmental Design (LEED) Gold under the more stringent v4 system. MIT’s Kendall Square Initiative will be one of the largest LEED v4 collections of projects on the east coast that incorporates the latest energy standards and new sustainability initiatives such as material content disclosure to encourage healthy buildings and indoor environments.

DESIGN REVIEW
GRAPHIC MATERIAL

MIT KENDALL SQUARE NOMA

BUILDING 1
ONE BROADWAY



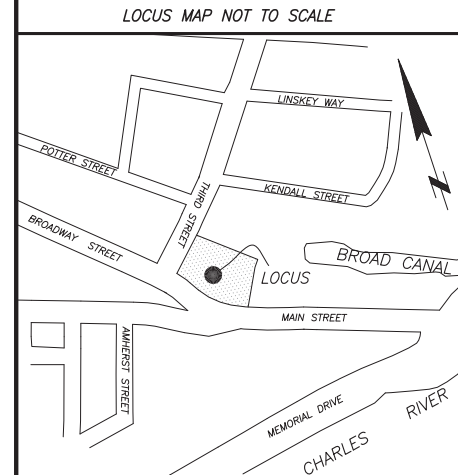


NOTES:
 1) THE PURPOSE OF THIS PLAN IS TO CONSOLIDATE LOTS REFERENCED IN DEED BOOK 51973, PAGE 539 AND DEED BOOK 53716, PAGE 143, INTO LOT 1; THEN TO SUBDIVIDE SAID LOT 1 INTO LOT 1A AND LOT 1B, AS SHOWN ON PLAN.

RESERVED FOR REGISTRY USE

- LEGEND**
- DRILL HOLE
 - MONUMENT TO BE SET
 - BOUND FOUND
 - DH DRILL HOLE
 - FND FOUND
 - TBS TO BE SET
 - SBND STONE BOUND
 - SQ. FT. SQUARE FEET

REFERENCES
 MIDDLESEX REGISTRY OF DEEDS
 BOOK 51973, PAGE 539
 BOOK 44450, PAGE 263
 BOOK 46486, PAGE 165
 PLAN NO. 966 OF 1972
 PLAN NO. 3 OF 1966



MAIN (PUBLIC - 70' WIDE) STREET

I CERTIFY THAT THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY AND THE LATEST PLANS AND DEEDS OF RECORD.
 I CERTIFY THAT THIS PLAN CONFORMS WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.
 FOR FELDMAN LAND SURVEYORS

DRAFT-10-04-2016

DAMIEN J. RAFFLE, PLS (MA# 49629) DATE
 draffle@feldmansurveyors.com

**SUBDIVISION PLAN
 ONE BROADWAY
 CAMBRIDGE, MASS.**

FELDMAN LAND SURVEYORS AUGUST 4, 2016
 112 SHAWMUT AVENUE PHONE: (617)357-9740
 BOSTON, MASS. 02118 www.feldmansurveyors.com

FELDMAN
 LAND SURVEYORS



SCALE: 1"=40'

RESEARCH JBD	FIELD CHIEF NB	PROJ MGR DJR	APPROVED	SHEET NO. 1 OF 1
CALC JBD	CADD JBD	FIELD CHECKED	CRD FILE	JOB NO. 14526W
FILENAME: S:\PROJECTS\14500s\14526\14526W\DWG\14526W-SUB1.dwg				

- RETAIL / ACTIVE USE
- RES.COMMON SPACE
- OFFICE
- MECH. / PARKING
- SERVICE



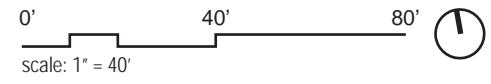
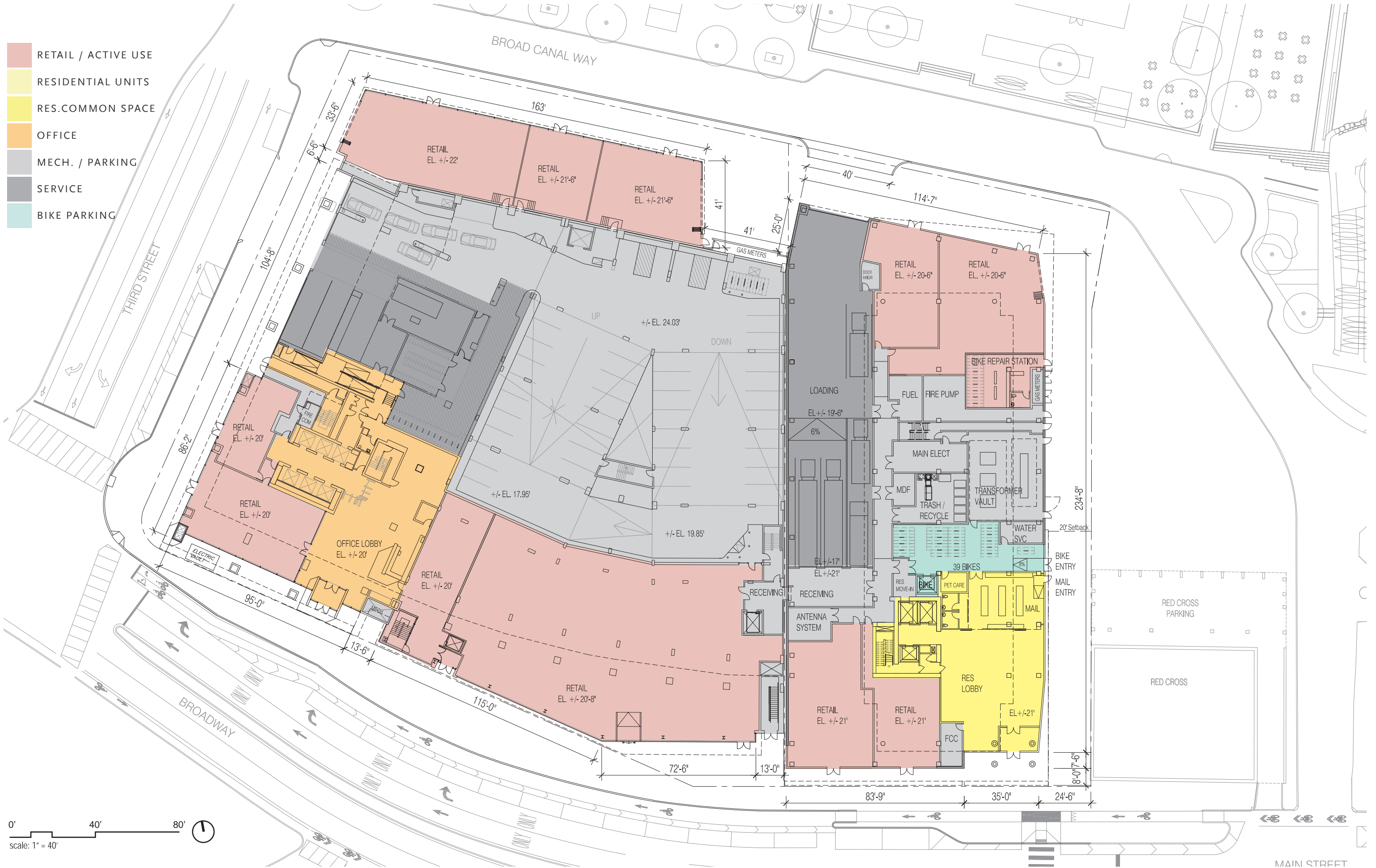
- BUILDING ENTRY
- RETAIL ENTRY OR SECONDARY BUILDING ENTRY
- POTENTIAL OPERABLE WALL AT RETAIL
- BUILDING SERVICE AND/OR PARKING ENTRY

