EXPANDED ENVIRONMENTAL NOTIFICATION FORM
DRAFT PROJECT IMPACT REPORT
VOLUME II

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

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FEBRUARY 2019

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B: Metes & Bounds*

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E: Environmental Protection Supporting Documentation*

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Transportation

This chapter provides a detailed and comprehensive evaluation of the existing and proposed transportation conditions and identifies potential traffic impacts and resulting mitigation as a result of the Proposed Project. The analysis has been conducted using standard methodologies of the Boston Transportation Department (BTD). The study also has been performed in conformance with the Massachusetts Executive Office of Environmental Affairs (EEA)/Executive Office of Transportation (EOT) guidelines. The version of the study presented in the City of Boston Project Notification Form (PNF) has been expanded to include material and responses requested in both the August 3, 2018 Boston Planning & Development Agency (BPDA) Scoping Determination, as well as the December 13, 2018 Transportation Scoping Letter issued by the Massachusetts Department of Transportation (MassDOT). Both documents are included in Appendix D for reference. This additional material includes analysis of additional study area intersections along Cambridge Street, transit capacity analyses, and an additional evaluation of bicycle and pedestrian accommodations within and around the Site, among other items.

A full Traffic Impact and Access Study already has been conducted and presented in the City of Boston PNF for an earlier version of the current development proposal. As discussed in this chapter, the sizes of some development components have changed, and other Site enhancements have been added. Updated traffic counts and analysis also have been conducted to accurately reflect any changes that have occurred in the area since the preparation of the prior study.

The Proposed Project meets the traffic impact analysis criteria for both MassDOT and BTD. In addition, the Proposed Project's traffic analysis presented in the PNF was reviewed by two separate independent traffic peer reviewers.

The Proposed Project will provide for the following area-wide improvements/benefits:

- **Advances the Proposed Project's transportation improvements and mitigation together with Phase 1, the initial phase of development;**
- **Advances the goals of the Brighton Guest Street Area Planning Study ("Guest Street Planning Study");**
- **Provides a lotting plan that allows for enhanced vehicular and pedestrian connections via East Street and West Street, and including the new Guest Street, Braintree Street, and West Street Extensions, which would otherwise not be achievable without the Proposed Project;**
- **Addresses existing deficiencies and improves conditions and operations of Everett Street, resulting in an LOS C at all time periods at the Guest Street Extension/Everett Street intersection, with the exception of the Weekday**

Evening Peak Hour, when the intersection would operate at an acceptable LOS D;

- **Dedicates substantial land area to public streets and ways promoting the long-term success of other previously approved projects;**
- **Addresses existing deficiencies and fulfills the long-term need to align the Arthur Street/Guest Street intersection;**
- **Creates new and enhanced access to the Boston Landing MBTA commuter rail station for both Site residents and workers, and the nearby surrounding neighborhoods;**
- **Minimizes impacts at key locations, including the North Beacon Street/ Market Street intersection, Everett Street/North Beacon Street intersection, Union Square, and other locations; and**
- **Reduces vehicular traffic by locating density immediately adjacent to the recently-opened Boston Landing MBTA commuter rail station and providing ample accommodations for pedestrians and bicyclists.**
- **Allows for a rerouting of MBTA Route 64 through the Project Site to maximize use of public transportation, while introducing Transit Signal Priority (TSP) measures at three key locations along the revised bus route.**

The transportation infrastructure improvements to be implemented as part of the Proposed Project have been designed to accommodate traffic from the potential redevelopment of surrounding properties, including Boston Landing and others, as well as the traffic anticipated to be generated by the Proposed Project. By providing transportation improvements as part of Phase 1, the Proposed Project "unlocks" the potential for redevelopment of these surrounding properties. This also will result in the required transportation mitigation being fully in place prior to the phased ongoing development of the Site and accompanying traffic.

Overall, the additional new traffic generated by the Proposed Project can be accommodated on the surrounding roadway network and, with the Proposed Project's transportation infrastructure improvements, minimal impacts are expected from the Proposed Project.

5.1 Summary of Key Findings and Benefits

The following are key findings and benefits related to transportation in conjunction with the Proposed Project:

- 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 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.
- The Proposed Project provides a more pedestrian-friendly environment with sidewalks to be constructed along all streets within the Project Site with connections between Market Street, Everett Street, and North Beacon Street.
- The Proposed Project provides an internal roadway network designed to be compatible with bicycle use, including a new separated bike lane on Guest Street Extension and on Arthur Street within the Project limits, as well as secure interior bicycle storage and at-grade bicycle racks.
- The Proposed Project will include implementation of a Transportation Demand Management ("TDM") Plan with specific measures to promote and encourage residents, employees, and visitors to use alternative transportation modes.
- The Proposed Project supports the viability of the recently opened Boston Landing MBTA commuter rail station through enhanced station connections, increased ridership, and frequency of stops and weekend service by creating additional housing units (including home ownership) and promoting the use of the adjacent public transit services.
- A new "Braintree Street Extension" roadway will be constructed at the north end of the Site and will include a 100-foot long pick-up/drop-off area suitable both for passenger vehicles, as well as shuttle busses which may soon be visiting the Boston Landing MBTA commuter rail station as mitigation for other local development projects.
- The previously-proposed Site design has been modified, which will allow for a new "West Street Extension" to be constructed west of and adjacent to Building A. This will serve as access to and from Building A. The initial Site construction will include the construction of this roadway within the Project Site.

While the Project Site access enhancements all are designed to accommodate the full Project development, as well as the ongoing development of other nearby projects, these improvements all will be constructed in conjunction with Phase 1 of the Project.

