

EXPANDED ENVIRONMENTAL NOTIFICATION FORM
DRAFT PROJECT IMPACT REPORT
VOLUME I

Allston Yards

ALLSTON, MA

PROPONENT

The Stop & Shop Supermarket Company, LLC

PROPONENT/MASTER DEVELOPER

New England Development

SUBMITTED TO

Executive Office of Energy & Environmental Affairs
MEPA Office
Boston Redevelopment Authority
d/b/a Boston Planning & Development Agency

PREPARED BY



FEBRUARY 2019

Allston Yards LLC
c/o New England Development
75 Park Plaza
Boston, MA 02116

February 22, 2019

BY HAND

Matthew A. Beaton
Secretary of Energy and Environmental Affairs
Attn: Deidre Buckley, Director, MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

Brian Golden, Director
Boston Planning & Development Agency
Boston City Hall, 9th Floor
Boston, MA 02201

Re: Allston Yards Project (the “Project”)

Dear Secretary Beaton and Director Golden:

The Stop & Shop Supermarket Company LLC with New England Development as Master Developer (together, the “**Proponent**”), are pleased to submit the enclosed combined Expanded Environmental Notification Form/Draft Project Impact Report (“**EENF/DPIR**”) for the Allston Yards Project under the MEPA regulations at 301 CMR 11.00 et. Seq. and Section 80B of the Boston Zoning Code. The EENF/DPIR is submitted for review of the redevelopment of the existing retail center located at 60 Everett Street in the Allston neighborhood of Boston and is referred to as Allston Yards (the “**Project**”).

On January 22, 2018, the Proponent filed a Project Notification Form (“**PNF**”) for the Project with the Boston Planning & Development Agency (“**BPDA**”) in accordance with Article 80B of the Zoning Code. The BPDA issued its Scoping Determination on August 3, 2018.

As outlined below, the EENF/DPIR incorporates modifications to and information regarding the Project resulting from comments from the MEPA Office, Massachusetts Department of Transportation, Massachusetts Bay Transportation Authority, Massachusetts Department of Energy Resources, the Boston Planning and Development Agency, Boston Civic Design Commission, Boston Transportation Department, elected officials, the Project’s Impact Advisory Group (“**IAG**”), abutters and members of the community. The EENF/DPIR also responds to the Scoping Determination.

Consistent with the Guest Street Planning Study and Smart Growth principles, the Project provides the opportunity to transform an underutilized suburban-style shopping plaza into a vibrant mixed-use neighborhood. The Project will provide a connected and walkable community adjacent to the Boston Landing commuter rail station in the Allston neighborhood. The Project includes a mix of uses such as residential, retail, grocery, and office/high tech that builds on and complements the newly created Boston Landing development. The Proposed Project will provide direct access to the commuter rail station and other amenities and benefits, such as publicly-accessible, activated open space, and a new street grid with widened sidewalks activated by ground floor retail that connect to the existing neighborhood.

With input from State and City agencies and individual stakeholders, and in response to the Scoping Determination, the Proponent has refined the Project significantly since the PNF filing. Key refinements include:

- Reduced building density and height (especially at the neighborhood edges to the east and south);
- Introduced building height and massing variety for a more interesting skyline;
- Reduced housing density, while maintaining homeownership;
- Reevaluated office/high-tech space given area demand;
- Increased size of public open space and landscaped areas; and
- Improved connections to public transit, including the commuter rail.

The enclosed EENF/DPIR presents details about the Project and provides full analysis of traffic/transportation, potential environmental impacts, and infrastructure needs to inform reviewing agencies and the community about the Project, its potential impacts, and the mitigation measures proposed to address those potential impacts. With respect to potential environmental impacts and review under MEPA, the EENF/DPIR includes a MEPA Greenhouse Gas Emissions Analysis and draft Section 61 Findings. Given the previous extensive study of potential environmental and community impacts, and the ongoing public review and agency coordination, the Proponent requests that the Secretary allow the filing of a Single EIR (“**SEIR**”) in lieu of the two-stage Draft and Final EIR process. The filing of a SEIR will be determined as part of the EENF Certificate.

We respectfully request that notice of availability of this EENF is published in the March 6, 2019 edition of the MEPA Environmental Monitor. We will also publish notice of the DPIR submission in the Boston Herald on February 25th and of the EENF submission before March 6th, as required by 301 CMR 11.15(1). Based upon this schedule, public comments on the EENF will be due by April 5, 2019 and a decision is anticipated to be issued on or around April 12, 2019. Public comments on the DPIR may be submitted to the BPDA through May 10, 2019. Requests for copies of the EENF/DPIR should be directed to Lauren DeVoe at 617-607-0091 or via e-mail at ldevoe@vhb.com.

We look forward to continuing to work with the MEPA Office, BPDA, municipal and state agencies, the Impact Advisory Group, elected officials and the community in the continued review of the Allston Yards Project

[Signature on the following page]

Sincerely,

ALLSTON YARDS, LLC
c/o New England Development

By: 

Name: JOHN E. TWOHIG

Title: EXECUTIVE V.P.

cc: Ms. Deirdre Buckley, Director, MEPA Office
Mr. Guy Stutz, Stop & Shop Supermarket Company
Mr. Michael Barelli, New England Development
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Allston Yards

Allston, Massachusetts

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February 2019

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5.16	Route 57 Outbound Passenger Volumes - Existing
5.17	Route 57A Inbound Passenger Volumes - Existing
5.18	Route 57A Outbound Passenger Volumes - Existing
5.19	Route 64 Inbound Passenger Volumes - Existing
5.20	Route 64 Outbound Passenger Volumes - Existing
5.21	Route 66 Inbound Passenger Volumes - Existing
5.22	Route 66 Outbound Passenger Volumes - Existing
5.23	Route 70 Inbound Passenger Volumes - Existing
5.24	Route 70 Outbound Passenger Volumes - Existing
5.25	Route 70A Inbound Passenger Volumes - Existing
5.26	Route 70A Outbound Passenger Volumes - Existing
5.27	Route 86 Inbound Passenger Volumes - Existing
5.28	Route 86 Outbound Passenger Volumes - Existing
5.29	Route 501 Inbound Passenger Volumes - Existing
5.30	Route 501 Outbound Passenger Volumes - Existing
5.31	Route 503 Inbound Passenger Volumes - Existing

Figure No.	Description
5.32	Route 503 Outbound Passenger Volumes - Existing
5.33	On-Street Parking
5.34	2025 No-Build Condition Weekday Morning Peak Hour
5.35	2025 No-Build Condition Weekday Evening Peak Hour
5.36	2025 No Build Conditions Saturday Midday Peak Hour
5.37	Residential Trip Distribution
5.38	Commercial Trip Distribution
5.39	2025 Build Conditions Weekday Morning Peak Hour
5.40	2025 Build Conditions Weekday Evening Peak Hour
5.41	2025 Build Conditions Saturday Midday Peak Hour
5.42	Proposed Site Transportation and Access Improvements
5.43	Proposed Guest Street Extension
5.44	Guest Street/Everett Street/Old Everett Street Improvements
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5.46	Proposed Guest Street/Everett Street/Old Everett Street Improvements – Existing Northbound View
5.47	Proposed Guest Street/Everett Street/Old Everett Street Improvements – Proposed Northbound View
5.48	Arthur Street/Guest Street Improvements
5.49	Proposed MBTA Boston Landing Station Access Improvements
6.1a	Pedestrian Wind No-Build Condition – Mean Speed
6.1b	Pedestrian Wind No-Build Condition – Effective Gust Speed
6.2a	Pedestrian Wind Full Build Condition – Mean Speed
6.2b	Pedestrian Wind Full Build Condition – Effective Gust Speed
6.3a	Phase 1 (Building A) Wind Condition - Mean Speed
6.3b	Phase 1 (Building A) Wind Condition - Effective Gust Speed
6.4a	Build Alternative Wind Condition - Mean Speed
6.4b	Build Alternative Wind Condition - Effective Gust Speed
6.5a	Full-Build Condition Shadows - March 21
6.5b	Full-Build Condition Shadows – June 21
6.5c	Full-Build Condition Shadows – September 21
6.5d	Full-Build Condition Shadows – December 21
6.6a	Phase 1 Build Condition Shadows - March 21
6.6b	Phase 1 Build Condition Shadows - June 21
6.6c	Phase 1 Build Condition Shadows - September 21
6.6d	Phase 1 Build Condition Shadows - December 21

Figure No.	Description
6.7a	Build Alternative Condition Shadows - March 21
6.7b	Build Alternative Condition Shadows – June 21
6.7c	Build Alternative Condition Shadows – September 21
6.7d	Build Alternative Condition Shadows – December 21
6.8a	Daylight Analysis - Center of Arthur Street
6.8b	Daylight Analysis - Center of Braintree Street
6.8c	Daylight Analysis - Center of Everett Street
6.8d	Daylight Analysis - Center of Guest Street Looking North
6.8e	Daylight Analysis - Center of Guest Street Looking South
6.9	Microscale Receptors
6.10	Noise Monitoring and Receptor Locations
8.1	Existing Utilities
8.2	Proposed Utilities
9.1	Historic Resources within ¼-mile of the Project Site

Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
Massachusetts Environmental Policy Act (MEPA) Office

Environmental Notification Form

For Office Use Only

EEA#: _____

MEPA Analyst: _____

The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Allston Yards

Street Address: 60 Everett Street

Municipality: Boston

Watershed: Charles River

Universal Transverse Mercator Coordinates:

Latitude: 42°21'23"N

Longitude: 71°08'23"W

Estimated commencement date: Q1 2020

Estimated completion date:

Q2 2022 (Phase 1); 7 years (Full Build)

Project Type: Mixed-use

Status of project design: Master Plan
%complete

Proponent: Stop & Shop Supermarket Company LLC (Stop & Shop) with New England Development

Street Address: 1385 Hancock St, 9th Floor

Municipality: Quincy

State: MA

Zip Code: 02169

Name of Contact Person: Lauren DeVoe

Firm/Agency: VHB

Street Address: 99 High Street, 10th Floor

Municipality: Boston

State: MA

Zip Code: 02110

Phone: 617-607-0091

Fax: 617-728-7782

E-mail: ldevoe@vhb.com

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?

☒ **Yes** ☐ **No**

If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a Notice of Project Change (NPC), are you requesting:

a Single EIR? (see 301 CMR 11.06(8))

☒ **Yes** ☐ **No**

a Special Review Procedure? (see 301 CMR 11.09)

☐ **Yes** ☒ **No**

a Waiver of mandatory EIR? (see 301 CMR 11.11)

☐ **Yes** ☒ **No**

a Phase I Waiver? (see 301 CMR 11.11)

☐ **Yes** ☒ **No**

(Note: Greenhouse Gas Emissions analysis must be included in the Expanded ENF.)

Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?

- **301 CMR 11.03(6)(a)(6) – Generation of 3,000 or more new average daily trips on roadways providing access to a single location**
- **301 CMR 11.03(6)(b)(15) – Construction of 300 or more new parking spaces at a single location**

Which State Agency Permits will the project require?

Massachusetts Department of Transportation (DOT) – Vehicular Access Permit, work within highway easement area (as required) and License and/or Easement related to Boston Landing Station Connection (as required)

Identify any financial assistance or land transfer from an Agency of the Commonwealth, including the Agency name and the amount of funding or land area in acres:

The Proponent is not seeking financial assistance from an Agency for the Proposed Project. In approximately 2016, the property owner at that time, an affiliate of the Proponent, worked with MassDOT and the MBTA to terminate certain easements, sidetrack, and box culvert rights burdening the Project Site. In connection with these terminations, the Proponent's affiliate executed a Compliance Agreement with MassDOT/MBTA. Refer to Appendix D for a copy of this agreement.

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	±10.6		
New acres of land altered		±10.6	
Acres of impervious area	±10.4	(±0.8)	±9.6
Square feet of new bordering vegetated wetlands alteration		-0-	
Square feet of new other wetland alteration		-0-	
Acres of new non-water dependent use of tidelands or waterways		-0-	
STRUCTURES			
Gross square footage	100,000	1,896,850	1,996,850 ¹
Gross floor area	114,292	1,142,840	1,257,132 ²
Number of housing units	-0-	895	895
Maximum height (feet)	25	210	235
TRANSPORTATION			
Vehicle trips per day (Unadjusted) ³	10,310	8,360	18,670
Vehicle trips per day (Adjusted) ⁴	4,020	4,150	8,170
Parking spaces	450	950	Up to 1,400
WASTEWATER			
Water Use (Gallons per day)	8,360	196,695	205,055
Water withdrawal (GPD)	-0-	-0-	-0-
Wastewater generation/treatment (GPD)	7,600	178,814	186,414
Length of water mains (miles)	0.3	-0-	0.3
Length of sewer mains (miles)	0.1	0.2	0.3

1. Represents total building area inclusive of parking, mechanical/back-of-house, circulation, etc. areas that are excluded from zoning calculations.
2. Represents total zoning square footage, or Gross Floor Area (GFA), as defined by the Boston Zoning Code, which excludes parking, mechanical/back-of-house, circulation, etc.
3. Trip Generation Manual – 10th Edition, Institute of Transportation Engineers (ITE), Washington D.C. (2017). Land Use Codes (LUC) 222 (Multi-family housing (high-rise), LUC 710 (General Office Building), LUC 820 (Shopping Center) and LUC 850 (Supermarket) used to estimate trip generation for the individual site components based on size. The base trip generation estimates were subsequently categorized into transit, walk, bike or vehicular trips following Boston Transportation Department's guidelines for Zone 17. Unadjusted trips do not account for shared trips or local mode share.
4. Adjusted vehicle trips account for shared trips/internal capture and mode share.

Has this project been filed with MEPA before?

☐ Yes (EEA # _____) ☒ **No**

Has any project on this site been filed with MEPA before?

☒ **Yes (EEA # 10668)** ☐ No

GENERAL PROJECT INFORMATION – all proponents must fill out this section

PROJECT DESCRIPTION:

Describe the existing conditions and land uses on the project site:

The Project Site lies within the growing neighborhood of Allston just south of the Turnpike bounded by the Everett Street bridge to the east, Arthur Street, the Boston Volvo Village dealership and a mix of other uses that front on North Beacon Street to the south and the Boston Landing redevelopment project to the west. Figure 1.3 shows the existing site plan and Figure 1.4 shows photographs of the existing site conditions.

The Project Site currently houses approximately 100,000 gross square feet of retail space, including an approximately 65,000-square foot Stop & Shop constructed in 1998 with smaller ancillary retailers in a one-story building with an approximately 450-space surface parking lot.

Describe the proposed project and its programmatic and physical elements:

The Proposed Project intends to redevelop the existing approximately 10.6-acre Project Site with a mixed-use, transit-oriented development (“TOD”) consisting of residential, office, and ground floor retail/restaurant uses, including a flagship grocery store, and a new approximately 1.0-acre Community Green. The following uses are proposed:

- **Residential;**
- **Office/High-Tech/R&D Lab Space;**
- **Grocery;**
- **Retail/Restaurant;**
- **Fitness;**
- **Open space and programmed open space; and**
- **Parking.**

Refer to Chapter 1, *Project Description and Alternatives*, of this EENF/DPIR for a more detail description of the Proposed Project and to the subsequent chapters of this EENF/DPIR for a description of the Proposed Project-related impacts and infrastructure needs, as well as proposed mitigation and other beneficial measures.

NOTE: The project description should summarize both the project’s direct and indirect impacts (including construction period impacts) in terms of their magnitude, geographic extent, duration and frequency, and reversibility, as applicable. It should also discuss the infrastructure requirements of the project and the capacity of the municipal and/or regional infrastructure to sustain these requirements into the future.

Describe the on-site project alternatives (and alternative off-site locations, if applicable), considered by the proponent, including at least one feasible alternative that is allowed under current zoning, and the reasons(s) that they were not selected as the preferred alternative:

The Proponent has considered the following development alternatives:

- **No-Build Alternative:** The No-Build Alternative reflects the existing conditions of the Project Site to set a baseline for comparing project alternatives. The No-Build Alternative was not selected as the preferred alternative because it does not include any of the significant public

benefits (such as public realm activation, transportation improvements, and sustainability/environmental improvements) associated with the Project.

- **Guest Street Planning Study Build Alternative (the "Build Alternative"):** The Build Alternative reflects the development program that follows criteria laid out in the Guest Street Planning Study. Based on the criteria, this alternative consists of approximately 1.37 million square feet of office space with approximately 140,500 square feet of ground-floor retail space supported by approximately 2,610 parking spaces.
- **PNF Build Alternative:** The PNF Alternative reflects the development program submitted for the January 2018 PNF filing. This alternative proposes a multi-phase redevelopment of the Project Site, consisting of approximately 300,000 SF of office space, 50,000 SF of retail/restaurant uses, 67,000 SF for grocery store, up to 1,050 residential units, a new 0.5-acre community green, and up to 1,300 parking spaces. The PNF Build Alternative includes all of the significant public benefits (such as public realm activation, transportation improvements, and sustainability/environmental improvements) associated with the Project.
- **Preferred Alternative:** Represents the Proposed Project consisting of approximately 375,000 SF of office space, up to 895 residential units, 117,000 GSF of retail space, including a 67,000-square foot grocery store and up to approximately 1.0 acre of Community Green.

Refer to Section 1.8 of Chapter 1, *Project Description and Alternatives*, of this EENF/DPIR for a comparison of potential environmental impacts of the project alternatives.

NOTE: *The purpose of the alternatives analysis is to consider what effect changing the parameters and/or siting of a project, or components thereof, will have on the environment, keeping in mind that the objective of the MEPA review process is to avoid or minimize damage to the environment to the greatest extent feasible. Examples of alternative projects include alternative site locations, alternative site uses, and alternative site configurations.*

Summarize the mitigation measures proposed to offset the impacts of the preferred alternative:

Refer to Chapter 10, *Summary of Mitigation/Section 61 Findings*, of this EENF/DPIR.

If the project is proposed to be constructed in phases, please describe each phase:

Refer to Section 1.6 of Chapter 1, *Project Description and Alternatives*, of this EENF/DPIR for a project phasing description.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN:

Is the project within or adjacent to an Area of Critical Environmental Concern?

☐ Yes (Specify _____)

☒ No

If yes, does the ACEC have an approved Resource Management Plan? ____ Yes ____ No;

If yes, describe how the project complies with this plan.

Will there be stormwater runoff or discharge to the designated ACEC? ____ Yes ____ No;

If yes, describe and assess the potential impacts of such stormwater runoff/discharge to the designated ACEC.

RARE SPECIES:

Does the project site include Estimated and/or Priority Habitat of State-Listed Rare Species? (see http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/priority_habitat/priority_habitat_home.htm)

☐ Yes (Specify _____) ☒ No

HISTORICAL /ARCHAEOLOGICAL RESOURCES:

Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

Yes (Specify _____) ☒ **No**

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources? Yes (Specify _____) **No**

WATER RESOURCES:

Is there an Outstanding Resource Water (ORW) on or within a half-mile radius of the project site? ____ Yes _

☒ **No**;

if yes, identify the ORW and its location. _____

(NOTE: Outstanding Resource Waters include Class A public water supplies, their tributaries, and bordering wetlands; active and inactive reservoirs approved by MassDEP; certain waters within Areas of Critical Environmental Concern, and certified vernal pools. Outstanding resource waters are listed in the Surface Water Quality Standards, 314 CMR 4.00.)

Are there any impaired water bodies on or within a half-mile radius of the project site? **X** **Yes** ____ **No**; if yes, identify the water body and pollutant(s) causing the impairment:

Charles River (Segment MA72-36) – Pollutants: bacteria/pathogens, phosphorus

Is the project within a medium or high stress basin, as established by the Massachusetts Water Resources Commission? ____ Yes **X** **No**

STORMWATER MANAGEMENT:

Generally describe the project's stormwater impacts and measures that the project will take to comply with the standards found in MassDEP's Stormwater Management Regulations:

The Proposed Project will incorporate stormwater management and treatment systems that will improve water quality, reduce runoff volume and control peak rates of runoff in comparison to existing conditions. The Proposed Project will provide infiltration that retains site runoff while providing treatment and peak flow mitigation, in accordance with DEP and Boston Water and Sewer Commission (BWSC) standards and the BPDA Smart Utilities Policy. Additionally, to better ensure improved water quality from the Proposed Project, a "Don't Dump, Drains to Charles River" casting will be installed at all new catch basins, area drains, and trench drains. Stormwater runoff calculations will be done for existing and proposed conditions during the BWSC permitting process for the 2-, 10-, 25- and 100-year storm events. During construction, measures will be implemented to minimize water quality impacts and avoid impacts to abutters.

MASSACHUSETTS CONTINGENCY PLAN:

Has the project site been, or is it currently being, regulated under M.G.L.c.21E or the Massachusetts Contingency Plan?

Yes **X** **No** ____ ; if yes, please describe the current status of the site (including Release Tracking Number (RTN), cleanup phase, and Response Action Outcome classification): _____

Environmental studies, response actions, and regulatory compliance were previously performed under the MCP at the Project Site. Refer to Section 6.8 of Chapter 6, *Environmental Protection*, for further details.

Is there an Activity and Use Limitation (AUL) on any portion of the project site? Yes ____ **No** **X** ; if yes, describe which portion of the site and how the project will be consistent with the AUL:

_____.

Are you aware of any Reportable Conditions at the property that have not yet been assigned an RTN?
Yes ___ **No** **X**; if yes, please describe: _____

Will your project disturb asbestos containing materials? Yes ___ **No** **X** ;
if yes, please consult state asbestos requirements at <http://mass.gov/MassDEP/air/asbhom01.htm>

SOLID AND HAZARDOUS WASTE:

If the project will generate solid waste during demolition or construction, describe alternatives considered for re-use, recycling, and disposal of, e.g., asphalt, brick, concrete, gypsum, metal, wood:

Demolition debris waste will be separated and legally disposed of in regional landfills. Any material which can be separated (structural steel, electrical, metal plumbing) will be sorted and recycled. Asphalt, brick and concrete from the demolition will be stockpiled on-site and processed for use as site fill material during construction. Any steel located within concrete will be removed and recycled. During construction, wood, metals, gypsum, cardboard and plastic will be segregated and sent to recycling facilities. All construction debris will be sent to a solid waste sorting facility for separation of any recyclable materials. Overall, the Master Plan Project is expected to divert at least 75 percent of construction debris from landfills.

(NOTE: Asphalt pavement, brick, concrete and metal are banned from disposal at Massachusetts landfills and waste combustion facilities and wood is banned from disposal at Massachusetts landfills. See 310 CMR 19.017 for the complete list of banned materials.)

Will your project disturb asbestos containing materials? Yes ___ **No** **X**;
if yes, please consult state asbestos requirements at <http://mass.gov/MassDEP/air/asbhom01.htm>

Describe anti-idling and other measures to limit emissions from construction equipment:

The Master Plan Project will enforce anti-idling measures consistent with MGL Chapter 90 Section 16A. In addition, all diesel construction machinery will be fitted with oxidation catalysts to reduce emissions.

DESIGNATED WILD AND SCENIC RIVER:

Is this project site located wholly or partially within a defined river corridor of a federally designated Wild and Scenic River or a state designated Scenic River? Yes ___ **No** **X**;
if yes, specify name of river and designation:

If yes, does the project have the potential to impact any of the "outstandingly remarkable" resources of a federally Wild and Scenic River or the stated purpose of a state designated Scenic River?
Yes ___ No ___; if yes, specify name of river and designation: _____;
if yes, will the project will result in any impacts to any of the designated "outstandingly remarkable" resources of the Wild and Scenic River or the stated purposes of a Scenic River.
Yes ___ No ___; if yes, describe the potential impacts to one or more of the "outstandingly remarkable" resources or stated purposes and mitigation measures proposed.

ATTACHMENTS:

1. List of all attachments to this document.
Appendix A: MEPA Distribution List
Appendix B: Metes & Bounds
Appendix C: BPDA Checklists
Appendix D: Transportation Supporting Documentation
Appendix E: Environmental Supporting Documentation
Appendix F: Air Quality/Greenhouse Gas Supporting Documentation

Appendix G: Construction Supporting Documentation

Appendix H: Public Comments on the PNF

2. U.S.G.S. map (good quality color copy, 8-½ x 11 inches or larger, at a scale of 1:24,000) indicating the project location and boundaries. **Refer to Figures 1.1 and 1.2.**
- 3.. Plan, at an appropriate scale, of existing conditions on the project site and its immediate environs, showing all known structures, roadways and parking lots, railroad rights-of-way, wetlands and water bodies, wooded areas, farmland, steep slopes, public open spaces, and major utilities. **Refer to Figure 1.3.**
- 4 Plan, at an appropriate scale, depicting environmental constraints on or adjacent to the project site such as Priority and/or Estimated Habitat of state-listed rare species, Areas of Critical Environmental Concern, Chapter 91 jurisdictional areas, Article 97 lands, wetland resource area delineations, water supply protection areas, and historic resources and/or districts. **Refer to Figure 9.1 for nearby historic resources.**
5. Plan, at an appropriate scale, of proposed conditions upon completion of project (if construction of the project is proposed to be phased, there should be a site plan showing conditions upon the completion of each phase). **Refer to Figure 1.6.**
6. List of all agencies and persons to whom the proponent circulated the ENF, in accordance with 301 CMR 11.16(2). **See Appendix A for the MEPA Distribution List.**
7. List of municipal and federal permits and reviews required by the project, as applicable. **See Table 2-1 of Chapter 2, Regulatory Context and General Information.**

LAND SECTION – all proponents must fill out this section

I. Thresholds / Permits

- A. Does the project meet or exceed any review thresholds related to land (see 301 CMR 11.03(1))
___ Yes **X** **No**; if yes, specify each threshold:

II. Impacts and Permits

- A. Describe, in acres, the current and proposed character of the project site, as follows:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Footprint of buildings	<u>2.38</u>	<u>3.16</u>	<u>5.54</u>
Internal roadways	<u>1.37</u>	<u>0.78</u>	<u>2.15</u>
Parking and other paved areas	<u>5.25</u>	<u>(3.55)</u>	<u>1.70</u>
Other altered areas	<u>1.56</u>	<u>(0.39)</u>	<u>1.17</u>
Undeveloped areas	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
Total: Project Site Acreage	<u>10.56</u>	<u>0.00</u>	<u>10.56</u>

- B. Has any part of the project site been in active agricultural use in the last five years?
___ Yes **X** **No**; if yes, how many acres of land in agricultural use (with prime state or locally important agricultural soils) will be converted to nonagricultural use?
- C. Is any part of the project site currently or proposed to be in active forestry use?
___ Yes **X** **No**; if yes, please describe current and proposed forestry activities and indicate whether any part of the site is the subject of a forest management plan approved by the Department of Conservation and Recreation:
- D. Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97? ___ Yes **X** **No**; if yes, describe:
- E. Is any part of the project site currently subject to a conservation restriction, preservation restriction, agricultural preservation restriction or watershed preservation restriction? ___ Yes **X** **No**; if yes, does the project involve the release or modification of such restriction? ___ Yes ___ No; if yes, describe:
- F. Does the project require approval of a new urban redevelopment project or a fundamental change in an existing urban redevelopment project under M.G.L.c.121A? ___ Yes **X** **No**; if yes, describe:
- G. Does the project require approval of a new urban renewal plan or a major modification of an existing urban renewal plan under M.G.L.c.121B? ___ Yes **X** **No**; if yes, describe:

III. Consistency

- A. Identify the current municipal comprehensive land use plan:

The Project Site is addressed in the *Brighton Guest Street Area Planning Study* approved in March 2012 (the "Study"). Section 2.1 of Chapter 2, *Regulatory Context and General Information*, includes a detailed description of Proposed Project's consistency with applicable zoning and regulatory requirements.

- B. Describe the project's consistency with that plan with regard to:

Refer to Section 1.5.1 of Chapter 1, *Project Description and Alternatives*.

- C. Identify the current Regional Policy Plan of the applicable Regional Planning Agency (RPA)

The Project Site is located within the planning area of the Metropolitan Area Planning Council ("MAPC"). *MetroFuture: Making a Greater Boston Region* (2008) is the applicable regional plan.

- D. Describe the project's consistency with that plan with regard to:

The Proposed Project is consistent with the MACP's regional plan in that it supports economic development and expands housing opportunities with access to public transit.

RARE SPECIES SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to rare species or habitat (see 301 CMR 11.03(2))? ____ Yes **X** **No**; if yes, specify, in quantitative terms:

(NOTE: If you are uncertain, it is recommended that you consult with the Natural Heritage and Endangered Species Program (NHESP) prior to submitting the ENF.)

- B. Does the project require any state permits related to rare species or habitat? ____ Yes **X** **No**

- C. Does the project site fall within mapped rare species habitat (Priority or Estimated Habitat?) in the current Massachusetts Natural Heritage Atlas (attach relevant page)? ____ Yes **X** **No**.

- D. If you answered "No" to all questions A, B and C, proceed to the **Wetlands, Waterways, and Tidelands Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Rare Species section below.

WETLANDS, WATERWAYS, AND TIDELANDS SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to wetlands, waterways, and tidelands (see 301 CMR 11.03(3))? ____ Yes **X** **No**; if yes, specify, in quantitative terms:

- B. Does the project require any state permits (or a local Order of Conditions) related to wetlands, waterways, or tidelands? ____ Yes **X** **No**; if yes, specify which permit:

- C. If you answered "No" to both questions A and B, proceed to the **Water Supply Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wetlands, Waterways, and Tidelands Section below.

WATER SUPPLY SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to water supply (see 301 CMR 11.03(4))? ____ Yes **X** **No**; if yes, specify, in quantitative terms:

- B. Does the project require any state permits related to water supply? ____ Yes **X** **No**; if yes, specify which permit:

- C. If you answered "No" to both questions A and B, proceed to the **Wastewater Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Water Supply Section

below.

WASTEWATER SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to wastewater (see 301 CMR 11.03(5))? ____ Yes **X** **No**; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to wastewater? ____ Yes **X** **No**; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Transportation -- Traffic Generation Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wastewater Section below.

TRANSPORTATION SECTION (TRAFFIC GENERATION)

I. Thresholds / Permit

A. Will the project meet or exceed any review thresholds related to traffic generation (see 301 CMR 11.03(6))? **X** **Yes** ____ **No**; if yes, specify, in quantitative terms:

301 CMR 11.03(6)(a)(6) – Generation of 3,000 or more new average daily trips on roadways providing access to a single location

301 CMR 11.03(6)(b)(15) – Construction of 300 or more new parking spaces at a single location

B. Does the project require any state permits related to state-controlled roadways? **X** **Yes** ____ **No**; if yes, specify which permit:

Massachusetts Department of Transportation (DOT) Vehicular Access Permit

C. If you answered "No" to both questions A and B, proceed to the **Roadways and Other Transportation Facilities Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Traffic Generation Section below.

II. Traffic Impacts and Permits

A. Describe existing and proposed vehicular traffic generated by activities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Number of parking spaces	<u>450</u>	<u>950</u>	<u>Up to 1,400</u>
Number of Unadjusted vehicle trips per day	<u>10,310</u>	<u>8,360</u>	<u>18,670</u>
Number of Adjusted vehicle trips per day	<u>4,020</u>	<u>4,150</u>	<u>8,170</u>

Based on ITE Land Use Code(s):

- **LUC 222 (Multi-family housing (high-rise);**
- **LUC 710 (General Office Building);**
- **LUC 820 (Shopping Center); and**
- **LUC 850 (Supermarket).**

B. What is the estimated average daily traffic on roadways serving the site?

<u>Roadway</u>	<u>Existing</u>	<u>Change</u>	<u>Total</u>
1. North Beacon Street	<u>14,970</u>	<u>+696</u>	<u>15,666</u>
2. Everett Street	<u>11,180</u>	<u>+922</u>	<u>12,102</u>
3. Market Street	<u>20,870</u>	<u>+1,430</u>	<u>22,300</u>

C. If applicable, describe proposed mitigation measures on state-controlled roadways that the project proponent will implement:

No roadway improvements are proposed on roadways under state jurisdiction. Only one study area intersection is under non-City of Boston jurisdiction, Market Street/Birmingham Parkway/Lincoln Street intersection, which is under the jurisdiction of the Department of Conservation and Recreation.

D. How will the project implement and/or promote the use of transit, pedestrian and bicycle facilities and services to provide access to and from the project site?

The Transportation Impact Assessment ("TIA") is presented in Chapter 5, *Transportation*, of this EENF/DPIR. The TIA documents a comprehensive Transportation Demand Management program.

C. Is there a Transportation Management Association (TMA) that provides transportation demand management (TDM) services in the area of the project site? X Yes No; if yes, describe if and how will the project will participate in the TMA:

The Proponent is committed to becoming an active member of the A Better City TMA.

D. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation facilities? X Yes No; if yes, generally describe:

The Project Site is located immediately adjacent to the MBTA Boston Landing commuter rail station and is proposing access improvements to promote transit use for the Project, and to enhance MBTA services for the surrounding neighborhood. Refer to Section 5.8 of Chapter 5, *Transportation*, of this EENF/DPIR for further details.

E. If the project will penetrate approach airspace of a nearby airport, has the proponent filed a Massachusetts Aeronautics Commission Airspace Review Form (780 CMR 111.7) and a Notice of Proposed Construction or Alteration with the Federal Aviation Administration (FAA) (CFR Title 14 Part 77.13, forms 7460-1 and 7460-2)?

The Proposed Project will not penetrate airspace of any nearby airport.

III. Consistency

Describe measures that the proponent will take to comply with municipal, regional, state, and federal plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services:

Consistent with the Study and described more fully in the subsequent chapters of this EENF/DPIR, a bicycle- and pedestrian-friendly environment will be provided by way of dedicated bicycle facilities and new sidewalks, respectively, along the new Guest Street Extension (to be constructed as part of the Proposed Project), as well as other improvements within the Project Site. The Proposed Project will also reinforce pedestrian connectivity

between Market Street, Everett Street, and North Beacon Street. The Guest Street Extension will also provide a full multi-modal environment consistent with the City of Boston's goals for this area.

In the fall of 2013, BTD published its *Boston Bike Network Plan* which laid out a plan for creating safer streets for bicycling. The five-year action plan in that report calls for Guest Street to the west of the Project Site to have protected bicycle lanes. The Guest Street Extension to be constructed through the Project Site will be entirely consistent with this vision and will feature separated bike lanes on both sides of the road. These new bike facilities will connect to the existing exclusive bicycle lanes already in place on Guest Street further to the west. In addition, all other internal roadways within the Project Site are being designed to be bicycle friendly.

In becoming a member of "A Better City," which is the local Transportation Management Association (TMA), the Proponent will support the TMA's efforts in improving and expanding public transportation in the area. Through its involvement in the TMA, the details of the site design, internal roadway networks, and overall transportation infrastructure all will be advanced consistent with the goals of the TMA's "Go Boston 2030" vision.

TRANSPORTATION SECTION (ROADWAYS AND OTHER TRANSPORTATION FACILITIES)

I. Thresholds

A. Will the project meet or exceed any review thresholds related to roadways or other transportation facilities (see 301 CMR 11.03(6))? X Yes No; if yes, specify, in quantitative terms:

301 CMR 11.03(6)(b)(1)(a) – Construction of a New roadway one-quarter or more miles in length.

B. Does the project require any state permits related to roadways or other transportation facilities? X Yes No; if yes, specify which permit:

Massachusetts Department of Transportation (DOT) Vehicular Access Permit

C. If you answered "No" to both questions A and B, proceed to the **Energy Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Roadways Section below.

II. Transportation Facility Impacts

A. Describe existing and proposed transportation facilities in the immediate vicinity of the project site:

The Project will include the construction of a new "Guest Street Extension" which will be almost 800 feet in total length. The new roadway will connect Guest Street to Everett Street, and will be constructed within an area currently occupied by a surface parking lot. A new "Braintree Street Extension" also will be constructed along the northerly end of the Site within an area currently occupied by a paved loading area for the existing grocery and retail uses on the Site. It has not yet been determined if these roadways officially will be public roadways, but they are being designed to meet city standards for public roadways.

B. Will the project involve any

1. Alteration of bank or terrain (in linear feet)?
2. Cutting of living public shade trees (number)?
3. Elimination of stone wall (in linear feet)?

No
No
No

III. Consistency -- Describe the project's consistency with other federal, state, regional, and local plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services, including consistency with the applicable regional transportation plan and the Transportation Improvements Plan (TIP), the State Bicycle Plan, and the State Pedestrian Plan:

The Proposed Project, and construction of the new on-site roadways described above, is entirely consistent with the Study. That BPDA planning effort evaluated a variety of transportation needs in the area and both roadways provide the desired connections identified in that study. The new Guest Street Extension and improved Arthur Street both will feature separated bike lanes, and standard bike lanes also will be provided on Braintree Street Extension.

ENERGY SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to energy (see 301 CMR 11.03(7))? ___ Yes X **No**; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to energy? ___ Yes X **No**; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Air Quality Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Energy Section below.

AIR QUALITY SECTION

I. Thresholds

A. Will the project meet or exceed any review thresholds related to air quality (see 301 CMR 11.03(8))? ___ Yes X **No**; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to air quality? ___ Yes X **No**; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Solid and Hazardous Waste Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Air Quality Section below.

SOLID AND HAZARDOUS WASTE SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to solid or hazardous waste (see 301 CMR 11.03(9))? ___ Yes X **No**; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to solid and hazardous waste? ___ Yes X **No**; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Historical and Archaeological Resources Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Solid and Hazardous Waste Section below.

HISTORICAL AND ARCHAEOLOGICAL RESOURCES SECTION

I. Thresholds / Impacts

A. Have you consulted with the Massachusetts Historical Commission? ____ Yes **X** **No**; if yes, attach correspondence. For project sites involving lands under water, have you consulted with the Massachusetts Board of Underwater Archaeological Resources? ____ Yes ____ No; if yes, attach correspondence

B. Is any part of the project site a historic structure, or a structure within a historic district, in either case listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? ____ Yes **X** **No**; if yes, does the project involve the demolition of all or any exterior part of such historic structure? ____ Yes **X** **No**; if yes, please describe:

C. Is any part of the project site an archaeological site listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? ____ Yes **X** **No**; if yes, does the project involve the destruction of all or any part of such archaeological site? ____ Yes ____ No; if yes, please describe:

D. If you answered "No" to all parts of both questions A, B and C, proceed to the **Attachments and Certifications** Sections. If you answered "Yes" to any part of either question A or question B, fill out the remainder of the Historical and Archaeological Resources Section below.