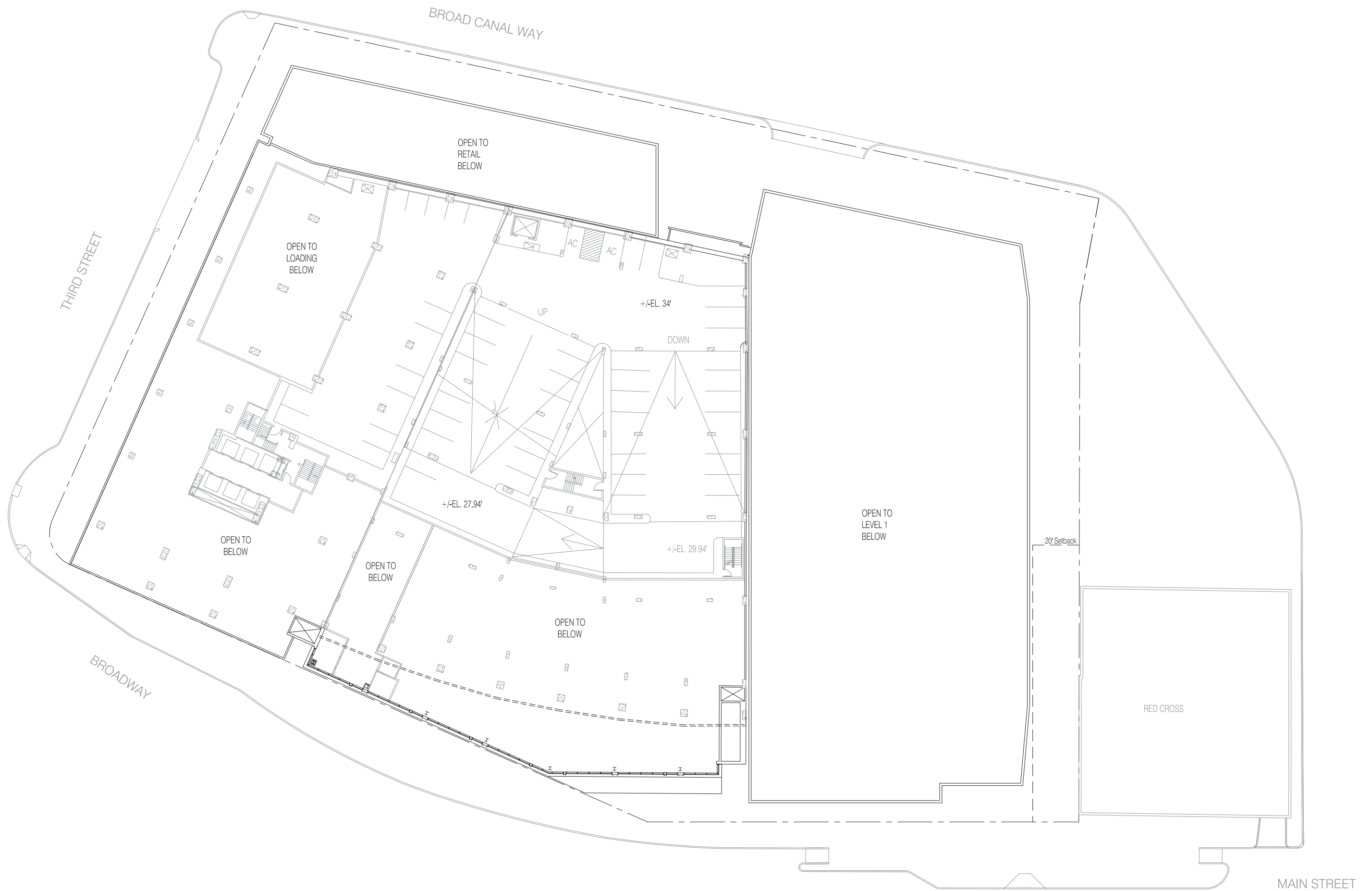
0' 40' 80'

scale: 1" = 40'