5.2 Project Description

As described previously in Chapter 1, *Project Description*, the Proposed Project involves the redevelopment of a 10.6-acre Project Site currently occupied by a supermarket and adjoining retail stores. Since the preparation of the PNF Transportation evaluation, the Project development program has been modified, and additional Site enhancements have been added. Table 1 compares the current development program to that evaluated in the January 2018 Project Notification Form (PNF).

Table 5-1 Proposed Development Program Summary*

Project Element	PNF	EENF/DPIR	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

*Note: 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 units 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 square feet of Grocery space when accounting for the existing on-site Stop & Shop store.
4 Represents new 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.

The Proposed Project is intended to be developed through a long-term, multi-phased approach over several years. As currently anticipated, Phase 1 will include Building A and certain other site-wide improvements while keeping the existing supermarket open and operational. Refer to Section 1.4.1 of Chapter 1, *Project Description and Alternatives,* for the components of Phase 1 as currently contemplated. Access improvements involving the Guest Street Extension to the other new/surrounding streets and intersections (East Street, and the new Guest Street Extension/Everett Street and Guest Street/Arthur Street intersections) will be implemented as part of Phase 1 of development.

The Proposed Project has been designed to accommodate a variety of phasing scenarios. The proposed development program presented above in Table 5-1 is to be developed in individual buildings, each of which can be developed together or independently of the other with a mix of uses, consistent with the uses and use intensities above, in response to evolving market conditions.

5.3 Study Methodology

The following transportation analysis has been performed in conformance with the Massachusetts Executive Office of Energy and Environmental Affairs (EEA)/Executive Office of Transportation (EOT) guidelines. Following the submittal of the Transportation Scoping Letter (dated November 7, 2018) by the Proponent, VHB met with MassDOT staff on November 27, 2018 to discuss the proposed Project and the contents of the Transportation Evaluation. Following that meeting, the Project team also has maintained an ongoing dialogue with the MBTA regarding the required

methodology for the transit capacity analysis that will be conducted. In addition, the resulting Project design and transportation mitigation is consistent with the "Integrated Multi-modal Mitigation Package" requested by MassDOT in its December 13, 2018 Transportation Scoping memorandum issued for the Project. The study also follows standard methodologies used by BTD, including the projection of Proposed Project-related trips based on Institute of Transportation Engineers (ITE) trip rates and the application of local travel characteristics established through the *Access Boston 2000-2010* initiative. *Synchro 9* software was used to facilitate the evaluation of traffic operations based on Highway Capacity Manual[1] (HCM) methodologies. This study is an updated and expanded version of the Transportation Evaluation previously presented in the PNF submitted under the City of Boston's Article 80 review process. Updates were made to reflect the aforementioned changes to the development program as well as feedback from BTD, BPDA, MassDOT, and the MBTA. Updated traffic counts and analysis also have been conducted to accurately reflect any changes that have occurred in the area since the preparation of the prior study.

This current transportation analysis considers the following primary analysis scenarios:

- **2018 Existing Conditions** – based on traffic data collection conducted within the study area in May 2018 and September 2018.
- **2025 No-Build Conditions** – Future conditions for a seven-year time horizon as expected to occur if the Proposed Project was not constructed.
- **2025 Build Conditions** – Future conditions for a seven-year time horizon assuming the construction of the Proposed Project.

The transportation analysis considers automobile traffic operations and well as bus and rail public transit. Both sets of analysis involve developing a thorough understanding of existing conditions, and then evaluating future conditions with the Project in place. While the required automobile traffic counts have been conducted, not all of the existing conditions ridership data needed for the transit analysis was available at the time of this study. Specifically, while bus ridership data is available, current commuter rail ridership counts conducted by the Central Transportation Planning Staff (CTPS) of the Boston Region Metropolitan Planning Organization (MPO) were just released on January 28, 2019. These counts identify boardings and alightings by trip and station for data collected during 2018. Prior to that release, the only available data for the Framingham/Worcester commuter rail line was 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. The future conditions analysis for both bus and rail operations is now being conducted following the recent release of the required commuter rail data. This will allow for the breakdown between bus and rail ridership to be determined and analyzed. This

1 Highway Capacity Manual; Transportation Research Board; Washington D.C.; 2010.

analysis will be provided to the MBTA following the submittal of this document, with the results summarized in the subsequent MEPA filing.

5.3.1 Study Area

Based on a review of traffic studies prepared for other nearby development projects and the characteristics of the surrounding area, vehicular traffic associated with the Proposed Project will be widely dispersed throughout the nearby street network. MassDOT has determined that this study area should be considered acceptable and adequate for capturing the potential impacts of the Proposed Project on area roadways. While Project traffic will end up at roadways and intersections beyond this area, that traffic should fall below the levels where peak-hour traffic at a given intersection would increase by more than five-percent or one hundred vehicles per hour. Considering these factors, as well as comments from MassDOT, BPDA, and BTD, the following intersections, as shown in Figure 5.1, were included in the study area for this current Traffic Impact and Access Study:

- Market Street at Leo M. Birmingham Parkway/Lincoln Street
- Market Street at Guest Street/Stockyard Driveway
- Market Street at Vineland Street
- Market Street at North Beacon Street
- Market Street at Faneuil Street
- Market Street at Sparhawk Street/Arlington Street
- North Beacon Street at Life Street/Etna Street
- North Beacon Street at Murdock Street/Self-Storage Driveway
- North Beacon Street at Hichborn Street/ Dustin Street
- North Beacon Street at Arthur Street/Spaulding Driveway
- North Beacon Street at Saunders Street
- North Beacon Street at Gordon Street
- North Beacon Street at Everett Street/KFC Driveway
- North Beacon Street/Brighton Avenue at Cambridge Street
- Cambridge Street at Hano Street
- Cambridge Street at Denby Road
- Cambridge Street at Harvard Avenue/Franklin Street
- Braintree Street at Rugg Road
- Everett Street at Western Avenue
- Everett Street at "Old" Everett Street (north)
- Everett Street at Stop & Shop Driveway
- Everett Street at "Old" Everett Street (south)
- "Old" Everett Street at Blaine Street
- "Old" Everett Street at Braintree Street

- Guest Street at Life Street
- Guest Street/Stop & Shop Driveway at Arthur Street

The following three intersections also were added to the study area at the request of BPDA/BTD following their review of the PNF transportation evaluation.