CERTIFICATIONS:

1. The Public Notice of Environmental Review has been/will be published in the following newspapers in accordance with 301 CMR 11.15(1):

(Name): **Boston Herald** (Date): 3/6/2019

2. This form has been circulated to Agencies and Persons in accordance with 301 CMR 11.16(2).

Signatures:

Date	Signature of Responsible Officer or Proponent	Date	Signature of person preparing ENF (if different from above)
		2/15/19	

John Twohig	Lauren DeVoe
Name (print or type)	Name (print or type)
Allston Yards, LLC	VHB, Inc.
Firm/Agency	Firm/Agency
75 Park Plaza	99 High Street, 10th Floor
Street	Street
Boston, MA 02116	Boston, MA 02110
Municipality/State/Zip	Municipality/State/Zip
617-243-7070	617-607-0091
Phone	Phone

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Project Description and Alternatives

Stop & Shop Supermarket Company LLC ("Stop & Shop") with New England Development as Master Developer (together, as appropriate, the "Proponent") are pleased to submit this combined Expanded Environmental Notification Form ("EENF")/Draft Project Impact Report ("DPIR") for review of the redevelopment of the existing retail center located at 60 Everett Street in the Allston neighborhood of Boston (the "Project Site"). The Proponent has worked in conjunction with Elkus Manfredi Architects as Master Planner, and in collaboration with The Bozzuto Group and Southside Investment Partners in the preparation of this EENF/DPIR and advancement of the Proposed Project. The redevelopment project is referred to as Allston Yards (the "Proposed Project"). Refer to Figure 1.1 for a site location map. The overall vision for Allston Yards is to deliver a transit-oriented redevelopment including a state-of-the-art urban grocery store, substantial publicly-accessible open space and civic spaces, a variety of housing options and an office component. The office component is envisioned to respond to the emerging tenant demand for a transit-oriented office and high-tech/Research & Development cluster centered around Boston Landing and Harvard's new Allston campus.

This EENF/DPIR will be reviewed by the Executive Office of Energy and Environmental Affairs ("EEA") and by the Boston Redevelopment Authority, d/b/a Boston Planning & Development Agency ("BPDA"), as well as regulating agencies and the public. The EENF is being filed for the state review process, in accordance with the Massachusetts Environmental Policy Act ("MEPA"), M.G.L. c. 30, Sections 61-62I and the regulations promulgated thereunder set forth at 301 CMR 11.00. The DPIR is being filed jointly with the EENF to continue the Large Project Review process in accordance with Article 80B of the Boston Zoning Code (the "Code"). The BPDA issued its Scoping Determination on the Project Notification Form ("PNF") on August 3, 2018.

The Proposed Project has been refined significantly since the PNF filing in January 2018 based on feedback received from abutters, elected officials, BPDA staff, the Boston Civic Design Commission ("BCDC"), various state and city agencies, and the Impact Advisory Group ("IAG"). Key issues that were addressed through the redesign included: reduced building density and height (especially at the neighborhood edges to the east and south); explored a greater variety in building height for a more interesting skyline; reduced housing density and re-evaluated office space given the growing demand in the area; increased the size of public open space and landscaped area; and improved connections to the Boston Landing MBTA commuter rail station.

1.1 Project Overview

The Allston Yards redevelopment will create a new neighborhood at the nexus of Allston, Brighton, and the new Boston Landing district. The Proponent intends to redevelop an existing approximately 10.6-acre Project Site with a mixed-use, transit-oriented development (“TOD”) consisting of residential, office, restaurant, fitness and retail uses, including a flagship grocery store, and a new approximately one-acre public open space (“Community Green”) to be activated with programming to enhance use and enjoyment, such as outdoor health and wellness events, public art exhibits, music concerts and holiday festivals. As described further below, the Proposed Project is anticipated to be built out over several years.

The Proposed Project will provide and build upon a number of critical infrastructure investments: extension and expansion of the street grid through the Project Site, new connections to the Boston Landing MBTA commuter rail station, improved pedestrian and bicycle connections, and the creation of new pedestrian-scale, publicly-accessible open spaces. All of this will transform an underutilized urban site – currently occupied by an older shopping plaza and large surface parking lots – into a new neighborhood.

Through the redevelopment master plan, the Proponent strives to achieve the following goals:

- › Since the submission of the Projection Notification Form (“PNF”) in January 2018, the Proponent has worked with its development team, abutters, elected officials, BPDA staff, various state and city agencies, as well as the IAG to further refine the Proposed Project’s development program. In doing so, the Proponent strived to make the Proposed Project substantially consistent with the Brighton Guest Street Area Planning Study completed in 2012 (the “Guest Street Planning Study”)¹ ;
- › Continue Stop & Shop’s 20-plus year commitment to the Allston-Brighton neighborhood by constructing a new state-of-the-art, flagship grocery store in a location and configuration to allow the existing supermarket to remain open during construction;
- › Provide a range of housing options in a variety of sizes and price points, including an opportunity for affordable units and home ownership units;
- › Connect the Project Site to the larger surrounding street grid, thereby improving vehicular circulation for the neighborhood;
- › Provide new connections for transit, bicycles, and pedestrians;
- › Incorporate attractive landscaping and publicly-accessible open spaces throughout the Project Site, including a programmed approximately one-acre Community Green, landscaped plazas, and large sidewalks all activated through lighting, site furnishings, special paving, and wayfinding signage.
- › Provide Development Impact Project exactions payments estimated at \$4.2 million, subject to final project uses.

¹ Boston Planning & Development Agency, Brighton Guest Street Area Planning Study (Boston, Massachusetts), March 2012.

- › Support community groups, causes, and the public realm through a “Public Realm Fund”
- › Create approximately 2,500 new construction jobs and more than 2,000 new permanent jobs.
- › Create substantial net new annual real estate tax revenue for the City, as well as state sales and business tax revenue.

This EENF/DPIR presents details about the Proposed Project and provides full analysis of traffic/transportation, potential environmental impacts, and infrastructure needs to inform reviewing agencies and the community about the Proposed Project, its potential impacts, and the mitigation measures proposed to address those potential impacts.

1.2 Site Context and Existing Conditions

The Project Site lies within the Allston neighborhood just south of the Massachusetts Turnpike and bounded by the Everett Street bridge to the east, Arthur Street to the west, and the Boston Volvo Village dealership and a mix of other uses that front on North Beacon Street to the south. The Boston Landing redevelopment project lies to the west. Refer to Figure 1.2 for the Project Site context.

New, planned, or potential development adjacent to the Proposed Project includes:

- › Boston Landing—a partially complete mixed-use development on an approximately 15-acre site consisting of sport-related facilities, hotel, office space, retail and restaurants, and residential housing.
- › The Boston Landing MBTA commuter rail station—a new, recently opened stop on the Framingham/Worcester line that connects to downtown Boston and points west.
- › Boston Volvo Village dealership—planned for redevelopment of an existing car dealership use with future redevelopment opportunities.
- › Various development projects along North Beacon Street.

Figure 1.3 shows the existing site plan and Figure 1.4 shows photographs of the existing site conditions. The Project Site currently houses approximately 100,000 gross square feet of retail space, including an approximately 65,000-square foot Stop & Shop constructed in 1998 with smaller ancillary retailers in a one-story building with an approximately 450-space surface parking lot. Access to the Project Site, as shown on Figure 5.2, is currently provided by multiple driveways connecting to the surrounding roadway network, including:

- › A two-way access to Guest Street;
- › A two-way access to Arthur Street;
- › A one-way “in-only” access from Braintree Street underneath the Everett Street overpass; and
- › A one-way “in-only” access from Everett Street.

Arthur Street is a public way that extends from North Beacon Street to Hichborn Street where it then turns into a private access drive into the Project Site. An internal driveway rings the Project Site with truck delivery to the existing retail center occurring along the Turnpike frontage from Braintree Street.

The existing grocery store layout and circulation pattern are modeled on a suburban prototype where the retail and parking are seen more as an isolated destination. The surface parking and current site design lacks connectivity to the adjacent neighborhood and abutters. Coupled with a lack of program diversity, the existing site lacks the activity and vibrancy found in thriving mixed-use environments; all issues which the Proposed Project addresses.

1.2.1 Metes and Bounds

Appendix B includes a description of the metes and bounds of the Project Site and the accompanying site survey plan.

1.3 Project Description

Consistent with the City's and community's vision, the Guest Street Planning Study and Smart Growth principles, the Proposed Project provides the opportunity to transform an underutilized suburban-style shopping plaza into a vibrant mixed-use neighborhood.

The Proposed Project, as shown in Figure 1.5, envisions a connected and walkable community with a mix of uses, as listed below, and builds on and complements the newly created Boston Landing development. The Proposed Project will provide direct access to the Boston Landing MBTA commuter rail station and other amenities, such as a flagship grocery store, publicly-accessible, activated open space, and a new street grid with widened sidewalks activated by ground floor retail that connect to the existing neighborhood.

The residential component of the Proposed Project offers a variety of unit types and a mix of rental and homeownership opportunities. The office component is envisioned to respond to the emerging tenant demand for a transit-oriented office and high-tech/Research & Development ("R&D") cluster centered around Boston Landing and Harvard's new Allston campus. The following uses are proposed (refer to Table 1-2 below for the proposed development program):

- › Residential;
- › Office/High-Tech/R&D Lab Space;
- › Grocery;
- › Retail;
- › Restaurant;
- › Fitness;
- › Open space and programmed open space; and

- › Parking.

1.4 Summary of Changes to the Project Since the PNF

The Proposed Project has been refined since the PNF filing in January 2018 based on feedback received from the community, elected officials, BPDA staff, various state and city agencies, and the IAG. Such modifications are summarized in the list below. One of the modifications is to change which building will be constructed first. So as to distinguish the Proposed Project from the PNF Project and its different phasing, the building naming scheme has switched to letters (Buildings A, B, C and D) from numbers (Buildings 1, 2, 3 and 4). Table 1-1 below details out this change and from this point on the proposed buildings will be referred to as Buildings A through D, accordingly.

Table 1-1 Building Naming Changes from the PNF

EENF/DPIR (Current)		PNF (Previous)	
Name	Primary Use	Name	Primary Use
Building A	Residential with Grocery + Retail	Building 2	Residential with Ground Level Retail
Building B	Office/High-Tech/R&D Lab Space with Ground Level Residential + Retail	Building 1	Residential with Grocery + Retail
Building C	Residential with Ground Level Retail	Building 3	Residential with Ground Level Retail
Building D	Residential with Ground Level Retail	Building 4	Office with Ground Level Residential + Retail

1.4.1 Changes to Site Plan, Height, and Massing

In response to comments to the PNF, including those of the Boston Civic Design Commission ("BCDC") and IAG, the Proposed Project's site plan, building height and massing have been substantially revised, including:

- › Reduced overall building area resulting in fewer overall residential units (from approximately 1,050 units to 895 units).
- › Reduced building heights of all four proposed buildings to better relate to the smaller scale neighborhoods to the south and east and in keeping with the Guest Street Planning Study, including:
 - Reduced the building height and increased the building setback of Building B from Everett Street to "step down" toward the smaller-scale neighborhoods to the east;
 - Reduced the height of Building A significantly (from 200 feet to 85 feet) so that it "steps down" toward the smaller-scale neighborhoods to the south; and

- › Introduced greater variety in height and building elements to create an interesting and lively skyline from the neighborhood and Massachusetts Turnpike.
- › Shifted the grocery store component to the center of the Project Site from Building B to Building A to be closer to residential uses and the Community Green.
- › Moved the office use from Building D to Building B to eliminate substantial massing adjacent to the Community Green to “open up” views to/from the Community Green and expanded office use by 75,000 square feet to respond to the growing demand for a high-tech/R&D cluster in Allston.
- › Redesigned Building D to have a narrower “tower” element, which enhances the “boulevard” nature of Arthur Street (including bicycle accommodations) and provides more openness to the Community Green.
- › Increased the size of the Community Green, from 0.5 acre to approximately one acre. This expansion of publicly-accessible open space was made possible by reducing the footprint of Building A and eliminating the standalone restaurant building previously proposed for the Community Green.
- › Introduced a slight curve on the extension of Guest Street into the Project Site (“Guest Street Extension”) to add design interest and to accommodate the footprint of Building A, which allows the existing Stop & Shop to remain open during construction while keeping the Complete Street features (i.e., separated cycle track, streetscape, etc.) presented in the PNF.
- › Improved connections to the Boston Landing MBTA commuter rail station, including a new Kiss & Ride and Shuttle Area and enhanced pedestrian area on the proposed extension of Braintree Street (“Braintree Street Extension”).
- › Provided a more generously-landscaped streetscape and expanded the sidewalk along the eastern side of Arthur Street between Guest Street and the Boston Landing MBTA commuter rail station’s drop-off area to a 24-foot wide pedestrian plaza that enhances the “boulevard” nature of this street. (This has been accomplished in part by pulling back the ground floor of Building D from the Arthur Street drop off area.)

With the various site plan changes, the Proponent has maintained a level of service for vehicular circulation with extensive transportation infrastructure continuing the commitment of approximately \$20 million in up-front infrastructure and mitigation.

Building Height and Density

In the PNF, the Proposed Project’s building heights were all at least 200 feet, with a maximum building height of 235 feet. Since then, based on community feedback, the Proponent has reduced maximum building heights south of Guest Street Extension to not more than 85 feet. This results in an overall reduction of over 100 feet of building height to remain in scale with adjacent buildings in the neighborhood.

To balance the scale and height elements of the proposed buildings north of Guest Street Extension, the Proponent introduced building height variety to avoid creating

a monolithic building “wall.” These varying heights will also provide a human-scaled transition to the streets where most of the building podium elements are low-rise (ranging from 40 to 89 feet). The sky exposure of the Community Green has also been enhanced.

1.4.2 Programmatic Changes

With the above-mentioned numerous and significant revisions to the Proposed Project in response to public comments, the Proponent has continued to strive to make the Proposed Project substantially consistent with the Guest Street Planning Study. Changes to the Program are outlined in Table 1-2 below and described in further detail below.

Table 1-2 Summary of Changes to Proposed Development Program Since the PNF Submission

Project Element	PNF (Previous)	EENF/DPIR (Current)	Change
Residential	Up to 1,050 units ¹	895 units ¹	(-155 units)
Office	300,000 GSF ²	375,000 GSF ²	+75,000 GSF
Grocery	67,000 GSF ³	67,000 GSF ³	No Change
Retail/Restaurant	50,000 GSF ⁴	50,000 GSF ⁴	No Change
Community Green	0.5 acre ⁵	+1.0 acre	+0.5 acre
Parking	Up to 1,300 spaces ⁶	Up to 1,400 spaces ⁶	+100 spaces

Notes: To be developed in multiple buildings each of which can be developed together or independently of the other. Consistent with the program detailed above, the mix of uses constructed will be in response to evolving market conditions.

GSF Gross Square Feet including mechanical/unusable space.

- 1 To consist of a range of housing types, sizes, and price points, including affordable and home ownership units.
- 2 May be replaced by residential use consisting of approximately 340 units; however, office use is more impactful from a transportation perspective and, therefore, is being analyzed as such under MEPA and Article 80 review for the Proposed Project.
- 3 Represents 2,000 net new square feet of Grocery space when accounting for the existing on-site Stop & Shop store.
- 4 Represents 15,000 net new square feet of Retail space when accounting for the existing on-site retail space. Includes restaurant space proposed throughout; locations to be determined.
- 5 Includes a proposed restaurant with outdoor seating.
- 6 Consists of structured and at-grade off-street parking spaces with additional on-street parking spaces provided along Guest Street Extension. Refer to Section 5.7 of Chapter 5, *Transportation*, for a parking analysis for the Proposed Project.

Residential

The total number of units has been reduced from 1,050 units to 895 units. The entirety of this reduction has been made to the rental units, with no change in homeownership units (approximately 110 units, or over 12 percent of the overall proposed units). Residential units are predominately distributed among Buildings A, C, and D.

Office and High-Tech/R&D Lab Space

The overall office component has increased from 300,000 SF to 375,000 SF, to respond to the emerging tenant demand for transit-oriented office space/high-tech/R&D cluster around Boston Landing and Harvard’s new Allston campus. Building B is anticipated to be developed as an office building.

Retail

Since the PNF filing, there is no change to the total gross square footage to accommodate the grocery store and additional retail/restaurant use. Building A has changed to a mid-rise building accommodating Stop & Shop, additional retail, and residential in upper levels.

1.4.3 Changes to Community Green, Open Space, and Public Realm

Since the PNF filing, the Proponent has significantly increased the size, quality, and activation of public open space at the Project Site. The Community Green has been expanded from approximately 0.5 acre to nearly one acre of public open space. This expansion of publicly-accessible open space was made possible by shifting the footprint of Building A away from the Community Green and eliminating the previously proposed standalone restaurant within the Community Green. In addition, all four buildings will include private use rooftop amenity areas that will range from 5,000 to 7,000 square feet (SF) per building.

The sidewalks within the Project are proposed to be generously proportioned and activated with landscaping and street furniture. In addition, the sidewalk along the eastern side of Arthur Street between Guest Street and the Boston Landing MBTA commuter rail station drop off will be expanded to a 24-foot wide pedestrian plaza that enhances the “boulevard” nature of this street. This has been accomplished in part by pulling back the ground floor of Building D from the Arthur Street drop-off area.

Community Green

The Community Green is anticipated to have a balance of planted and paved areas that will allow for passive enjoyment when events are not occurring, and well-proportioned paved zones for more active opportunities, such as farmers’ markets. Pathways are planned to provide for smooth movement through the space into the development while reinforcing the passive zones. The Community Green will also include an approximately 2,200-square foot fenced dog run/park located in the southeast corner.

Since the PNF, the quality of the Community Green has been enhanced by reducing the height of adjacent Building A from 200 to 85 feet. The Community Green has been further activated by grouping “18-hour” active uses (i.e., residential and retail) around it. Additionally, the public open space will be activated with programming to enhance use and enjoyment, such as outdoor health and wellness events, public art exhibits, music concerts and holiday festivals. Programming of the public open space will be done in conjunction with the community.

The Proposed Project includes a new West Street Extension, between the Community Green and Building A, which has been laid out, dimensioned, and designed to function as a street, when needed.

1.5 Consistency with Applicable Plans & Policies

1.5.1 Brighton Guest Street Area Planning Study

The Proposed Project is located within the area of the Guest Street Planning Study. The Guest Street Planning Study included a 100-acre area extending one mile along the Turnpike generally from Market Street to the west to Harvard Avenue to the east. The Guest Street Planning Study resulted from coordinated efforts of multiple stakeholders and was approved by the BRA in March 2012.

The long-term vision of the Guest Street Planning Study is to create an urban mixed-use district featuring vibrant community uses and residential development resulting in an area that will become a transit-oriented mixed-use destination with a blend of workplaces, homes, and neighborhood amenities. The Project Site is located within an area of the Guest Street Planning Study in which taller buildings and increased floor area ratio ("FAR") are noted as appropriate.

The Proposed Project continues to align with the principles and goals set forth in the Guest Street Planning Study in the following key ways:

- › Building Height and Massing
 - Provide building massing varied with low-rise or mid-rise massing components (a base and tower) to optimize views through the Project Site and create an interesting skyline.
 - Height and massing located along the north side of Guest Street Extension away from North Beacon Street.
 - Screen the Turnpike from nearby residential neighborhoods.
- › Diversity of Uses
 - Provide a mix of uses for all Proposed Project parcels and aims to provide a live-work-play community, including office, residential, grocery, retail, fitness and restaurant uses.
 - Introduce a new flagship grocery store.
 - Provide a variety of housing types, including affordable housing and homeownership units.
 - Create an active mixed-use corridor by locating retail, office entry, and residential lobbies along the Guest Street Extension.
- › Open Space
 - More than 50 percent of the Project Site south of Guest Street is devoted to a truly publicly-accessible open space including the Community Green.
 - Provide increased open/pervious space on a site that is currently almost completely impervious.

› Connected Street Grid

- Develop a range of street types with a pattern of smaller blocks and public spaces integrated throughout.
- Extend Guest Street from Arthur Street to Everett Street.
- Complete the Arthur Street/Guest Street intersection.
- Construct a new Everett Street/Guest Street intersection.
- Connect Guest Street with Braintree Street through the addition of West and East Streets.
- Create new pedestrian and bicycle accommodations to connect with existing infrastructure and provide for future connections.
- Connect to and maintain the underpass at Braintree Street while introducing a more functional two-way operation.

1.5.2 Boston Landing Project

As previously mentioned, Boston Landing is a mixed-use development on an approximately 15-acre site located along the Turnpike and adjacent to the Project Site. Formerly an industrial site, Boston Landing will provide approximately 650,000 square feet of new office and lab space, a 350,000-square foot sports complex, a 295-unit residential complex, a 175-room hotel, and approximately 65,000 square feet of restaurant and retail space throughout the site at full build-out.

The Proposed Project looks to complement and reinforce many of the strong design characteristics and the planning direction seen at Boston Landing. The Proposed Project extends the vibrant, pedestrian-oriented streetscape of existing Guest Street through its Project Site to Everett Street. With improved access and circulation along a retail-, restaurant- and residential-oriented Guest Street Extension, both sites will benefit from the density and program mix. Buildings lining Guest Street Extension thoughtfully frame the Community Green to create programmed open space between the two sites as an amenity for those who work and live in the neighborhood. The proposed building heights are consistent with the existing and planned Boston Landing buildings so that the two developments relate while each afford dynamic downtown views. The network of streets created on the Project Site ties into the new Boston Landing MBTA commuter rail station at the end of West Street. Therefore, the Proposed Project will complement and enhance the success of the Boston Landing project by providing a variety of uses and connectivity between the two projects and surrounding street grid.

1.5.3 Infrastructure/Mitigation

If approved, the initial phase of the Proposed Project, or Phase 1, discussed in Section 1.6, will be advanced as soon as possible. In addition to the Community Green, Phase 1 will include the following infrastructure/mitigation commitments, valued at approximately \$20,000,000.

Street Infrastructure	<ul style="list-style-type: none"> › New Guest Street Extension to Everett Street, with new signalized intersections at Arthur Street and Everett Street › New Braintree Street Extension, East Street, West Street and West Street Extension › Expanded Arthur Boulevard with enhanced 24-foot Arthur Boulevard Plaza › A separate protected cycle track along Guest Street Extension and Arthur Street within the Project Site limits (the segment of Arthur Street south of Guest Street), and dedicated bike lanes on Braintree Street Extension
MBTA Connections ²	<ul style="list-style-type: none"> › New Braintree Street Extension Kiss & Ride and Shuttle Area › Enhanced Braintree Street Extension pedestrian area › Relocated two 64 bus route stops onto Guest Street Extension (subject to necessary permits and approvals) › Transit signal priority
Utility Infrastructure	<ul style="list-style-type: none"> › New water, sewer, and stormwater lines › Improved stormwater quality through increased treatment and infiltration
Guest Street Extension & Everett Street Intersection	<ul style="list-style-type: none"> › Enhanced intersection for pedestrians, bicycles, and vehicles › New traffic signal (to be constructed as adaptive-control ready) › New ADA-compliant pedestrian signal › Transit signal priority measures included in signal operation

² Based on the Proponent's coordination with the MBTA to date and subject to receipt of necessary permits and approvals.

Guest Street & Arthur Street Intersection	<ul style="list-style-type: none"> › Enhanced intersection for pedestrians, bicycles, and vehicles › New traffic signal (to be constructed as adaptive-control ready) › New ADA-compliant pedestrian signal › Transit signal priority measures included in signal operation
Braintree Street Extension & Everett Street Intersection	<ul style="list-style-type: none"> › Enhanced intersection for pedestrians, bicycles, and vehicles › New 4-way stop
North Beacon Street at Everett Street	<ul style="list-style-type: none"> › Transit signal priority measures included in signal operation
Uber/Lyft Spaces	<ul style="list-style-type: none"> › At least 6 spaces on Guest Street Extension for pick-up/drop-off within total of 21 parking spaces proposed › Opportunities for expansion as needed

1.6 Project Phasing

Initial Phase and Site Improvements

In the PNF, Building B was contemplated as Phase 1, the initial phase of development. Since the PNF, building design and site-wide improvements have been further advanced, and Building A is now considered as part of Phase 1 of the development. Building A will continue to include the grocery use as previously contemplated. In summary, Phase 1 will include:

- › A new flagship urban-style grocery store.
- › Ground floor retail.
- › Up to 176 new residential units, including affordable units.
- › An approximately one-acre Community Green, half of which is lawn and planted areas and is accessible for all residents and the greater Allston-Brighton neighborhood.
- › A dog run/park for residents and public use.
- › The roadway and utility network infrastructure, suitable for the full build-out of the Proposed Project and needed to support existing, approved, and proposed projects in the area, such as Boston Landing.
- › Construction of Guest Street Extension into and through the Project Site, including:
 - Connection to the other new and surrounding streets and intersections, including Arthur Street, East Street, and Everett Street;

- Construction of an improved signalized Guest/Everett Street intersection; and
 - Construction of an improved signalized Guest/Arthur Street intersection.
- › Construction of East and West Streets.
 - › Construction of West Street Extension within the Project Site.
 - › Construction of the extension of Braintree Street as a new two-way multi-modal roadway that replaces the existing retail service/loading area while also providing for accommodations for pedestrians and bicyclists to access the Boston Landing MBTA commuter rail station.
 - › Pedestrian and bicycle accommodations throughout the Project Site, including a separate protected cycle track along Guest Street Extension and Arthur Street within the Project Site limits (the segment of Arthur Street south of Guest Street) connecting to the surrounding neighborhood and the Boston Landing MBTA commuter rail station.
 - › Over 300 structured parking spaces, as well as on-street parking.

The first floor of Building A will feature ground floor retail, pedestrian access to the new grocery store (allowing visibility and convenient access from the adjoining neighborhood), lobby and amenity space for the residences, as well as covered, screened parking and loading for the building's various uses.

The new Stop & Shop store will be located on the second floor of Building A, directly accessible via escalator, elevator, and stairs from Guest Street, as well as all parking levels.

An additional four stories of residences set in a 'T-shaped' building is proposed above the grocery podium. Pedestrian access to the residential building will be located off West Street in a ground-floor lobby with supporting first floor amenity space, which may include the leasing office and/or concierge. The residential component will contain supporting amenities on the upper floors, such as a roof deck accessible to building residents. There will also be green roof areas, as well as balconies for some units. Resident bicycle storage will be located on the first floor near the garage entrance, within the podium levels, as well as in the parking garage.

The majority of parking spaces for Building A's retail and residential uses will be located below grade, with additional parking spaces at-grade and in a mezzanine level.

The existing Stop & Shop will remain open during the construction of Building A. The location and configuration of the proposed Stop & Shop store will allow for the existing supermarket to remain open during construction.

Figure 1.6 presents the initial development phase plan with possible interim conditions of the Buildings B, C, and D parcels. Each future development parcel, in the interim condition, will be paved to be used for potential temporary programming and/or surface parking, if needed, as well as construction staging area. Each parcel will be fenced with asphalt sidewalks provided for pedestrian access and circulation through the Project Site.

Later Phase Buildings

The designs for Buildings B, C and D have not been as advanced as Building A; however, the Proposed Project can accommodate a variety of phasing scenarios. Each of the proposed buildings can be developed together with or independently of and in differing sequences with the others and the mix of uses presented in Table 1-2 allows the Proposed Project to remain responsive to evolving market conditions.

Depending on market conditions or other factors, uses may be relocated to another building, while remaining consistent with the overall program, site-wide improvements and mitigation commitments, which will be established through the Article 80 review process. And although the flexibility of sequencing is critical to the Project's ability to respond to market conditions, the Proponent has committed to the infrastructure supporting the full build program as part of the initial phase of development.

1.7 Summary of Public Benefits

This section summarizes the many project benefits associated with the Proposed Project. Collectively, the below-mentioned commitments equate to approximately \$20,000,000 representing a significant investment in the community.

Public Benefits

- › Significant, "up front" transportation and infrastructure improvements to facilitate redevelopment of the Project Site and surrounding sites with an interconnected, multi-modal street grid.
- › Provide Development Impact Project exactions payment estimated at approximately \$4.2 million, subject to final project uses.
- › Over the term of the Project, create approximately 2,500 new construction jobs and more than 2,000 new permanent jobs.
- › Create substantial net new annual real estate tax revenue for the City, as well as state sales and business tax revenue.
- › Increase housing options, including affordable housing consistent with the Inclusionary Development Program.
- › Provide a range of housing types (i.e., varying sizes and price points), including affordable and homeownership units.
- › Deliver a new, modern flagship urban-style grocery store as part of Phase 1 of the development to support the on-site uses, as well as the broader community.
- › Continue to operate the existing Stop & Shop while the new store is under construction.
- › Create a new approximately one-acre programmed Community Green. If the Community Green were considered a development parcel would be valued at approximately \$6,000,000, without improvements.

- › Offer a “Public Realm Fund” to be available to the community including schools, community groups, athletic organizations and others to promote wellness, education and public realm and transportation enhancements. The Public Realm Fund is proposed to be funded by each of the four principal buildings as part of the Proposed Project and initially available for payment over a ten-year period, to ensure an extended and continuing fund to benefit the community, with such payments to commence as buildings come online. The Proponent will work through the Large Project Review process to determine the mechanism to administer the Fund to ensure it will provide funds to further recipient organizations’ wellness and educational missions and quality of life enhancements to the public realm and transportation infrastructure.
- › Improve access and circulation throughout the Project Site, including a connection to the new, recently opened Boston Landing MBTA commuter rail station.
- › Provide new residents to patronize existing stores, restaurants, bars and amenities of the community, helping small business owners.

Public Realm Activation

- › Transform an underutilized urban site into a vibrant mixed-use neighborhood.
- › Connect the Project Site to the Allston neighborhood.
- › Create a sustainable, true TOD project that is consistent with the City of Boston's and community's vision from the Guest Street Planning Study and Smart Growth principles.
- › Provide convenient walking routes to public transit, as well as to amenities in the Allston and Brighton neighborhoods.
- › Provide a pedestrian-friendly environment with sidewalks along all roadways within the Project Site with connections between Market Street, Everett Street, and North Beacon Street.

Transportation Benefits

- › Traffic generated by the Proposed Project can be accommodated at the study area intersections through the implementation of planned improvements and signal timing modifications planned as part of Phase 1 of the Proposed Project.
- › The Project Site’s proximity to public transportation, including several bus lines and the new MBTA Boston Landing MBTA commuter rail station, will help minimize the need for vehicular travel.
- › The parking needs for the Proposed Project will be accommodated by a proposed parking supply of up to 1,400 parking spaces.
- › Transportation improvements proposed as part of the Proposed Project have been designed to accommodate pedestrian, bicycle, and vehicular traffic.
- › Provide an internal roadway network designed to be compatible with bicycle use, including a separate protected cycle track along Guest Street Extension and Arthur Street within the Project Site limits (the segment of Arthur Street south of Guest Street), as well as secure interior bicycle storage and at-grade bicycle racks.

- › Support the viability of the recently opened Boston Landing MBTA commuter rail station through increased ridership, and frequency of stops and weekend service by creating additional housing units (including home ownership), retail and office space, and by promoting the use of the adjacent public transit services.
- › Improve connections to the Boston Landing MBTA commuter rail station, including a drop-off/pick-up area for ride-share and shuttle buses.
- › Implement a comprehensive Transportation Demand Management (“TDM”) Plan with specific measures to promote and encourage residents, employees, and visitors to use alternative transportation modes.

Sustainability/Environmental Benefits

Measures and strategies to help the Proposed Project minimize potential environmental impacts and to achieve its sustainability goals are grouped into the following categories:

Site Location and Design

- › Reuse a previously developed site in a dense urban setting as opposed to building on undeveloped open space.
- › Comply with all applicable stormwater management standards to the extent practicable to improve water quality.
- › Manage stormwater runoff rate and provide infiltration through below-grade re-charge and the incorporation of pervious surfaces.
- › Reduce heat island effect by incorporating greenery throughout the Project Site, utilizing reflective roof materials and/or vegetated roofs, and providing the majority of the on-site parking under cover.
- › Incorporate sustainable/green building design, construction, and operational measures so that the Proposed Project is LEEDv4 certifiable, in compliance with Article 37, Green Buildings of the Code.³ Since the PNF, the draft LEED Scorecards have been updated based on more current design and resulted in an increase in potential ‘yes’ points across all building typologies.
 - The Proponent has developed pathways to potentially achieve higher levels of LEED certifiability, and intends to continue exploring the opportunities for Building B (office building) to achieve the LEED Core & Shell Gold or Platinum level, the grocery store to achieve the LEED Commercial Interior Gold level, and one or more of the three residential buildings (Building A, C, and D) to achieve the LEED New Construction Gold level.
- › Incorporate adaptation and resiliency measures to address future impacts associated with climate change.

³ City of Boston Article 37 submittal requirements require completing a Leadership in Energy and Environmental Design (“LEED™”) credit scorecard to demonstrate that a project meets the minimum requirements to achieve a LEED Certified level (all LEED prerequisites and achieve at least 40 points) without requiring the project to be registered with or certified by with the Green Business Certification Inc. (“GBCI”).

Energy Conservation/GHG Emissions Reductions

- › Reduce overall annual energy consumption through the implementation of energy optimizing building design and systems, which would result in a reduction in stationary source CO₂ emissions when compared to a building design that meets the minimum building code requirements.
- › Comply with the Massachusetts Stretch Energy Code requirement to be 10 percent better than ASHRAE 90.1-2013.
- › Utilize potential energy conservation incentives offered by utility companies.
- › Provide Electric Vehicle (EV) charging stations (including “EV ready” spaces), to further reduce GHG emissions associated with vehicles.
- › Continue to evaluate building design and alternative energy options throughout design.
- › Study the feasibility of a District Energy Microgrid system and incorporation of alternative energy options, including the use of fuel cell for the new grocery store in Building A (as discussed further in Section 7.3.5 of Chapter 7, *Greenhouse Gas Emissions Assessment*).
- › Study the feasibility of implementing passive house principles into the design of Building D to maximize energy efficiency and reduce greenhouse gas emissions.
- › Subsequent to the filing of this EENF/DPIR, and for inclusion in the next MEPA filing, the Proponent will evaluate implementation of passive housing principles into the design of Buildings A, B and C.

Water Conservation

- › Target substantial reduction of the annual potable water use for sewage conveyance.
- › Reduce potable water for irrigation use through the use of efficient irrigation systems, and drought tolerant trees, shrubs, and groundcover.

Resiliency

- › Bury all new utilities below ground to reduce the possibility of a localized power outage caused during extreme storm events.
- › Incorporate protective plantings throughout and at the edges of the Project Site to mitigate potential wind effects created by open spaces.
- › Incorporate natural ventilation into the design of residential units, as appropriate, to mitigate potential rising temperature impacts.

1.8 Alternatives Analysis

The following development alternatives have been considered to fulfill the MEPA Alternative Analysis as well as the BDPA’s Scoping Determination requirements:

- › No-Build Alternative;
- › Guest Street Planning Study Build Alternative (the “Build Alternative”);

- › PNF Build Alternative; and
- › Preferred Alternative (the Proposed Project).

Table 1-3 below summarizes the programs of these development alternatives.

Table 1-3 Summary of Project Alternatives

	No-Build Alternative	Guest Street Planning Study Build Alternative	PNF Build Alternative	Preferred Alternative
Total Building Area (GFA)	100,000	±1.51 million	±1.43 million	±1.26 million
Office SF	NA	1.37 million	300,000	375,000
Residential SF	NA	-0-	1,011,480	788,400
Residential Units	NA	-0-	1,050	895
Grocery SF	65,000	-0-	67,000	67,000
Retail SF	35,000	140,500	50,000	50,000
Total Parking Spaces	450	3,060	Up to 1,300	Up to 1,400
Number of New Buildings	-0-	3	4	4
Maximum Building Height (feet)	25	150	235	232
GFA	Gross Floor Area, as defined by the Boston Zoning Code (excluding parking, circulation, and mechanical/back-of-house area)			
SF	Square Feet			
NA	Not Applicable			

1.8.1 No-Build Alternative

The No-Build Alternative reflects the existing conditions of the Project Site, as described in Section 1.2, to set a baseline to which the potential environmental impacts of the project alternatives can be determined. The Project Site currently houses approximately 100,000 gross square feet of retail space, including an approximately 65,000-square foot Stop & Shop constructed in 1998 with smaller ancillary retailers in a one-story building with an approximately 450-space surface parking lot. Refer to Figure 1.7a for a massing diagram of the No-Build Alternative.

The No-Build Alternative does not include any of the significant public benefits (such as public realm activation, transportation improvements, sustainability/environmental improvements, providing increased housing and affordable housing responding to the Mayor's *Boston 2030* housing plan and increased employment opportunities) associated with the Project.

1.8.2 Guest Street Planning Study Build Alternative

Figure 1.7b presents a massing diagram of the Build Alternative. This project alternative reflects the approximately 1.5 million-square foot office development that meets the Guest Street Planning Study's suggested maximum building height of 150 feet. This hypothetical alternative is preserved to respond to a request in the BPDA Scoping Determination and as a project alternative to compare potential environmental impacts under MEPA (refer to Section 1.8.5 below). Additionally, the

wind and shadow impacts were studied for this project alternative, as required by the BPDA Scoping Determination.

The Build Alternative lacks the key public benefits that both the PNF Alternative and Preferred Alternative provide, including connections to the Boston Landing MBTA commuter rail station, a thoughtful roadway network, a true mixed-use development and an interesting/varied building skyline.