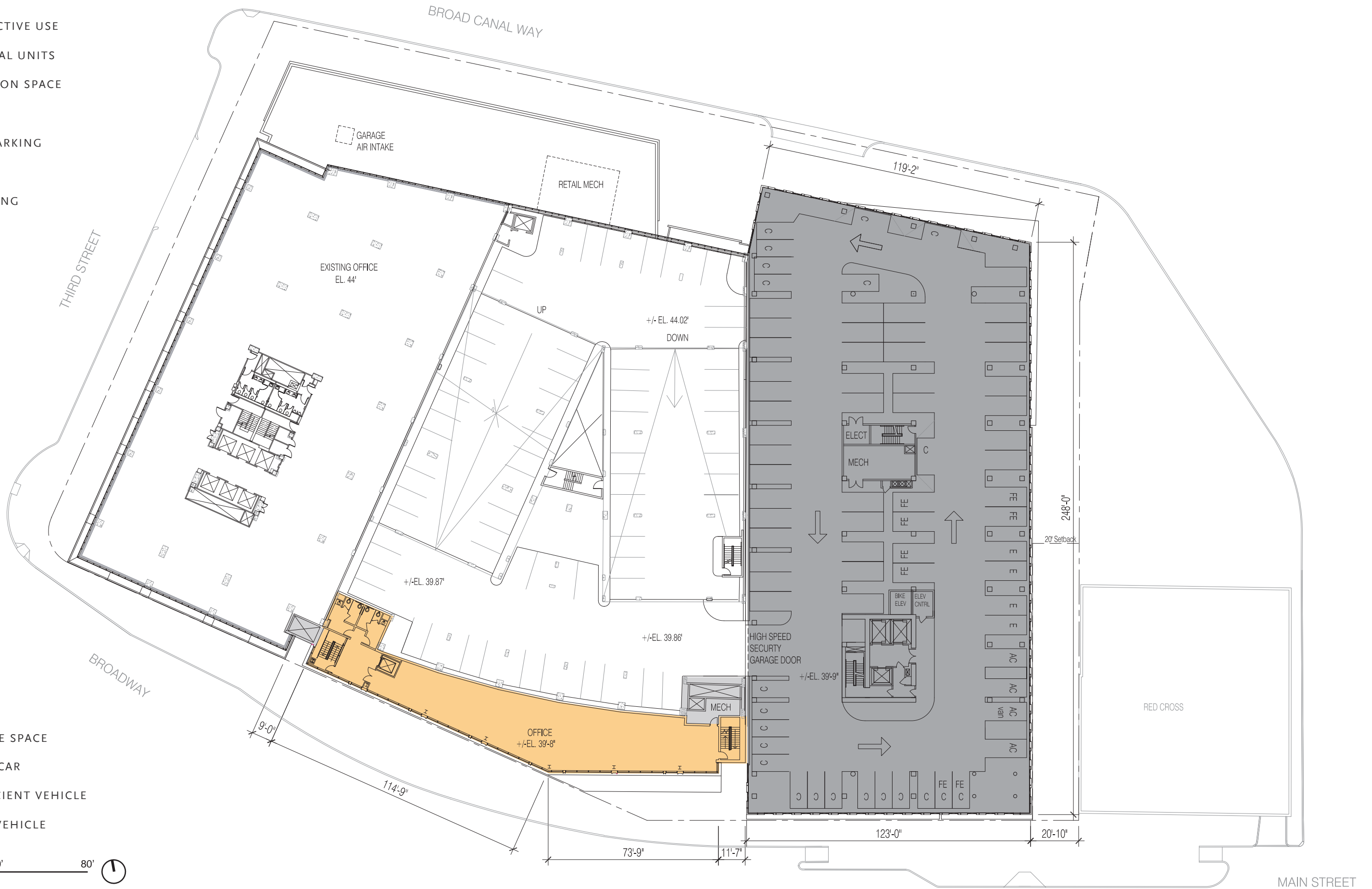
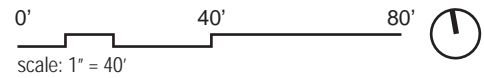
- RETAIL / ACTIVE USE
- RESIDENTIAL UNITS
- RES.COMMON SPACE
- OFFICE
- MECH. / PARKING
- SERVICE
- BIKE PARKING





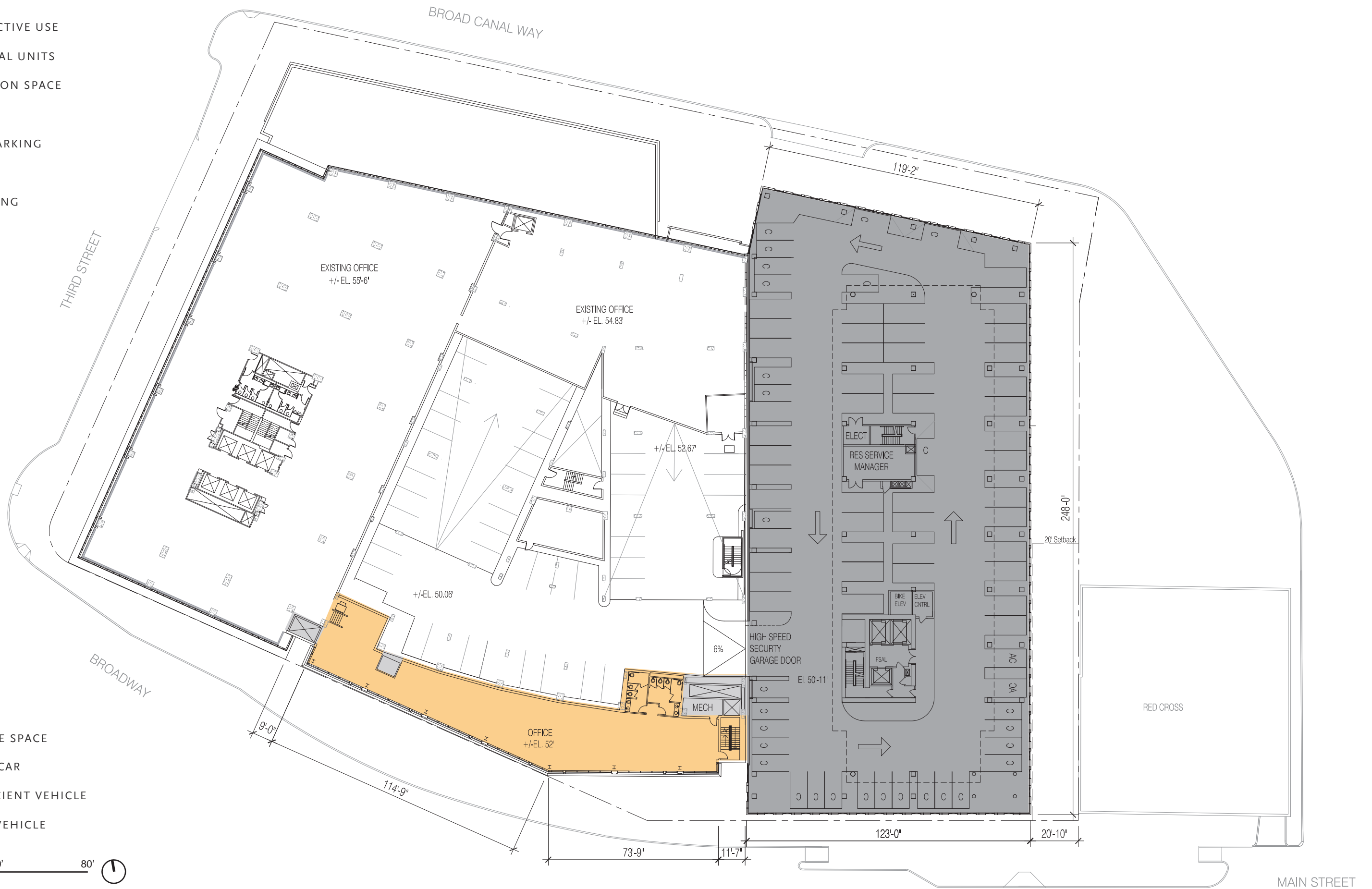
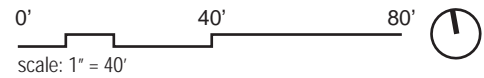
- RETAIL / ACTIVE USE
- RESIDENTIAL UNITS
- RES.COMMON SPACE
- OFFICE
- MECH. / PARKING
- SERVICE
- BIKE PARKING