- Cambridge Street at Gordon Street
- Cambridge Street at Eleanor Street
- Cambridge Street at Dustin Street

Of the intersections listed above, only the intersection of Market Street at Leo M. Birmingham Parkway/Lincoln Street is under state (Department of Conservation & Recreation) jurisdiction. The remainder of the study area intersections are under City of Boston jurisdiction. All of the roadways serving the Site are under City jurisdiction, though the Everett Street bridge over Route I-90 is owned and maintained by MassDOT. I-90 is under MassDOT jurisdiction but the Site does not directly abut that highway.

5.3.2 Consistency with Area Planning

As described in Section 1.5.1 of Chapter 1, *Project Description and Alternatives*, in 2012, neighborhood stakeholders, local officials, and city planners collaborated to produce the Guest Street Planning Study. The study established the framework and urban design guidelines that will shape the future development of the area surrounding the Project Site, including approximately 100 acres of land located between the Turnpike, Cambridge Street, North Beacon Street, and Market Street. When this planning study was approved in 2012, it envisioned the transformation of an underutilized 100-acre district into an innovative and vibrant mixed-use destination in the heart of the Allston-Brighton community.

Consistent with the Guest Street Planning Study, the area surrounding the Project Site has been transforming from a general manufacturing/warehousing environment to one that will be predominantly mixed-use. As this transformation continues, there will continue to be an increase in pedestrians and bicyclists in the study area. To respond to and to accommodate this trend, the Proposed Project provides a more pedestrian-friendly environment within the Project Site limits. This will be achieved by way of dedicated bicycle facilities and sidewalks along the new Guest Street Extension and the reconstructed segment of Arthur Street within the Project limits, and other new pedestrian and bicycle improvements within the Proposed Project. The Proposed Project will also reinforce pedestrian and bicycle connectivity between Market Street, Everett Street, and North Beacon Street.

As noted earlier, the development proposal for the Project Site is consistent with the Guest Street Planning Study. This chapter also contains analysis and discussion of how the Proposed Project is consistent with the vision of the Guest Street Planning Study for the improved transportation network that will be created in conjunction with the Proposed Project. The Brighton Guest Street Planning Study also identified an opportunity to provide a continuous Guest Street, from Market Street to Everett Street, as well as improvements to the Arthur Street/Guest Street intersection and

pedestrian crossings on Everett Street. The Proposed Project provides this connection and these improvements as part of the Phase 1 of the Proposed Project.

In the summer of 2018, the City of Boston also initiated the "Allston-Brighton Mobility Study." This planning effort by the City will evaluate the multi-modal transportation infrastructure needed to accommodate the ongoing growth and development in the surrounding area. The Proponent has provided the underlying vehicular traffic counts and analysis framework to the BPDA to assist with this effort. The Proponent will continue to provide material and input to help advance this effort moving forward.

The transit planning associated with the Project will build upon MassDOT's "Allston Early Action Transit Study" from the fall of 2018. That study focused primarily on bus service in the Allston area with near-term improvements being identified. This study identified key issues including bus overcrowding, traffic congestion, and others which will be explored in detail as part of the Project's transit analysis. The transit improvements recommended in that study also have been reviewed to confirm the Project's compatibility with these measures. Additional information is provided in the Public Transportation section of this Chapter.

5.4 Existing Transportation Conditions

Evaluation of the transportation impacts associated with the Proposed Project requires a thorough understanding of the existing transportation system in the study area. Therefore, a complete inventory and evaluation of the existing transportation system in the study area was conducted. The analysis of existing transportation conditions is based on the existing network, roadway and intersection geometry, traffic control, existing daily and peak hour traffic volumes, traffic safety conditions, and existing public transportation and pedestrian facilities.

This section describes existing transportation conditions, including an overview of roadway conditions, transit, pedestrian and bicycle facilities, and general site conditions. A discussion of the existing on-street parking supply also is provided.

5.4.1 Existing Site Uses and Access

While the Project Site either abuts or is in close proximity to several notable roadways, access and egress are constrained due to driveway turn restrictions and other existing physical constraints. As currently configured, the existing Site access plan limits development opportunities both for the Site and other nearby properties, and results in inefficient traffic flow in and around the Project Site. Access to the Project Site is currently provided by multiple driveways connecting to the surrounding roadway network, though there are various restrictions associated with some of these driveways. The existing Project Site vehicular access and circulation is shown on Figure 5.2. Primary access to the Project Site is currently provided via a driveway extending from Arthur Street to the south. Arthur Street is a public way that extends from its signalized intersection with North Beacon Street (Route 20) 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 grocery store occurring along the Turnpike frontage from Braintree Street. The Project Site also connects to the west to Guest Street, which leads to and from Market Street further to the west through the adjacent Boston Landing development. The existing Site currently also has a right-turn, enter-only driveway on Everett Street. While there is signage restricting that driveway to entering right-turns only, exiting traffic and entering left-turn movements also were observed to occur at this driveway. Finally, an enter-only driveway is located at the northeasterly end of the Project Site connecting to Braintree Street underneath the Everett Street overpass.