1.8.3 PNF Build Alternative

The PNF Build Alternative reflects the development program submitted for the PNF filing. This alternative proposes a multi-phase redevelopment of the Project Site with a mixed-use, TOD consisting of approximately 300,000 GSF of office space, 50,000 GSF of retail/restaurant uses, 67,000 GSF for grocery store, up to 1,050 residential units, a new 0.5-acre community green, and up to 1,300 parking spaces. Refer to Figure 1.7c for a massing diagram of the PNF Build Alternative.

The PNF Build Alternative includes all of the significant public benefits (such as public realm activation, transportation improvements, sustainability/environmental improvements, providing increased housing and affordable housing responding to the Mayor's *Boston 2030* housing plan and increased employment opportunities) associated with the Proposed Project, or Preferred Alternative (described below).

1.8.4 Preferred Alternative

The Preferred Build Alternative, or the Proposed Project, as shown in Figure 1.7d and described previously in Sections 1.3 and 1.4, would construct up to approximately 1.26 million GFA of mixed-use development with up to 1,400 structured parking spaces.

This alternative reflects the updated proposed plan that shows adjustment in building height and residential units, increase in Community Green area, and relocation of Stop & Shop into Building A as part of Phase 1 of the Proposed Project. As described in Section 1.4.2, since the PNF filing, the Project Team has modified the Project in certain ways to incorporate feedback received from state and city agencies, community members and the IAG. Most notably, the Proponent has reduced building heights closest to the neighborhood, reduced the number of residential units, introduced greater variety in height, improvements to roadway and utility network, and nearly doubled the Community Green in size to approximately one acre.

1.8.5 Qualitative and Quantitative Comparison of Alternatives

The sections below compare potential environmental impacts of the Project alternatives. Table 1-4 below provides a quantitative impact analysis comparing the No-Build Alternative, the Guest Street Planning Study Build Alternative, the PNF Build Alternative, and the Preferred Alternatives.

Table 1-4 Comparison of Project Alternatives

Impact Category	No-Build Alternative	Guest Street Planning Study Build Alternative	PNF Build Alternative	Preferred Alternative
Land				
Size of Project Site	±10.6 acres	±10.6 acres	±10.6 acres	±10.6 acres
Acres of Impervious Area	±10.6 acres (existing)	Negligible	±10.1 acres	±9.6 acres ²
New Land Alteration ¹	-0-	-0-	-0-	-0-
Wetlands Impacts (SF of LSCSF)	-0-	-0-	-0-	-0-
Transportation & Parking				
New Vehicle Traffic ³	4,020 (existing)	8,650	4,470	4,150
New Parking Spaces	450 (existing)	2,610	850	950
Water & Wastewater				
New Water Use Demand (GPD)	8,360 (existing)	95,150	217,473	196,695
New Wastewater Generation (GPD)	7,600 (existing)	104,665	197,703	178,814

GFA Gross Floor Area, as defined by the Boston Zoning Code (excluding parking and mechanical/back-of-house area)

LSCSF Land Subject to Coastal Storm Flowage

GPD gallons per day

1 Previously undeveloped land

2 Due to increase in size of the Community Green from approximately 0.5 to 1.0 acre

3 Based on Adjusted vehicle trips

1.8.6 Land Alteration

Since the entire existing Project Site consists of impervious surface area, neither the No-Build Alternative, the Guest-Street Planning Study Build Alternative, the PNF Build Alternative, or the Preferred Alternative would result in creating additional impervious area.

The Preferred Alternative would result in less impervious area than all the other alternatives. As noted in Section 1.4, since the PNF filing, the Proponent has modified the Preferred Alternative to nearly double in size of the Community Green, from 0.5 to approximately one acre.

The net new land alteration would be none for all alternatives because the Project Site is currently fully developed/altered.

1.8.7 Transportation

The transportation (traffic and parking)-related impacts are most significant for the Build Alternative given the office-dominated use (an estimated 8,650 new daily vehicle trips (adjusted) and approximately 2,610 parking spaces). The PNF Build Alternative transportation impacts would be very similar to the Preferred Alternative's impacts (Table 1-4). However, the Preferred Alternative consists of a

refined development program and building height/massing that aims to address the community's comments and concerns, as described more fully in Section 1.4.

1.8.8 Water and Wastewater

Since the No-Build Alternative reflects the existing condition of the Project Site, it would not create any additional need for water, or generation of wastewater.

Of the alternatives creating new building area, the Build Alternative would result in the least amount of water use and wastewater generation. It is most likely because the Build Alternative does not include residential use. While the Preferred Alternative would result in more water and wastewater generation than the Build Alternative, it should be noted that it still represents a reduction compared to the PNF Build Alternative due to adjusted residential units per community feedback. Both the PNF Build Alternative and the Preferred Alternative reflect mixed-use development programs that are consistent with the City's and community's vision, as laid out in the Guest Street Planning Study. Refer to Chapter 8, *Infrastructure*, for an analysis of existing and proposed infrastructure and capacity.

1.9 Updated Community Outreach

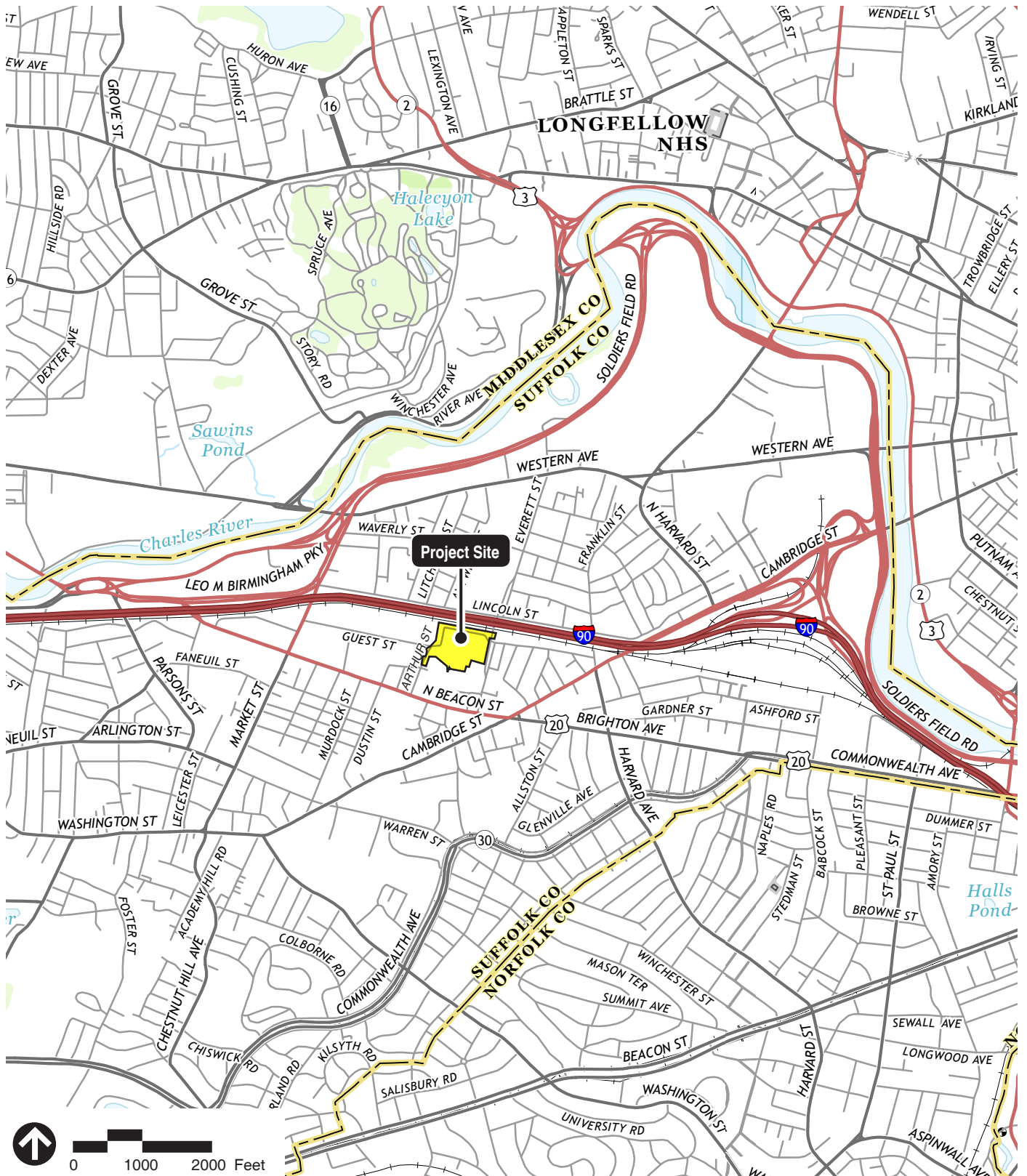
Since the submission of the Project Notification Form ("PNF") in January 2018, the Proponent has collaborated closely with its development team, abutters, elected officials, BPDA staff, various state and city agencies, as well as the IAG to further refine the Proposed Project's development program.

The Proponent held the following IAG and public meetings during the comment period:

- › March 12, 2018: IAG meeting at Jackson Mann Community Center
- › April 23, 2018: Public community meeting at Jackson Mann Community Center
- › April 30, 2018: IAG meeting at WGBH headquarters in Brighton
- › May 9 and 29, 2018: IAG meetings at Brighton Marine Medical Center

The Proponent has also continued ongoing discussions with direct abutters, including New Balance, 119 Braintree Street, Boston Volvo, and Studio 52, as well as various state and city agencies, including BPDA, BTDA, the MEPA Office, Massachusetts Department of Energy Resources ("DOER"), MassDOT, and Massachusetts Bay Transportation Authority ("MBTA").

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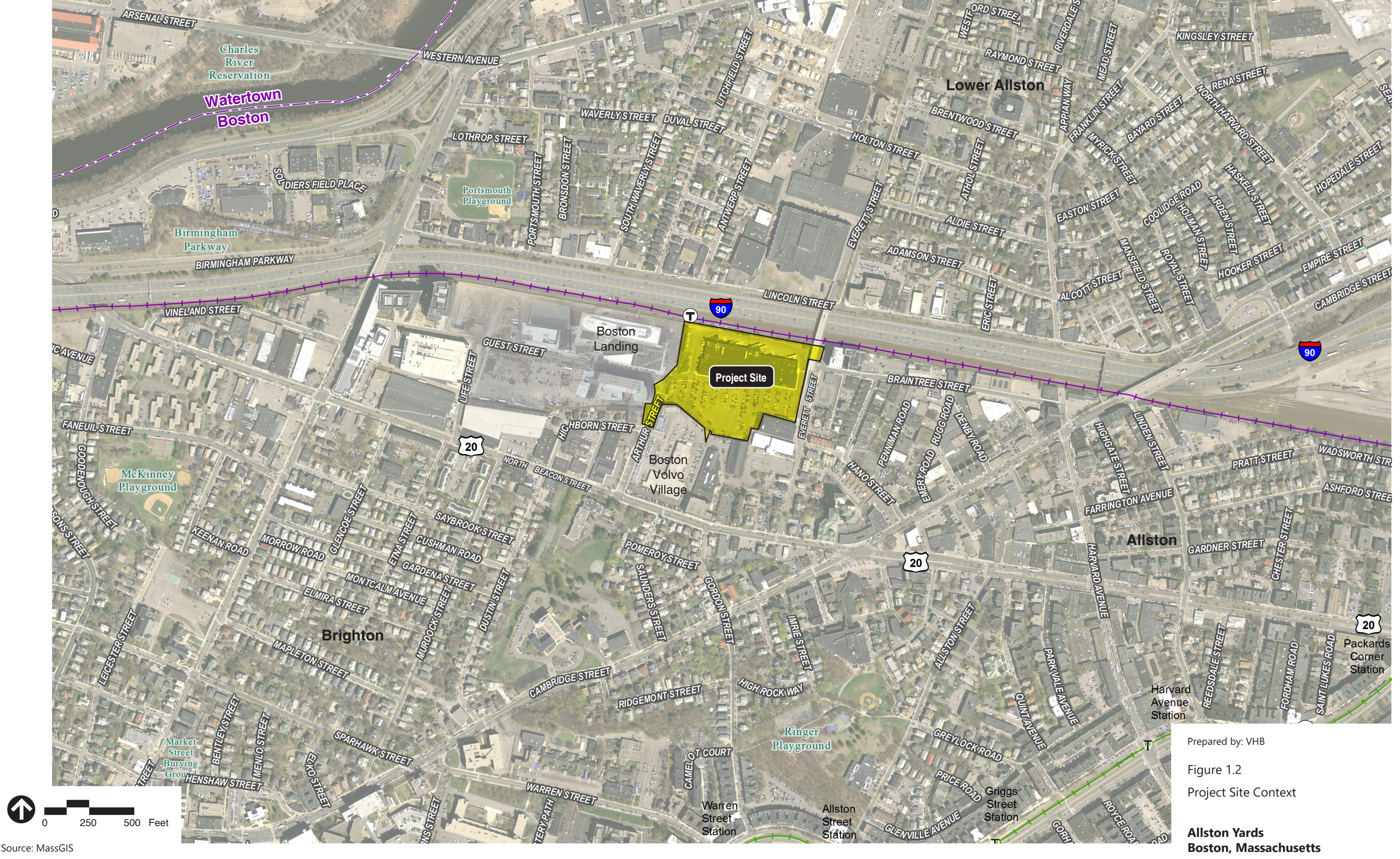


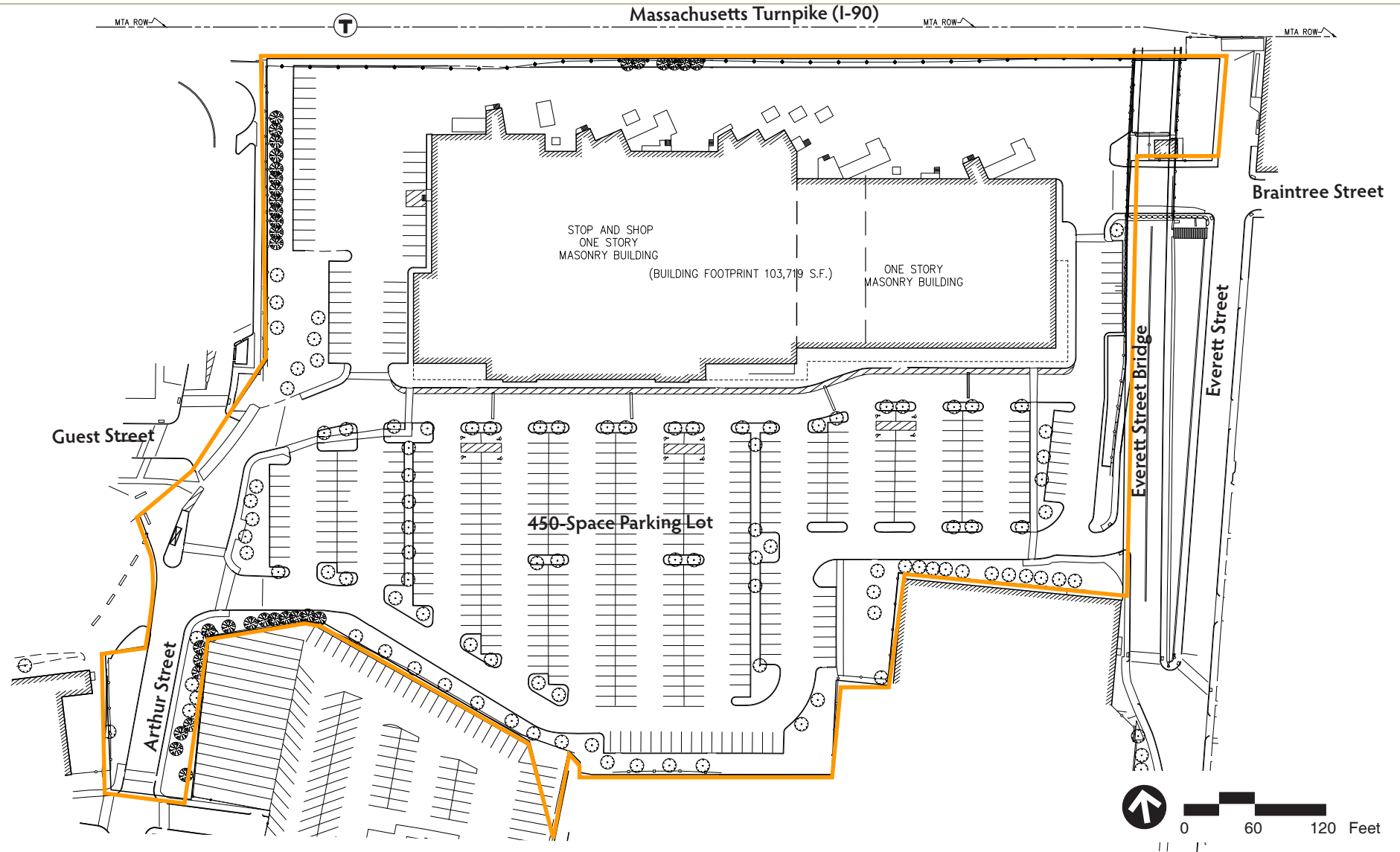
Source 2015 USGS

Prepared By: VHB

Figure 1.1
Site Locus Map

**Allston Yards
Boston, Massachusetts**





Source: VHB Survey

Prepared By: VHB

— Project Site Boundary

Figure 1.3

Existing Conditions Site Plan

**Allston Yards
Boston, Massachusetts**



Prepared by: VHB

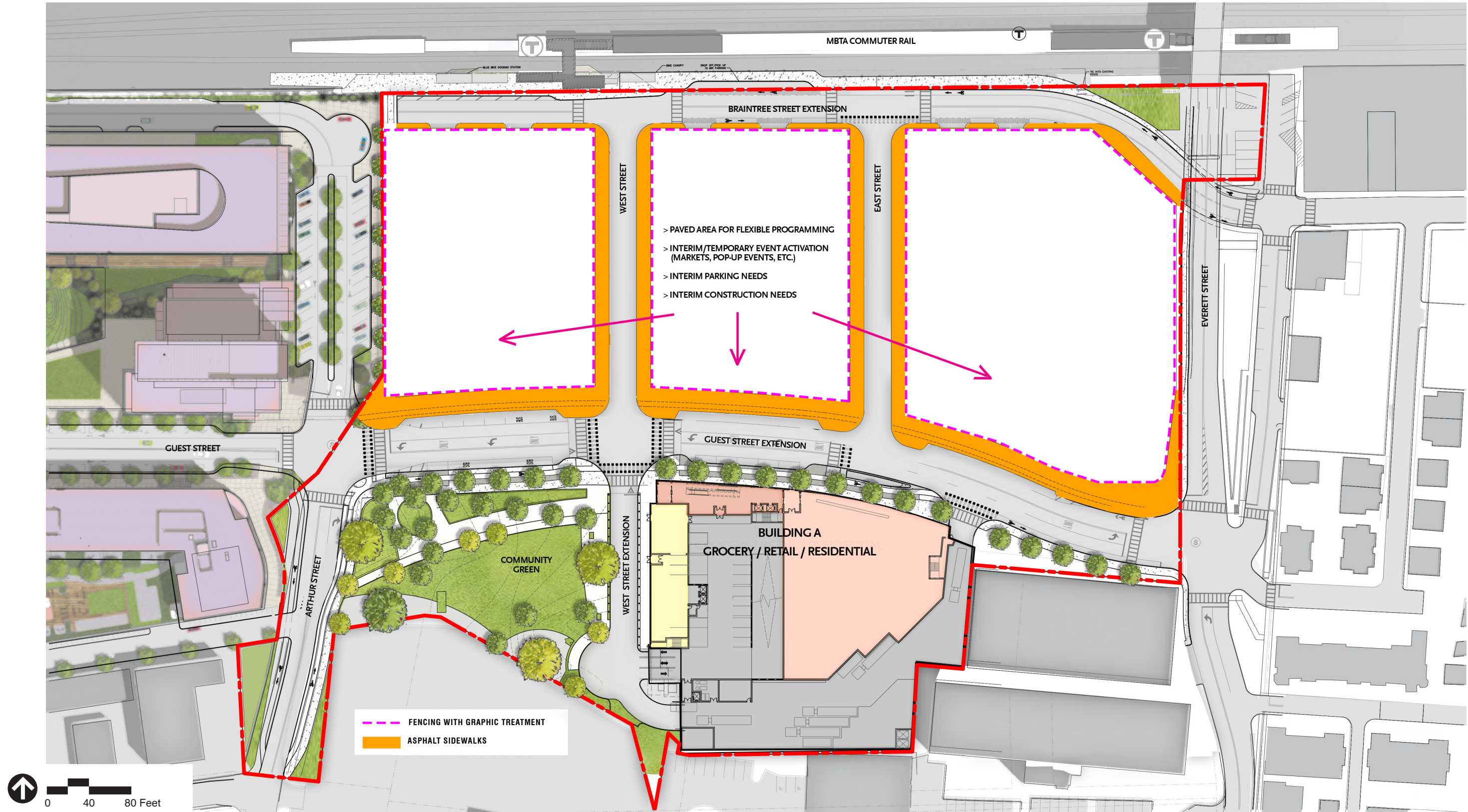
Figure 1.4
Existing Site Photos



Prepared by: Elkus Manfredi Architects

Figure 1.5
Proposed Conditions Plan/
Ground Floor Plan

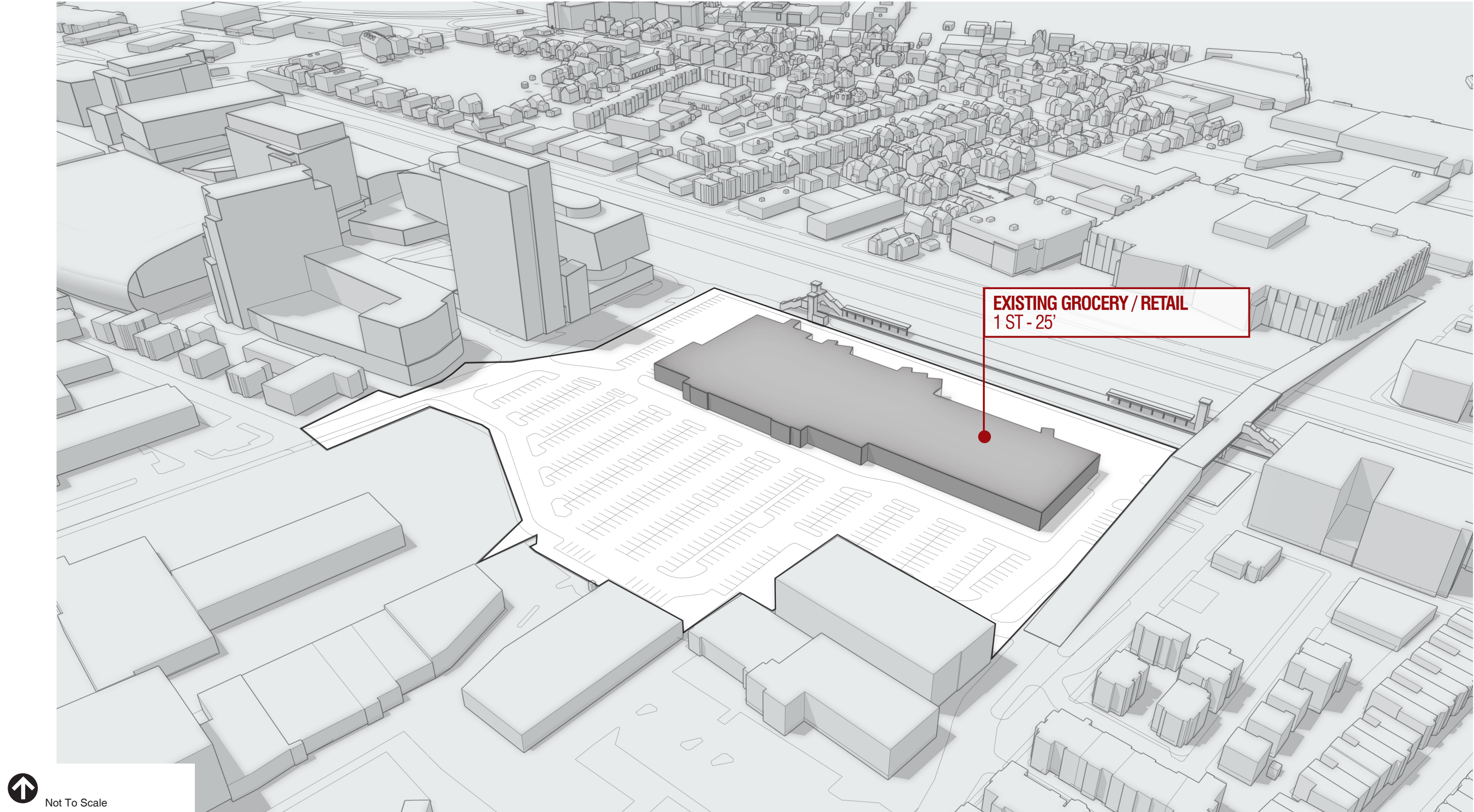
Allston Yards
Allston, Massachusetts



NOTE: FUTURE PHASES MAY BE DEVELOPED IN ANY SEQUENCE TO RESPOND TO MARKET CONDITIONS. AS FUTURE PHASES, WHICH MAY INCLUDE INDIVIDUAL BUILDINGS OR MULTIPLE BUILDINGS, ARE DEVELOPED, THE REMAINING UNDEVELOPED PARCELS WILL BE PROGRAMMED/MANAGED TO ACCOMODATE FLEXIBLE PROGRAMMING SPACE. INTERIM ROADWAY LOCATIONS AND USES WILL BE REVIEWED AS EACH PHASE IS ADVANCED, WHICH MAY RESULT IN INTERIM MODIFICATIONS

Prepared by: Elkus Manfredi Architects

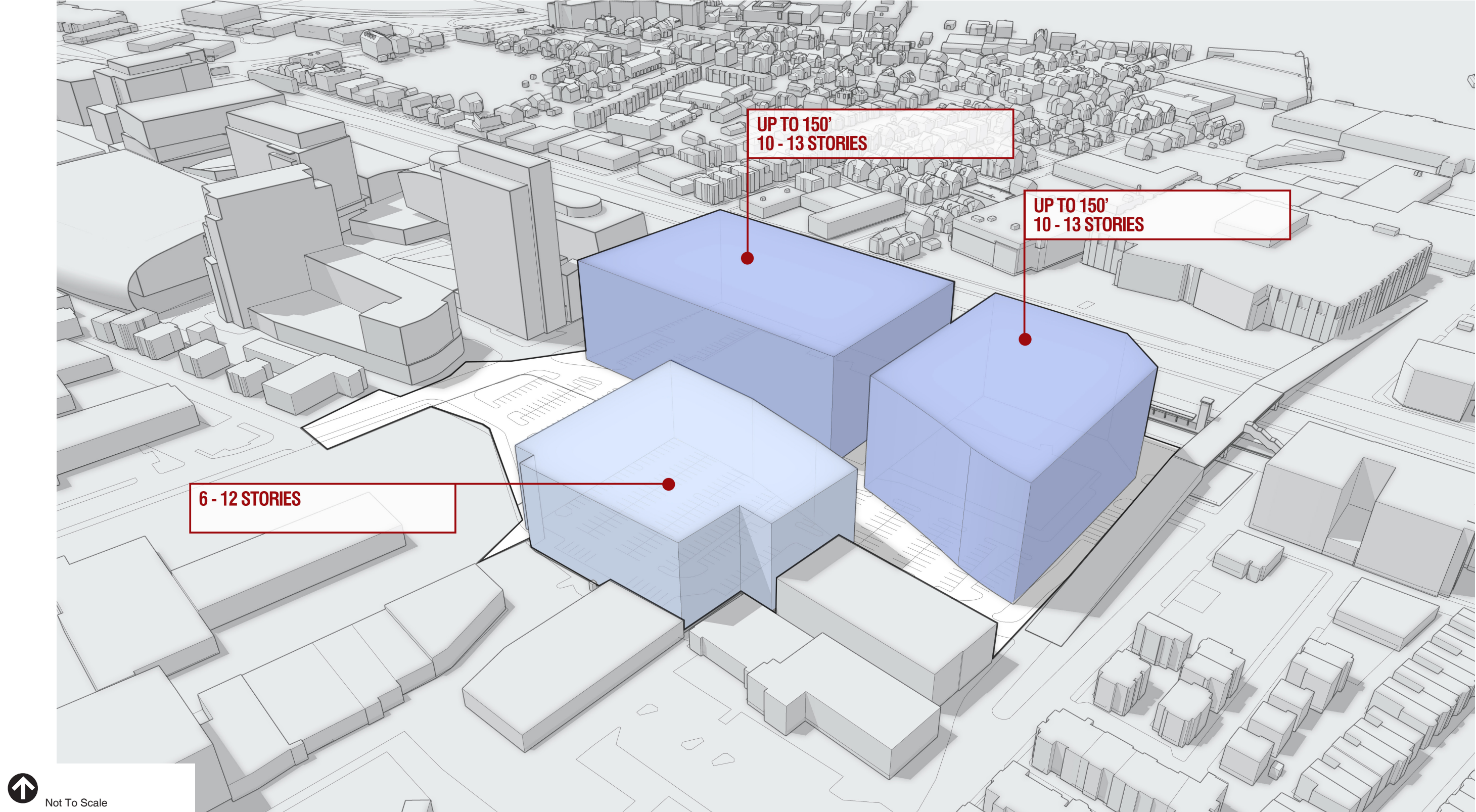
Figure 1.6
Phasing Diagram



↑
Not To Scale

Prepared by: Elkus Manfredi Architects

Figure 1.7a
No-Build Alternative



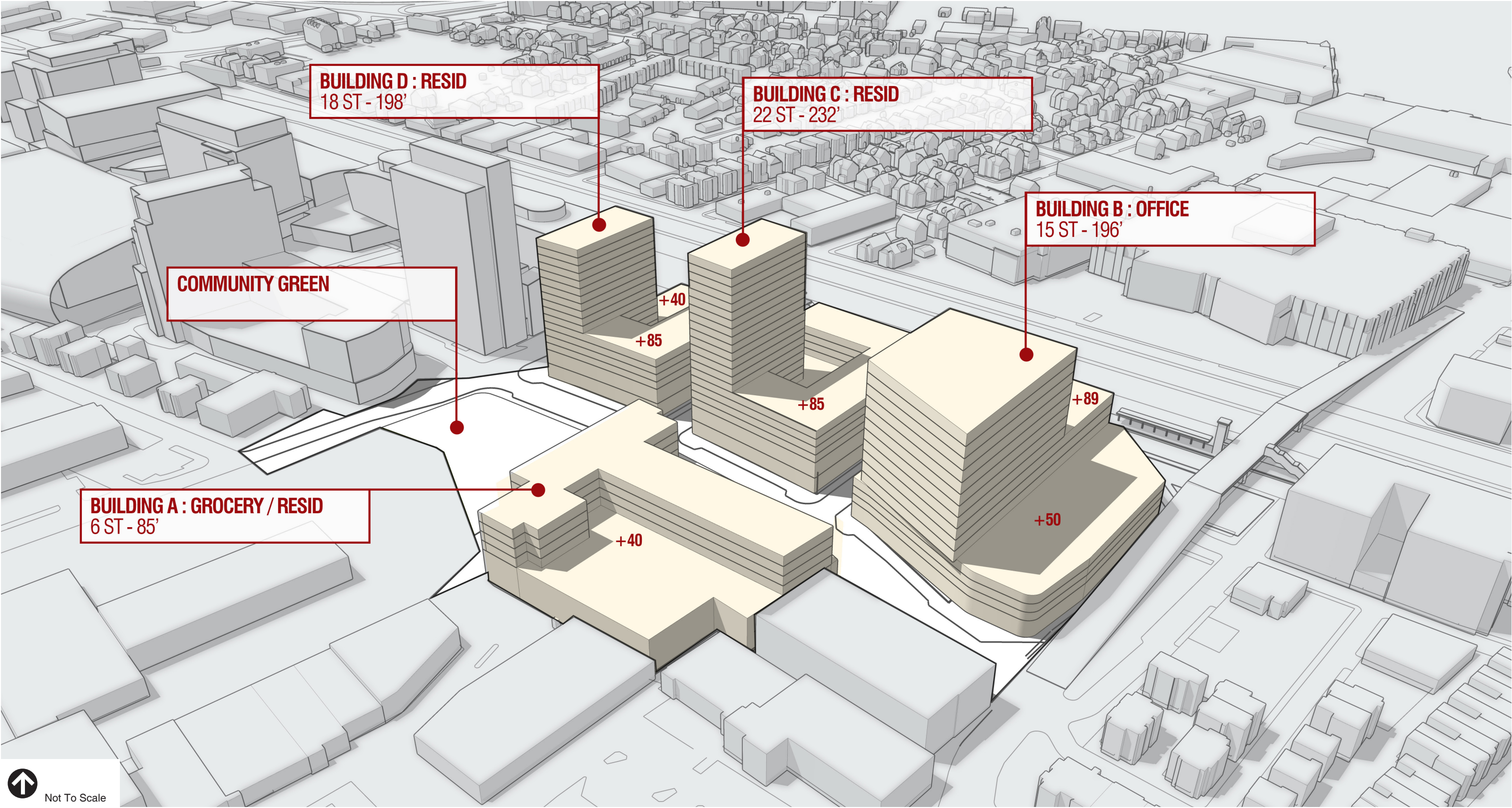
Prepared by: Elkus Manfredi Architects
Figure 1.7b
Guest Street Planning Build Alternative



↑
Not To Scale

Prepared by: Elkus Manfredi Architects

Figure 1.7c
PNF Build Alternative



Prepared by: Elkus Manfredi Architects

Figure 1.7d
Preferred Build Alternative

2

Regulatory Context and General Information

This chapter describes the local planning and regulatory controls and anticipated permits and approvals applicable to the Project.

In compliance with Article 80 requirements, Section 2.4 of the PNF presented legal information relative to the Project Site. There are no changes or updates to that information at this time.

2.1 Local Planning/Zoning and Regulatory Controls

The Project Site is located within the Guest Street Local Industrial Sub-district (the "Guest Street LI-2 District") within the Allston-Brighton Neighborhood District governed by Article 51 of the Boston Zoning Code (the "Code"). While not adopted as zoning, the Project Site is located within the area of the Brighton Guest Street Area Planning Study (the "Guest Street Planning Study"). The Project Site is not within any zoning overlay districts. Zoning relief for the Proposed Project will be required to be obtained through adoption of a Planned Development Area Development Plan which may be through adoption of a PDA Master Plan and individual PDA Development Plans (the "PDA Development Plan"), pursuant to Article 80C of the Code. Planned Development Areas are specifically allowed in the Guest Street LI-2 District by Section 51-44 of the Code.

The PDA Development Plan to be submitted and adopted for the Proposed Project will include the entire Project Site and Proposed Project. Filing for Large Project Review and a PDA Development Plan for the entire Proposed Project will allow the Proposed Project's impacts, mitigation and program to be studied and reviewed in a comprehensive manner. As the design of Phase 1 of the Proposed Project is more advanced, the Proponent will seek approval of the design of Building A by the Boston Civil Design Commission ("BCDC") in conjunction with the Proposed Project's Large Project Review, with the design review of later phase buildings to follow.

2.1.1 Demonstration of Compliance with Zoning

Uses

In the Guest Street LI-2 District, all office uses, open space uses, certain restaurants and local retail uses are allowed by right. General retail uses are allowed by conditional use permit; residential uses are not permitted. As noted above, zoning relief to allow the Proposed Project's uses, as necessary, will be obtained via adoption of a PDA Development Plan. The appropriate number of required off-street

parking spaces and off-street loading facilities for the Proposed Project will be determined through Large Project Review. The Proposed Project's general conformity of proposed parking, including bicycle parking, to Boston Transportation Department guidelines is addressed in Chapter 5, *Transportation*.

Building Dimensions

The Guest Street LI-2 District allows building dimensions of up to 45 feet in building height, a FAR of 2, front yards of 5 feet and rear yards of 12 feet. The Guest Street LI-2 District also requires 50 square feet of open space per dwelling unit. As noted in the Guest Street Planning Study, most of the study area, including the Project Site, is zoned as a local industrial sub-district, a classification that is "somewhat outdated and could limit the range of future development." As the Project Site is located along the Turnpike, the Project Site is located within an area of the Guest Street Planning Study in which a FAR range of 3 to 4 was recommended, as well as taller building heights. The Proposed Project's preliminary FAR based on the total area of the Project Site is approximately 2.7 (excluding below-grade space, parking, ramps, mechanical space and interior bike storage space). The Proposed Project's preliminary building heights, which range from approximately 85 to 232 feet, calculated in accordance with the Code, are consistent with the building heights of the adjacent Boston Landing project.

Notwithstanding the general conformity of the Proposed Project to the Guest Street Planning Study, the Proposed Project will require zoning relief from the building height, FAR, and other dimensional requirements of underlying zoning. As noted above, zoning relief will be obtained through adoption of a PDA Development Plan.

2.1.2 Article 80 Large Project Review

The Proposed Project requires Large Project Review pursuant to Article 80B of the Code because it involves new construction in excess of 50,000 square feet of Gross Floor Area and adoption of a PDA Development Plan pursuant to Article 80C of the Code. Proponent filed a Letter of Intent ("LOI") with the BPDA on February 10, 2017 as the initial step in the Article 80 review process. In January 2018, the Proponent filed a Project Notification Form ("PNF") to commence public review of the Proposed Project and its potential environmental and community. This Draft Project Impact Report ("DPIR") is a continuation of the Large Project Review process and responds to the Scoping Determination issued on the PNF by the BPDA on August 3, 2018.

Also, in connection with the Large Project Review, the Proposed Project will be subject to, among other requirements: (i) BCDC Review; (ii) Development Impact Project Exactions under Section 80B-7 of the Code; and (iii) the green building requirements of Article 37 of the Code, which are described further in Section 2.2 below.