- AC ACCESSIBLE SPACE
- C COMPACT CAR
- FE FUEL EFFICIENT VEHICLE
- E ELECTRIC VEHICLE

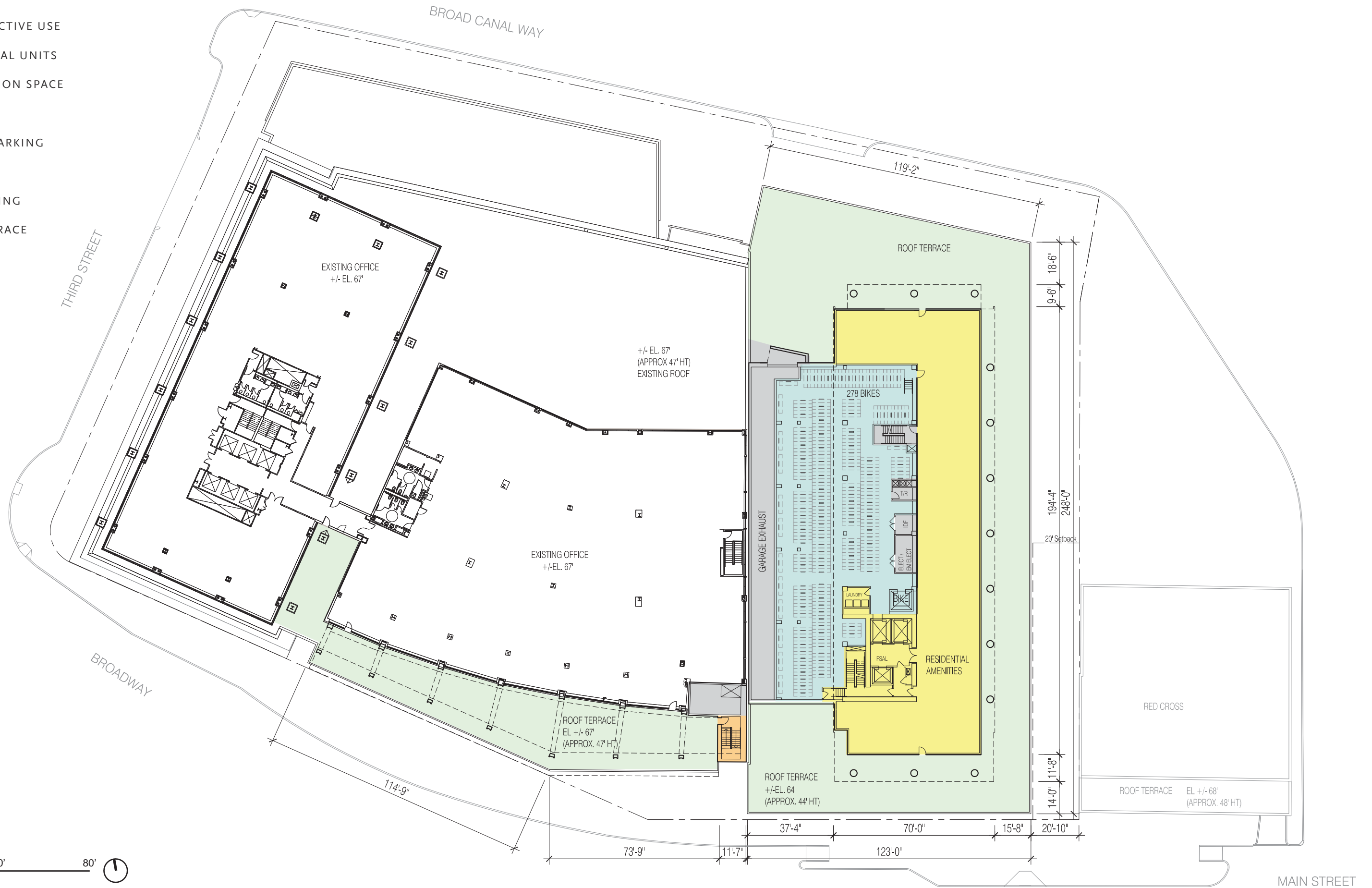


- RETAIL / ACTIVE USE
- RESIDENTIAL UNITS
- RES.COMMON SPACE
- OFFICE
- MECH. / PARKING
- SERVICE
- BIKE PARKING

- AC ACCESSIBLE SPACE
- C COMPACT CAR
- FE FUEL EFFICIENT VEHICLE