5.4.2 Existing Roadways

Market Street

Market Street is located approximately 2,000 feet to the west of the Project Site and traverses the study area in a general north-south direction between Birmingham Parkway and Sparhawk Street. Market Street is currently a four-lane roadway between Birmingham Parkway and North Beacon Street and a two-lane roadway between North Beacon Street and Sparhawk Street with additional turning lanes provided at major intersections. On-street parking is provided on both sides of Market Street between Faneuil Street and Sparhawk Street and on the east side of the roadway between Faneuil Street and North Beacon Street. Sidewalks are provided on both sides of Market Street and crosswalks are provided at major intersections. Bike lanes are provided in both directions on Market Street between Birmingham Parkway and Guest Street and between Faneuil Street and Sparhawk Street. Land use along Market Street consists of a mix of commercial and residential uses.

North Beacon Street

North Beacon Street is located approximately 700 feet to the south of the Project Site and traverses the study area in a general east-west direction between Market Street and Cambridge Street. North Beacon Street is currently a two-lane roadway with additional turning lanes provided at major intersections. On-street parking is provided on both sides of North Beacon Street. Sidewalks are provided on both sides of North Beacon Street and crosswalks are provided at most intersections. Land use along North Beacon Street consists of a mix of commercial, industrial, and residential uses.

Everett Street

Everett Street is located to the east of the Project Site and traverses the study area in a general north-south direction between Western Avenue and North Beacon Street. Everett Street is currently a two-lane roadway. On-street parking is prohibited on both sides of Everett Street. Sidewalks are provided on both sides of Everett Street and crosswalks are provided at the intersections with North Beacon Street and Old

Everett Street (south). Land use along Everett Street consists of a mix of commercial and residential uses.

5.4.3 Existing Intersections

Intersection geometry and physical characteristics are presented below. Traffic operations and LOS analysis are presented later in this chapter.

Market Street at Leo M. Birmingham Parkway/Lincoln Street

Market Street, Leo M. Birmingham Parkway, and Lincoln Street intersect at a four-way signalized intersection. The Leo M. Birmingham Parkway eastbound approach consists of two general purpose travel lanes. Lincoln Street is one-way in the westbound direction and the approach consists of one left-turn lane and one general purpose travel lane. The Market Street northbound approach consists of two general purpose travel lanes. The Leo M. Birmingham Parkway southbound approach consists of two through lanes and one right-turn lane. Sidewalks are provided on both sides of Market Street south of the intersection, the east side of Leo M. Birmingham Parkway north of the intersection and the north side of Lincoln Street east of the intersection. Crosswalks are provided across the Market Street northbound approach and the Lincoln Street westbound approach. Bike lanes are provided in both directions on Market Street south of the intersection. On-street parking is provided on both sides of Lincoln Street east of the intersection. MBTA bus stops are located on both sides of Leo M. Birmingham Parkway north of the intersection.

Market Street at Guest Street/Stockyard Driveway

Market Street and Guest Street/Stockyard driveway intersect at a four-way signalized intersection. The Stockyard restaurant driveway eastbound approach consists of one general travel lane and provides access to/from the parking lot for the Stockyard restaurant. The Guest Street westbound approach consists of one left-through lane and one right-turn lane. The Market Street northbound and southbound approaches consist of two general purpose travel lanes. Sidewalks are provided on both sides of the Guest Street westbound approach and the Market Street northbound and southbound approaches. Crosswalks are provided across the Guest Street westbound approach and the Market Street northbound approach. Bike lanes are provided in both directions on Market Street north of the intersection. On-street parking is prohibited on both sides of all approaches. An MBTA bus stop is located on the east side of Market Street south of the intersection.

Market Street at Vineland Street

Market Street and Vineland Street intersect at a three-way unsignalized intersection. Vineland Street is one-way in the eastbound direction, consists of one general travel lane, and is under stop control. The Market Street northbound and southbound approaches consist of two general purpose travel lanes. Sidewalks are provided on both sides of all approaches. There are no crosswalks provided at this intersection.

On-street parking is provided on both sides of Vineland Street. An MBTA bus stop is located on the west side of Market Street south of the intersection.

Market Street at North Beacon Street

North Beacon Street and Market Street intersect at a four-way signalized intersection. All four approaches consist of two general purpose travel lanes. Sidewalks are provided on both sides of all approaches and crosswalks are provided across all approaches. On-street parking is prohibited on both sides of North Beacon Street and Market Street. MBTA bus stops are located on both sides of North Beacon Street east of the intersection and on the east side of Market Street south of the intersection.

Market Street at Faneuil Street

Market Street and Faneuil Street intersect at a three-way signalized intersection. The Faneuil Street eastbound approach and the Market Street northbound approach consist of one general travel lane. The Market Street southbound approach consists of one through lane and one right-turn lane. Sidewalks are provided on both sides of all approaches and crosswalks are provided across all approaches. Bike lanes are provided in both directions on Market Street south of the intersection and in the southbound direction on Market Street north of the intersection. On-street parking is provided on both sides of Faneuil Street and on the east side of Market Street.