Development Impact Project (DIP)

The Proposed Project is a Development Impact Project (DIP) within the meaning of Section 80B-7 (Development Impact Project Exactions). Based on a preliminary

estimate, approximately \$4.2 million will be provided to the City as a result of the Project. The DIP exactions are calculated based on the amount of office square footage (375,000 SF) plus the amount of retail and restaurant square footage (117,000 SF), minus 100,000 SF, and multiplies by the current combined DIP exaction rate of \$10.81.

2.1.3 Boston Civic Design Commission

The Proposed Project will comply with the provisions of Article 28 of the Boston Zoning Code. Since the submission of the PNF in January 2018, the Project Team participated in a pre-DPIR filing hearing with BCDC (on July 10, 2018) for feedback on the refined site plan and building height/massing from what was previously presented in the PNF. The Project Team has also met with BPDA Urban Design staff to review the design of the Project and public realm.

Building A constitutes Phase 1 of the long-term multi-phased redevelopment project. Therefore, the Proponent is seeking BCDC approval of Building A at this time and will provide the appropriate level of detailed plans to obtain the necessary approval.

2.1.4 BPDA Smart Utilities Pilot Policy

Adopted in June 2018, the BPDA's Smart Utilities Pilot Policy seeks to develop a more equitable, sustainable, affordable, resilient, and integrated planning approach among energy, transportation, water and communication utilities in the City of Boston. Key elements of the policy include:

1. *A Feasibility Assessment for a District Energy Microgrid* – While the Proposed Project is below the applicable review threshold of “at or above 1.5 million square feet of floor area,” the Proponent recognizes the benefits associated with this technology and is voluntarily studying a feasibility assessment of incorporating a District Energy/Microgrid system for the Proposed Project. The Proponent has met with BPDA staff on September 19, 2018 and January 8, 2019 to discuss study approach, potential regulatory opportunities and constraints, as well as anticipated timing for study completion. Refer to Section 7.3.5 of Chapter 7, *Greenhouse Gas Emissions Assessment*, for further details on the feasibility study.
2. *Incorporation of a Telecom Utilidor* – The Proposed Project will incorporate this component to the maximum extent practicable. Refer to Section 8.6.5 of Chapter 8, *Infrastructure*, for further details.
3. *Use of Green Infrastructure* - The Proposed Project is expected to improve stormwater runoff quality and reduce peak flows by increasing landscaping and pervious areas, and through the use of treatment and infiltration facilities. Refer to Section 4.3.2 in Chapter 4, *Sustainability and Climate Change Resiliency*, for consideration of green roofs, and Section 8.3 of Chapter 8, *Infrastructure*, for further details related to the proposed stormwater management system.

4. *Incorporation of Adaptive Signal Technology* (and any related components into the traffic signal system network, consistent with any applicable BTM standards or guidelines) – Adaptive signal technology will be installed as part of the proposed traffic improvements for the Proposed Project, as discussed in Section 5.7.1 of Chapter 5, *Transportation*.
5. *Incorporation of Smart Street Lights* – The Proposed Project will include additional electrical connection and fiber optic service in all street light installations (or a contribution toward the same), consistent with any applicable Public Works Department (PWD) standards or guidelines. Refer to Section 8.6.5 of Chapter 8, *Infrastructure*, for further details.

2.2 Updated List of Anticipated Permits/Approvals

Table 2-1 presents a preliminary list of permits and approvals from governmental agencies that are expected to be required for the Proposed 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 may be required.

Table 2-1 Anticipated Project Permits and Approvals

Agency/Department	Permit/Approval/Action
Federal	
Environmental Protection Agency	NPDES General Construction Permit
	NPDES Remediation General Permit
Federal Aviation Administration	Determination of No Hazard to Air Navigation
Commonwealth of Massachusetts	
Executive Office of Energy and Environmental Affairs	Massachusetts Environmental Policy Act (MEPA) Review
Massachusetts Historic Commission	State Register Review
Department of Environmental Protection	Fossil Fuel Utilization Permit (as required)
	Notice of Demolition/Construction
	Pre-Asbestos Removal Notice (as required)
	M.G.L. 21E actions (as required)
	Brownfields Tax Credits
Massachusetts Water Resources Authority	Air Quality Permit for heating boilers and generators (Environmental Results Program (ERP)/Plan Approval as required)
	Temporary Construction Dewatering Permit (issued jointly with BWSC, if necessary)
Massachusetts Department of Transportation	Sewer Use Discharge Permit (as required depending on Project uses)
	M.G.L. c. 40 s. 54A Consent
	Vehicular Access Permit
	Work within highway easement area (as required)
	License and/or Easement related to Boston Landing Station Connection (as required)

Table 2-1 Anticipated Project Permits and Approvals (Continued)

Agency/Department	Permit/Approval/Action
Massachusetts Bay Transportation Authority	Approvals related to the connection to the Boston Landing MBTA commuter rail station and/or to construct Braintree Street Extension, such as a license and/or easement agreement (as required)
City of Boston	
Boston Planning & Development Agency	Article 80B Large Project Review
	Article 80C Planned Development Area (PDA) Development Plan Approval
	Cooperation Agreement
	Development Impact Project Agreement
	Affordable Housing Agreement
	Certification of Consistency and Compliance
Boston Interagency Green Building Committee	Zoning Article 37 Green Building compliance and Climate Resiliency Checklist review
Boston Zoning Commission	PDA Development Plan Approval
Boston Civic Design Commission	Design Review
Boston Employment	Boston Residents Construction Employment Agreement
Boston Water and Sewer Commission	Site Plan Review
	Water and Sewer Connection Permits
	Cross Connection Backflow Prevention Approval (as required)
	Temporary Construction Dewatering Permit
	Easement Relocation (as required)
Public Improvements Commission	Pedestrian Easement Acceptance
	Specific Repair Plan
	Permit/Agreement for Temporary Earth Retention Systems, Tie-back Systems and Temporary Support of Subsurface Construction (as required)
	Vertical Discontinuance (as required)
	Permit for Sign, Awning, Hood, Canopy or Marquee (as required)
	Easement Relocation (as required)
	Line and Grade and Layout Approval
Boston Fire Department	Storage Tank Permit
Boston Transportation Department	Construction Management Plan
	Transportation Access Plan Agreement
Boston Public Works Department	Curb Cut Permit(s)
	Street Opening Permit (as required)
	Street/Sidewalk Occupancy Permit (as required)
Public Safety Commission Committee on Licenses	Permit to Erect and Maintain Garage
	Flammable Storage License
Boston Inspection Services Department	Demolition Permits
	Building Permits
	Certificates of Occupancy

2.2.1 Architectural Access Board Requirements

The Proposed Project will comply with the requirements of the Massachusetts Architectural Access Board and will be designated to comply with the standards of the Americans with Disabilities Act. See Appendix C for the Accessibility Checklist.

2.2.2 Massachusetts Environmental Policy Act (MEPA)

The Project is subject to review by the Office of the Massachusetts Executive Office of Energy and Environmental Affairs (EEA) under the Massachusetts Environmental Policy Act (MEPA) because it requires one or more state agency actions and exceeds a review threshold pursuant to:

- › 301 CMR 11.03(6)(a)(6) – Generation of 3,000 or more new average daily trips on roadways providing access to a single location; and
- › 301 CMR 11.03(6)(b)(15) – Construction of 300 or more new parking spaces at a single location.

In December 2017, the Proponent commenced the City of Boston Article 80B, Large Project Review process by filing a PNF. The PNF included a full study of traffic and transportation impacts, as well as other studies of potential environmental impacts (i.e., infrastructure needs, water quality, sustainability, estimated energy usage and associated GHG emissions, climate resiliency, historic resources)—all of which have been reviewed by the BPDA, city departments and local community. Additionally, as demonstrated in Section 2.3 below, the Proponent has coordinated with state agencies prior to this filing, including MassDOT, MBTA, DOER, and the MEPA Office. On December 13, 2018, the Proponent received the Transportation Scoping Letter (TSL) from MassDOT outlining the requirements of the Transportation Impact Assessment (TIA). Chapter 5, *Transportation*, provides details that respond to the majority of the components of the scope of work as laid out in the TSL. The Proponent plans to submit additional information primarily related to the Transit Capacity Analysis prior or as part of the Project's next MEPA filing.

The existing conditions MBTA ridership data for the Framingham/Worcester commuter rail line needed for the transit analysis has not yet been publicly released. The only available data is from prior to the construction of the Boston Landing MBTA commuter rail station and other notable schedule changes along this line. Accordingly, this current evaluation provides the existing conditions analysis for MBTA bus operations only. Once the required commuter rail data has been published, the breakdown between bus and rail ridership can be determined, which will allow for the subsequent future conditions analysis to be conducted. This analysis will also be provided to the MBTA following the EENF submittal, with the results summarized in the subsequent MEPA filing. Refer to Appendix D for a copy of MassDOT's December 13, 2018 TSL.

In addition, the Proposed Project is subject to an agreement with the MBTA and MassDOT dated March 1, 2016, related to the prior termination of certain easements by such agencies, which agreement requires MEPA review of any proposed work or

activities on the Project Site that would exceed any MEPA review threshold. A copy of this agreement is provided in Appendix D.

Consistent with the MEPA Regulations, the analysis presented within this EENF/DPIR considers “the positive and negative, short-term and long-term potential environmental impacts for the Proposed Project, and the cumulative impacts of the Proposed Project and any other project or other work or activity in the immediate surroundings and region.” This document also includes extensive details that address all comments received by agencies and the community on the PNF. Given this previous extensive study of potential environmental and community impacts, and the ongoing public review and agency coordination, the Proponent requests that the Secretary allow the filing of a Single EIR (“SEIR”) in lieu of the two-stage Draft and Final EIR process. The filing of a SEIR will be determined as part of the EENF Certificate.

2.2.3 Massachusetts Historical Commission

The Massachusetts Historical Commission (MHC) has review authority over projects requiring state or federal funding, licensing, permitting, and/or approvals, in order to evaluate potential direct or indirect impacts to properties listed in, or eligible for listing in, the National and State Registers of Historic Places, in compliance with State Register Review requirements (M.G. L. Chapter 9, Sections 27-27c, as amended by Chapter 254 of the Acts of 1988). The filing of this EENF for review under MEPA will initiate MHC review of the Proposed Project.

2.3 Agency Coordination

The Proponent has met with members of the BPDA, including development review and design review staff, as well as other key city staff to review the Proposed Project. The Proponent, along with its development team, has also met with BTM to discuss site access and circulation, as well as connections to adjacent properties.

Since the PNF filing, the Proponent has participated the following agency pre-filing meetings for this EENF/DPIR:

- › MBTA – April 30, 2018; October 18, 2018; and December 6, 2018
- › BPDA – November 16, 2018 and December 19, 2018
- › BPDA (specific to the Smart Utilities Pilot Policy and Microgrid Feasibility Study) – September 19, 2018 and January 8, 2019
- › MassDOT – November 27, 2018
- › BTM – December 19, 2018
- › MEPA Office – January 10, 2019
- › City Councilor Mark Ciommo – January 16, 2019
- › State Representative Kevin Honan – January 16, 2019
- › State Representative Michael Moran – January 16, 2019
- › DOER – January 25, 2019

- › City of Boston Office of Neighborhood Services – January 31, 2019

2.4 Development Team

Stop & Shop Supermarket Company

The Stop & Shop Supermarket Company opened its very first supermarket in 1914 in Somerville, MA. Today, Stop & Shop operates 132 stores in the Commonwealth, nine of those stores are located within the City of Boston and approximately 1,300 associates are employed.

Stop & Shop has a long commitment to supporting organizations that help end hunger and recognizes the important role it plays in providing food to those in need throughout New England. In addition, Stop & Shop is committed to improving the quality of life for children and is a charter sponsor of Family Aid and Bottom Line organizations.

In 2016, Stop & Shop donated a total of \$23 million in combined cash and product donations, including contributions from customers, vendors, and associates.

Donations served to:

- › Fight hunger through cash and product donations to regional food banks and local hunger relief organizations. In 2016, Stop & Shop donated more than \$14 million in cash and product to regional food bank partners and local hunger relief organizations through various programs.
- › Through a 26-year partnership with the Dana-Farber Cancer Institute, customers, associates and vendors have come together to raise millions for pediatric cancer research and care at the Dana-Farber Cancer Institute.
- › Fund scholarship programs and educational needs through Stop & Shop's A+ Rewards Program.
- › Support the U.S. military members and their families by raising money for the USO of New England.
- › Support non-profit organizations around New England, including Boys & Girls Club, United Way, and YMCA.

Stop & Shop has been operating in the Allston-Brighton community for over 20 years and the proposed redevelopment of the Project Site further deepens Stop & Shop's commitment to the community by providing a modern grocery store facility with expanded offerings, the latest energy efficient and sustainable green building design while also creating a dynamic and lively project as an extension of the established neighborhood.

As demonstrated in the list of key development team members below, Stop & Shop has partnered with a development team experienced in delivering mixed-use projects with a variety of housing types and exciting retail uses.

New England Development

For over 40 years, New England Development, based in Boston, has taken a creative, entrepreneurial approach to real estate development and management—delivering and sustaining successful projects across a wide range of property types. These projects transform complex challenges into preferred locations, generate long-term value to communities, afford compelling opportunities for local and national businesses, and offer sought-after experiences to a wide range of consumers. New England Development has more than 50 million square feet of retail and commercial space to its credit.

New England Development is acclaimed for creating some of the country's most widely recognized and successful regional centers, as well as multifaceted developments that combine retail, residential, hotel, and office uses.

For example, in Boston, New England Development planned and permitted Pier 4, Boston's most iconic waterfront address, to include over 1 million square feet of residential, office, retail and civic uses on approximately 9.5 acres.

New England Development prides itself on an all-inclusive approach to development, seeking input from community leaders and partnering with state and city entities, neighborhoods, residents, and tenants.

New England Development is acclaimed for creating some of the country's most widely recognized and successful regional centers, as well as multifaceted developments that combine retail, residential, hotel, and office uses, and often require significant master planning and permitting efforts.

Highlights of New England Development's master-planned projects in Massachusetts include:

- › **CambridgeSide, Cambridge, Massachusetts:** Developed by New England Development on the site of the original Lechmere store, this one million square foot project on 11 acres in East Cambridge includes the CambridgeSide shopping center, a parking garage, two office buildings, and the Hotel Marlowe, a Kimpton property. A prime example of a large-scale mixed-use urban project completed in phases over several years, the shopping mall opened in 1990, the office buildings were completed in 1995 and 1998, and the hotel opened in 2003. New England Development is in the process of a \$30 million renovation of the shopping center. CambridgeSide exemplifies New England Development's development acumen, spirit of partnership with city officials, and sensitivity to the existing architectural environment.
- › **University Station, Westwood, Massachusetts:** University Station is a transit-oriented, mixed-use development in Westwood, Massachusetts adjacent to the Route 128 MBTA/Amtrak Station. Combining unique retail, restaurant, fitness, hotel, office, and residential uses, the 125-acre property is zoned for mixed use and allows 750,000 SF of retail and restaurant uses. The 2.1 million SF master plan transformed formerly vacant industrial property into a destination for commercial

and residential uses in greater Boston, creating economic drivers for the Town of Westwood and the region.

The Bozzuto Group

The Bozzuto Group is an experience-focused real estate company that is continually celebrated for its developments, customer service, and workplace culture.¹ With an expertise in homebuilding, multifamily development, construction and management for itself and its clients, Bozzuto is devoted to crafting extraordinary experiences. This commitment is applied to creating communities that mix belonging and inspiration with the promise of adventure and discovery.

Founded in 1988, Bozzuto has developed, acquired and built more than 42,000 homes and apartments. Currently, it manages more than 60,000 apartments and 2 million square feet of retail space along the East Coast between Miami and Boston, in the Northeast and Chicago.

Southside Investment Partners

Southside Investment Partners is a developer and owner of retail and mixed-use properties throughout the Mid-Atlantic and New England.² Based in Baltimore, Maryland (MD) with a second office in Bethesda, MD, the company pursues new investment opportunities – either through new development, or by investing in assets in need of redevelopment.

2.4.1 List of Development Team Members

The following provides a list of the members of the Development Team with contact information.

Proponent	The Stop & Shop Supermarket Company, LLC 1385 Hancock Street Quincy, MA 02467 (781) 380-8000 <i>Contacts:</i> Guy Stutz, Vice President Real Estate
Proponent/Master Developer	New England Development 75 Park Plaza Boston, MA 02116 617-965-8700 <i>Contacts:</i> Stephen Karp, Chairman John Twohig, Executive Vice President Michael Barelli, Vice President William O'Brien, Vice President Director of Construction

¹ For more information visit www.bozzuto.com.

² For more information visit www.southsidellc.com.

<i>In Partnership with:</i>	<p>The Bozzuto Group 60 Mall Road Burlington, MA 01803 857-301-7018 <i>Contact:</i> Lauren Jezienicki, Senior Vice President</p> <p>Southside Investment Partners 2800 Quarry Lake Drive, Suite 320 Baltimore, MD 21209 410-308-6373 <i>Contact:</i> Ben Hoskins, President</p>
Master Planner	<p>Elkus Manfredi Architects 25 Drydock Avenue Boston, MA 02210 617-426-1300 <i>Contact:</i> David Manfredi, FAIA, LEED AP, Founding Principal Christian Galvao, Vice President</p>
Architect	<p>Stantec Architecture 311 Summer Street Boston, MA 02210 617-234-3100 <i>Contacts:</i> James Gray, Senior Principal Eric Weyant, Principal</p>
Legal Counsel	<p>Goulston & Storrs 400 Atlantic Avenue Boston, MA 02110 617-482-1776 <i>Contact:</i> Christian Regnier, Director</p> <p>Sherin & Lodgen 101 Federal Street Boston, MA 02110 617-646-2000 <i>Contact:</i> Ronald W. Ruth, Partner</p>
Permitting Consultant, Transportation, Site Civil Engineering, Cultural Resources	<p>VHB 99 High Street, 10th Floor Boston, MA 02110 617-728-7777 <i>Contacts:</i> Michael McNeice, Principal-In-Charge Elizabeth Grob, Director of Urban Permitting Lauren DeVoe, Senior Environmental Planner Van Du, Sustainability Planner Rick Dupuis, Civil Engineer/Project Manager Pat Dunford, Transportation/Traffic Engineer Heidi Richards, Air Quality/Noise Services Carolyn Barry, Preservation Planner</p>

Landscape Architect	<p>Copley Wolff Design Group 160 Boylston Street, 3rd Floor Boston, MA 02116 617-654-9000 <i>Contacts:</i> John Copley, ASLA, Principal James A. Heroux, ASLA, Senior Landscape Architect</p>
Geotechnical Services	<p>Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129 617-886-7389 <i>Contacts:</i> Mark Balfe, P.E., Senior Associate Jesse Siegel, P.E., Project Manager/Senior Technical Specialist</p>
Sustainable Design Consultant	<p>The Green Engineer, Inc. 54 Junction Square Dr. Concord, MA 01742 978-369-8978 <i>Contact:</i> Sarah Michelman, RA, LEED AP BD+C, Principal</p>
Wind & Solar Glare Technical Expert	<p>RWDI Consulting Engineers and Scientists 600 Southgate Drive Guelph, Ontario, Canada N1G4P6 519-823-1311 <i>Contact:</i> Bill Smeaton, Principal/Senior Project Manager</p>
Mechanical, Electrical, and Plumbing Engineer; Smart Utility	<p>WSP USA 88 Black Falcon Avenue, Suite 210 Boston, MA 02210 617-210-1600 <i>Contacts:</i> Michael F. Brown, Senior Vice President Nancy Gould, PE, LEED AP, Associate David Venturoso, PE, CEM, Associate Commissioning Claire McKenna, Associate</p>
Structural Engineer	<p>Odeh Engineers 1223 Mineral Spring Avenue North Providence, RI 02904 51 Sleeper Street Boston, MA 02210 401-724-1771 <i>Contact:</i> David J. Odeh, Principal</p>

3

Urban Design

This chapter provides detailed descriptions of the design of the Proposed Project, including its substantial public realm improvements. Consistent with the City's and community's vision from the Brighton Guest Street Area Planning Study (the "Guest Street Planning Study") and Smart Growth principles, the Proposed Project provides the opportunity to transform an underutilized site currently consisting of big box retail with a vast surface parking lot into a vibrant urban mixed-use neighborhood. The Proposed Project builds on and complements the newly created Boston Landing development by constructing new residential, office, and retail uses with direct access to the Boston Landing MBTA commuter rail station and other amenities, including a flagship grocery store, an activated and programmed Community Green, and widened sidewalks with ground floor retail and restaurants that connect to the existing neighborhood.

Since Building A's design is more advanced, the Proponent has provided a more detailed written description of the design of said building, along with floor plans, massing studies, and rendered perspectives. The design details of other buildings will be submitted for design approval as such buildings advance for construction.

3.1 Summary of Key Findings and Benefits

The key findings and benefits of the Proposed Project related to urban design include:

- › Transform an underutilized urban site into a vibrant mixed-use neighborhood that will connect the Project Site to the Allston neighborhood;
- › Complement the architectural characteristics of the surrounding neighborhood, such as the recently built Boston Landing community by providing articulated massing and striking architecture;
- › Provide convenient walking paths to the adjacent Boston Landing MBTA commuter rail station, nearby MBTA bus stops, office buildings and other amenities, including shops and restaurants in the Allston-Brighton neighborhood;
- › Create a walkable development in a TOD location with a Walk Score® of 91¹;
- › Provide a separate protected cycle track along Guest Street Extension and a portion of Arthur Street (within the Project Site), and an on-street level designated bike lane on Braintree Street Extension;

¹ Walk Score® is a numerical evaluation of walkability and access to transportation for choosing where to live to promote walkable neighborhoods. Walk Score uses a number rating system between 0 and 100 to measure the walkability of any address. For further information visit: <https://www.walkscore.com/how-it-works/>

- › Provide publicly-accessible walkways along all streets with complete pedestrian accessibility to and from the Project Site;
- › Create approximately 2.5 acres of public realm space—site area dedicated to streets, sidewalks, hardscape plazas, and an approximately one-acre Community Green at the corner of Guest and Arthur Streets accessible for all residents and the greater Allston-Brighton community; and
- › Provide 8-foot wide sidewalks for the majority of the Project Site. Along Braintree Street Extension the sidewalk width will be five (5) feet as it enters the Project Site and expand to as wide as 11 feet on main pedestrian corridors.

3.2 Neighborhood Context

As shown on Figures 3.1a and 3.1b (showing the existing and proposed site context, respectively), the Project Site is located in between the Brighton and Allston neighborhoods of Boston. The existing Project Site and immediate building adjacencies are varied in height, scale, use and materiality, as the area is transitioning from lower-scale uses to a denser, mixed-use area. The Project Site is favorably positioned adjacent to the new larger-scale mixed-use Boston Landing development directly to the west, and railroad tracks with the Boston Landing MBTA commuter rail station to the north. Just beyond the railroad tracks lies the Turnpike with eight lanes of travel. The Boston Volvo Village property buffers the Project Site to the south. Some industrial low- to mid-rise uses and an established small-scale residential area lie to the east of the Project Site. The area's architectural language is diverse with a mixture of brick and masonry structures, glass and metal panel buildings, and wood shingle and clapboard residences. The Project Site is in close proximity to the arts, restaurants, and shopping destinations of the neighborhood to the south in Union Square, along Cambridge Street, and North Beacon Street. Figure 3.2 shows the existing land uses surrounding the Project Site.

3.3 Planning Principles and Design Goals

The Proposed Project's key goals are to:

- › Create a mixed-use neighborhood;
- › Provide a range of housing types (i.e., varying sizes and price points), including affordable and homeownership units;
- › Connect the Project Site to the Allston neighborhood and the Boston Landing MBTA commuter rail station with multi-modal transportation routes;
- › Transform a single large big-box site into smaller-scale development blocks in the scale of the adjacent recent Boston Landing development;
- › Create a new publicly-accessible Community Green that connects to local roadways and adjacent properties, such as Boston Landing;
- › Concentrate density along Guest Street Extension, and create a clustering of active uses around the Community Green; and

- › Provide differentiated architecture, active open spaces, plazas, and sidewalks.

Consistent with Smart Growth principles and the Guest Street Planning Study, a key goal of the Project is to introduce a variety of uses to the Project Site (including a range of housing opportunities), offer multi-modal transportation choices, and create a neighborhood with a strong sense of place. The Project is modeled on the framework developed in the Guest Street Planning Study coupled with the scale and vibrancy of the adjacent Boston Landing development and surrounding context.

3.3.1 Site Planning Strategy

Consistent with the goal of providing development blocks in keeping with the scale of the adjacent recent development, the Project Site has been divided into five distinct blocks, as illustrated in Figure 1.5. As discussed in Section 1.6 of Chapter 1, *Project Description and Alternatives*, upon completion of Building A, the remaining buildings are planned to be developed depending on market conditions or other factors.

The development team has worked extensively to incorporate the Guest Street Planning Study's recommendation for a connected street grid by including a series of key connections through the Project Site. Previous studies on behalf of the Boston Landing Master Plan considered a new connection of an extended Guest Street to a new road aligning south of Harvey Steel Road and requiring demolition of building(s) and removal of surface parking to connect to and access Everett Street. The Proposed Project aims to simplify this connection between existing Guest and Everett Streets, with the proposed Guest Street Extension creating an efficient link to improve circulation and access for adjacent neighborhoods.

The proposed site plan layout is organized around four distinct connections:

- › The new multi-modal Guest Street Extension as the primary east-west links across the Project Site from Everett Street to Arthur Street;
- › The connection along Guest Street Extension will ultimately tie back to Market Street across Boston Landing; and
- › The Braintree Street Extension fronting the train tracks and Turnpike will be predominately a service-oriented street while providing for pedestrian and bicycle access, and, in coordination with the MBTA, a proposed pedestrian connection to the Boston Landing MBTA commuter rail station and Kiss and Ride/shuttle drop off location.

Two new north-south links, temporarily identified as East and West Streets, will connect Guest Street Extension and Braintree Street Extension (Figure 1.5). The location of East Street will create a development parcel for and access to Building B, now programmed as an office building. West Street will lead pedestrians through the Project Site to the Boston Landing MBTA commuter rail station. At Guest Street Extension, West Street connects across to a new West Street Extension and the new Community Green as a welcoming gateway into the Project Site and Guest Street corridor. The proposed access and circulation network aims to expand street

connections through the Project Site while creating a mixed-use destination anchored by the Community Green. Location of the connection to the Community Green may be refined in the future as building design advances.

3.4 Building Design Concept and Development

Given the new construction in the immediate neighborhood, the development team aimed to design and set a tone for a new mixed-use neighborhood. Figures 3.3a through 3.3h present the currently proposed building floor plans, and Figure 3.4 provides a massing diagram for the Proposed Project.

The Project's buildings are located on four parcels, with a fifth parcel dedicated to publicly-accessible open space. Three parcels with taller buildings are located on the north side of Guest Street Extension, and two parcels are located south of Guest Street Extension—one consisting of public open space (the one-acre Community Green) and one with a low-rise mixed-use building. Following this concept, each parcel has been shaped further to accommodate a proper scale and variety to the building composition. Each parcel will have a distinct architectural language that will allow diversity not only in the building movements but also in its materiality. The combination of contemporary façade systems and the use of familiar traditional materials will bring identity to the neighborhood while respecting its history. Figures 3.5 through 3.10 show details of the proposed buildings in the form of building sections, building elevations, and view perspectives and including their relationship to adjacent buildings and neighborhood at large.

3.4.1 Height and Massing

The building heights and massing are informed by the guidelines outlined in the Guest Street Planning Study and are consistent with the existing and planned Boston Landing buildings so that the two developments relate while each are afforded dynamic downtown views. The Proposed Project concentrates massing along the north side of Guest Street Extension allowing the Community Green to receive maximum sky exposure.

All the proposed buildings' massing has been set back from the pedestrian edges along Guest Street Extension, Everett Street, and Braintree Street Extension. The massing of Buildings B through D step back from Braintree Street Extension to allow for views from the neighboring properties towards Boston, and to set back from the Boston Landing MBTA commuter train station and Turnpike. The tallest building height is proposed for Building C, which is located at the center of the massing composition stepping away from the surrounding neighborhood. The taller elements of the buildings north of Guest Street Extension are oriented north-south to allow long range views from Beacon Street through to the neighborhoods across the Turnpike. Building A and B "step down" in height to relate more closely to the adjacent, smaller-scale neighborhoods to the south and east, respectively.

The ground-floor residential units along West Street and East Street place street-side human-scaled elements, including terraces and garden space, at eye-level to activate the sidewalks. Arthur Street has the least amount of building massing along it, as most of its frontage is adjacent to the Community Green.

3.4.2 Character and Exterior Materials

As previously mentioned in the building design concept, the buildings will generally show diversity in its architectural massing and materiality. The use of materials such as brick, metal panels, steel, textured concrete, wood and glass, will provide a palette with a variety of choices to accomplish such diversity where needed. The character and exterior materials of the remaining proposed buildings have not yet been decided at this time and will be reviewed at a later time during Design Review for each building as design advances.

3.4.3 Signage

Major corners of pedestrian transition areas will receive illuminated wayfinding signage with site context and directional content. Wayfinding pylons are proposed at the intersections of Guest Street Extension and Arthur Street, West Street, and East Street. Retail and restaurant tenant, office tenant, and residential building signage will be visible along all interior streets and the Turnpike.

3.4.4 Phase 1 (Building A) Design

Since Building A's design is more advanced, the Proponent has provided a more detailed written description of the design of said building, along with floor plans, massing studies, and rendered perspectives. The design details of other buildings will be submitted for design approval as such buildings advance for construction.

Building A is influenced by its unique location and relationship both to Guest Street Extension and the Community Green. The proposed building is broken into two expressions including a two-story retail podium and four-story residential bar above it. The podium architecture follows the gentle curve of Guest Street Extension and is articulated with large expanses of glass and masonry allowing views into and out of the retail spaces. Entries to the retail tenants occur mid-block and at the corner of Guest Street Extension and West Street Extension. The residential lobby is located directly across from the Community Green, creating an active yet quiet liner.

The upper residential floors on Level 3-6 are setback from the Guest Street Extension podium, allowing the retail to engage the sidewalk and allow more sun to reach the ground along the north side of the building. Along West Street Extension and the Community Green the massing is flush, allowing residents on the upper levels to have views and a clear relationship to the public open space. The Community Green-facing façade will be expressed through a variety of punch windows, balconies, and Juliet balconies in a series of warm modern materials and colors with a variety of textures. Figures 3.11a through 3.11g present the Building A floor plans, Figure 3.12

shows the massing study for Building A, and Figures 3.13 through 3.14 present the building sections and elevations for Building A. Figures 3.16 through 3.20 present view perspectives of Building A.

Character and Materials

Influenced by Allston's history and neighborhood identity, Building A looks to implement a warm industrial color palette composed in a contemporary form. The building is designed as an interlocked expression of two distinct programs: retail and housing. The retail podium, anchored by a new grocery store on the first and second floors, is articulated primarily with curtainwall and charcoal masonry. Masonry "portals" frame the entry points at the street level and are accentuated with coursing that steps in and out, creating a unique texture and play of light and shadow. The retail windows are grouped, creating a two-story vertical slot that is accented with a bronze toned panel. The adjacent masonry piers are set in varying widths and make their way along the gentle curve of Guest Street Extension, supporting decorative lighting and retail signage opportunities. The common retail entry located mid-block is expressed with a series of horizontal louvers, creating identity and a connection to the ribbed masonry texture.

The residential levels are clad with a vertical oriented fiber-cement panel set in varying widths of 3, 6, and 12" and composed of warm tones in a variety of sand-blasted texture. The "T" shaped residential bar allows for the shorter leg along West Street Extension to engage with the Community Green. Its dynamic form angles and lifts as it makes its way to the corner, creating a unique corner glass expression for the grocery store. The longer leg of the housing is set back from Guest Street and its massing is broken with vertical steps, allowing the rhythm of its unit demising to translate to the façade.

3.5 Site Design and Public Realm Improvements

3.5.1 Pedestrian Access and Circulation

The Project Site is effectively flat along the southern, western and northern property lines along which there is complete pedestrian accessibility off-site and to the proposed program within the Project Site limits. The proposed publicly-accessible walkways along all streets will have pedestrian accessibility to and from the Project Site. Figure 3.21 presents the pedestrian access and circulation plan for the Proposed Project.

Accessibility

The Proposed Project will improve accessibility around the Project Site. All site conditions will provide a smooth paved accessible path-of-travel to building entrances and egresses as required by the Massachusetts Architectural Access Board (MAAB) and City of Boston's Commission for Person with Disabilities Advisory Board. The Proposed Project includes a total of approximately 895 residential units;

approximately 45 of the total units proposed will be accessible Group 2A units, and approximately 18 will be hearing impaired units, per MAAB. All proposed buildings will have an outdoor amenity component that will be accessible via elevators for building users. Refer to the BPDA Accessibility Checklist in Appendix C for more details.

Additionally, in response to BPDA Scoping Determination's comment concerning accessibility issues at the new crosswalk at the northside of the Guest Street Extension and Everett Street, modifications are proposed to the grading as part of this intersection's proposed improvements. These modifications will be a notable improvement over the deficient existing conditions. Refer to Figure 5.45 for more details of this intersection's grading improvements.

3.6 Landscaping and Open Space

Different types of public realm space will be provided on-site in the form of both green/pervious and hardscape spaces totaling approximately 2.5 acres. This includes site area dedicated to streets, sidewalks, hardscape plazas, and the new one-acre publicly accessible Community Green, of which over half is proposed to be lawn and planted area. This new open space is intended to be accessible for all residents and the greater Allston-Brighton neighborhood.

Arthur Street will be lined with a double row of shade trees and generous greenscape/furnishing and pedestrian and bicycle zones to accommodate the anticipated pedestrian traffic from the community connecting the North Beacon Street neighborhood to the new Community Green, the grocery store and neighborhood retail, and the Boston Landing MBTA commuter rail station. The retail formerly shown located in the Community Green has been removed in lieu of 5,000 square feet of additional park area. The Everett Street edge along Building B has been widened to allow the planting of on-grade shade trees and a generous width sidewalk from the abutment at Braintree Street Extension to Guest Street Extension. Figure 3.22 presents the proposed open space and streetscape improvement plan.

Landscaping and open space at Allston Yards will include a publicly accessible one-acre Community Green, and all four buildings will include private use rooftop amenity areas that will range from approximately 5,000 to 7,000 SF. Building A, to be constructed during Phase 1, or the initial phase of the Proposed Project, will have an approximately 7,000-square foot rooftop amenity area for use by the residents. Each of the subsequent three buildings will also have an amenity deck for the building residents of approximately 5,000 SF. The rooftop amenity space will ease demand on the Community Green and neighborhood parks from these specific residents.

The one-acre Community Green will be preserved for public use, and the Proponent will work with City agencies to ensure its permanent status as open space. Upon completion, the Community Green will be maintained by the Proponent and programmed with input from the community for activities, such as open-air music, art, and food markets.

3.6.1 Community Green

As shown on Figure 3.24, the approximately one-acre Community Green proposed at the corner of Arthur Street and Guest Street Extension has been designed to host night and day community and neighborhood activities and support the retail activities along the building edge. The Community Green has a balance of planted and paved areas that will allow for passive enjoyment when events are not occurring, and paved zones for art, music, and food market opportunities. Pathways are planned to provide for smooth movement through the space while reinforcing the passive zones.

The Community Green will include a fenced dog run/park of approximately 2,200 square feet. This will be adjacent to the residential program, in the southeast corner of the Community Green in order to provide easy proximity for the residents of Building A and maintain a clear separation from the future community programs taking place in the green.

Lighting is expected to consist of a combination of feature lighting associated with specialty improvements, such as low lighting along pathways. Lighting at retail and restaurant edges is expected to have a combination of specialty overhead lighting and building lighting. Street edges will follow established Boston and the existing Guest Street standards. Anticipated plantings for the Community Green include a combination of indigenous and urban tested shade trees, evergreen edges, and ornamental seasonal feature trees, shrubs, ground covers and perennials.

3.6.2 Pedestrian Realm/Streetscape Improvements

The public realm improvements will include fully accessible concrete walkways with a permeable paver edge located at the back of the curb, per the City's requirements. Permeable pavers along Guest Street Extension will be similar to the materials and patterns established at the Boston Landing portion of Guest Street. Street lights along Guest Street Extension will continue the established patterns; Arthur Street and Braintree Street Extension will maintain Boston standards for light levels and ground cut-off.

The proposed walk widths allow for flexible retail and restaurant seating. Some street corners are anticipated to include wayfinding focal-points that are illuminated and include interpretive information for residents and visitors.

The streetscape improvements will consist of indigenous urban-tested street trees selected from the Boston Parks & Recreation Department-approved list and set in a sand-based structural soil with tree grates and/or raised curbs to minimize compaction of soils within the tree pits and a raised edging at the tree pits to minimize direct infiltration of winter snow melt products into the plant bed. Street corners will receive raised stone edge planters where appropriate to provide green transitions from the streetscape and provide run-off mitigation.

3.6.3 Green Buffers and Townhouse Green Space

Green buffers along the Project Site boundary, as identified on Figure 3.24, are expected to include selective appropriate trees and shrubs that will provide screening and a green edge. The green buffer proposed along the MBTA commuter rail tracks is expected to consist of both shade and upright deciduous trees spaced between 20 to 25 feet to mediate the open area between the train tracks and Braintree Street Extension, as well as the Everett Street overpass, while providing a sense of scale to the street edge. The green buffer proposed along the southern edge of the Community Green and adjacent to Building A provides a flexible design edge to account for potential changes to the property to the south.

The townhouse green spaces along West Street and East Street will be private, as they are associated with the individual residential program adjacent to them, but publicly viewed to reflect entrance gardens found in other Boston neighborhoods, such as Back Bay, the South End, and parts of South Boston.

3.6.4 Urban Open Space

The pedestrian public realm space along Guest Street Extension is expected to include such elements as unit pavers to highlight specialty areas and concrete pavement, raised seat walls, specialty lighting, informational signage, raised planters for perennial and annual display, and tree planting to provide shade and scale to potential outdoor retail/restaurant areas while providing a transitional edge along the publicly-accessible walkways.