- E ELECTRIC VEHICLE

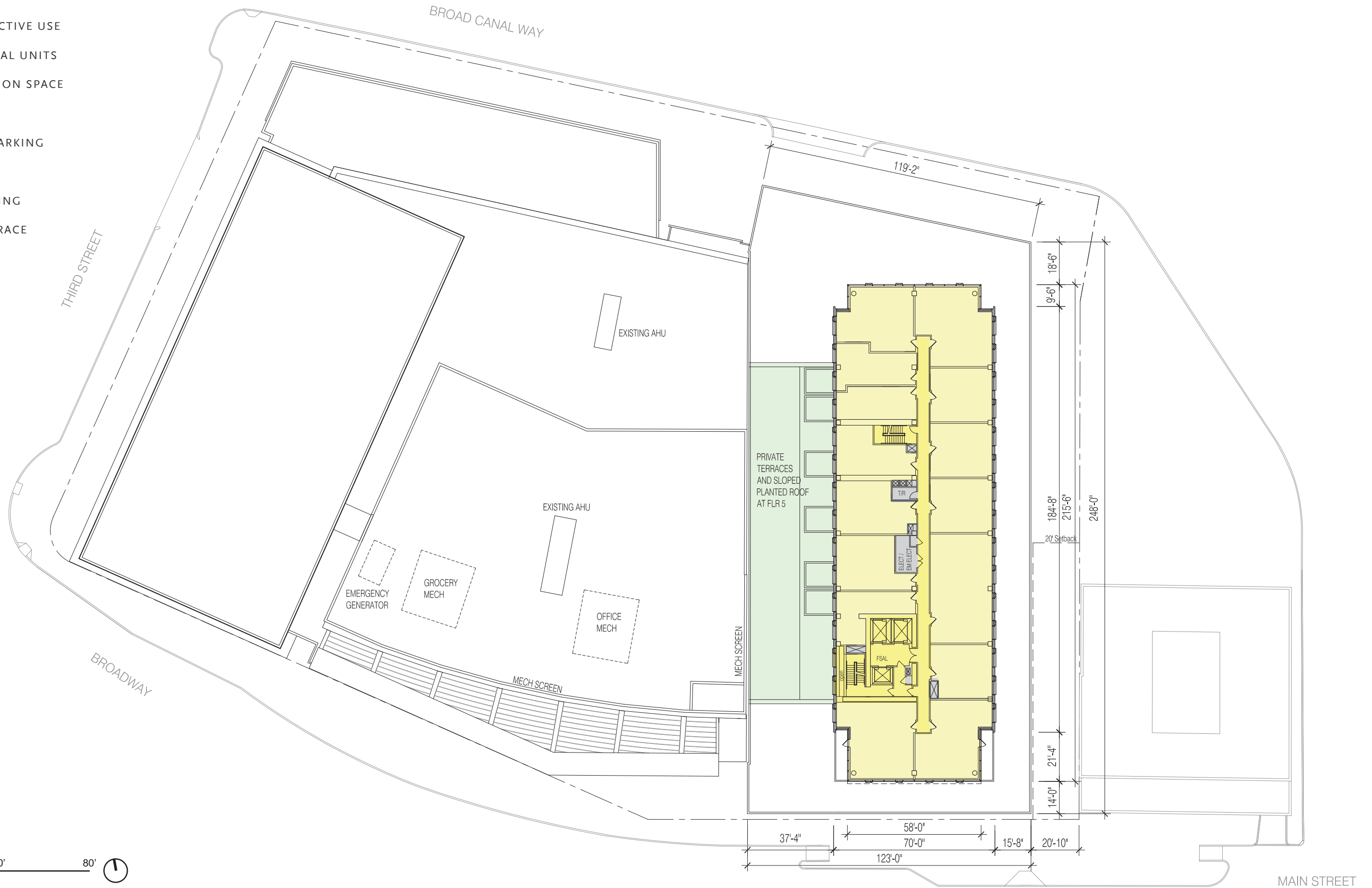


- RETAIL / ACTIVE USE
- RESIDENTIAL UNITS
- RES.COMMON SPACE
- OFFICE
- MECH. / PARKING
- SERVICE
- BIKE PARKING
- ROOF TERRACE



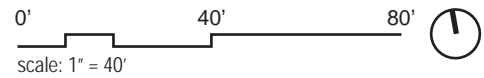
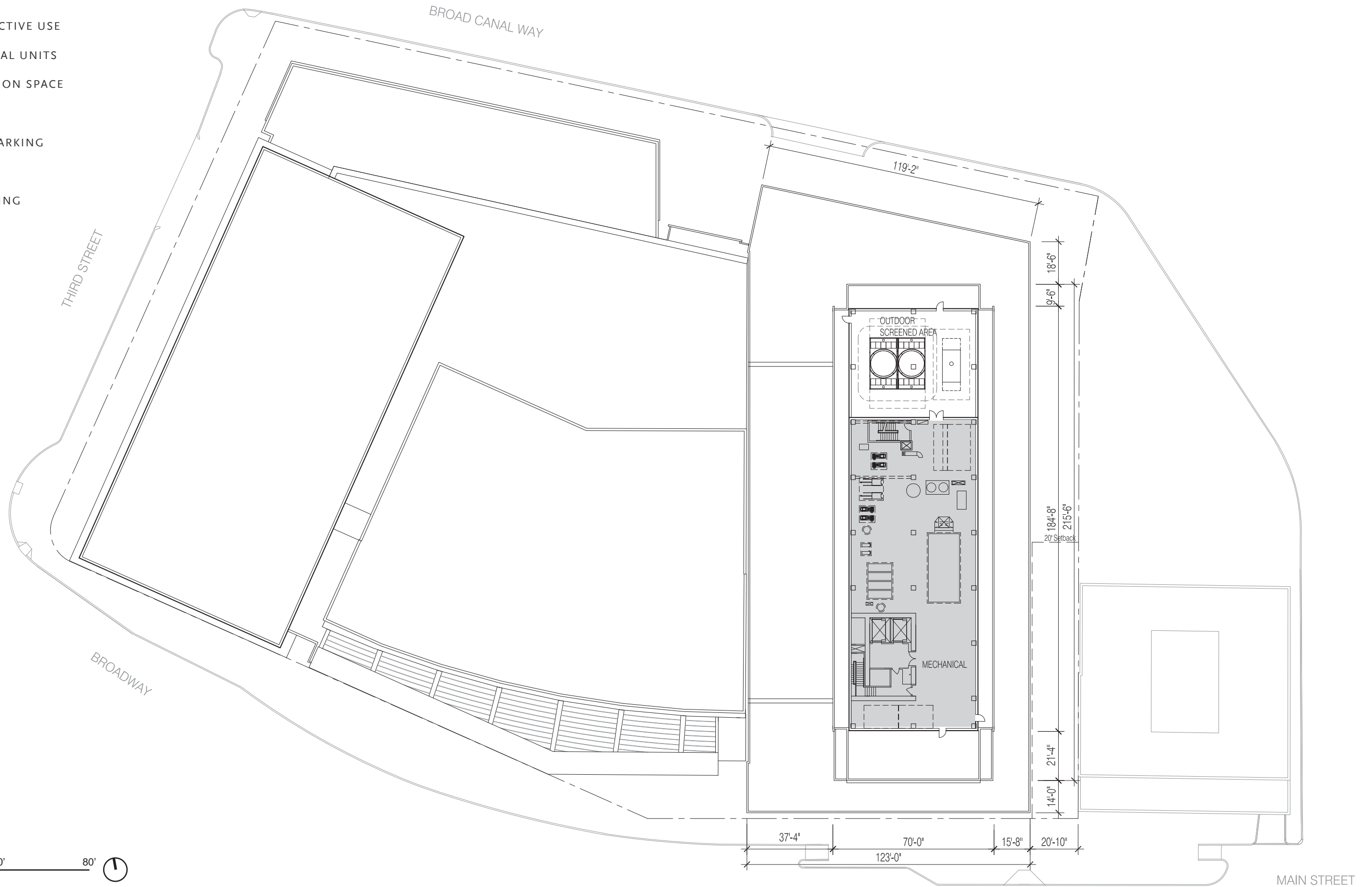
0' 40' 80' scale: 1" = 40'