Market Street at Sparhawk Street/Arlington Street

Market Street and Sparhawk Street/Arlington Street intersect at a four-way signalized intersection. The Arlington Street eastbound approach, Sparhawk Street westbound approach, and Market Street northbound approach consist of one general travel lane. The Market Street southbound approach consists of one left-turn lane and one through-right lane. Sidewalks are provided on both sides of all approaches and crosswalks are provided across all approaches. Bike lanes are provided in both directions on Market Street with “bike boxes” also provided on both approaches. On-street parking is provided on both sides of Arlington Street. MBTA bus stops are located on the west side of Market Street south of the intersection and on the east side of Market Street north of the intersection.

North Beacon Street at Life Street/Etna Street

North Beacon Street and Life Street/Etna Street intersect at a four-way signalized intersection with offset approaches on Life Street and Etna Street. The North Beacon Street eastbound and westbound approaches and the Life Street southbound approach consist of one general purpose travel lane. Etna Street is one-way in the southbound direction away from the intersection. Sidewalks are provided on both sides of all approaches and crosswalks are provided across the northbound Etna Street approach, the southbound Life Street approach, and on North Beacon Street between Etna Street and Life Street. On-street parking is provided on both sides of Etna Street,

the west side of Life Street, and the south side of North Beacon Street. MBTA bus stops are located on both sides of North Beacon Street west of the intersection.

North Beacon Street at Murdock Street/Simply Self-Storage Driveway

North Beacon Street and Murdock Street/Simply Self-Storage driveway intersect at a four-way unsignalized intersection. The North Beacon Street eastbound and westbound approaches and the Self-Storage driveway southbound approach consist of one general purpose travel lane. Murdock Street is one-way in the southbound direction away from the intersection. The Self-Storage driveway southbound approach provides access to/from the parking lot for a Self-Storage facility and is under stop control. Sidewalks are provided on both sides of the North Beacon Street eastbound and westbound approaches and the Murdock Street northbound approach. No crosswalks are provided at this intersection. On-street parking is provided on both sides of North Beacon Street and the east side of Murdock Street.

North Beacon Street at Dustin Street/Hichborn Street

North Beacon Street and Dustin Street/Hichborn Street intersect at a four-way unsignalized intersection. All approaches consist of one general purpose travel lane. Dustin Street is one-way in the northbound direction towards the intersection. The Dustin Street northbound and Hichborn Street southbound approaches are under stop control. Sidewalks are provided on both sides of all approaches and crosswalks are provided across all approaches. On-street parking is provided on both sides of Dustin Street.

North Beacon Street at Arthur Street/Spaulding Driveway

North Beacon Street and Arthur Street intersect at a four-way signalized intersection with offset approaches on Arthur Street and the Spaulding Nursing and Therapy Center driveway. The North Beacon Street eastbound approach consists of one left-turn lane and one through-right lane. The North Beacon Street westbound approach consists of one left-through lane and one right-turn lane. The Arthur Street southbound approach consists of one left-turn lane and one right-turn lane. The Spaulding driveway northbound approach consists of one general purpose lane. Sidewalks are provided on both sides of the North Beacon Street eastbound and westbound approaches and the Arthur Street southbound approach. Crosswalks are provided across the North Beacon Street eastbound approach and the Arthur Street southbound approach. On-street parking is prohibited on both sides of all approaches.

North Beacon Street at Saunders Street

North Beacon Street and Saunders Street intersect at a three-way unsignalized intersection. All approaches consist of one general purpose travel lane. Saunders Street is one-way in the northbound direction towards the intersection and is under stop control. Sidewalks are provided on the both sides of all approaches and crosswalks are provided across the North Beacon Street westbound approach and the Saunders Street northbound approach. On-street parking is provided on both

sides of Saunders Street. MBTA bus stops are located on both sides of North Beacon Street east of Saunders Street.

North Beacon Street at Gordon Street

North Beacon Street and Gordon Street intersect at a three-way unsignalized intersection. All approaches consist of one general purpose travel lane. The Gordon Street northbound approach is under stop control. Sidewalks are provided on both sides of all approaches and a crosswalk is provided across the Gordon Street northbound approach. On-street parking is provided on the north side of North Beacon Street and the west side of Gordon Street.

North Beacon Street at Everett Street/KFC Driveway

North Beacon Street and Everett Street/KFC driveway intersect at a four-way signalized intersection with offset approaches on Everett Street and the KFC Driveway. The North Beacon Street eastbound approach consists of two general purpose lanes. The North Beacon Street westbound approach consists of one through lane and one right-turn lane. All left turns from the westbound approach of North Beacon Street into the KFC driveway are prohibited via signage. The Everett Street southbound approach consists of one general purpose lane. The KFC Driveway is one-way southbound away from the intersection, only providing access for vehicles entering the KFC parking lot. Sidewalks are provided on both sides of the North Beacon Street eastbound and westbound approaches and the Everett Street southbound approach. Crosswalks are provided across the North Beacon Street eastbound approach and the Everett Street southbound approach. On-street parking is provided on the north side of North Beacon Street west of the intersection.

North Beacon Street/Brighton Avenue at Cambridge Street

North Beacon Street/Brighton Avenue and Cambridge Street intersect at a four-way signalized intersection known locally as Union Square. The North Beacon Street eastbound approach consists of two general purpose lanes. The Brighton Avenue westbound approach consists of one left-turn lane, one left-through lane, and one through lane. Right-turning traffic exits the westbound Brighton Avenue approach prior to the intersection via a channelized right-turn slip-ramp. The Cambridge Street northeast-bound approach consists of two through lanes and one right-turn lane. All left turns from the northeast-bound approach of Cambridge Street onto North Beacon Street are prohibited via signage. The Cambridge Street southwest-bound approach consists of one left-through lane, one through lane, and one right-turn lane. Sidewalks are provided on both sides of all approaches and crosswalks are provided across all approaches. On-street parking is provided on the north side of Cambridge Street. MBTA bus stops are located on both sides of North Beacon Street west of the intersection, the south side of Brighton Avenue east of the intersection, and the north side of Cambridge Street southwest of the intersection.