These open spaces parallel pedestrian and bicycling corridors through the Project Site and will provide continuity between the existing Guest Street streetscape at Boston Landing and Guest Street Extension. Bicycle racks are provided throughout the Project Site concentrated most along retail and restaurant areas while allowing for the placement of public bike-sharing (Bluebikes) opportunities closest to the Boston Landing MBTA commuter train station.

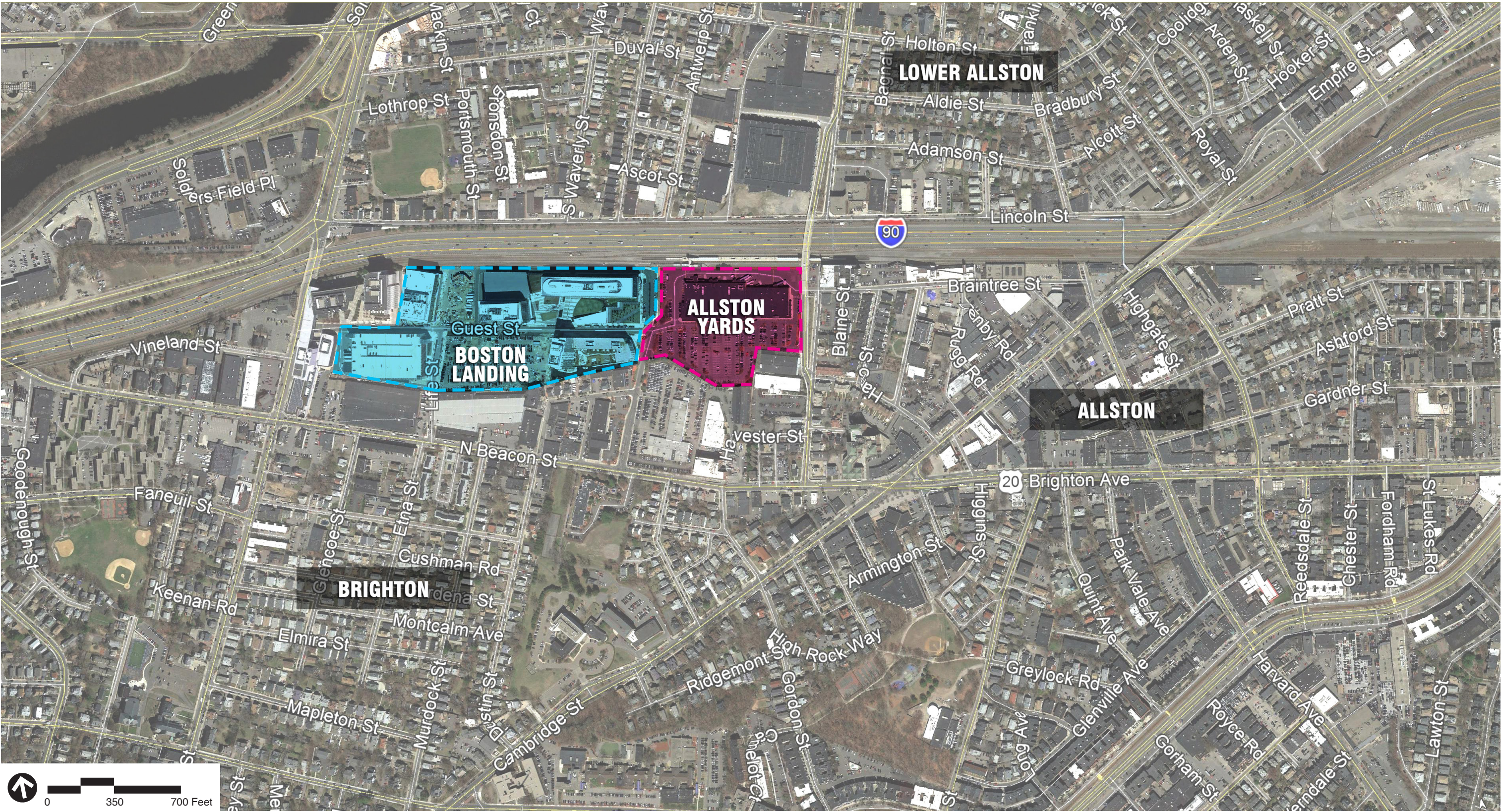
Refer to Figures 3.25a and 3.25b for more details on public realm sections of the Proposed Project.

3.6.5 Open Space Needs Analysis

While the Proposed Project does not have an active recreation zone, there are already a number of parks and green spaces in the surrounding neighborhoods of Allston and Brighton that serve this function. The Community Green is intended as a passive park that will be programmed for community gathering, markets, and festivals, and does not include active recreation except for a fenced dog run/park. However, as shown in Figure 3.23, there are approximately eight other active recreation areas within the $\frac{3}{4}$ -mile radius of the Project Site. For instance, within a $\frac{1}{4}$ -mile radius of the Project Site, there is another one-acre public park that includes active recreation and a playground. Within a $\frac{1}{2}$ -mile from the Project Site, there are three public parks ranging in size from 3.7 to 10.5 acres that include active

recreation and playgrounds. Within a $\frac{3}{4}$ -mile radius there are four additional public parks ranging in size, from 1.5 to 8.7 acres, that also include active recreation and playgrounds. The Charles River Park is also within a $\frac{3}{4}$ -mile radius of the Project Site and includes both passive and active recreation.

Furthermore, to maintain the recreational diversity of the neighborhood, if desired, the Proponent can provide monetary support through the Public Realm Fund for improvements of nearby active-use playgrounds and community gardens, including Penniman Park, Portsmouth Playground, and Ringer Playground.

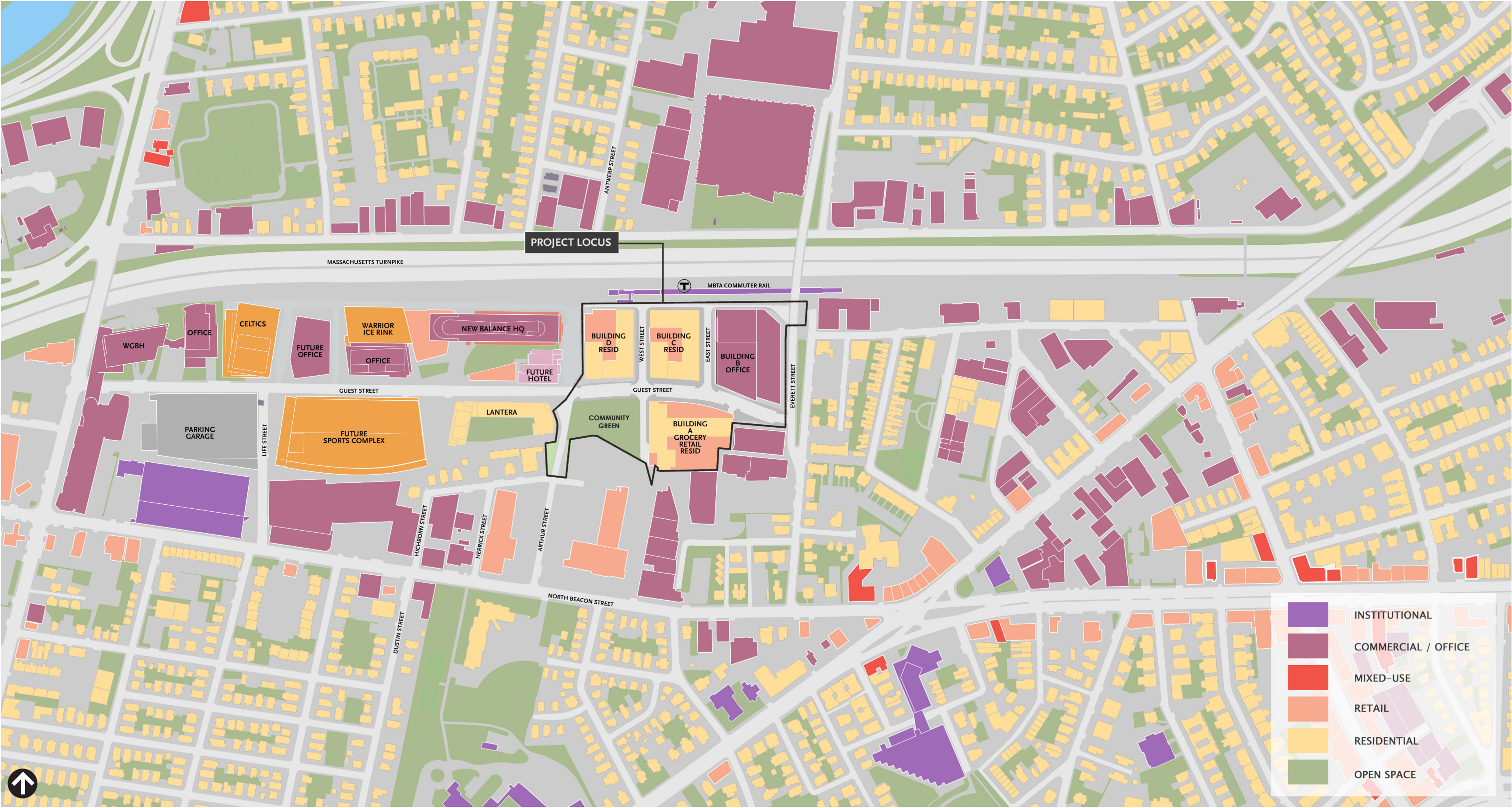


Prepared by: Elkus Manfredi Architects

Figure 3.1a
Existing Neighborhood Context Plan



Prepared by: Elkus Manfredi Architects
Figure 3.1b
Proposed Neighborhood Context Plan



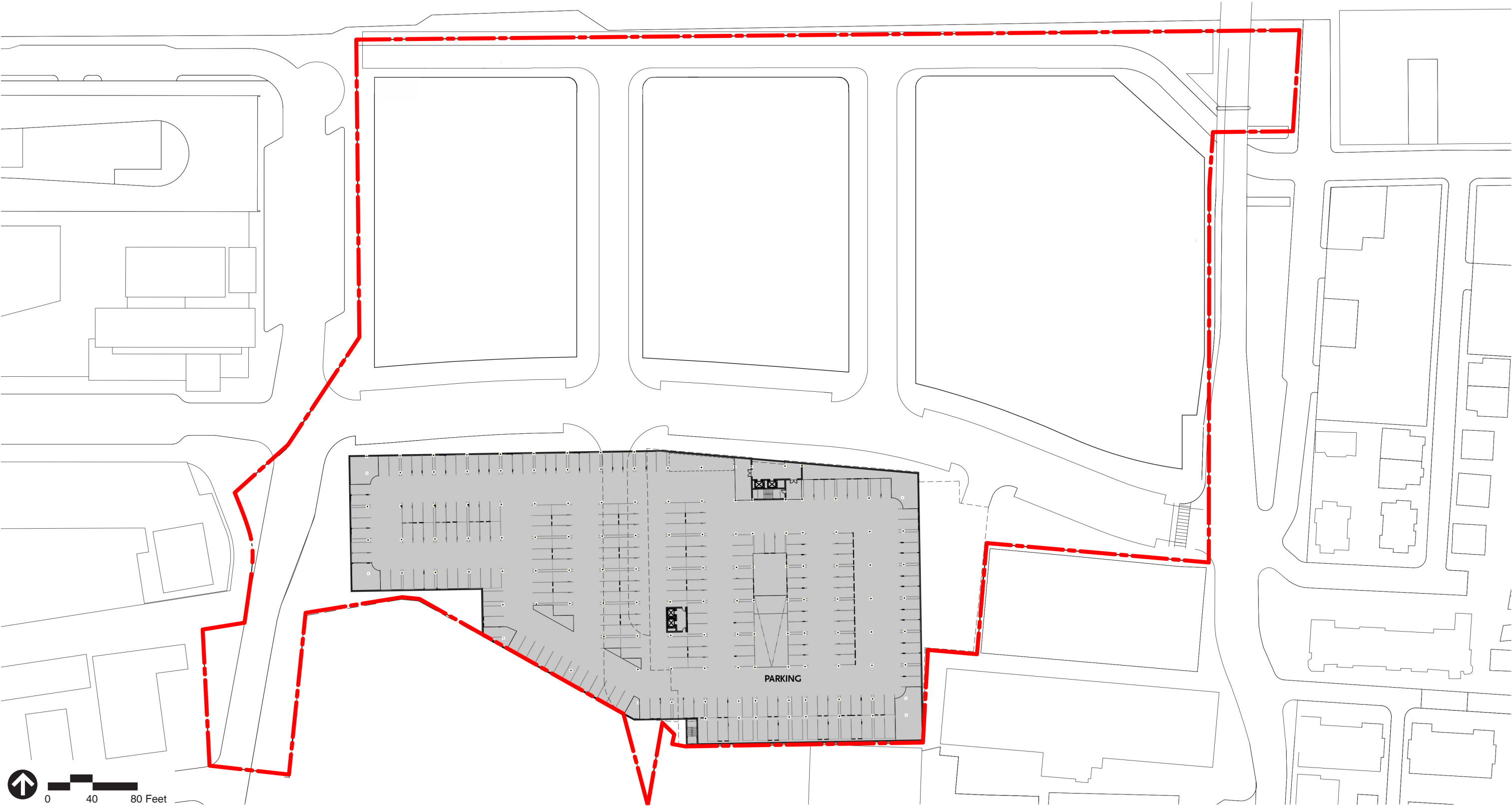
Prepared by: Elkus Manfredi Architects

Figure 3.2
Land Use Plan



Prepared by: Elkus Manfredi Architects

Figure 3.3a
Ground Level Floor Plan



Prepared by: Elkus Manfredi Architects

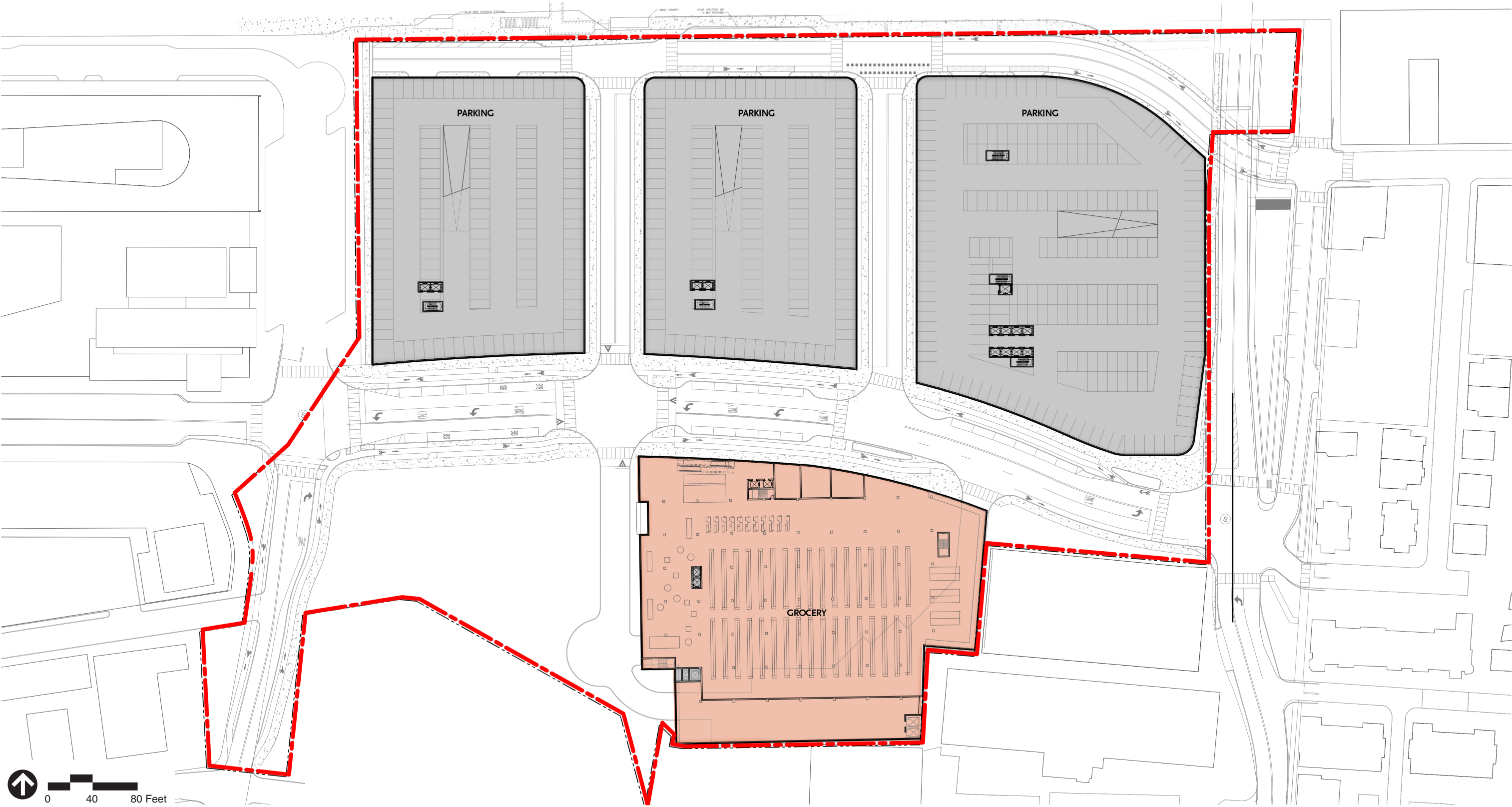
Figure 3.3b
Below-Grade Parking Level 1 Floor Plan



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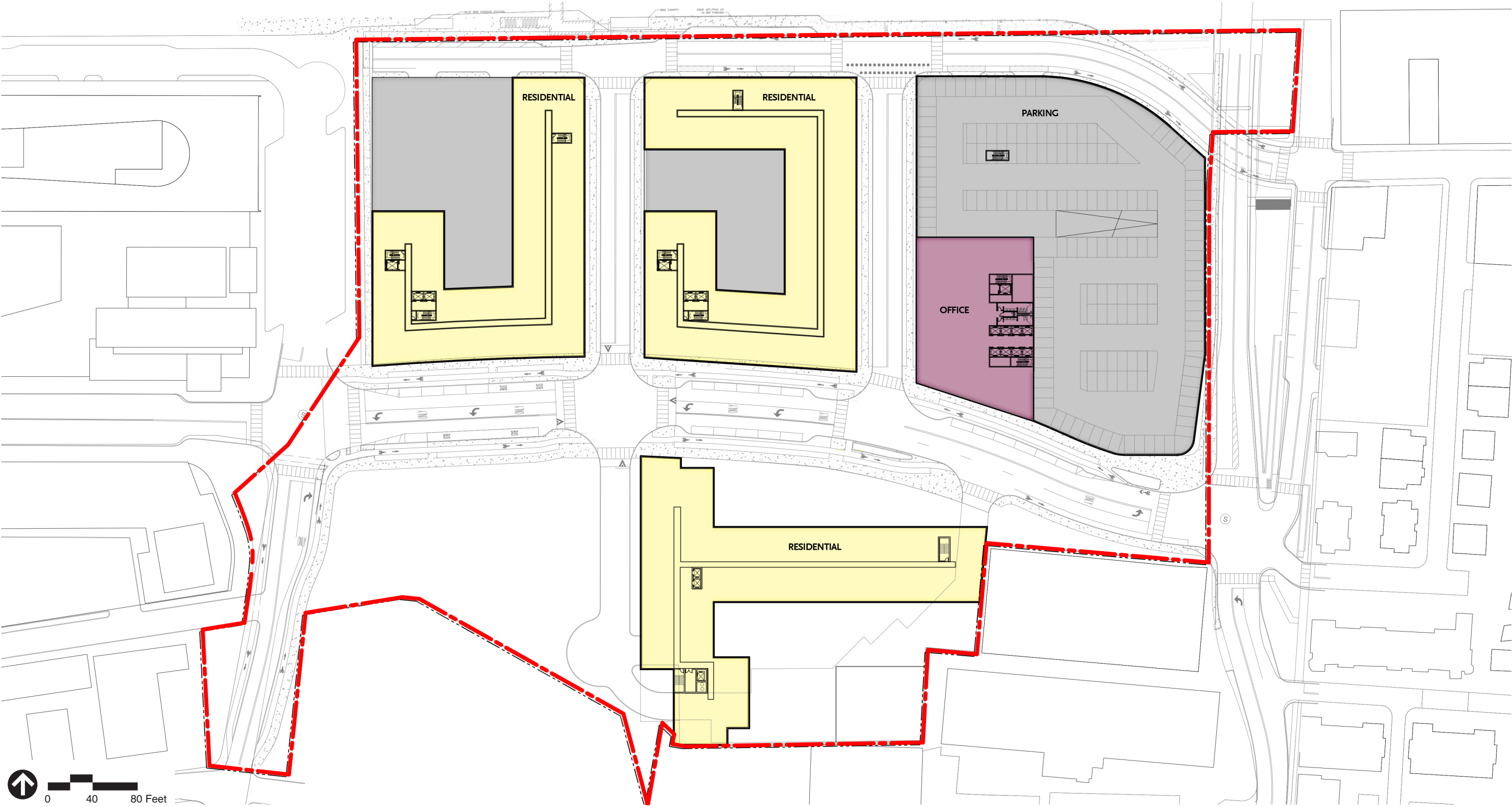
Figure 3.3c
Structured Parking Mezzanine Level Floor
Plan

Allston Yards
Allston, Massachusetts



Prepared by: Elkus Manfredi Architects

Figure 3.3d
Second Floor Plan



Prepared by: Elkus Manfredi Architects

Figure 3.3e
Third & Fourth Floor Plan



Prepared by: Elkus Manfredi Architects

Figure 3.3f
Mid Level Floor Plan



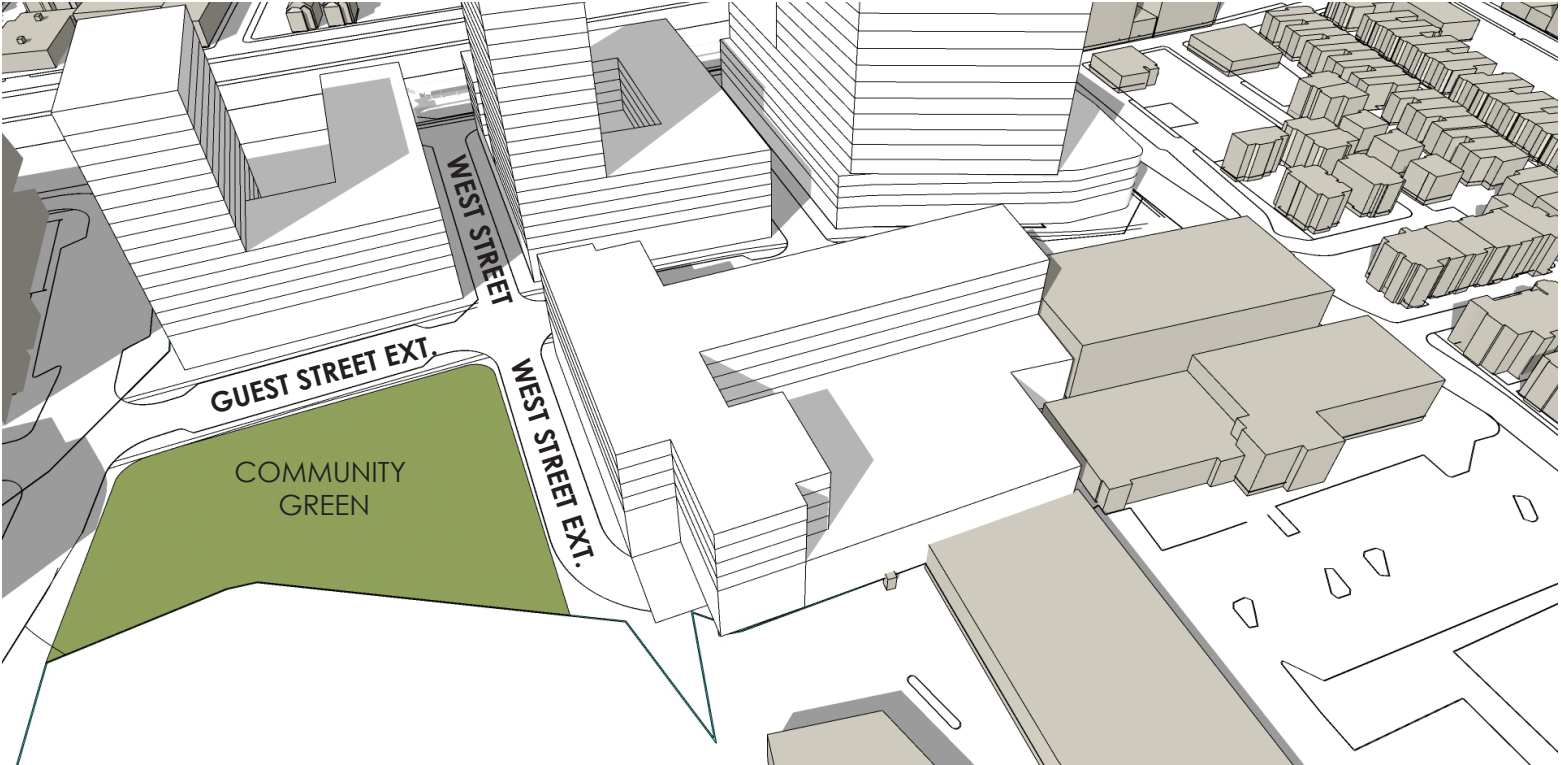
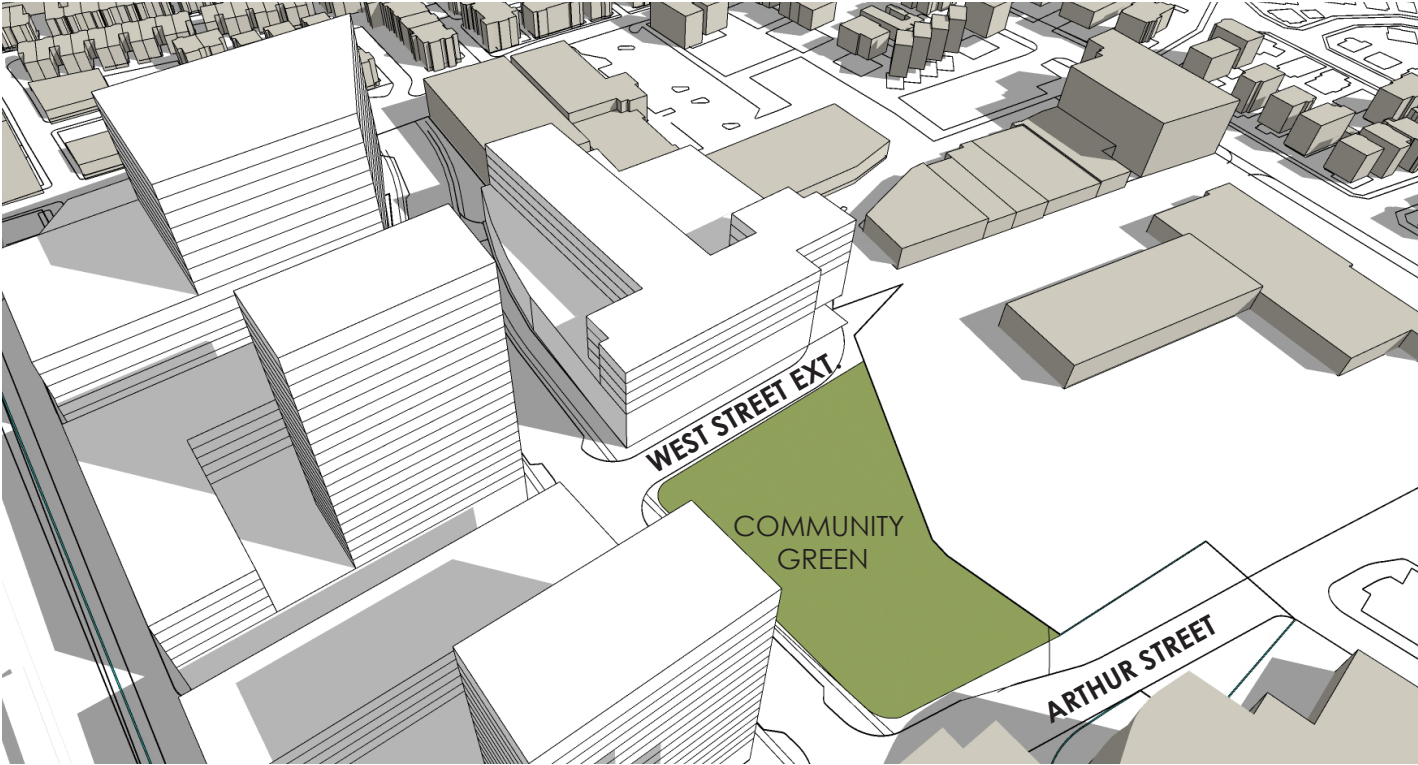
Prepared by: Elkus Manfredi Architects