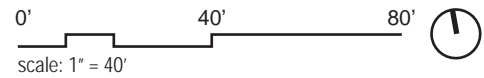
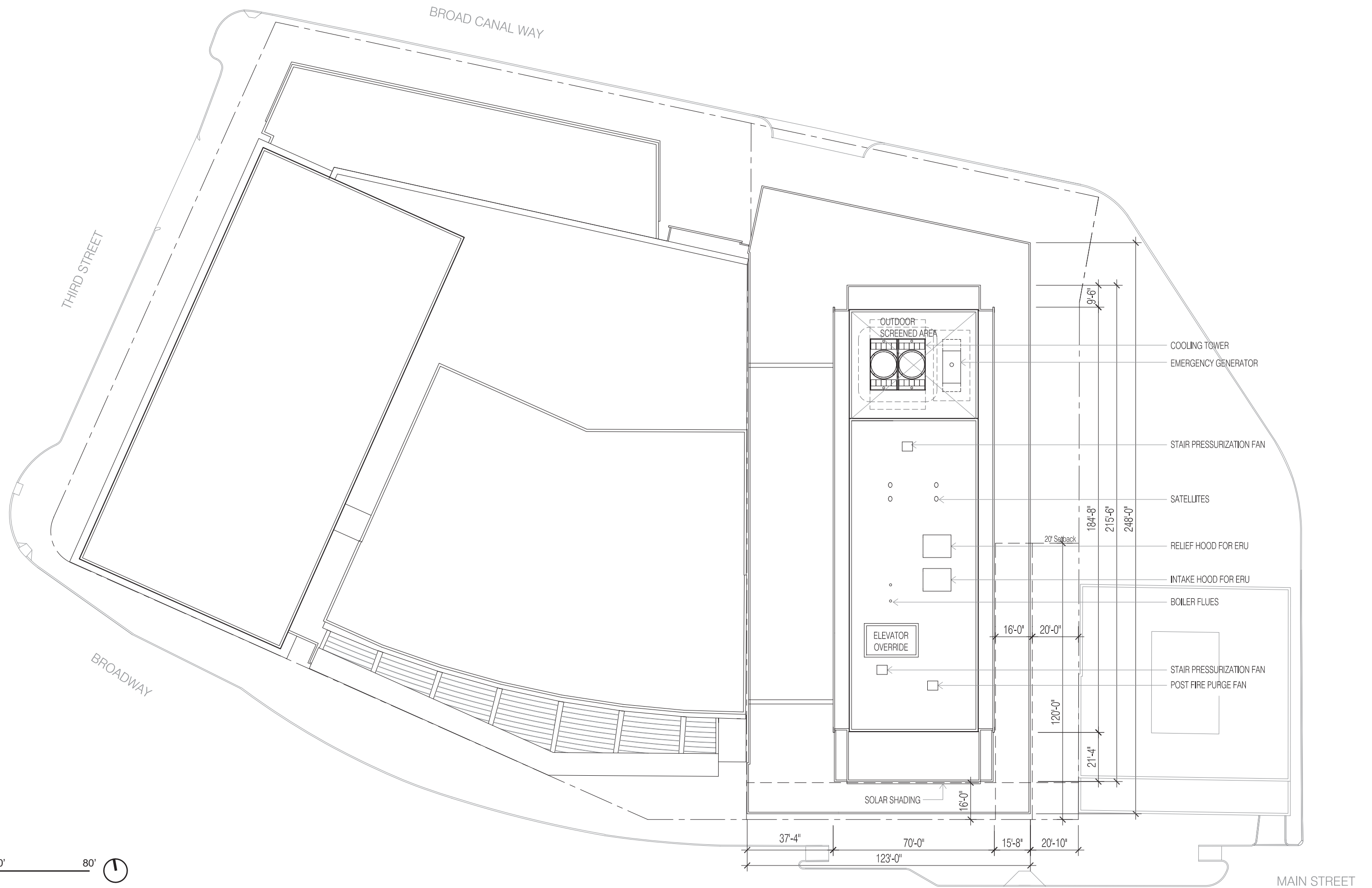
- RETAIL / ACTIVE USE
- RESIDENTIAL UNITS
- RES.COMMON SPACE
- OFFICE
- MECH. / PARKING
- SERVICE
- BIKE PARKING
- ROOF TERRACE