Cambridge Street at Hano Street

Cambridge Street and Hano Street intersect at a three-way unsignalized intersection. All approaches consist of one general travel lane. The Hano Street southbound approach is under stop control. Sidewalks are provided on both sides of all approaches and crosswalks are provided across the Hano Street southbound approach and the Cambridge Street westbound approach. A bike lane is provided in the westbound direction on Cambridge Street east of the intersection. The westbound movement through the intersection is marked with standard cross-hatched "Do not block intersection" pavement markings. On-street parking is provided on the west side of Hano Street and the north side of Cambridge Street. MBTA bus stops are located on the north side of Cambridge Street east of the intersection and on the south side of Cambridge Street across from the Hano Street approach.

Cambridge Street at Denby Road

Cambridge Street and Denby Road intersect at a three-way signalized intersection. All approaches consist of one general travel lane. Sidewalks are provided on both sides of all approaches and crosswalks are provided across the Denby Road southbound approach and the Cambridge Street westbound approach. Bike lanes are provided in both directions on Cambridge Street. The westbound and eastbound movements through the intersection are marked with standard cross-hatched "Do not block the intersection" pavement markings. On-street parking is provided on both sides of Cambridge Street and on the east side of Denby Road.

Cambridge Street at Harvard Avenue/Franklin Street

Cambridge Street and Harvard Avenue/Franklin Street intersect at a four-way signalized intersection. The Cambridge Street eastbound approach consists of two general purpose travel lanes. The Cambridge Street westbound approach consists of one left-turn lane, one through lane, and one right-turn lane. The Harvard Avenue northbound approach consists of one left-through lane and one right-turn lane. The Franklin Street southbound approach consists of one general purpose travel lane. Sidewalks are provided on both sides of all approaches and crosswalks are provided across all approaches. Bike lanes are provided in the westbound direction on Cambridge Street west of the intersection and in the southbound direction on Harvard Avenue south of the intersection. On-street parking is provided on the west side of Harvard Avenue south of the intersection and on the west side of Franklin Street north of the intersection. MBTA bus stops are located on both sides of Cambridge Street west of the intersection.

Braintree Street at Rugg Road

Braintree Street and Rugg Road intersect at a three-way unsignalized intersection. All approaches consist of one general purpose travel lane. The Rugg Street northbound approach is under stop control. Sidewalks are provided on both sides of all approaches. No crosswalks are provided at this intersection. On-street parking is provided on the south side of Braintree Street and on the west side of Rugg Road.

Everett Street at Western Avenue

Everett Street and Western Avenue intersect at a four-way signalized intersection approximately one-half mile to the north of the Project Site. The Western Avenue eastbound approach consists of one shared left-turn/through lane and one right-turn lane. The Western Avenue westbound approach consists of a single left-turn lane and one shared through/right lane. The Everett Street northbound approach consist of one left-turn lane and one shared through/right-turn lane. The Everett Street southbound approach consists of one general purpose travel lane. Sidewalks are provided on both sides of all approaches and crosswalks are provided across all approaches. Bike lanes are provided in both directions on Western Avenue to the west of the intersection and in the westbound direction only on Western Avenue east of the intersection. On-street parking is provided on the south side of Western Avenue east of the intersection. MBTA bus stops are located on both sides of Western Avenue west of the intersection.

Everett Street at "Old" Everett Street (north)

Everett Street and "Old" Everett Street (north) intersect at a four-way unsignalized intersection to the north of the Turnpike. "Old" Everett Street provides local access to Lincoln Street while Everett Street carries traffic over the Turnpike. All approaches consist of one general purpose travel lane. The northeast-bound and southbound approaches on Everett Street are under yield control and the northbound approach on Old Everett Street and the eastbound approach from the local driveway are under stop control. Sidewalks are provided on both sides of all approaches. A crosswalk is provided across the northbound approach of Everett Street. On-street parking is prohibited along all approaches.

Everett Street at Stop & Shop Driveway

Everett Street and the Stop & Shop driveway intersect at a three-way unsignalized intersection. The Everett Street northbound approach consists of one through travel lane. All left turns from the northbound approach of Everett Street into the Stop & Shop driveway are prohibited via signage. The Everett Street southbound approach consists of one general purpose travel lane. The Stop and Shop driveway is one-way westbound away from the intersection only providing access for vehicles entering the Stop & Shop Parking Lot. Sidewalks are provided on both sides of Everett Street and on the south side of the Stop & Shop driveway. No crosswalks are provided at this intersection. On-street parking is prohibited on all approaches.

Everett Street at Old Everett Street (south)

Everett Street and Old Everett Street (south) intersect at a four-way unsignalized intersection east of the Project Site and south of the Turnpike. Old Everett Street provides local access to Braintree Street while Everett Street carries traffic over the Turnpike. The easterly leg of the intersection consists of a driveway providing access and egress to a small residential complex. All approaches consist of one general purpose travel lane. The southbound approach on Old Everett Street and the

westbound approach on the driveway are under stop control while the southeast-bound and northbound approaches on Everett Street are under no control. Sidewalks are provided on both sides of all approaches. A crosswalk is provided across the southbound approach of Old Everett Street and the southeast-bound approach of Everett Street. A striped bike lane is provided along the easterly side of Everett Street through this intersection, while southbound bicycle traffic functions with a shared-lane condition. On-street parking is provided along the west side of the southbound approach of Old Everett Street.