Figure 3.3g
Upper Level Floor Plan



Prepared by: Elkus Manfredi Architects

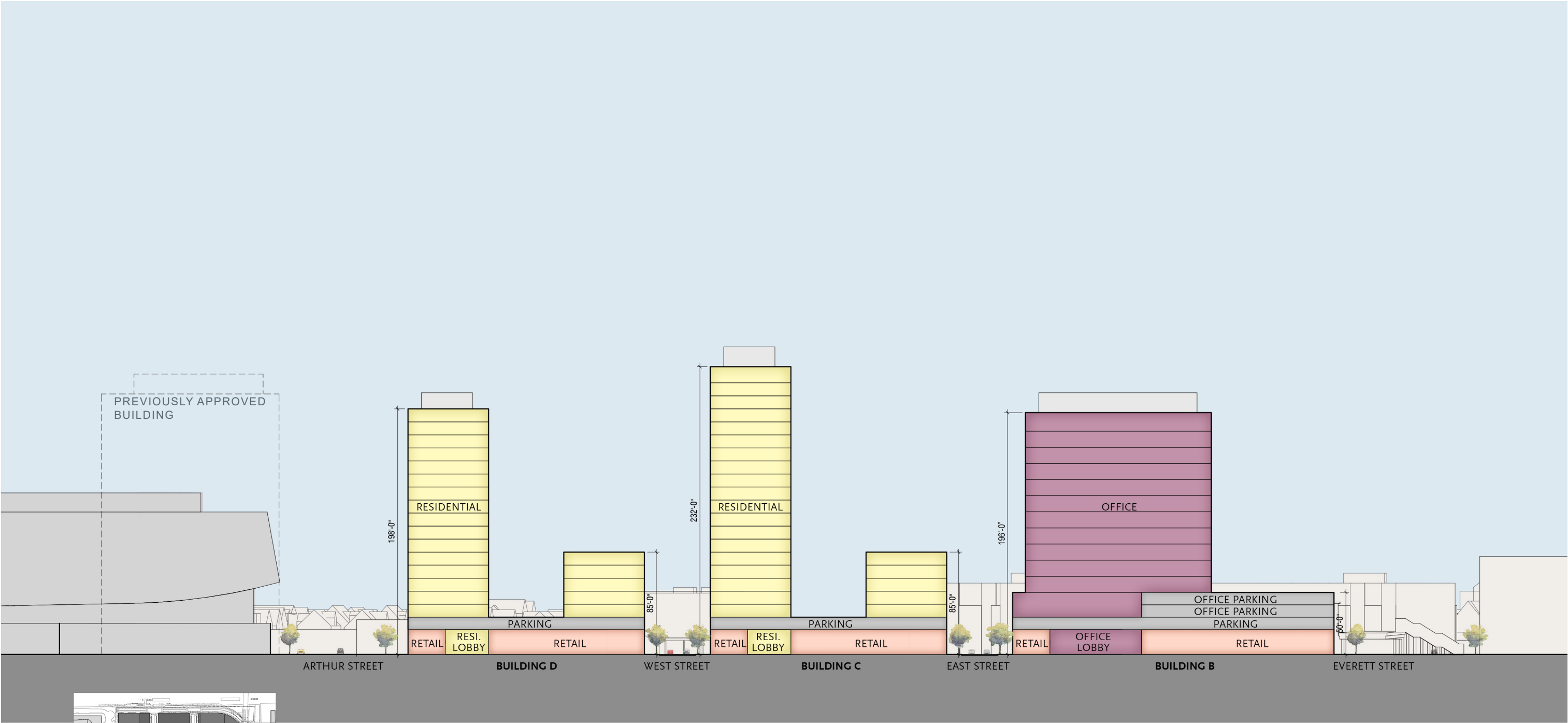
Figure 3.3h
Roof/Amenity Level Plan



Prepared by: Stantec

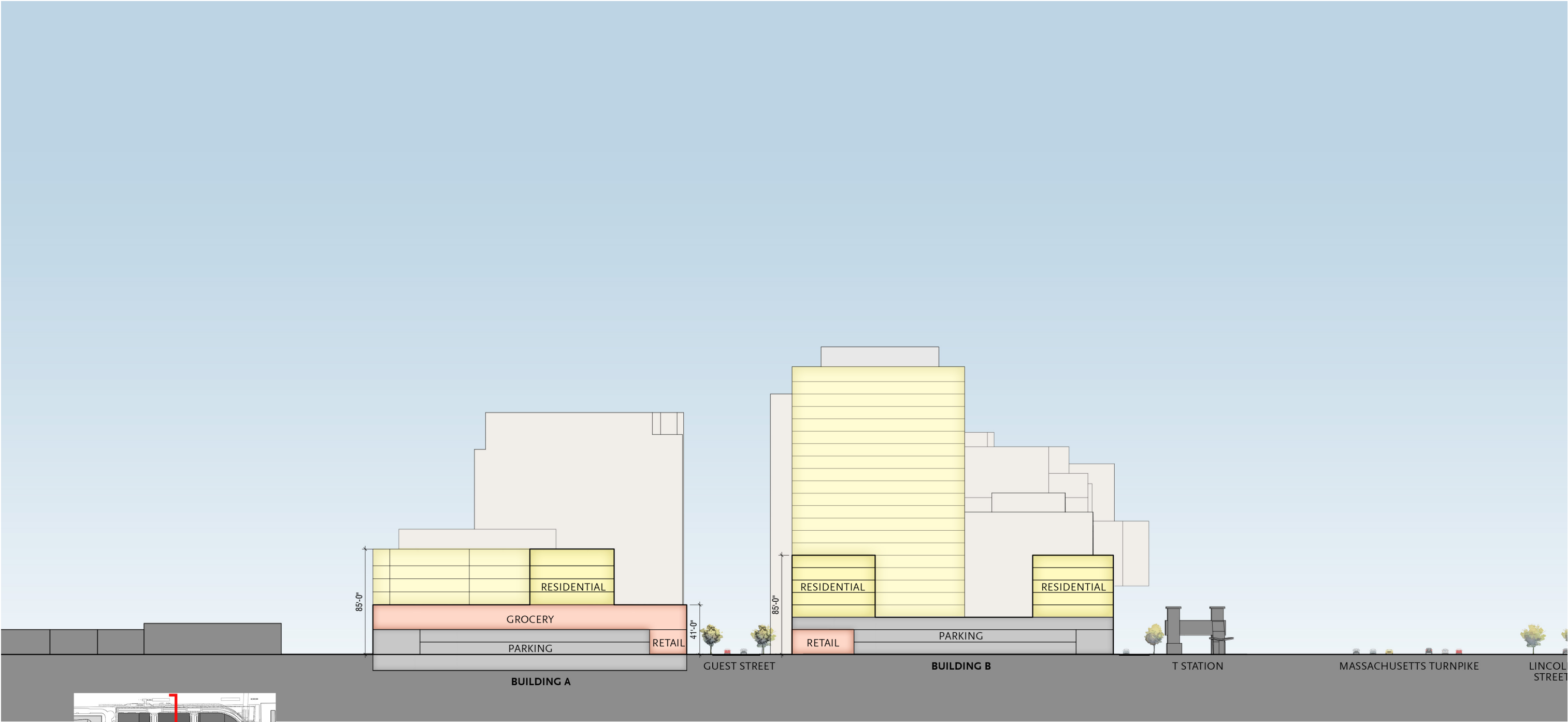
Figure 3.4

Full Build Condition Massing Diagram



Prepared by: Elkus Manfredi Architects

Figure 3.5a
Building Section



Prepared by: Elkus Manfredi Architects

Figure 3.5b
Building Section



Prepared by: Elkus Manfredi Architects

Figure 3.6
Neighborhood Sections



NOTE: BUILDING EXTERIORS ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND SUBJECT TO CHANGE

Prepared by: Elkus Manfredi Architects

Figure 3.7a
Massachusetts Turnpike Elevation

Allston Yards
Allston, Massachusetts

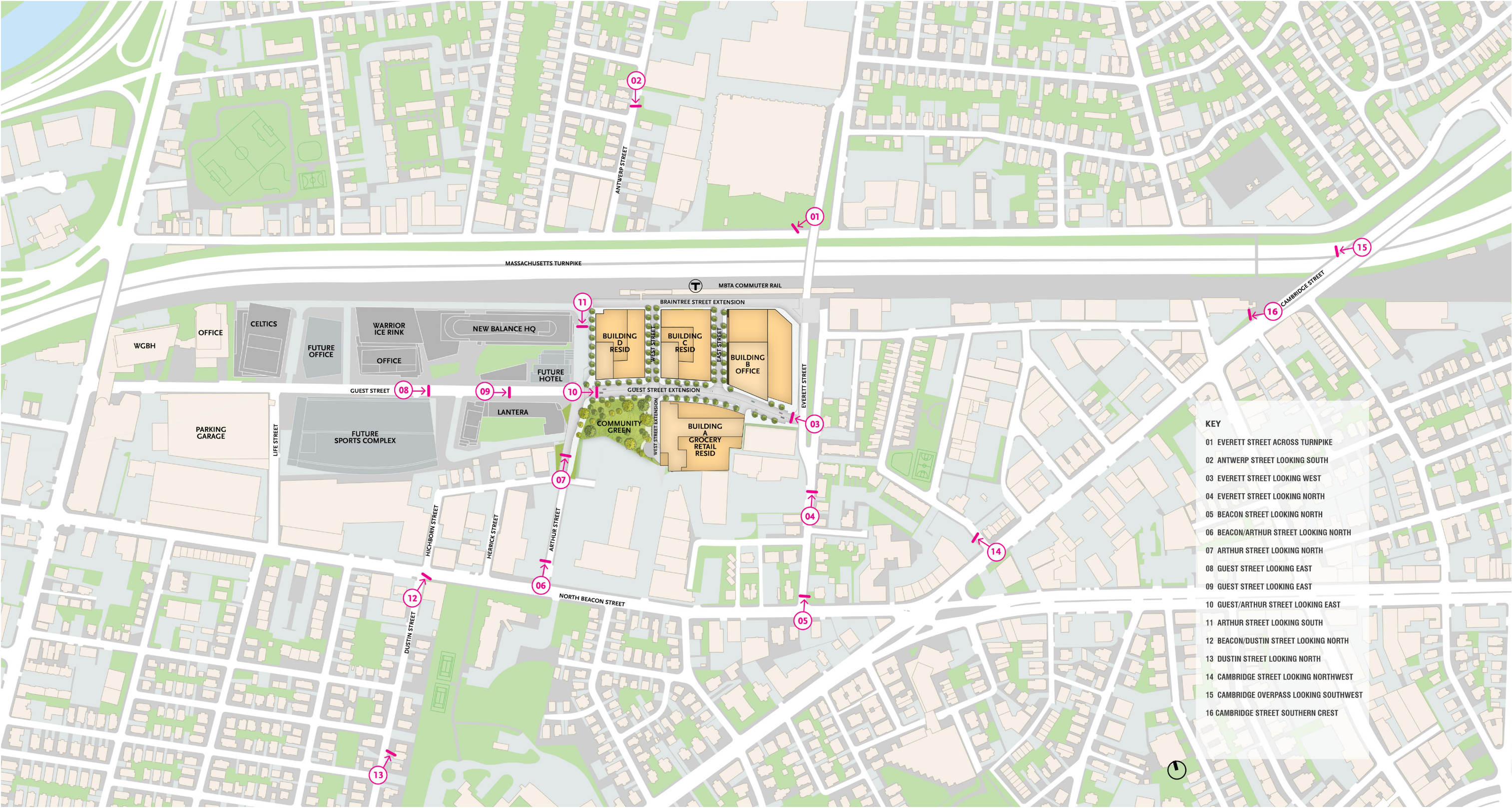


NOTE: BUILDING EXTERIORS ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND SUBJECT TO CHANGE

Prepared by: Elkus Manfredi Architects

Figure 3.7b
Guest Street Elevation

Allston Yards
Allston, Massachusetts



Prepared by: Elkus Manfredi Architects

Figure 3.8
View Perspectives - Key



NO BUILD CONDITION



FULL BUILD CONDITION

Prepared by: Elkus Manfredi Architects

Figure 3.9a
View Perspectives - View 1: Everett Street
Across Turnpike

Allston Yards
Allston, Massachusetts



NO BUILD CONDITION



FULL BUILD CONDITION

Prepared by: Elkus Manfredi Architects

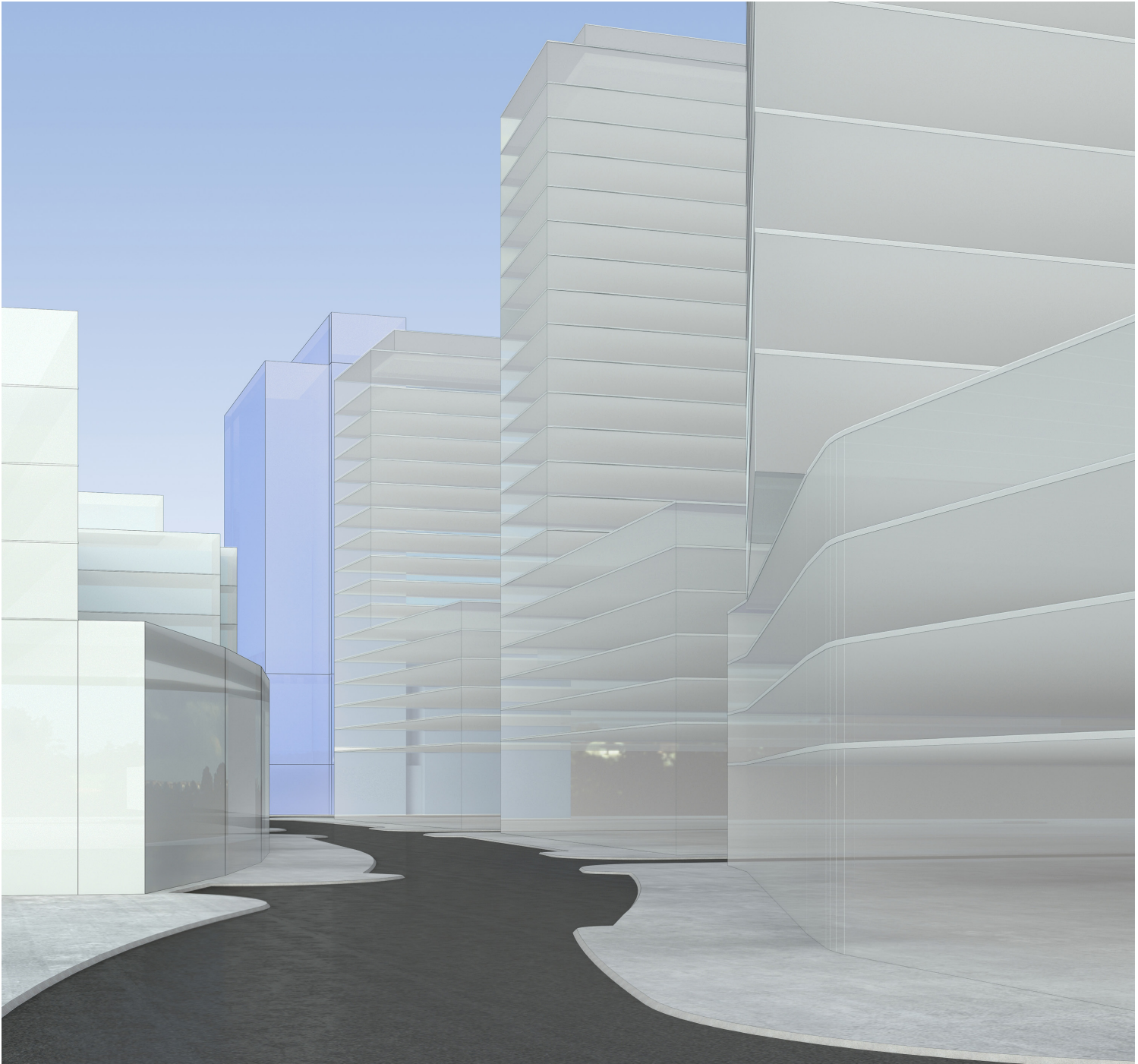
Figure 3.9b

View Perspectives - View 2: From Antwerp Street Looking South

Allston Yards
Allston, Massachusetts



NO BUILD CONDITION



FULL BUILD CONDITION

Prepared by: Elkus Manfredi Architects

Figure 3.9c

View Perspectives - View 3: Everett Street
Looking West

Allston Yards
Allston, Massachusetts



NO BUILD CONDITION



FULL BUILD CONDITION

Prepared by: Elkus Manfredi Architects

Figure 3.9d
View Perspectives - View 4: Everett Street
Looking North

Allston Yards
Allston, Massachusetts



NO BUILD CONDITION



FULL BUILD CONDITION

Prepared by: Elkus Manfredi Architects

Figure 3.9e
View Perspectives - View 5: Beacon Street
Looking North

Allston Yards
Allston, Massachusetts



NO BUILD CONDITION



FULL BUILD CONDITION

Prepared by: Elkus Manfredi Architects

Figure 3.9f
View Perspectives - View 6: Beacon Street/
Arthur Street Looking North

Allston Yards
Allston, Massachusetts



NO BUILD CONDITION



FULL BUILD CONDITION

Prepared by: Elkus Manfredi Architects

Figure 3.9g
View Perspectives - View 7: Arthur Street
Looking North

Allston Yards
Allston, Massachusetts



NO BUILD CONDITION

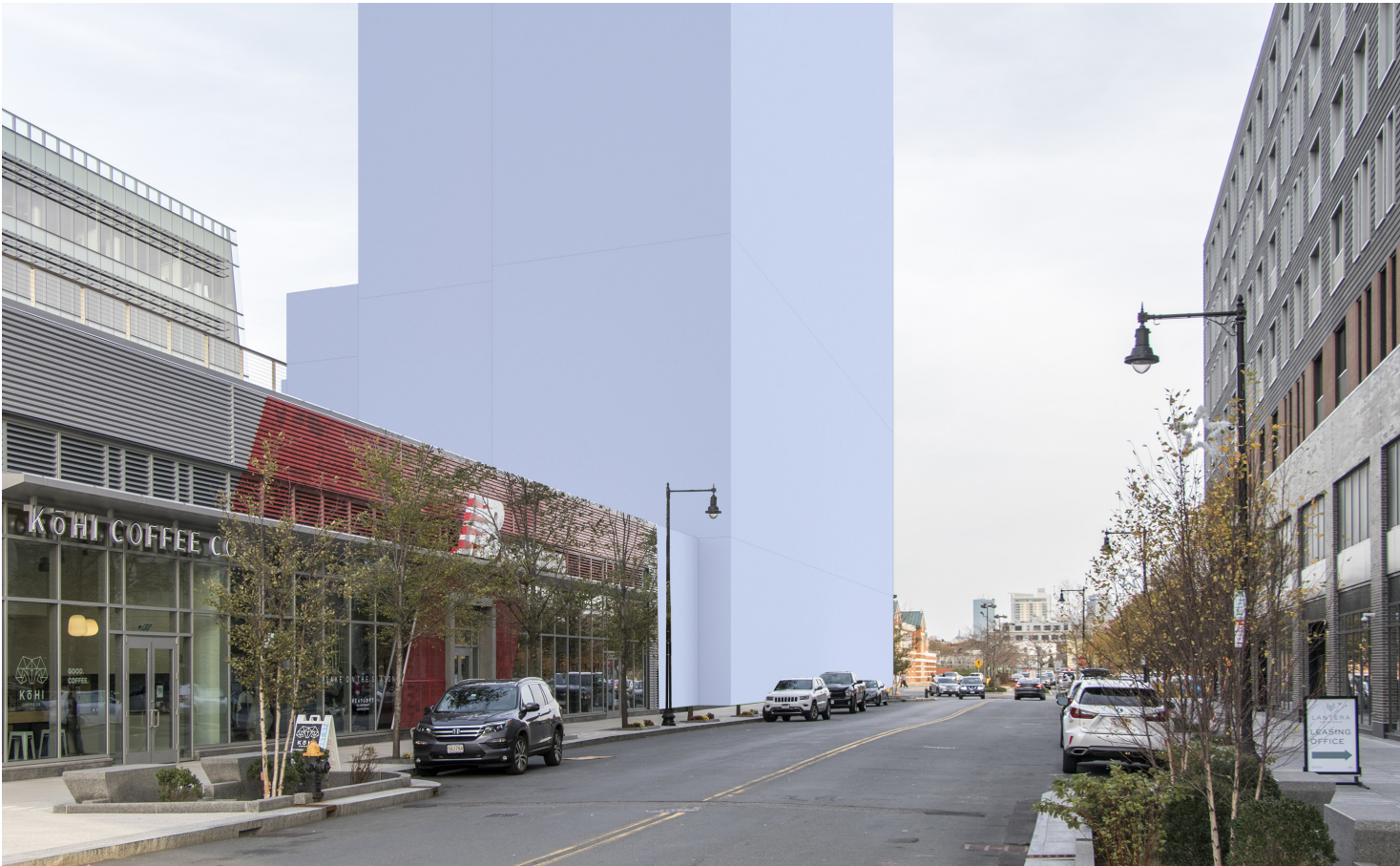


FULL BUILD CONDITION

Prepared by: Elkus Manfredi Architects

Figure 3.9h
View Perspectives - View 8: Guest Street
Looking East

Allston Yards
Allston, Massachusetts



NO BUILD CONDITION



FULL BUILD CONDITION

Prepared by: Elkus Manfredi Architects

Figure 3.9i
View Perspectives - View 9: Guest Street
Looking East

Allston Yards
Allston, Massachusetts



NO BUILD CONDITION



FULL BUILD CONDITION

Prepared by: Elkus Manfredi Architects

Figure 3.9j
View Perspectives - View 10: Guest Street/
Arthur Street Looking East

Allston Yards
Allston, Massachusetts



NO BUILD CONDITION



FULL BUILD CONDITION

Prepared by: Elkus Manfredi Architects

Figure 3.9k

View Perspectives - View 11: Arthur Street
Looking South

Allston Yards
Allston, Massachusetts



NO BUILD CONDITION



FULL BUILD CONDITION

Prepared by: Elkus Manfredi Architects

Figure 3.9I
View Perspectives - View 12: Beacon
Street/Dustin Street Looking North

Allston Yards
Allston, Massachusetts



NO BUILD CONDITION



FULL BUILD CONDITION

Prepared by: Elkus Manfredi Architects

Figure 3.9m
View Perspectives - View 13: Dustin Street
Looking North

Allston Yards
Allston, Massachusetts



NO BUILD CONDITION



FULL BUILD CONDITION

Prepared by: Elkus Manfredi Architects

Figure 3.9n
View Perspectives - View 14: Cambridge
Street Looking Northwest

**Allston Yards
Allston, Massachusetts**



NO BUILD CONDITION



FULL BUILD CONDITION

Prepared by: Elkus Manfredi Architects

Figure 3.9o
View Perspectives - View 15: Cambridge
Overpass Looking Southwest

Allston Yards
Allston, Massachusetts



NO BUILD CONDITION



FULL BUILD CONDITION

Prepared by: Elkus Manfredi Architects

Figure 3.9p
View Perspectives - View 16: Cambridge
Street Southern Crest

Allston Yards
Allston, Massachusetts



NO BUILD CONDITION



FULL BUILD CONDITION

Prepared by: Elkus Manfredi Architects

Figure 3.10

Bird's Eye View Perspective - Aerial View from South

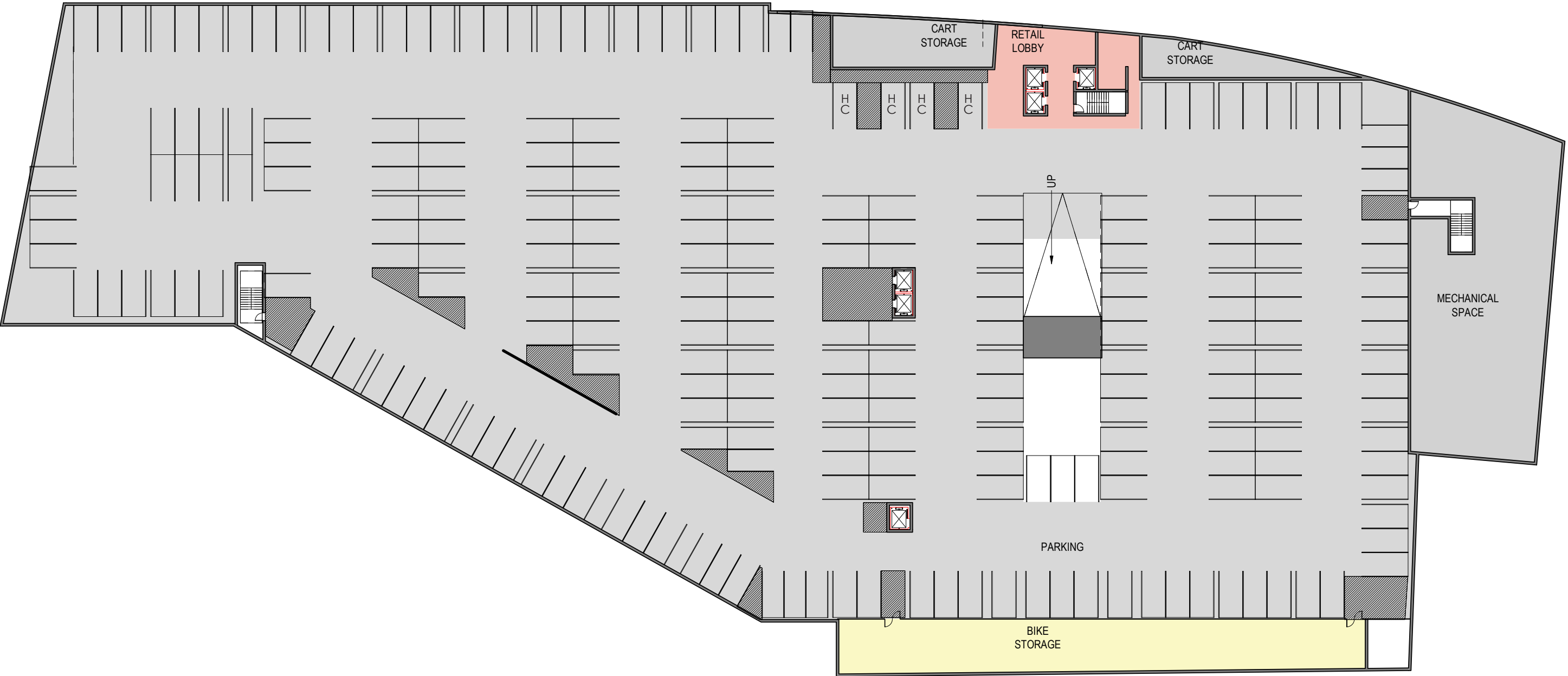
Allston Yards
Allston, Massachusetts



Prepared by: Stantec

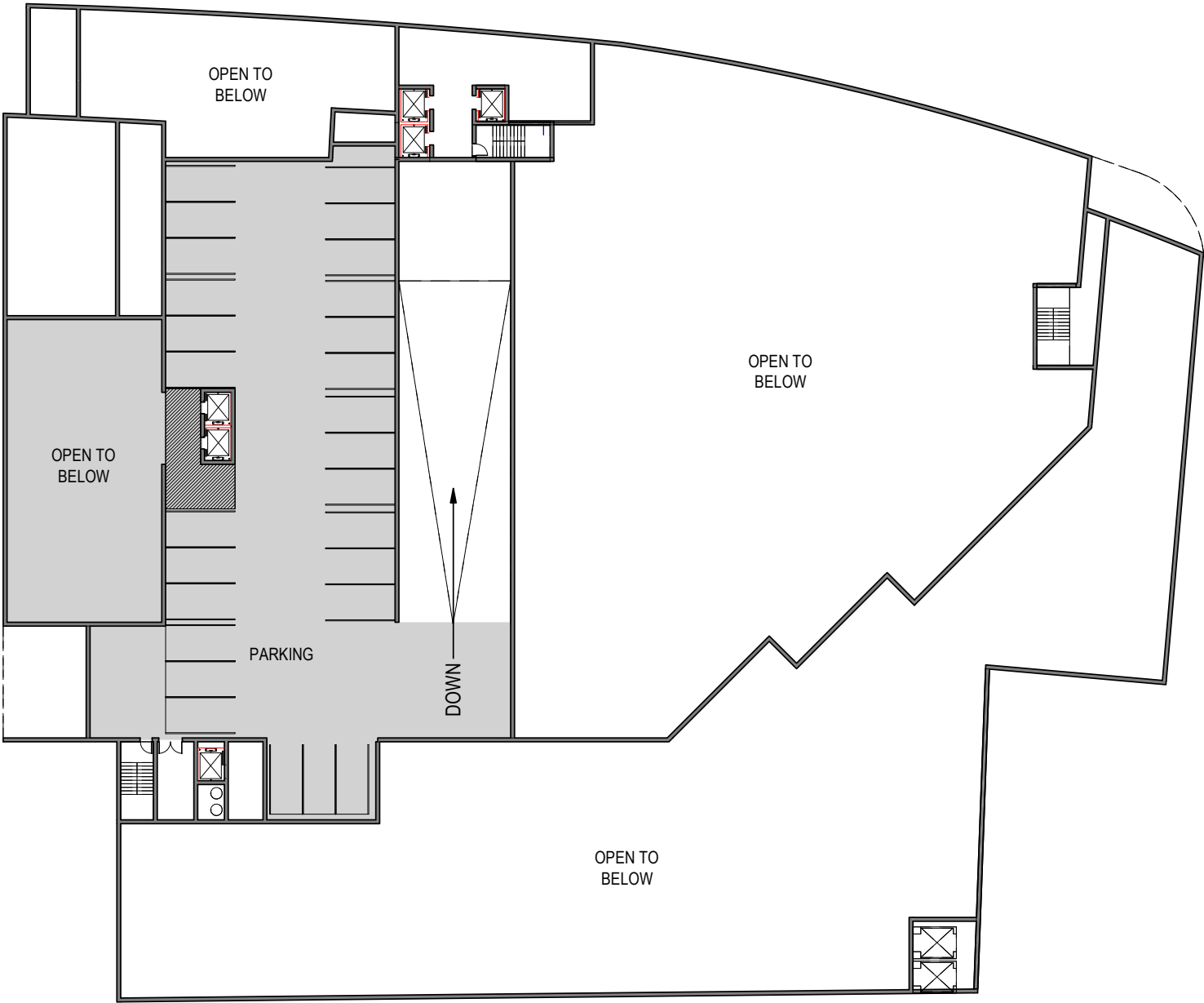
Figure 3.11a
Phase 1 (Building A)
Ground Floor Plan

Allston Yards
Allston, Massachusetts



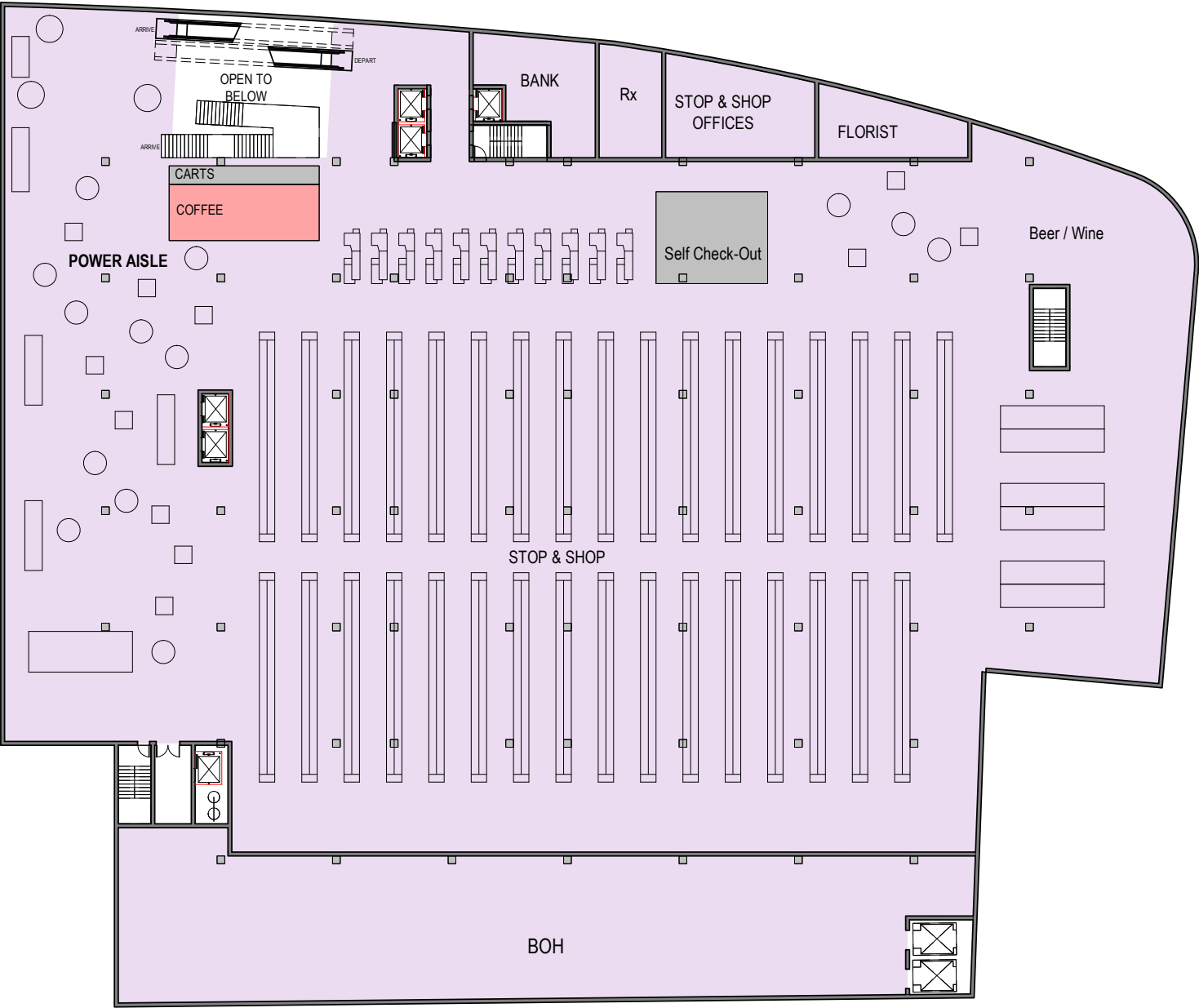
Prepared by: Stantec

Figure 3.11b
Phase 1 (Building A)
Below Grade Plan



Prepared by: Stantec

Figure 3.11c
Phase 1 (Building A)
Mezzanine Floor Plan



*INTERIOR STORE LAYOUT IS CONCEPTUAL
AND SUBJECT TO FINAL PROGRAMMING
AND DESIGN

Prepared by: Stantec

Figure 3.11d
Phase 1 (Building A)
Second Floor Plan

Allston Yards
Allston, Massachusetts



Prepared by: Stantec

Figure 3.11e
Phase 1 (Building A)
Third Floor Plan

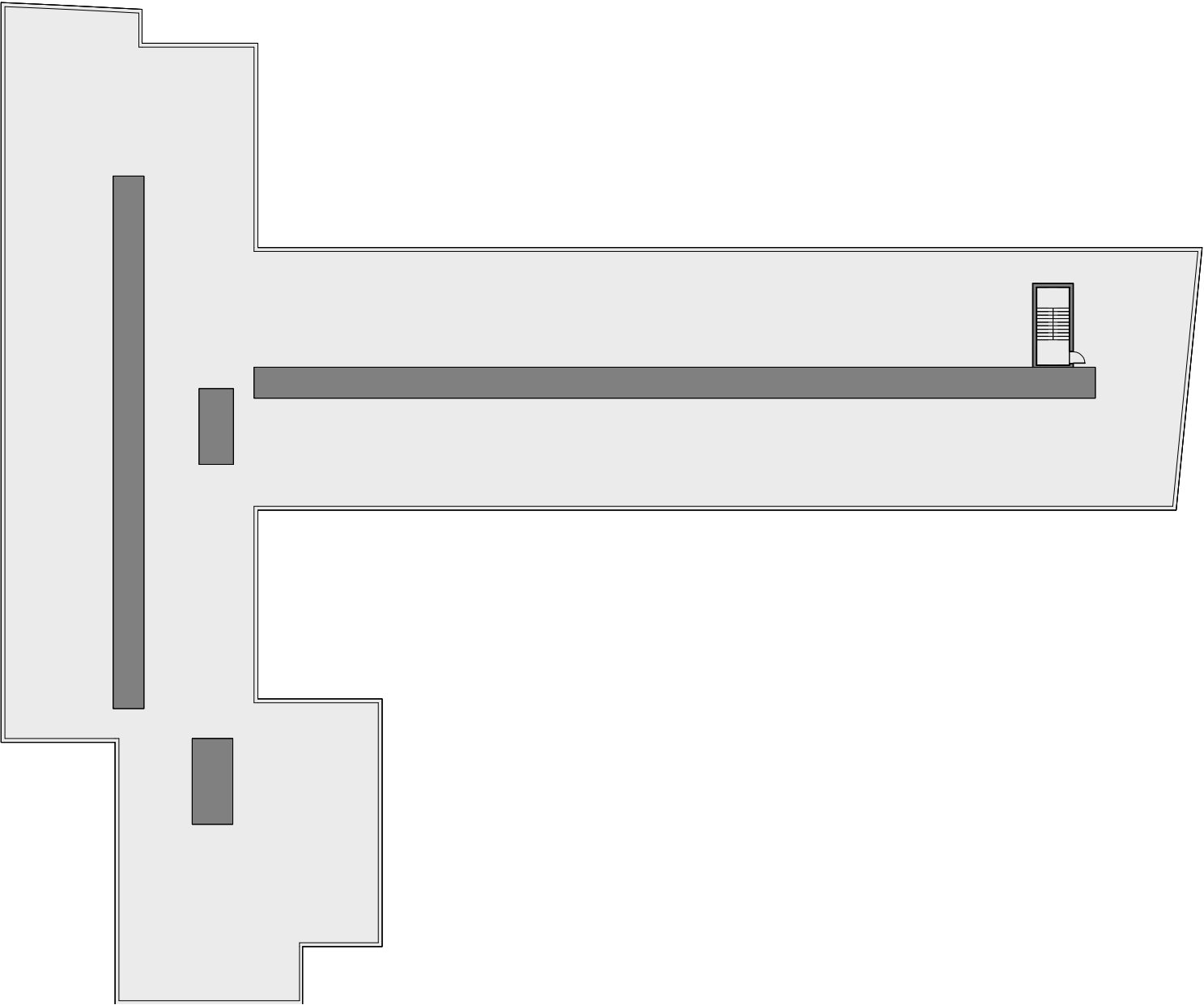


Prepared by: Stantec

Figure 3.11f

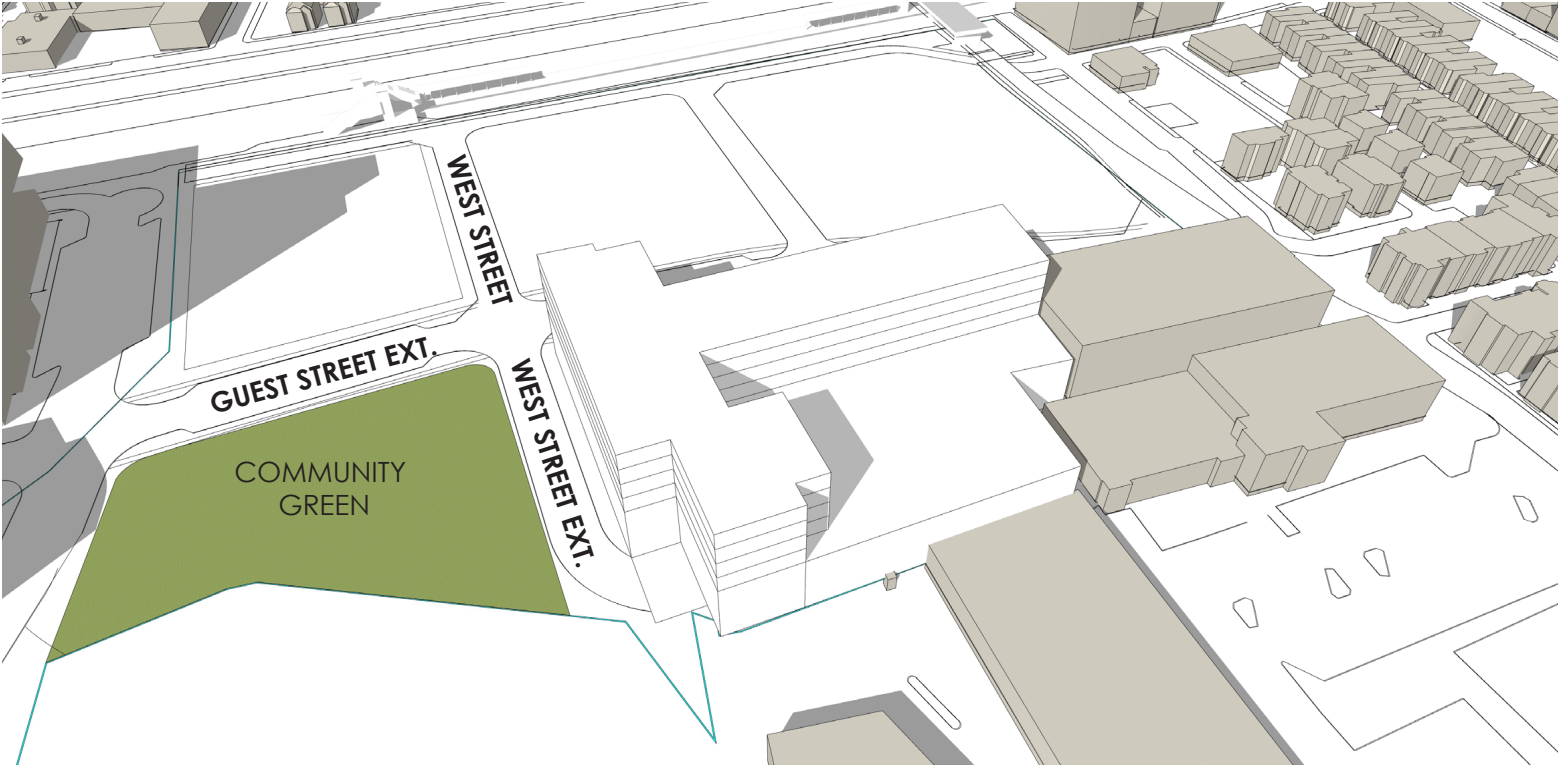
Phase 1 (Building A)
Typical Floor Plan (4-6)

Allston Yards
Allston, Massachusetts



Prepared by: Stantec

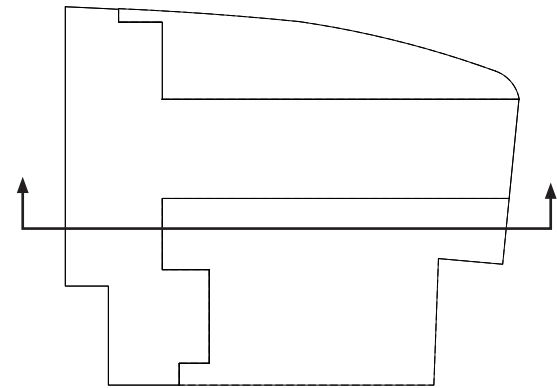
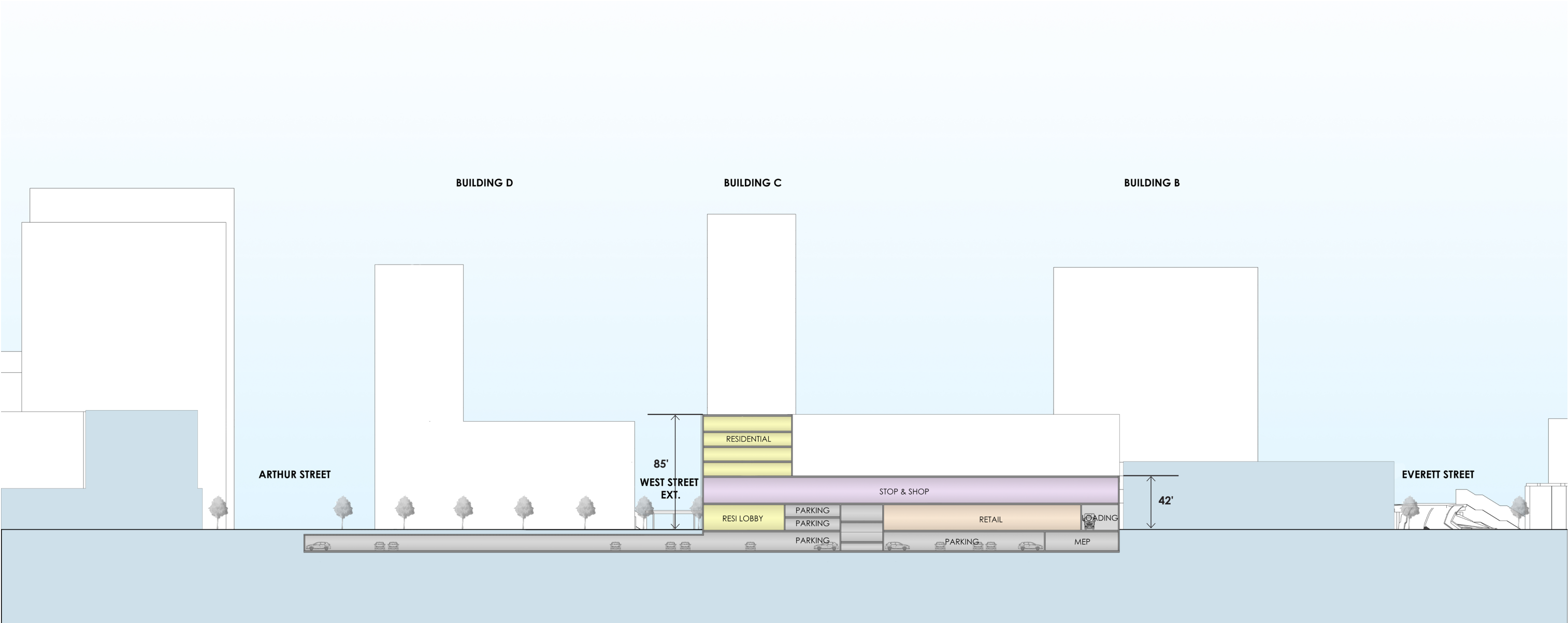
Figure 3.11g
Phase 1 (Building A)
Roof Plan



Prepared by: Stantec

Figure 3.12
Phase 1 (Building A)
Massing Diagram

Allston Yards
Allston, Massachusetts





NORTH ELEVATION (GUEST STREET EXTENSION)



WEST ELEVATION (WEST STREET EXTENSION)