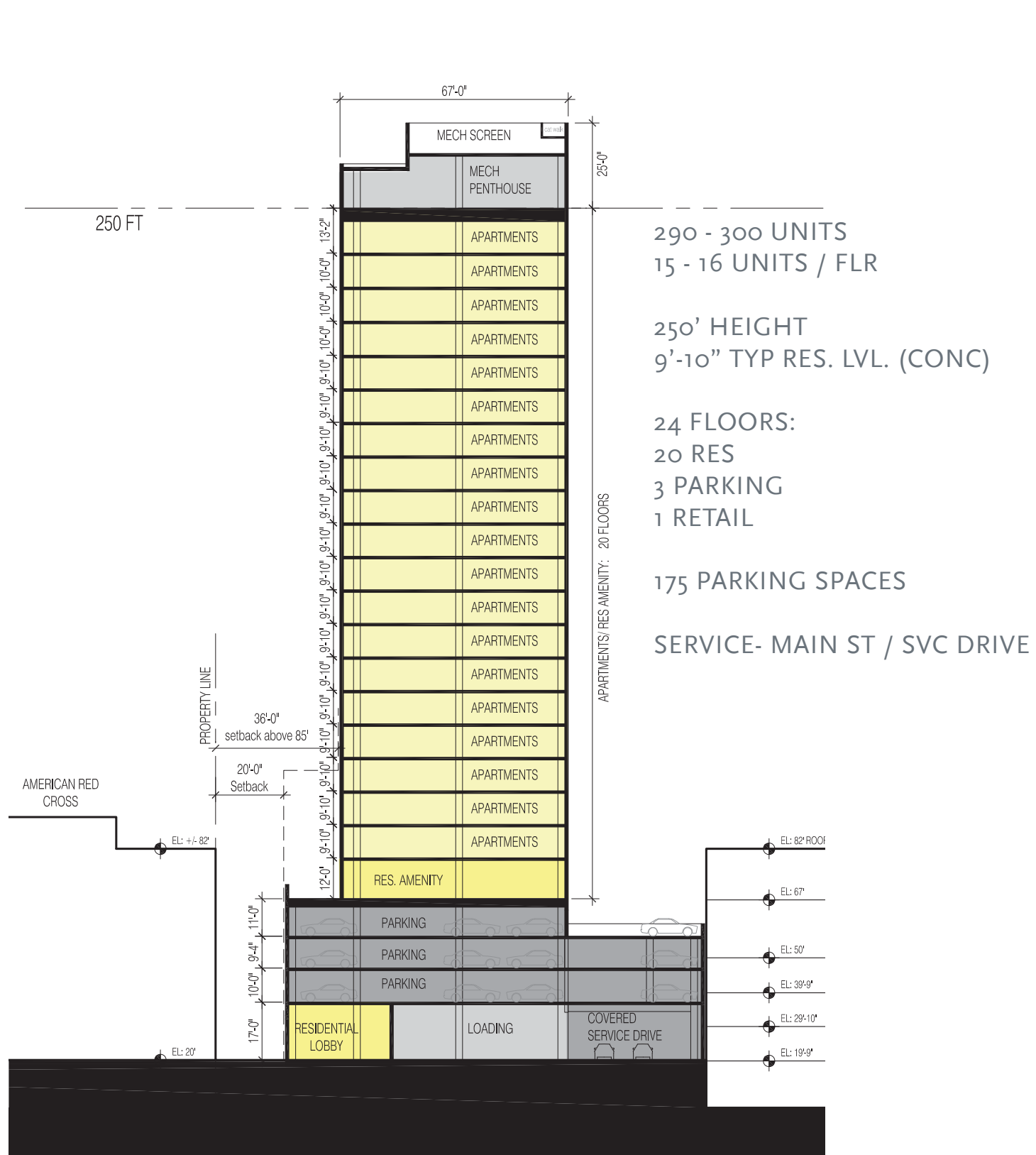


0' 40' 80'
 scale: 1" = 40'

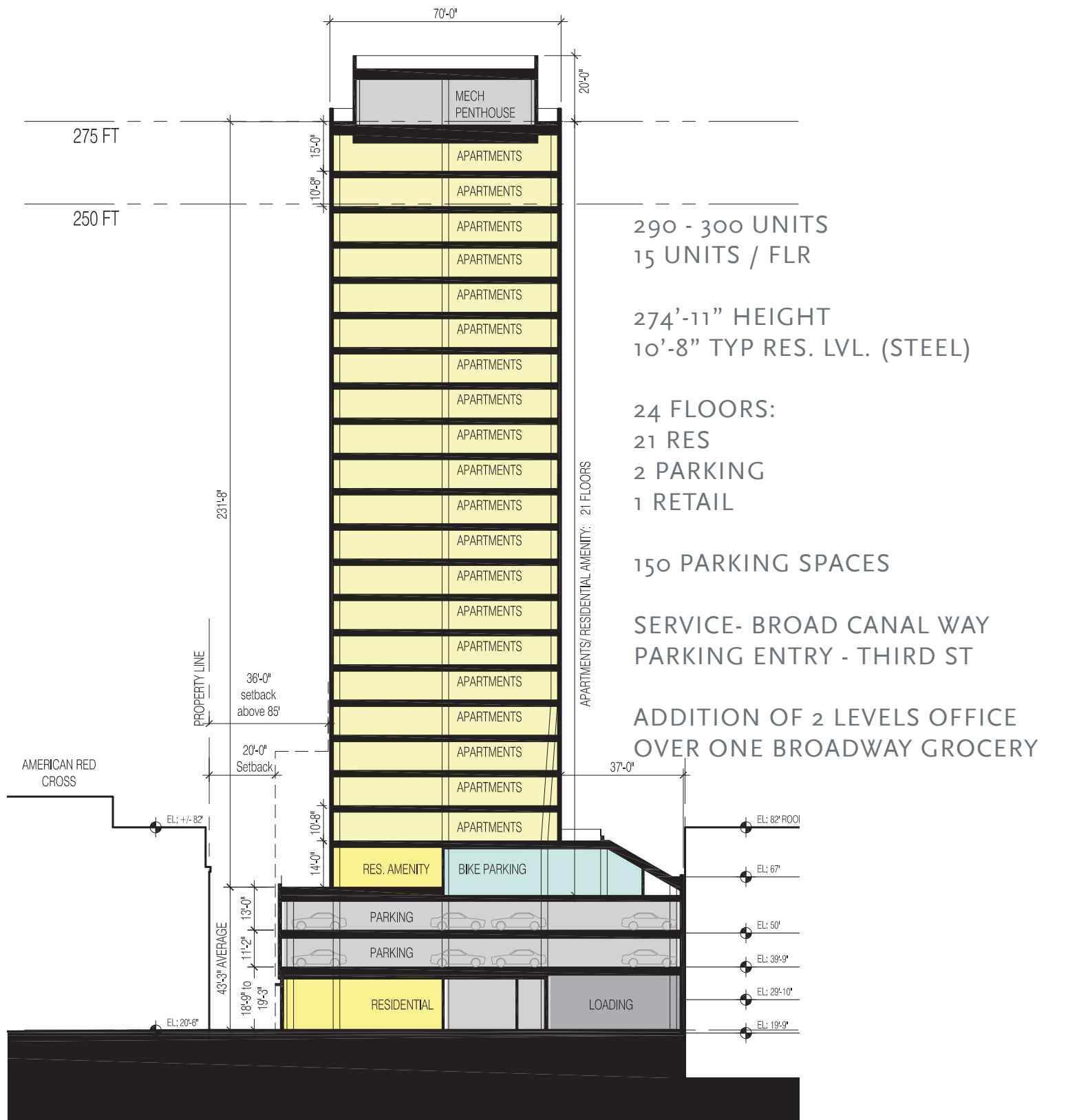
- RETAIL / ACTIVE USE
- RESIDENTIAL UNITS
- RES.COMMON SPACE
- OFFICE
- MECH. / PARKING
- SERVICE
- BIKE PARKING