Old Everett Street at Blaine Street

Old Everett Street and Blaine Street intersect at a three-way unsignalized intersection. Single travel lanes are provided in both directions on Old Everett Street and there is a single entering and exiting lane on Blaine Street, with the westbound approach being under stop control. Blaine Street is signed as a private way with no through-traffic allowed and parking only permitted for residents. Sidewalks are provided on both sides of Old Everett Street. A crosswalk is provided across the Blaine Street westbound approach. On-street parking is provided on the west side of Old Everett Street and on both sides of Blaine Street.

Old Everett Street at Braintree Street

Old Everett Street and Braintree Street intersect at a four-way unsignalized intersection at the northeast end of the Project Site. The Old Everett Street northbound approach and the Braintree Street westbound approach consist of one general purpose travel lane and are under stop control. The northerly leg of this intersection serves a 20+ space parking area primarily used by the adjacent commercial building located at 119 Braintree Street. The curb cut to this parking area is wide enough to allow for single entering and exiting lanes. While no signs or pavement markings are provided, the exiting approach was observed to function as if it were under stop-sign control. The westerly leg of the intersection is a one-way westbound, enter-only driveway to the existing Project Site, though some level of exiting traffic was regularly observed. Sidewalks are provided on both sides of Old Everett Street south of the intersection and on both sides of Braintree Street east of the intersection. No crosswalks are provided at this intersection. On-street parking is provided on the south side of Braintree street east of the intersection, and the west side of Old Everett Street south of the intersection. Regular parking activity also was observed on both sides of Braintree Street to the west of the intersection, though no signage is present concerning parking.

Guest Street at Life Street

Guest Street and Life Street intersect at a three-way unsignalized intersection. All approaches consist of one general purpose travel lane and are under stop control. Sidewalks are currently provided on both sides of Life Street and on the south side of Guest Street. A crosswalk currently is provided across the Life Street northbound approach. On-street parking is provided on both sides of Guest Street.

Guest Street/Project Site Driveway at Arthur Street/Arthur Street Extension

Approximately 725 feet to the north of North Beacon Street (Route 20), the private portion of Arthur Street is intersected by Guest Street from the west at a four-way unsignalized intersection. The easterly leg of this intersection is the driveway to the existing Project Site just west of the Stop & Shop building space. The northerly leg of this intersection is Arthur Street Extension. All approaches to this intersection currently consist of single lanes which are under stop control. The Arthur Street and Site driveway legs of the intersection are located on the Project Site property. The westerly Guest Street segment extends to Market Street as a public roadway while Arthur Street Extension extends to and from the north within Boston Landing. The new "Lantera" residential building located at 125 Guest Street recently opened in 2018 at the southwest corner of this intersection.

Arthur Street Extension provides access (by passing through the Project Site) to both structured parking for Boston Landing, as well as access to a "kiss and ride" area for the recently opened Boston Landing MBTA commuter rail station. Sidewalks currently are provided on both sides of Arthur Street, both sides of Guest Street, and the south side of the Site Driveway. Crosswalks are provided across the Guest Street eastbound approach and the Arthur Street southbound approach. On-street parking is provided on both sides of Guest Street. MBTA bus stops are located on both sides of Arthur Street south of the intersection.

As discussed later in Section 5.5.4, this intersection will be reconfigured as part of the Proposed Project's initial construction and will be signalized in conjunction with the continued advancement of the surrounding developments. In addition to addressing long-standing issues associated with the current non-standard configuration, these improvements will accommodate the Proposed Project's traffic while also allowing the adjacent Boston Landing project to move forward to its Full Build configuration. The construction of the planned Guest Street Extension within the Project Site and accompanying full-access signalized intersection with Everett Street also will be discussed in detail later in this chapter.

5.4.4 Existing Traffic Volumes

Traffic volumes for the study area roadways and intersections were collected by VHB in May and September 2018 while local schools were in session. Peak-period turning movement and classification (TMC) counts were collected at the study area intersections on a typical weekday from 7:00 to 9:00 AM and 4:00 to 6:00 PM, and on, a typical Saturday from 11:00 AM to 2:00 PM. These time periods were selected so that the combined peak periods for the roadway and Project Site activity would be evaluated.

In addition, VHB conducted automatic traffic (ATR) counts in May 2018 for a continuous 72-hour period, including a typical weekday and Saturday. These counts were conducted on Market Street, North Beacon Street, and Everett Street. The observed traffic volumes are summarized in Table 5-2.

Table 5-2 2018 Observed Traffic Volumes

	Weekday							Saturday			
	Daily[a]	Morning Peak Hour			Evening Peak Hour			Daily	Midday Peak Hour		
Location		Vol[b]	K Factor[c]	Dir. Dist.[d]	Vol[b]	K Factor[c]	Dir. Dist.[d]		Vol[b]	K Factor[c]	Dir. Dist.[d]
Market Street, north of North Beacon Street:											
Northbound	9,535	785			560			7,725	625		
Southbound	11,335	570			910			10,165	705		
Total	**20,870**	**1,355**	**6.5%**	**58%NB**	**1,470**	**7.0%**	**62%SB**	**17,890**	**1,330**	**7.4%**	**53%SB**
Everett Street, north of North Beacon Street:											
Northbound	6,795	595			455			5,700	265		
Southbound	4,385	255			365			3,565	430		
Total	**11,180**	**850**	**7.6%**	**70%NB**	**820**	**7.3%**	**55%NB**	**9,265**	**695**	**7.5%**	**62%SB**
North Beacon Street (Route 20), west of Gordon Street:											
Eastbound	8,830	535			640			7,390	555		
Westbound	6,140	360			390			5,275	405		
Total	**14,970**	**895**	**6.0%**	**60%EB**	**1,030**	**6.9%**	**62%EB**	**12,665**	**960**	**7.6%**	**58%EB**

Source: Based on automatic traffic recorder counts conducted in May 2018.
a Average Daily Traffic volume, expressed in vehicles per day
b Represents the percent daily traffic which occurs during the peak hour
c Directional distribution of peak hour traffic
Note: Peak hours do not necessarily coincide with the peak hours of turning movement counts.