Prepared by: Stantec

Figure 3.14a

Phase 1 (Building A)
North/West Elevations

Allston Yards
Allston, Massachusetts



EAST ELEVATION

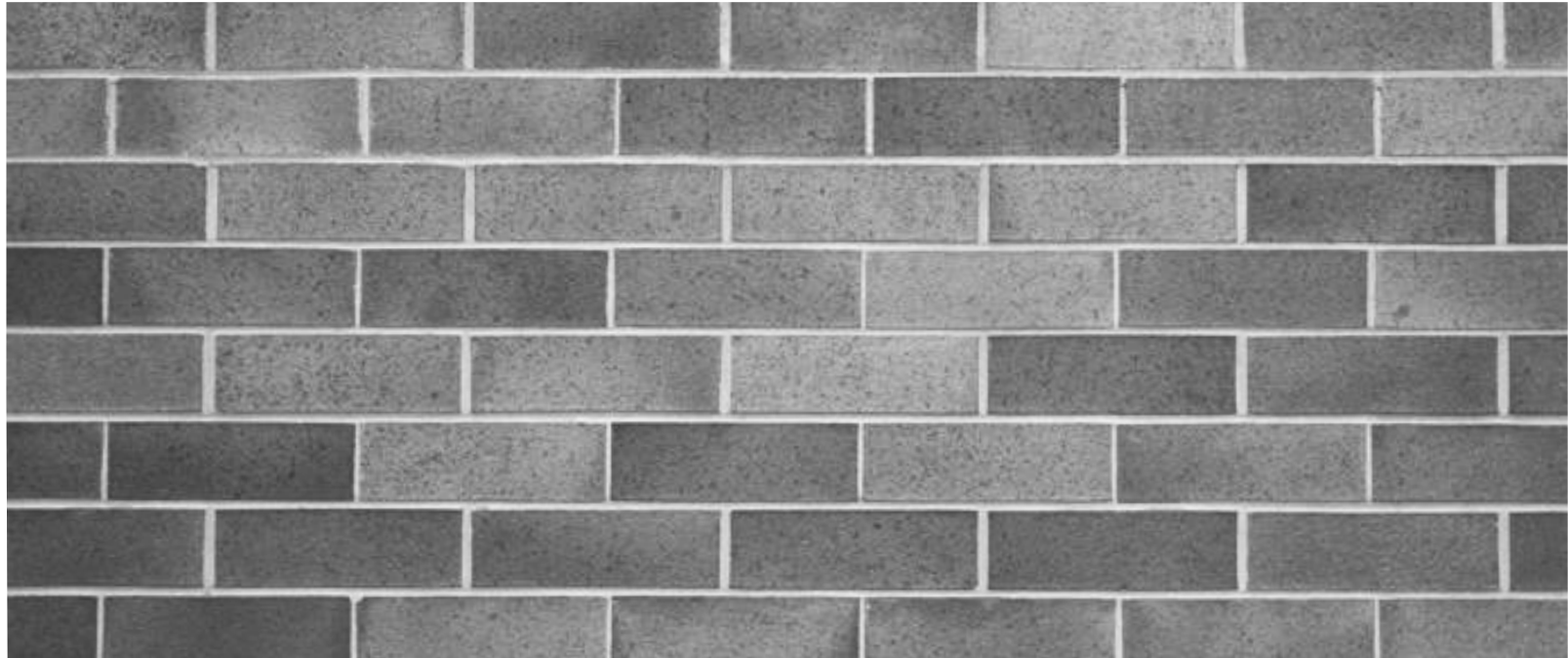


SOUTH ELEVATION

Prepared by: Stantec

Figure 3.14b
Phase 1 (Building A)
South/East Elevations

Allston Yards
Allston, Massachusetts



CHARCOAL MASONRY



BRONZE METAL PANEL



RIBBED CHARCOAL MASONRY



TAN FIBER CEMENT PANELS





Prepared by: Stantec

Figure 3.16a
Phase 1 (Building A)
Pedestrian View

Allston Yards
Allston, Massachusetts



Prepared by: Stantec

Figure 3.16b

Building A with Full Build
Pedestrian View

Allston Yards
Allston, Massachusetts



Prepared by: Stantec

Figure 3.17a

Phase 1 (Building A)
Aerial View

Allston Yards
Allston, Massachusetts



Prepared by: Stantec

Figure 3.17b

Building A with Full Build
Aerial View

Allston Yards
Allston, Massachusetts



Prepared by: Stantec

Figure 3.18a
Phase 1 (Building A)
Pedestrian View

Allston Yards
Allston, Massachusetts



Prepared by: Stantec

Figure 3.18b

Building A with Full Build
Pedestrian View

Allston Yards
Allston, Massachusetts



Prepared by: Stantec

Figure 3.19a

Phase 1 (Building A)
Pedestrian View

Allston Yards
Allston, Massachusetts



Prepared by: Stantec

Figure 3.19b

Building A with Full Build
Pedestrian View

Allston Yards
Allston, Massachusetts



Prepared by: Stantec

Figure 3.20a

Phase 1 (Building A)
Aerial View

Allston Yards
Allston, Massachusetts

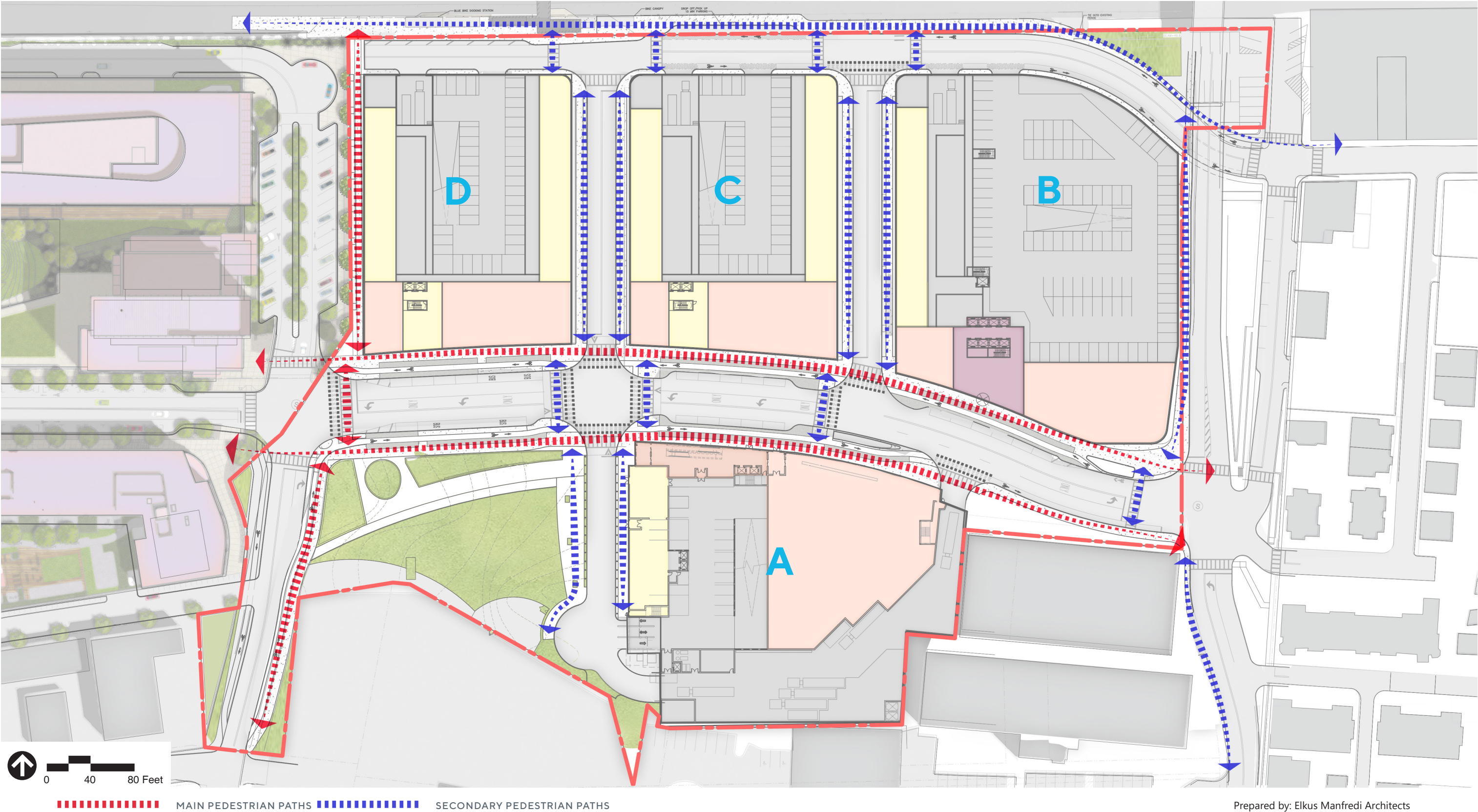


Prepared by: Stantec

Figure 3.20b

Building A with Full Build
Aerial View

Allston Yards
Allston, Massachusetts





Prepared by: Elkus Manfredi Architects




Figure 3.21
Pedestrian Access and Circulation



Illustrative Purposes Only, Subject to Change



Legend

-  Pedestrian Realm/Streetscape
-  Community Green
-  Green Buffer

Prepared by: Copley Wolff Design Group

Figure 3.22

Open Space and Streetscape
Improvement Plan

Allston Yards
Allston, Massachusetts

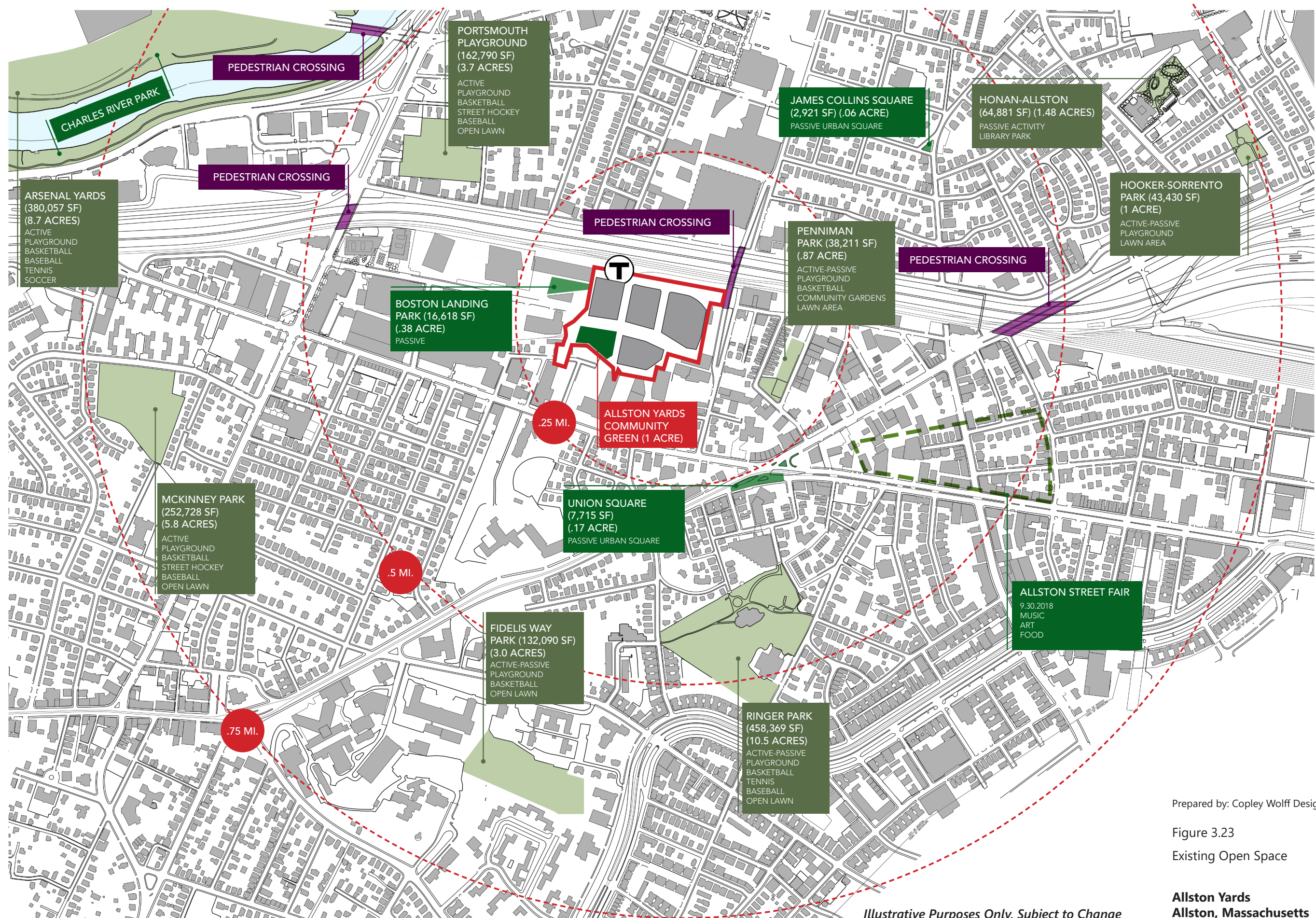
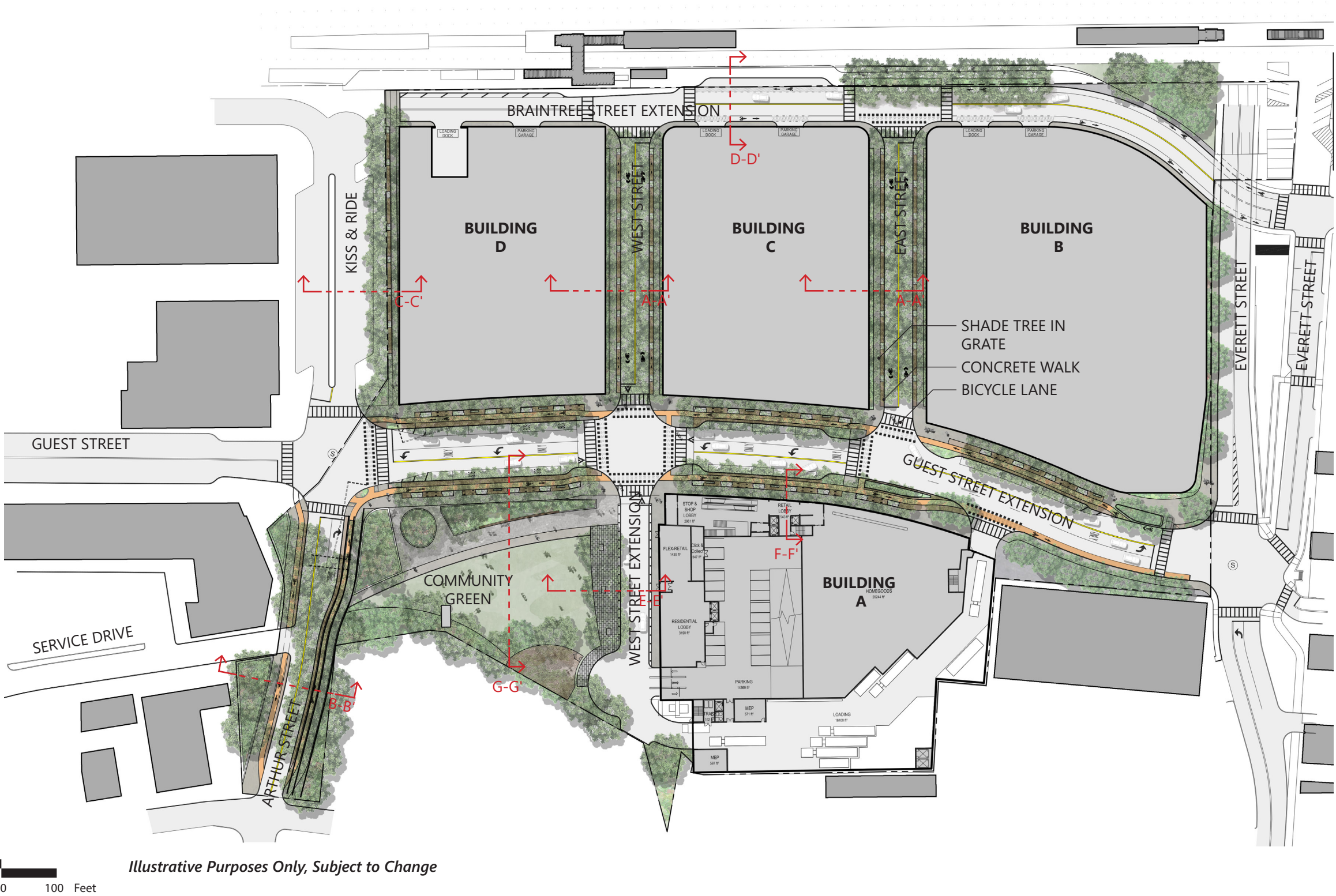
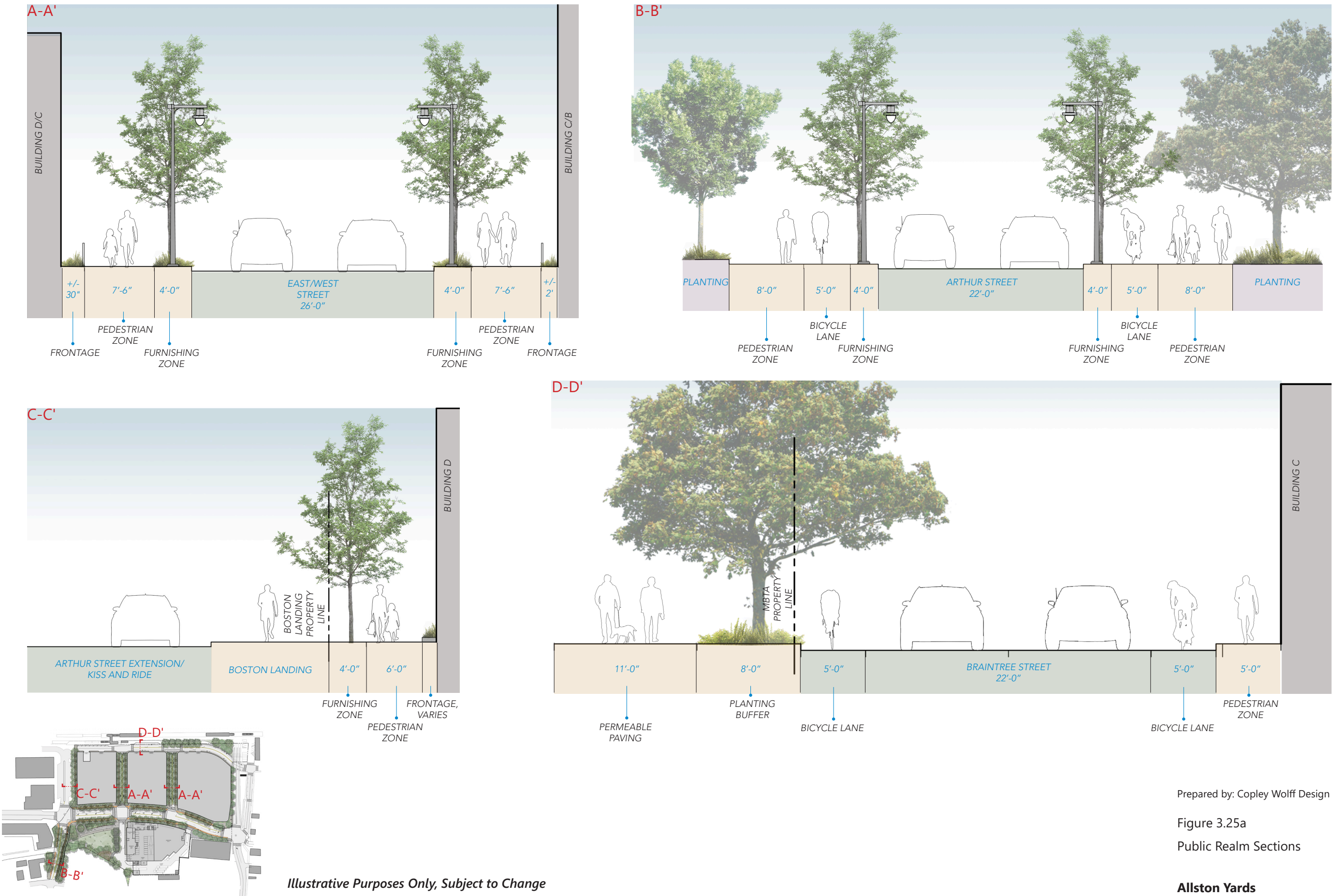


Figure 3.23
Existing Open Space



Prepared by: Copley Wolff Design Group

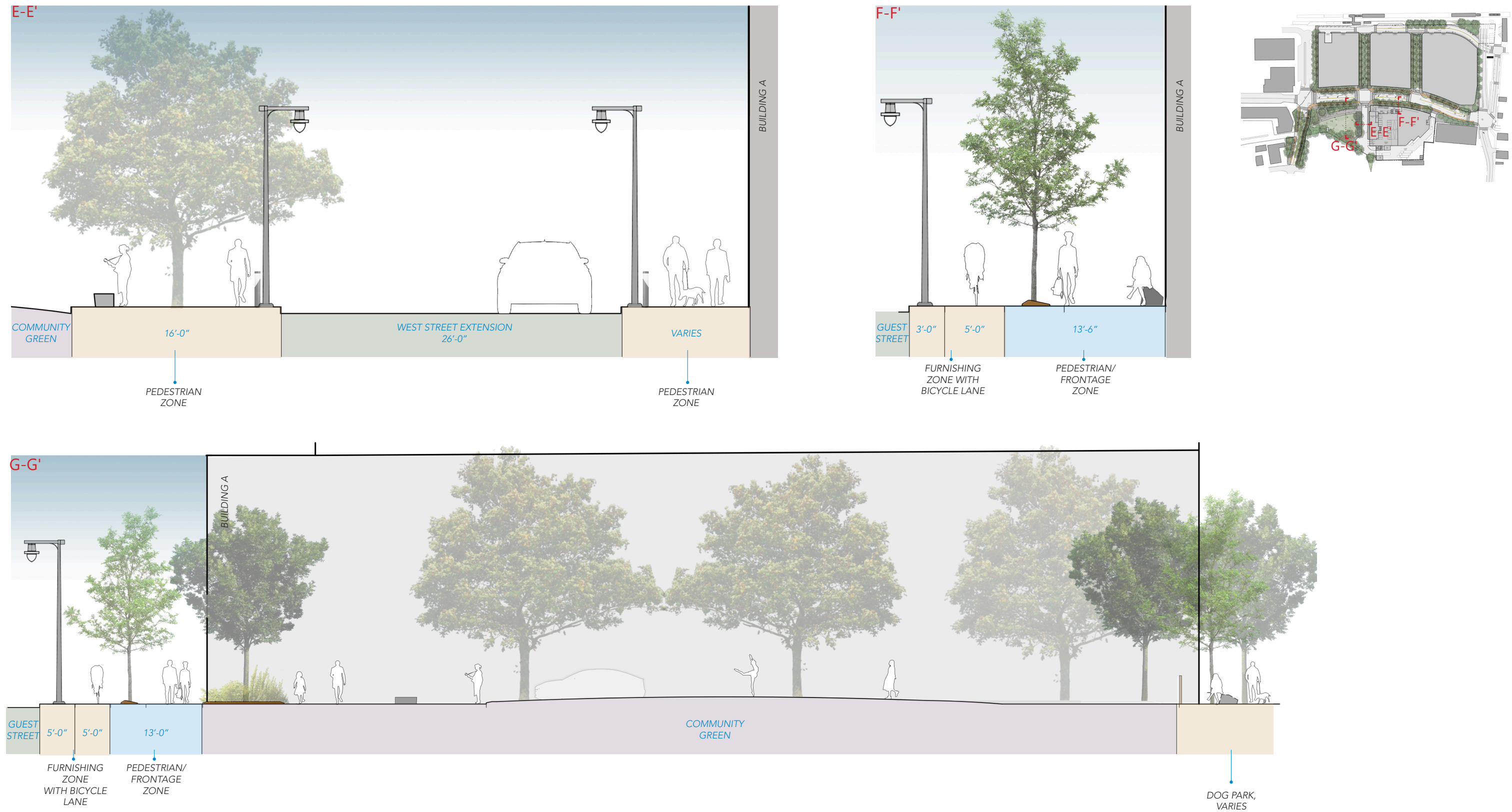
Figure 3.24
Conceptual Landscape Plan



Prepared by: Copley Wolff Design Group

Figure 3.25a
Public Realm Sections

Allston Yards
Allston, Massachusetts



Prepared by: Copley Wolff Design Group

Figure 3.25b
Public Realm Sections

Illustrative Purposes Only, Subject to Change

Allston Yards
Allston, Massachusetts

4

Sustainability and Climate Change Resiliency

The following chapter describes the overall approach to sustainable design, construction, and operations for the Proposed Project, in compliance with the requirements of Article 37 of the Boston Zoning Code relative to the City's Green Building policies and procedures. Specifically, this chapter includes an updated assessment of green building design and considerations for possible higher levels of LEED certifiability (at a Gold and/or Platinum) for all proposed buildings in response to the Interagency Green Building Committee's ("IGBC") comment letter on the PNF filing. A high-level discussion of the Proposed Project's District Energy Microgrid Feasibility Study is also provided, demonstrating the Proponent's commitment to understanding the Proposed Project's energy usage and opportunities for reducing GHG emissions. In addition, this chapter also discusses the approach to preparing for climate change impacts, in accordance with the BPDA Climate Change Preparedness and Resiliency Policy (the "Resiliency Policy"). The required Climate Change Preparedness and Resiliency Checklist (the "Resiliency Checklist") has been completed for the Proposed Project and is provided in Appendix C.

4.1 Summary of Key Findings and Benefits

The key findings related to sustainability and climate change include:

- › Reuse of a previously developed site in a dense urban setting as opposed to building on undeveloped open space.
- › Provide increased density with a mix of uses, including commercial office, residential, and retail in close proximity to public transit and walkable to the established Brighton-Allston neighborhood consistent with Smart Growth principles.
- › Reduce potable water for irrigation.
- › Increase pervious areas (including a large landscaped publicly-accessible Community Green) and incorporate green roofs and onsite infiltration to help manage and mitigate stormwater run-off from the Project Site.
- › Provide an efficient redevelopment plan that includes structured parking and increases open space, including a new one-acre publicly-accessible Community Green located at the corner of Guest Street Extension and Arthur Street. Additionally, the Community Green will introduce a tree canopy at the periphery, which could help mitigate potential wind effects created by the adjacent architecture.

- › Target a high level of sustainability by designing the Project Site and each building using the LEEDv4 rating system to demonstrate compliance with Article 37, Green Buildings, of the Code, specifically:
 - Target LEEDv4 certifiable Silver level at a minimum for all proposed buildings; and
 - Develop pathways for potentially achieving higher levels of LEED certifiability and continue exploring the opportunities for Building B (office building) to achieve the LEED Core & Shell ("C&S") Gold or Platinum level, the urban grocery store to achieve the LEED Commercial Interior ("CI") Gold level, and one or more of the three residential buildings (Building A, C, and D) to achieve the LEED New Construction ("BD+C") Gold level.
- › Reduce overall annual energy consumption through the implementation of energy optimizing building design and systems, which would result in a reduction in stationary source CO₂ emissions when compared to a building design that meets the minimum building code requirements.
- › Comply with the Massachusetts Stretch Energy Code requirement to be 10-percent better than ASHRAE 90.1-2013.
- › Incorporate adaptation and resiliency measures to address future impacts associated with climate change.
- › Utilize potential energy conservation incentives offered by utility companies.
- › Conduct a District Energy Microgrid Feasibility Study and consider incorporation of alternative energy options, including the use of fuel cell for the new grocery store in Building A. Refer to Section 7.3.5 of Chapter 7, *Greenhouse Gas Emissions Assessment*, for further details.
- › Study an alternative design of Building D to meet Passive House building design criteria (i.e., increase efficiency of the building envelope to reduce HVAC capacities).
 - Through coordination with DOER and based on the results of the study of Passive House for Building D, the Proponent will consider Passive House design strategies for the other residential buildings and the office building (Buildings A-C). Refer to Section 7.3.6 of Chapter 7, *Greenhouse Gas Emissions Assessment*, for further details.

4.2 Regulatory Context

4.2.1 Article 37 of Boston Zoning Code

Article 37 submittal requirements include completing a LEED scorecard to demonstrate that a project is being designed and constructed to meet the minimum requirements to achieve a LEED Certified level (all LEED prerequisites and achieve at least 40 points) without requiring the Proponent to register and/or certify the project through the GBCI third-party verification, or "LEED certifiable." With the LEED version 4, or "v4," rating system effective as of October 31, 2016, the BPDA requires

initial Article 80 Large Project Review submissions on or after November 1, 2016 to demonstrate LEED certifiable status using LEEDv4.

The Boston Interagency Green Building Committee ("IGBC") advises the BPDA on a proposed project's compliance with the provisions of the article. The Committee consists of representatives of city agencies including the BPDA, BED, BTB, the Inspectional Services Department and the Mayor's Office.

Boston Green Building Credits

Appendix A of Article 37 lists Boston Green Building Credits, which are credits that may be included in the calculation toward achieving a LEED certifiable project. These credits were developed by the City and are intended to address local issues unique to development within Boston. The credits include the following categories: Modern Grid, Historic Preservation, Groundwater Recharge, and Modern Mobility.

4.2.2 MEPA *Draft* Climate Adaptation and Resiliency Policy

In September 2014, the MEPA Office issued a draft policy for addressing potential impacts associated with climate change. The policy's intent is to facilitate the consideration and assessment of risks and vulnerabilities of a project or action under foreseeable scenarios or conditions associated with climate change in order to identify potential mitigation measures.

4.2.3 BPDA Climate Change Preparedness and Resiliency Policy

In conformance with the Mayor's 2011 Climate Action Leadership Committee's recommendations, the BPDA requires projects subject to Boston Zoning Article 80 Large Project Review to complete the Resiliency Checklist to assess potential adverse impacts that might arise under future climate conditions, and any project resiliency, preparedness, and/or mitigation measures identified early in the design stage. The Resiliency Checklist is reviewed by the IGBC. The Resiliency Checklist has been completed for the Proposed Project and is provided in Appendix C.

4.2.4 Boston Climate Action Plan

In 2010, the Boston Climate Action Leadership Committee and Community Advisory Committees presented the City's first climate action plan: Sparking the Climate Revolution 2010. The report contained wide-ranging recommendations for reducing Boston's contribution to climate change, addressing the changes we cannot avoid, and engaging the Boston community in the effort. Following an update in 2011, which set a goal of reducing GHG emissions by 25 percent by 2020 (A Climate of Progress), Mayor Walsh released the Greenovate Boston 2014 Climate Action Plan Update, which reported on the City's progress towards reducing GHG emissions and preparing for the impacts of climate change. This report documents that, since 2005, community-wide GHG emissions have decreased by 17 percent, and the City of Boston has made significant progress preparing for climate change. The City,

through the BPDA, uses the Article 80 Development Review process to include an assessment of likely effects of climate change in new development.

4.3 Sustainability/Green Building Design

4.3.1 Proposed Approach to Sustainability/Green Building Design

The Proposed Project supports Smart Growth objectives. It is located on a previously developed site in the Brighton-Allston neighborhood of the City of Boston and in close proximity to the new, recently opened Boston Landing MBTA commuter rail station and multiple bus routes, as well as vehicular access to the Turnpike which connects to major highway routes. Furthermore, the Proponent seeks to include environmentally conscious features and strategies that will benefit tenants, residents, and owners.

The Project Team continues to explore opportunities in energy conservation and sustainable design throughout the Proposed Project and will determine appropriate energy conservation and sustainable design approaches suited for integration into the development and buildings. Building design will include high-efficiency building systems, (mechanical, plumbing and electrical), LED lighting, and a high-performance building envelope. Refer to Section 7.3 of Chapter 7, *Greenhouse Gas Emissions Assessment*, for the energy modeling conducted for the Proposed Project. Other sustainable design measures, such as low-flow plumbing fixtures, building energy management systems and healthy interior environments are a few of the features the Project Team is considering as the design of each building advances.

Stop & Shop Corporate Commitment to Sustainability

Stop & Shop is very focused on sustainability through its store planning, design, and operations, as well as through customer wellness educational outreach efforts. The company's webpage provides information on its stores' sustainable features and food services, including green energy and energy conservation, responsible product promises, sustainable seafood, and waste reduction.¹ In 2016, Stop & Shop put into operation an anaerobic digester at its Distribution Center in Freetown, Massachusetts. As part of these sustainability efforts, Stop & Shop has set a target of diverting 90 percent of unsold food from landfills. Food from stores that goes unsold or is unable to be donated to regional food banks or local farms is transported to a state-of-the-art anaerobic digester which converts organic material into clean, sustainable power.

4.3.2 Compliance with Article 37

Article 37 of the Code requires new building projects to be designed to meet the compliance level of LEED certifiable using the LEEDv4 rating system as a guide. The

¹ Refer to the Stop & Shop website for descriptions of their existing corporate healthy living and wellness programs: <http://stopandshop.com/live-well/community/environment/>

proposed buildings will strive to meet or exceed this requirement by providing building designs that target LEEDv4 Silver certifiable level at a minimum for all proposed buildings, as demonstrated in the preliminary LEED Scorecards. Figures 4.1, 4.2, and 4.3 present the preliminary LEEDv4 rating system checklists for each of the building use typologies included in the Proposed Project. Consistent with the PNF, due to the varying use/building types, the following USGBC LEEDv4 rating systems are being used as guidance and to demonstrate compliance with Article 37, or LEED certifiable:

- › LEED-BD+C for Buildings A, C, and D (Figure 4.1);
- › LEED-C&S for Building B (Office) (Figure 4.2); and
- › LEED-CI for the new grocery store in Building A (Figure 4.3).

The checklists indicate the targeted LEEDv4 credits and the associated points. The narrative below summarizes the sustainable design compliance approach for each of the project types planned for the Proposed Project, in compliance with Article 37.

Since the PNF, the draft LEED Scorecards have been updated based on more current design. This resulted in an increase in potential 'yes' points across all building typologies, as follows:

- › From 44 to 52 points for the LEED-BD&C (residential Buildings A, C, and D);
- › From 49 to 51 points for LEED-C&S (office Building B); and
- › From 44 to 52 points for LEED-CI (grocery in Building A).

LEED Master Site Credit Approach

Along with site-wide infrastructure, the proposed site plan addresses stormwater management, pedestrian, vehicular and bicycle access, and accessible landscaped open space applicable to the individual buildings. Further, the inclusion of green roofs and the large landscaped Community Green and on-site infiltration contribute to mitigating stormwater run-off from the Project Site. Since the Proposed Project includes multiple new buildings with shared infrastructure, pedestrian-oriented circulation and extensive open space, a Master Site LEED documentation approach is proposed. Each building, including the grocery store, would then automatically achieve the site-wide credits, as applicable to the building-specific rating system. The LEED Master site and each of the buildings have been registered with the GBCI should the Proponent, or future tenants, elect to pursue certification in the future.

The USGBC provides sites with multiple buildings the opportunity to pursue several the prerequisites and credits under the Location and Transportation and Sustainable Sites credit category for the entire Project Site using a Master Site documentation approach. This approach streamlines the documentation process where applicable LEED prerequisites and credits are documented only one time under the Master Site project. Each building or fit-out project associated within the Master Site can demonstrate and document it meets the compliance level of LEED certifiable using the most appropriate LEEDv4 rating system, such as Core and Shell, New Construction, or Commercial Interiors. The Proponent has pro-actively registered a

LEED Master Site for the Proposed Project should one or more of the individual buildings or fit-out projects elect to pursue LEED Certification.

The LEED Prerequisites and Credits available to be documented through the Master Site process are listed below:

- › LT Sensitive Land Protection
 - The development site is a previously developed area adjacent to a similar parcel currently undergoing extensive development.
- › LT High Priority Site
 - The Project Site has areas of contaminated soils that must be removed and disposed of in compliance with all applicable regulations.
- › LT Bicycle Facilities
 - The development includes dedicated bike lanes that connect with the Boston bike network and/or roadways with a 25 MPH speed limit. Short-term on-site bike storage locations will be located throughout the site for visitor use. Enclosed long-term bike storage for residents and office building tenants will be provided within the garage or building footprint. Showers and changing rooms will be provided for employees of the office tower tenants.
- › LT Green Vehicles
 - Both the on-site parking and below grade parking will include both EV and Low-Emitting designated parking spaces.
- › SS Environmental Site Assessment
 - The Project is obtaining an updated Phase I site assessment.
- › SS Site Assessment
 - The design team carefully studied the Project Site including the existing topography and its relationships to the adjacent development, neighborhood and the Massachusetts Turnpike. Each of these was taken into consideration during the development of the Master Site.
- › SS Open Space
 - The Project includes a large landscaped public open space. The open space helps mitigate the local heat island effect and rainwater run-off. Wide sidewalks provide safe walking space for pedestrians.
- › SS Rainwater Management
 - A site-wide rainwater management plan has been developed. A minimum of 1.25-inch of stormwater will be captured and infiltrated and/or recharged on-site.
- › SS Heat Island Reduction
 - To mitigate local heat island effect, the buildings will include areas of green roof and light-colored membrane roofs. Pedestrian oriented hardscape materials will be light colored and landscaped areas will be incorporated throughout the development, including the Community Green. Trees will be included in the proposed landscape plan; they will provide additional areas of shade as they mature.

- › WE Outdoor Water Use Reduction
 - Potable water use for irrigation will target a reduction of 50 percent when compared to a mid-summer baseline.
- › EA Fundamental Refrigerant Management
 - The building systems throughout the development will include low impact refrigerants.
- › MR Construction and Demolition Waste Management Planning
 - The Construction Management team will implement compliant waste management plans for both construction and demolition (C+D). The plans will identify specific waste streams for diversion from land fill with a target to divert a minimum of 75 percent of C+D waste.
- › IEQ Environmental Tobacco Smoke Control
 - Each building will be non-smoking. The Project Site will be non-smoking. Appropriate signage will be posted.
- › Innovation in Design
 - The Proponent will continue exploring innovative approaches to design, construction, and operations and maintenance, to achieve these credits where applicable to the Master Site.