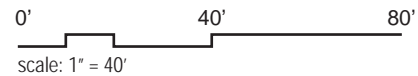




SPRING PLANNING BOARD SCHEME



CURRENT SCHEME















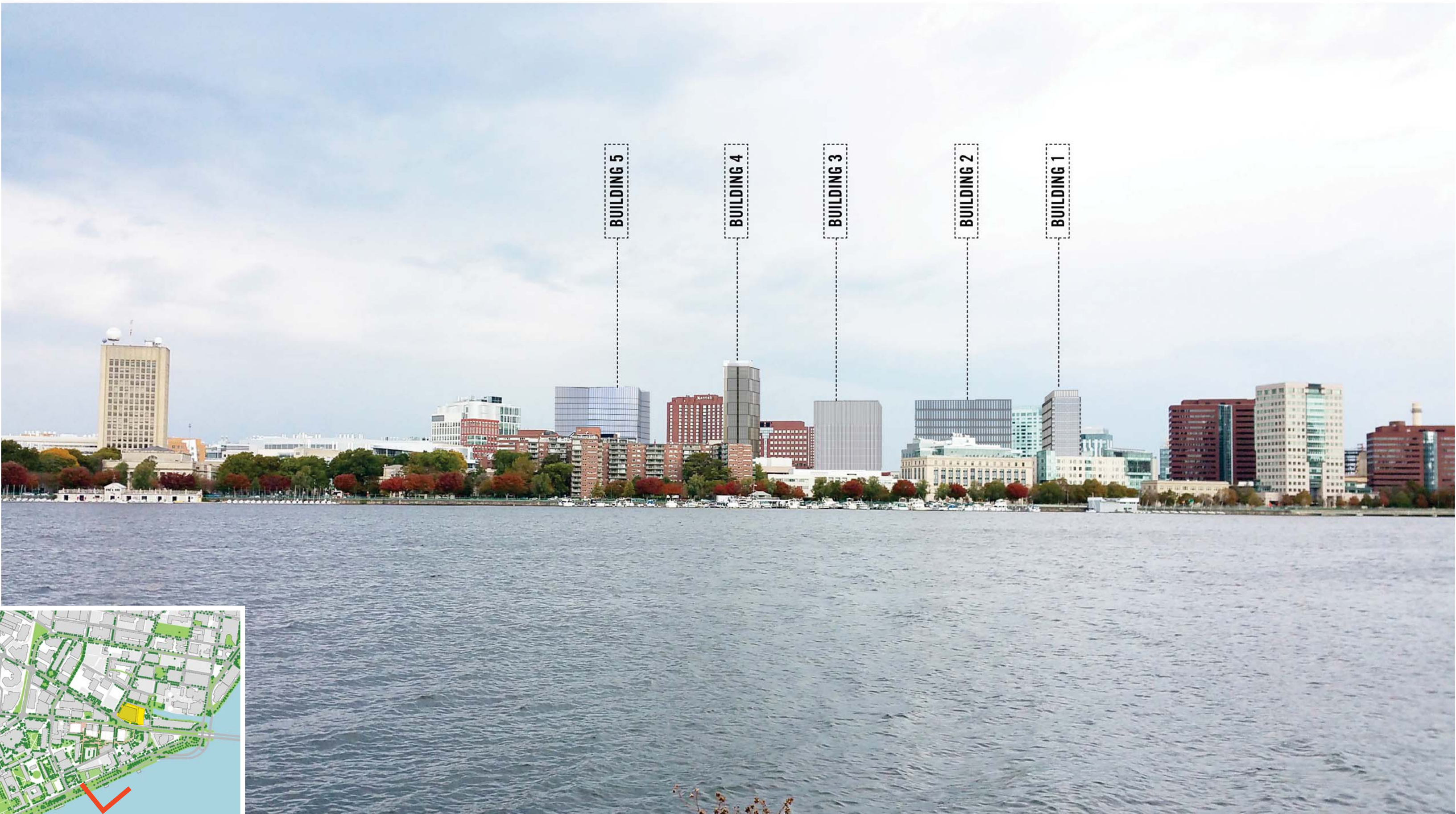


© ELKUS MANFREDI ARCHITECTS





© ELKUS MANFREDI ARCHITECTS



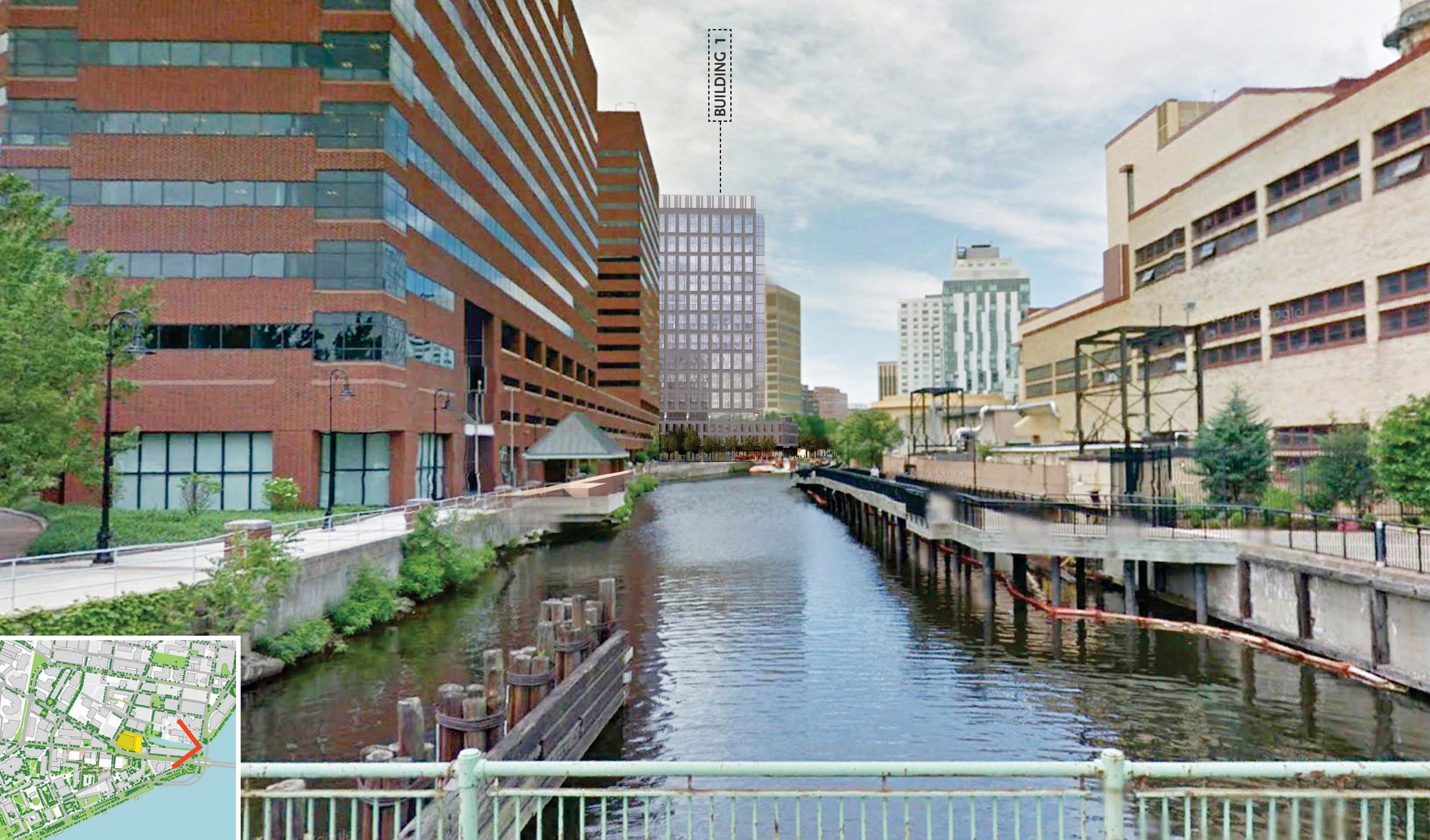
BUILDING 5

BUILDING 4

BUILDING 3

BUILDING 2

BUILDING 1



BUILDING 1