Integrative Process (IP)

The development team meets regularly to ensure the team members from the various disciplines involved are all known to each other and collectively communicating. Sustainable design focused workshops were held early on to assist the development team in establishing shared sustainable design and energy efficiency goals for the development. As the Proposed Project progresses, there will be multiple sustainable design-focused workshops to ensure the entire development team is engaged throughout the design and construction process.

The Proponent met with Eversource and National Grid to discuss the incentive programs and potential energy conservation measures for the Proposed Project.

Location and Transportation (LT)

The Project Site sits on the border between the Allston and Brighton neighborhoods of Boston. It abuts the new, recently opened Boston Landing MBTA commuter rail station. Local MBTA bus routes 64 and 86 pass through the neighborhood where there are currently stops located within ¼-mile of the Project Site. Additionally, the MBTA Green line 'B' route is approximately ¾-mile walking distance from the Project Site.

Based on initial discussions with the MBTA, the Proponent is planning to reroute the route 64 MBTA bus from Arthur Street to run along Guest Street Extension to Everett Street to North Beacon Street to better serve the anticipated development density in this area. Further details of this proposed transit improvement are provided in Section 5.4.7 of Chapter 5, *Transportation*.

In compliance with BTM requirements, to further reduce GHG emissions associated with vehicles, Electric Vehicle (EV) charging stations will be provided within in the structured parking across the Master Plan, including “EV ready” spaces, meaning that they are able to be converted to EV-equipped spaces as the demand grows. The EV-ready spaces will be constructed with sufficient electrical capacity and conduit will be installed in advance to serve these spaces. There will also be some parking below-grade, as well as on-street parking provided at designated locations throughout the Project Site. The overall quantity of parking provided within the development will target a 40-percent reduction from the ITE Transportation Planning Handbook for each anticipated building use, commercial office and residential, as per the credit requirements. Preliminary calculations confirm the credit requirements are currently being met for three of the four buildings.

The Proposed Project includes wide sidewalks and bike lanes to support pedestrian and cyclist safety. Exterior short-term bike storage for visitors and retail patrons will be provided at multiple exterior locations within the Proposed Project. Residents and employees will have access to enclosed secure bike storage areas within the parking structures. The new bike paths within the footprint of the Proposed Project will link with the established bike paths or marked bike lanes on the adjacent roadways in the neighborhood. Changing room and shower facilities are planned for inclusion in the core and shell office building to accommodate the employees of the office and retail tenants.

The immediate neighborhood provides a variety of services with pedestrian and cyclist access including restaurants, grocery stores, banks, and a post office. The Project Site currently has a Walk Score of 91.

Sustainable Sites (SS)

The Project Site is a previously developed industrial parcel in a densely developed Boston neighborhood. A site assessment was completed; it was determined there are urban fill type soils that require management. A compliant plan will be drafted, submitted and implemented to ensure the soils are managed appropriately.

The Proposed Project has been designed to incorporate pervious and open spaces through landscaping, a one-acre Community Green, pedestrian-oriented streetscapes and green roofs. The addition of these permeable areas helps reduce rainwater run-off.

A Proposed Project-wide rain water management plan will be developed to address the rate, run off and quality of the site rainwater. As described more fully in Chapter 8, *Infrastructure*, the Proposed Project will meet BWSC and MassDEP stormwater management requirements by significantly reducing the rainwater runoff by directing it into a below-grade re-charge/collection system sized to treat 1.25-inch of rain over all impervious areas of the Project Site, including proposed streets and sidewalks. Additionally, the rainwater will be absorbed through surface on-grade landscaping and green roofs. Rainwater directed to the municipal system will be treated to remove suspended solids prior to being released into the City system.

The Project Team is exploring the collection and re-use of site stormwater. Possible re-use options include landscaping irrigation, cooling tower make-up water and/or sewage conveyance.

Water Efficiency (WE)

The Proposed Project will reduce potable water use for both sewage conveyance and irrigation needs. The development team plans to specify low-flow/high-efficiency domestic and commercial plumbing fixtures including the following:

- › Residential: 1.28 gallons per flush (gpf) Water Closet (WC); 1.5 gallons per minute (gpm) Lavatory faucet; 1.5 gpm shower head; 1.5 gpm kitchen faucet.
- › Commercial: 1.28 gpf WC; 0.125 gpf urinal; 0.35 gpm Lavatory faucet; 1.5 gpm shower head.

Through the use of low-flow and high-efficiency plumbing fixtures, the proposed buildings are expected to reduce interior potable water use and sewage conveyance. WaterSense labeled fixtures will be specified where applicable. The flush and flow rates listed above are estimated to yield a 30 to 35 percent annual potable water use reductions.

To further reduce demand, the Project Team may explore using collected stormwater to mitigate potable water use for sewage conveyance.

The on-grade landscape design and the vegetated Community Green will use a mixture of drought tolerant trees, shrubs, and groundcover that grow well in an urban environment. The irrigation system will be designed to be efficient and use significantly less potable water when compared to a conventional irrigation system (at a mid-summer baseline, per LEED requirements).

Energy & Atmosphere (EA)

The proposed buildings will be designed with high-efficiency building systems and a high-performance building envelope, as demonstrated by the preliminary energy modeling based on conceptual design (updated from the PNF filing). The proposed HVAC system design for the residential buildings include vertical stack water source heat pumps, and a central plant for ventilation air and hot/chilled water distribution. The proposed HVAC system design for the core and shell office building includes an energy efficient central plant with cooling towers, chillers, and condensing boilers. Heat recovery ventilation AHUs will deliver 100 percent outside air. The design will include a DDC Building Automation system that is expandable to accommodate tenant systems and equipment. Refer to Section 7.3.2 of Chapter 7, *Greenhouse Gas Emissions Assessment*, for the specific Energy Conservation Measures ("ECM") proposed for each building, and the associated energy savings and stationary source GHG emissions reductions.

To further reduce energy usage and associated GHG emissions for the Proposed Project, the Proponent has continued to evaluate opportunities for incorporating on-site renewable energy technologies, including rooftop solar photovoltaic (PV)

arrays, combined heat and power, wind, fuel cell and district energy/microgrid. Refer to Section 7.3.5 of Chapter 7, *Greenhouse Gas Emissions Assessment*, for a discussion on the feasibility of each of these renewable energy sources.

Aligned with its corporate sustainability goals and commitments, Stop & Shop typically implements energy efficiency measures for its store systems design, including measures such as a heat reclaim system that uses the waste heat from the refrigeration compressors, high-efficiency gas boilers, and LED lighting. Additionally, Stop & Shop has evaluated the feasibility of incorporating fuel cell technology as an innovative ECM to help reduce its new grocery store's demand on the electrical grid.

Only refrigerants with low global warming and ozone depleting potential will be specified for use in building systems equipment. Each of the buildings, including the parking structures, will target lighting power densities 10 to 20 percent below code requirements through the use of LED lighting and lighting control systems.

The preliminary energy use assessment was conducted using whole building energy modeling. The proposed building designs currently meet both the Stretch Energy Code and LEEDv4 prerequisite criteria.²

Additionally, the Proponent plans to engage a Commissioning Agent (CxA) to perform both fundamental and enhanced commissioning services including providing reviews of design documents. The Proponent anticipates engaging a Building Envelope CxA to ensure the enclosure system is properly designed and installed as per owner's requirements. The CxA will continue through construction and ultimately confirm the building systems are installed and function as intended and desired.

Materials and Resources (MR)

The Proposed Project will specify materials and products that are environmentally responsible and are transparent regarding the harvest and extraction of raw materials and the manufacturing processes. The development team will endeavor to specify materials and products with environmental and health product declarations to help support a reduced impact of the development on the environment.

During design development the project may elect to run a whole building life cycle assessment for each building type to understand the environmental impact of the proposed building materials and components of the structure and enclosure.

Waste management will be addressed both during construction and post occupancy. The construction manager (CM) will provide a construction waste management plan to divert a minimum 75 percent of the construction and demolition debris comprised of multiple waste streams.

Post-occupancy collected recyclables will be accommodated on the ground floor of each of the buildings in an area near the loading docks. Core and shell tenants and

² The Stretch Energy Code compliance model is compared to an ASHRAE 90.1-2013 baseline and the LEED model is compared to the ASHRAE 90.1-2010 baseline.

residents will bring their recyclables to a central storage room. The residential buildings may incorporate trash and recycling chutes on each floor. A contracted waste management company will pick up the collected recyclables on a regular basis.

Indoor Environmental Quality (IEQ)

The buildings will have a healthy interior environment generated through the use of low-VOC containing interior construction and finish materials and maintained through an efficient ventilation system in compliance with ASHRAE 62.1-2010. In compliance with local regulations, each building will be non-smoking. Additionally, no smoking will be allowed on-site within the Master Plan, including on residential terraces and in building courtyards.

Additionally, during construction, the CM will develop and implement a compliant Indoor Air Quality Management Plan for the construction and pre-occupancy phases of the Proposed Project.

The conceptual building envelope design for the proposed buildings includes large areas of vision glazing with ample access to daylight and views for the anticipated regularly occupied spaces in both the residences and on a typical office floor.

Both the core and shell office and the residential building thermal comfort systems and controls will be designed to meet the requirements of ASHRAE 55-2010 for all applicable mechanically ventilated regularly occupied spaces.

Innovation in Design (ID)

The Proponent will explore innovative approaches to design, construction, and operations and maintenance, including considering specifying low-mercury lighting, integrating public green education, and implementing an integrated pest management plan, and/or a green housekeeping plan.

Regional Priority Credits (RPC)

Applicable regional priority credits for the Project Site may include:

- › EA Renewable Energy Production (2-point threshold)
- › EA Optimize Energy Performance (8-point threshold)
- › SS High Priority Site
- › SS Rainwater Management
- › Indoor Water Use Reduction (4-point threshold)

USGBC LEED Certification

The Proposed Project has been registered with USGBC through LEED Online as a LEED Master Site. Each of the proposed buildings is registered with USGBC through LEED Online in association with the LEED Master Site.

Boston Green Building Credits

At this preliminary design stage, the Proposed Project will evaluate achieving two of the four available Boston Green Building credits (Appendix A of Article 37):

Groundwater Recharge

The Proponent intends to assess if the site-wide rain water management plan meets the requirements of this Green Building credit once it is further developed.

At a minimum, the BWSC requirements will be met. The Project will incorporate groundwater recharge techniques, including the installation of surface and subsurface infiltration systems to meet BWSC infiltration requirements. Infiltration is the largest component of stormwater discharge rate reduction and will greatly promote annual recharge relative to the existing site condition, which is mostly impervious.

Modern Mobility

The Proponent plans to pursue the Boston Green Building Modern Mobility credit through implementation of a comprehensive TDM Plan, as described further in Section 5.11 of Chapter 5, *Transportation*. As part of the transportation mitigation strategy, the Proposed Project includes significant short- and long-term bicycle storage locations, in compliance with BTB's guidelines, and including a public bike-share station, if desired by the City, as well as access to public transportation. In compliance with BTB requirements, to further reduce GHG emissions associated with vehicles, Electric Vehicle (EV) designated parking with charging stations will be provided within the structured parking across the Master Plan. In addition, some portion of the parking spaces will be "EV ready," meaning that they are able to be converted to EV-equipped spaces as the demand grows. Also, the Proponent will consider providing preferred parking for low-emitting fuel-efficient vehicles within each of the garages serving the buildings comprising the Proposed Project.

4.3.3 Evaluation of Achieving Higher LEED Rating Levels

In response to IGBC's comment letter on the PNF filing, the Proponent has developed a pathway to achieving higher levels of LEED ratings, which includes identifying the additional credits required, as well as those best suited for further studies. The Proponent intends to continue exploring the opportunities to pursue additional credits with a target for Building B (office building) to achieve the LEED Core & Shell Gold or Platinum level, the grocery store to achieve the LEED Commercial Interior Gold level, and one or more of the three residential buildings (Building A, C, and D) to achieve the LEED New Construction Gold level.

LEED-BD+C Gold/Platinum Rating

In response to IGBC's comment letter on the PNF, the Project Team conducted an in-depth LEED credit analysis to determine the feasibility of attempting additional credit points to pursue the LEED certifiability levels of either Gold or Platinum for the residential building projects (Buildings A, C, and D), which are using the LEED-BD+C

rating system. The following credits have been identified as those applicable for further study to achieve Gold level certifiability:

- › LT Reduced Parking Footprint (1 point)
 - This credit is pending the final design of the Master Plan and quantity of on-grade and below-grade parking spaces.
- › SS Heat Island Reduction, Option 2 (1 point)
 - In addition to the below-grade parking, the Project will consider specifying and installing SRI-compliant hardscaping and roof materials.
- › SS Light Pollution Reduction (1 point)
 - The Project Team will explore opportunities to design the site and exterior building lighting in compliance with the backlight, uplight, and glare parameters for the applicable lighting zone designation.
- › WE Indoor Water Use Reduction (1-2 points)
 - The Project Team will consider performing test case scenario calculations to test various flush and flow rate combinations.
- › EA Enhanced Commissioning (2 points)
 - The Proponent will consider implementing the building envelope commissioning process.
- › EA Optimize Energy Performance (2+ points)
 - The Proposed Project will consider establishing an energy performance target to further increase annual energy cost savings beyond the prerequisite standard. (Note, energy modeling has been refined to reflect the current project conceptual design. The overall project energy savings has increased to 27.2 percent and stationary source GHG emissions reductions has improved to 20.6 percent. Refer to Section 7.3 of Chapter 7, *Greenhouse Gas Emissions Assessment*, for the updated energy model results by building.)
- › EA Demand Response (2 points)
 - Upon completion of the District Energy Microgrid Feasibility Study, the Project Team will confirm whether thermal and/or electrical energy storage is feasible for the Project.
- › EA Renewable Energy Production (1 point)
 - The Proponents will consider including rooftop PV arrays in available roof areas.
- › MR Building Life-cycle Impact Reduction (3 point)
 - The Proponents will consider conducting a whole building Life Cycle Assessment to review the environmental impacts of the materials and products planned for the building structure and enclosure.

Upon completion of the assessment to evaluate additional viable credits the Proposed Project could pursue. The Project Team met to review and discuss the options and at this time there are some credits that were identified as extremely difficult to achieve due to limitations in the availability of compliant materials

documentation. After considering the possible pathways it was determined that a Platinum level rating is not feasible for the residential buildings. Through design, the Project Team will continue to evaluate the achievability of credits for the highest LEED certifiable level, as reasonable and feasible.

LEED-C&S Gold/Platinum Rating

In response to IGBC's comment letter on the PNF, the Project Team completed an assessment to determine the feasibility of achieving LEED Gold and Platinum rating levels for Building B (office) under the LEED-C&S rating system. The following credits have been identified to attempt Gold certifiability:

- › LT Reduced Parking Footprint (1 point)
 - This credit is pending the final design of the Master Plan and quantity of on-grade and below-grade parking spaces.
- › SS Heat Island Reduction, Option 2 (1 point)
 - In addition to the below-grade parking, the Proposed Project will consider specifying and installing SRI compliant hardscaping and roof materials.
- › SS Light Pollution Reduction (1 point)
 - The Project Team will explore opportunities to design the site and exterior building lighting in compliance with the backlight, uplight, and glare parameters for the applicable lighting zone designation.
- › WE Indoor Water Use Reduction (1-2 points)
 - The Project Team will consider performing test case scenario calculations to test various flush and flow rate combinations.
- › EA Enhanced Commissioning (2 points)
 - The Proponent will consider implementing the building envelope commissioning process.
- › EA Optimize Energy Performance (2+ points)
 - The Proponents will consider establishing an energy performance target to further increase annual energy cost savings beyond the prerequisite standard.
- › EA Demand Response (2 points)
 - Upon completion of the District Energy Microgrid Feasibility Study, the Project Team will confirm whether thermal and/or electrical energy storage is feasible for the Proposed Project.
- › EA Renewable Energy Production (1 point)
 - The Proponent will consider including a rooftop PV array on the building.
- › EA Enhanced Refrigerant Management (1 point)
 - This credit is dependent on the final equipment selection and the total amount of refrigerants in the system.

- › MR Building Life-cycle Impact Reduction (3 point)
 - The Proponent will consider conducting a whole building Life Cycle Assessment to review the environmental impacts of the materials and products planned for the building structure and enclosure.
- › MR Construction Demolition Waste Management (1 point)
 - The Proponent will explore opportunities to ensure site separation of a minimum of four waste streams and meeting a 75-percent C+D waste diversion rate.
- › ID Innovation and Design Credits/Pilot Credit (up to 2 additional points)
 - The Project Team will consider exploring innovative approaches to design, construction, and operations and maintenance, to achieve these credits.

The following *additional* credits have been identified as those applicable for further study to pursue Platinum certifiability:

- › SS Rainwater Management (2 points)
 - This credit is pending the final stormwater management approach for the developed site.
- › WE Outdoor Water Use Reduction (1 point)
 - The Project will consider using captured/stored rainwater, instead of potable water, for irrigation.
- › EA Optimize Energy Performance (7+ points)
 - The Proponent will explore strategies to optimize energy efficiency of HVAC systems and optimize high performance envelope. Rooftop solar PV installation would contribute to this credit. A signed tenant lease and sales agreement would allow the building energy model to take into account certain tenant upgrades. To achieve higher rating levels, the Annual Energy savings must be significant.
- › MR Building Product Disclosure and Optimization - Sourcing of Raw Materials (1 point)
 - The Proponents will consider selecting products verified to have been extracted or sourced in a responsible manner.
- › EQ Low-Emitting Materials (1 point)
 - The Proponents will consider incorporating building materials that are in compliance with emissions and content standards for this credit.

Compared to the other building uses, it was determined the LEED-C&S office building would be the best candidate to consider pursuing LEED certifiability at the Platinum level. However, all credits listed above (under the Gold level pathway as well) would have to be achieved to meet such a high level of LEED certifiability, which is challenging, costly, and, more importantly, tenant-dependent. Without a tenant identified for Building B, whether a Platinum level office building could be achievable in the market is yet to be determined.

LEED-CI Gold/Platinum Rating

The Project Team completed an analysis to determine the feasibility of attempting the LEED certifiability levels of either Gold or Platinum for the Stop & Shop Commercial Interiors project which are pursuing certifiability under the LEED-CI for Retail rating system.

The following credits have been identified as those applicable for further study to achieve a Gold rating level:

- › EA Enhanced Commissioning (2 points)
 - The Project will consider including monitor-based commissioning.
- › EA Optimize Energy Performance (2+ points)
 - The Proponents will explore strategies to improve efficiency of building systems in order to increase annual energy cost savings.
- › EA Green Power and Carbon Offsets (2 points)
 - The Proponents will consider purchasing RECs and carbon offsets for 100 percent of the Project's annual energy use for five years.
- › EA Enhanced Refrigerant Management (1 point)
 - This credit is dependent on the final equipment selection and the total amount of refrigerants in the system.
- › MR Building Product Disclosure and Optimization – Material Ingredients (1 point)
 - The Proponents will consider using products and materials with preferred or improved life-cycle impacts.
- › MR Construction Demolition Waste Management (1point)
 - The Proponents will explore opportunities to ensure site separation and tracking of a minimum of four waste streams and meeting a 75-percent C+D waste diversion rate.
- › ID Innovation and Design Credits/Pilot Credit (up to 2 additional points)
 - The Project Team will consider exploring innovative approaches to design, construction, and operations and maintenance, to achieve these credits.

Upon completion of the LEED assessment to evaluate additional viable credits, the team met to review and discuss the options. At this time there are some credits that are extremely difficult to achieve due to limitations in the availability of compliant materials documentation. After considering the possible pathways it was determined that a Platinum rating level is not feasible for the Stop & Shop interior fit out. Through design, the Project Team will continue to evaluate the achievability of credits for the highest LEED certifiable level, as reasonable and feasible.

4.4 District Energy Microgrid Feasibility Study

As a result of changes to the development program since the PNF, the Proposed Project's total square footage fell below the 1.5 million SF BPDA Smart Utilities Pilot Policy District Energy Microgrid threshold. While the Proposed Project is no longer technically subject to the Policy, it has volunteered to participate in the Policy. To further understand energy use and GHG opportunities, in support of the BPDA's Policy, the Proponent has agreed to undertake a District Energy Microgrid Feasibility Study. Additionally, each building has been independently studied through a preliminary energy model to assess possible ECMs for inclusion as the design progress and for the purposes of estimating GHG emissions. Refer to Section 7.3 of Chapter 7, *Greenhouse Gas Emissions Assessment*, for the results of the energy modeling by building.

The District Energy Microgrid Feasibility Study will demonstrate the potential benefit of deploying various energy generation and storage technologies on four areas of focus emphasized by the BPDA: building energy use, operational energy cost, GHG mitigation, and climate resiliency design. The Proponent will identify District Energy Microgrid strategies that are suitable for the Project given its site opportunities (such as roof areas amendable to solar and local thermal heat sources) and constraints (such as phasing and ownership models). Each technology and site distribution approach studied for the Proposed Project will be assessed for its performance in the three area of focus described above.

The study is executed in two parts: Part A and Part B. For Part A, which was submitted to the BPDA on January 7, 2019, the Project Team investigated building thermal and electric load profiles to capture preliminary proposed energy conservation and/or GHG mitigation measures. This load information is paired with utility tariff structures to determine baseline operational energy cost for the development. Part A also includes an investigation of physical constraints on district energy/microgrid system deployment (such as mechanical/electrical plant area and building massing) and regulatory constraints (such as utility policies that do not incentivize self-generation and Massachusetts residential metering policies). An outcome of Part A includes a set of recommendations for system configuration as defined by the Project Site's data, utility information, and constraints.

For Part B of the analysis, a detailed technical and economic exploration of microgrid feasibility for the Proposed Project will be conducted. First, a "business as usual" case for utilities on the Project Site is defined and compared to all proposed microgrid scenarios as a baseline for energy cost and resiliency. Based on this assessment, the Project Team will then outline a proposed electrical and thermal plant and distribution scenario, including considerations of maintenance cost, construction cost, and operational cost savings to demonstrate the payback of that scenario. Potential energy resiliency measures for the Proposed Project are included in Section 4.5.3.

The Part B analysis will be conducted in advance of detailed building design and project phasing plans. As such, it is intended that the conclusions derived from this

assessment will be reviewed for feasibility at a later stage of when design details are more fully known. The Proponent and Project Team will continue to consult with the BPDA as it prepares and files Part B.

4.5 Climate Change Preparedness and Resiliency

Climate change is expected to result in increased temperatures, rising sea levels, more frequent extreme storms and extreme weather events. The following sections describe future climate scenarios, and the Project's approach regarding site and building design features, to improve the Project's resiliency under these scenarios. As required by the BPDA for Large Project Review, the Proponent has begun to consider the projected impacts related to climate change in early stages of planning and design by completing the Resiliency Checklist (Appendix C).

4.5.1 Projected Changes in Climate Conditions

The latest *Massachusetts Statewide and Major Basins/Climate Change Projections Report*, published by EEA in March 2018, provides an updated set of climate projections to demonstrate how climate change is likely to impact the Commonwealth through the end of the century. In addition to the statewide climate projections, the report also provides more down-scaled, localized projections by extrapolating the data to the Commonwealth's major watershed basins. The projections for expected total rainfall, number of days receiving over one-, two-, and four-inches of rainfall, and consecutive dry days are variable (fluctuating seasonally between loss and gain of days) for the Boston Harbor basin, where the Project Site is located. The Boston Harbor basin is also expected to experience increased average, seasonal, and extreme high temperatures, as well as increased number of days with extreme heat/temperatures greater than 90°F and 100°F) throughout the 21st century.

4.5.2 Sea Level Rise and Extreme Storms/Flooding

In December 2017, the BPDA released an updated Climate Resiliency Guidance document that identifies scenarios that the City believes represent reasonable SLR risk thresholds for evaluating impacts to new development. The BPDA used the Boston Harbor Flood Risk Model ("BH-FRM") to create its Sea Level Rise – Flood Hazard Area ("SLR-FHA") map, which depicts the one-percent annual chance flood event with 40 inches (3.3 feet) of SLR. This represents a combination of the mean SLR (3.2 feet above 2013 MSL) plus 2.5 inches of local subsidence that is projected to occur by 2070.

The Project Site is located outside of the 100-year flood zone and approximately 2,510 feet from the closest open body of water; therefore, extreme flooding and sea level rise are not anticipated to impact the Proposed Project. Figure 4.4 demonstrates that the Project Site is located outside of flood zone.

4.5.3 Potential Resiliency Measures

Site Design

The Proposed Project will provide infiltration that retains site runoff while providing treatment and peak flow mitigation in accordance with municipal stormwater standards. Additionally, the Project Site will grade away from the proposed buildings and on-site drainage will be picked up by area drains or infrastructure in the surrounding streets. The finished grade of the site (34.0+/- feet) is significantly higher than the Sea Level Rise - Base Flood Elevation (SLR-BFE) of the Charles River and surrounding sites (15.2-feet) north of the project.

At the street level, the Proponent aims to reduce the heat island effect through the use of light-colored paving materials and integration of greenery, such as tree canopy cover and several landscape features along the streetscape and common green space.

Consistent with the BPDA's Smart Utilities Pilot Policy and in coordination with BWSC and PIC, the Proposed Project will coordinate the design of underground utilities, including electrical and telecom. And, for redundancy, additional conduits adjacent to the street lighting will be install for future telecommunication uses.

Protective plantings throughout and at the edges of the Project Site will mitigate potential wind effects created by open spaces. Additionally, the proposed Community Green located at the corner of Guest Street Extension and Arthur Street will introduce a tree canopy at the periphery, which could help mitigate potential wind effects created by the adjacent architecture.

Building Design and Operations

The following design and planning measures will be explored to mitigate for rising temperature impacts:

- › Employing reflective roof materials and/or vegetated roofs;
- › Designing the residential units for natural ventilation (i.e., operable windows), which help mitigate power disruptions by reducing the reliance on mechanical ventilation systems windows by providing fresh air when mechanical systems are down; and
- › As part of the energy modeling process, climate profiles that reflect the predicted increase in temperature may be used to better understand how the buildings and their systems would perform under different climate conditions. (This understanding may then be considered when designing major plant and overall HVAC systems.)
- › As part of the District Energy Microgrid Feasibility Study, the Project Team will assess the level of back-up power and system control needed to maintain safe indoor temperatures and mechanical ventilation in the residences and office building in the event of simultaneous heatwave and grid outage.
- › The Project Team is exploring CHP, combined cooling heat and power (CCHP), fuel cells, rooftop solar PV, and energy storage to create redundant sources of

local energy generations and storage for the Project, enhancing the Project's ability to become "islanded" from the utility grid in the event of an outage.

- More specifically, the fuel cell system is being explored to reduce energy cost, mitigate GHG emissions, and provide back-up power for the new grocery store in Building A. The Project Team is currently examining the grocery store's electrical loads to determine the appropriate level of back-up power needed to protect perishable food and to keep the store open during utility outage.

Y	?	N			
1			Credit	Integrative Process	1
16	0	0	Location and Transportation		
		X	Credit	LEED for Neighborhood Development Location	16
1			Credit	Sensitive Land Protection	1
2			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
3	4	3	Sustainable Sites		
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
	2	1	Credit	Rainwater Management	3
1	1		Credit	Heat Island Reduction	2
	1		Credit	Light Pollution Reduction	1
5	2	4	Water Efficiency		
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
1	1		Credit	Outdoor Water Use Reduction	2
2	1	3	Credit	Indoor Water Use Reduction	6
1		1	Credit	Cooling Tower Water Use	2
1			Credit	Water Metering	1
10	7	16	Energy and Atmosphere		
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	2	1	Credit	Enhanced Commissioning	6
4	3	11	Credit	Optimize Energy Performance	18
1			Credit	Advanced Energy Metering	1
		2	Credit	Demand Response	2
	1	2	Credit	Renewable Energy Production	3
	1		Credit	Enhanced Refrigerant Management	1
2			Credit	Green Power and Carbon Offsets	2
3	5	5	Materials and Resources		
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
	3	2	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
7	4	5	Indoor Environmental Quality		
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
2			Credit	Enhanced Indoor Air Quality Strategies	2
1	1	1	Credit	Low-Emitting Materials	3
1			Credit	Construction Indoor Air Quality Management Plan	1
	1	1	Credit	Indoor Air Quality Assessment	2
1			Credit	Thermal Comfort	1
1	1		Credit	Interior Lighting	2
		3	Credit	Daylight	3
1			Credit	Quality Views	1
	1		Credit	Acoustic Performance	1
6	0	0	Innovation		
5			Credit	Innovation	5
1			Credit	LEED Accredited Professional	1
1	2	1	Regional Priority		
1			Credit	Regional Priority: High Priority Site	1
	1		Credit	Regional Priority: Rainwater management (2 pt threshold)	1
	1		Credit	Regional Priority: Optimize Energy (8 pt threshold)	1
		1	Credit	Regional Priority: Renewable Energy (2 pt threshold)	1
52	24	34	TOTALS		
Possible Points:					110
Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110					

Source: TGE

Prepared By: VHB

Figure 4.1

Preliminary LEED-New Construction and Major Renovation Scorecard

Allston Yards
Boston, Massachusetts

Y	?	N			
1			Credit	Integrative Process	1

16	0	4	Location and Transportation			20
		X	Credit	LEED for Neighborhood Development Location	20	
2			Credit	Sensitive Land Protection	2	
3			Credit	High Priority Site	3	
6			Credit	Surrounding Density and Diverse Uses	6	
3		3	Credit	Access to Quality Transit	6	
1			Credit	Bicycle Facilities	1	
		1	Credit	Reduced Parking Footprint	1	
1			Credit	Green Vehicles	1	

4	4	3	Sustainable Sites			11
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	
	2	1	Credit	Rainwater Management	3	
1	1		Credit	Heat Island Reduction	2	
	1		Credit	Light Pollution Reduction	1	
1			Credit	Tenant Design and Construction Guidelines	1	

5	2	4	Water Efficiency			11
Y			Prereq	Outdoor Water Use Reduction	Required	
Y			Prereq	Indoor Water Use Reduction	Required	
Y			Prereq	Building-Level Water Metering	Required	
1	1		Credit	Outdoor Water Use Reduction	2	
2	1	3	Credit	Indoor Water Use Reduction	6	
1		1	Credit	Cooling Tower Water Use	2	
1			Credit	Water Metering	1	

12	6	14	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	2	1	Credit	Enhanced Commissioning	6	
6	2	10	Credit	Optimize Energy Performance	18	
1			Credit	Advanced Energy Metering	1	
		1	Credit	Demand Response	2	
	1	2	Credit	Renewable Energy Production	3	
	1		Credit	Enhanced Refrigerant Management	1	
2			Credit	Green Power and Carbon Offsets	2	

3	4	7	Materials and Resources			14
Y			Prereq	Storage and Collection of Recyclables	Required	
Y			Prereq	Construction and Demolition Waste Management Planning	Required	
	3	3	Credit	Building Life-Cycle Impact Reduction	6	
1		1	Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2	
		2	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	

5	2	1	Indoor Environmental Quality			10
Y			Prereq	Minimum Indoor Air Quality Performance	Required	
Y			Prereq	Environmental Tobacco Smoke Control	Required	
2			Credit	Enhanced Indoor Air Quality Strategies	2	
1	1	1	Credit	Low-Emitting Materials	3	
1			Credit	Construction Indoor Air Quality Management Plan	1	
	1		Credit	Daylight	3	
1			Credit	Quality Views	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	Regional Priority: High Priority Site	1	
	1		Credit	Regional Priority: Rainwater management (2 pt threshold)	1	
	1		Credit	Regional Priority: Optimize Energy (8 pt threshold)	1	
		1	Credit	Regional Priority: Renewable Energy (2 pt threshold)	1	

51	22	34	TOTALS			Possible Points: 110
Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110						

Source: TGE

Prepared By: VHB

Figure 4.2

Preliminary LEED-Core and Shell

Allston Yards
Boston, Massachusetts

Y	?	N			
2			Credit	Integrative Process	2

16	0	2	Location and Transportation			18
		x	Credit	LEED for Neighborhood Development Location	18	
8			Credit	Surrounding Density and Diverse Uses	8	
5		2	Credit	Access to Quality Transit	7	
1			Credit	Bicycle Facilities	1	
2			Credit	Reduced Parking Footprint	2	

4	2	6	Water Efficiency			12
Y			Prereq	Indoor Water Use Reduction	Required	
4	2	6	Credit	Indoor Water Use Reduction	12	

14	11	13	Energy and Atmosphere			38
Y			Prereq	Fundamental Commissioning and Verification	Required	
Y			Prereq	Minimum Energy Performance	Required	
Y			Prereq	Fundamental Refrigerant Management	Required	
4	1		Credit	Enhanced Commissioning	5	
8	6	11	Credit	Optimize Energy Performance	25	
2			Credit	Advanced Energy Metering	2	
	1	2	Credit	Renewable Energy Production	3	
	1		Credit	Enhanced Refrigerant Management	1	
	2		Credit	Green Power and Carbon Offsets	2	

3	3	7	Materials and Resources			13
Y			Prereq	Storage and Collection of Recyclables	Required	
Y			Prereq	Construction and Demolition Waste Management Planning	Required	
1			Credit	Long-Term Commitment	1	
		4	Credit	Interiors Life-Cycle Impact Reduction	4	
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	

7	4	7	Indoor Environmental Quality		18
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
3			Credit	Enhanced Indoor Air Quality Strategies	3
1	1	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
1		1	Credit	Interior Lighting	2
	2	1	Credit	Daylight	3
	1		Credit	Quality Views	1
		2	Credit	Acoustic Performance	2

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

2	2	0	Regional Priority		4
1			Credit	Regional Priority: LT Bicycle Facilities	1
	1		Credit	Regional Priority: LT Reduced Parking Footprint	1
1			Credit	Regional Priority: MR BPDO EPDs	1
	1		Credit	Regional Priority: EA Renewable Energy OR Optimize Energy Perf	1

52	24	35	TOTALS			Possible Points:	111
Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80+							

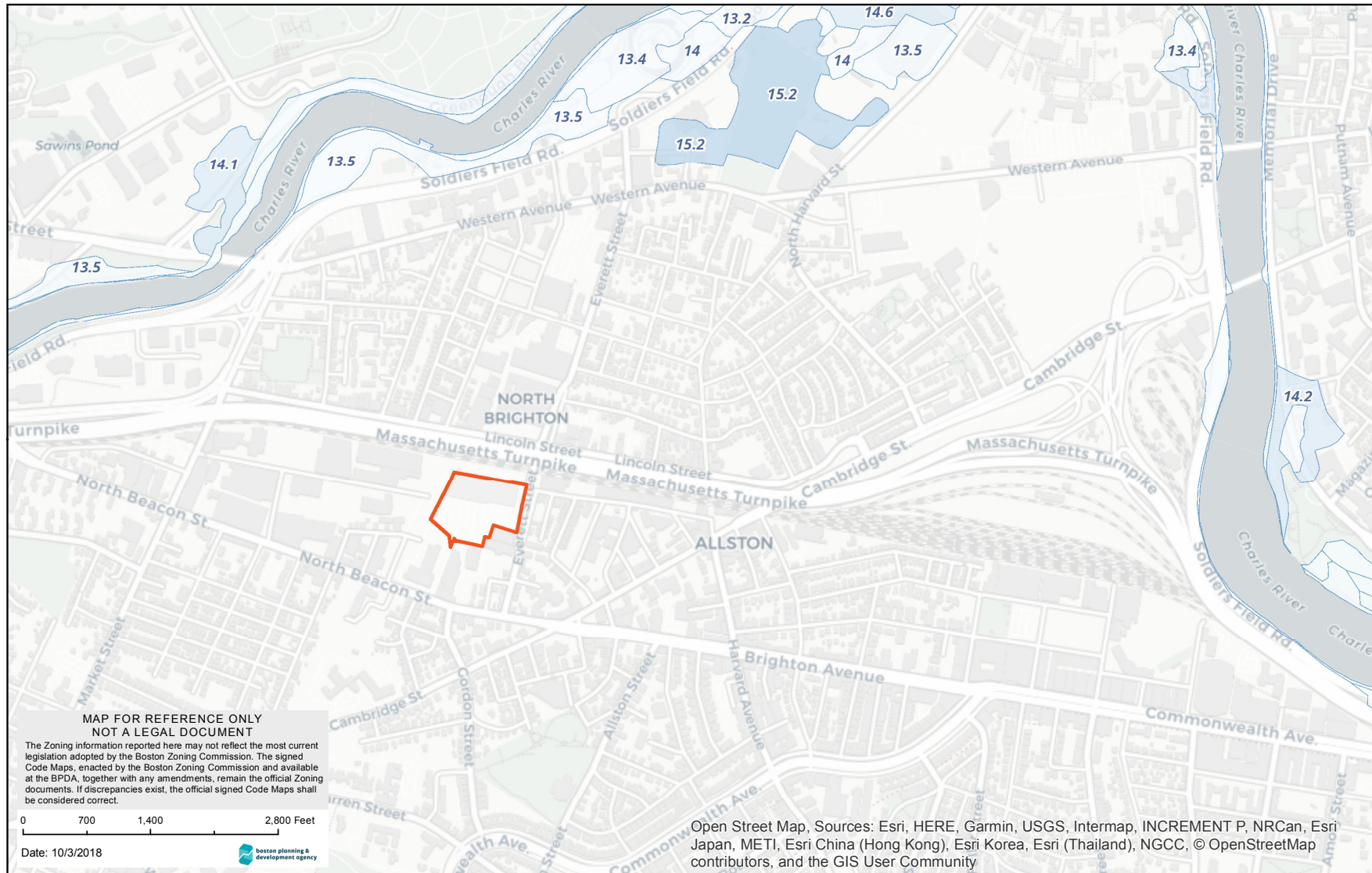
Source: TGE

Prepared By: VHB

Figure 4.3

Preliminary LEED-Commercial Interiors
Retail

Allston Yards
Boston, Massachusetts



Source: BPDA

Prepared By: VHB

Figure 4.4

Flood Zone

**Allston Yards
Boston, Massachusetts**