As noted earlier, intersection turning movement and classification counts (TMCs) also were conducted in conjunction with the traffic counts summarized above. The TMCs were used to establish the study area network peak hour volumes for the existing conditions analysis. The weekday morning peak hour was determined to be from 7:45 AM to 8:45 AM while the evening peak hour was from 5:00 PM to 6:00 PM. The Saturday peak hour occurred 12:15 PM and 1:15 PM. No seasonal adjustments were required based on VHB's research of this area. The 2018 existing weekday morning, weekday evening, and Saturday peak hour traffic volumes are shown in Figures 5.3, 5.4, and 5.5, respectively. The raw count data are included in Appendix D.

5.4.5 Pedestrians and Bicycles

Pedestrian volumes at the study area intersections also were collected by VHB in conjunction with the weekday morning, weekday evening, and Saturday morning peak hour data collection discussed in Section 5.4.4. These volumes are summarized in Figures 5.6 through 5.8. Currently observed bicycle volumes throughout the traffic study area also are highlighted in Figures 5.9 through 5.11 for the weekday morning, weekday evening, and Saturday midday peak hours, respectively. While nominal bicycling activity was observed within the study area, the Project supports the focus by MassDOT, BPDA, and BTD on providing improved bicycle amenities within this area. As part of city-wide efforts to promote biking, the City of Boston created the "Boston Bikes" program in 2007

to focus on improvements in engineering, enforcement, education, encouragement, and evaluation of biking. Through this program, the city has categorized most of the roadways within the traffic study area as being suitable for intermediate to advanced bicyclists.

In the fall of 2013, BTD published its *Boston Bike Network Plan*[2] 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. That treatment also is specified for Cambridge Street to the northwest of the Franklin Street/Harvard Street intersection. For the segment of Cambridge Street between this intersection and Union Square to the southwest, exclusive bike lanes are anticipated. Likewise, the plan also envisions exclusive bike lanes being provided for North Beacon Street within the study area. On a longer-term basis, the 30-year vision presented in that plan identifies Guest Street between Market Street and the Project Site as being part of a primary route connecting neighborhoods and employment centers as part of the overall bicycle network. As discussed later in greater detail, 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 Site are being designed to be bicycle friendly.

The City of Boston is also continuing to advance the city-wide bike-sharing program known as "Bluebikes", under which there are currently 260 bike-sharing stations in the greater Boston area providing over 2,500 bicycles. This program began operating in July 2011 and the goal is for it to continue expanding with accommodations for over 5,000 bikes at 300 bike-sharing stations.

5.4.5.1 Everett Street Bicycle Improvements

As part of its regular efforts to undertake neighborhood bike projects, BTD recently added bike lanes and shared-lane pavement markings on Everett Street, including the portion of this roadway adjacent to the Project Site. This project was constructed in the spring of 2017 and involved improved bicycle accommodations from North Beacon Street extending to Western Avenue to the north. As part of the Proposed Project, the newly signalized Everett Street/Guest Street/Old Everett Street intersection will be designed to tie into these newly installed amenities, in addition to those being provided within the Project Site.

2 Boston Bike Network Plan – Boston Transportation Department (Boston, Massachusetts) Fall 2013.

5.4.6 Existing Public Transit

Buses

The study area is currently well served by the following eight MBTA bus routes running within a half mile of the Project Site, as shown in Figure 5.12:

- Route 51
- Route 57/57A
- Route 64
- Route 66
- Route 70/70A
- Route 86
- Route 501
- Route 503

Routes 51, 57/57A, 64, 66, 70/70A, 86, 501, and 503 all operate within a half mile. The buses operating on the routes serving the Project Site are operated out of the Arborway, Cabot, Bennett, and Albany garages, where the vehicles are stored and maintained. The buses serving these routes have a seated capacity of 38 passengers and, utilizing the vehicle load standard dictated by MBTA Service Delivery Policy[3], have an average policy capacity equal to 53 passengers during the peak periods and equal to 47 passengers during off-peak periods.[4] The MBTA Service Delivery Policy also defines a passenger comfort standard for the percent of passenger travel time experienced in comfortable conditions, with a minimum of 92% and target of 96% of bus passenger minutes in comfortable conditions.[5]

The MBTA bus routes operating in the vicinity of the Project Site are described below along with the transit capacity analysis for each route for existing conditions. These transit capacity analyses have been performed consistent with the requested MassDOT and MBTA methodologies.

- **Route 51** provides service between Forest Hills and Reservoir. Three trips per day (at 6:35 a.m. and 6:45 a.m. outbound, and at 3:35 p.m. inbound) are extended between Reservoir and Union Square in Allston.[6] The nearest stops to the Project Site are Cambridge Street at North Beacon Street in the inbound direction and Cambridge Street at Barrows Street and Brighton Avenue at Cambridge Street in the outbound direction. Route 51 has an average of 858 total inbound boardings and 733 total outbound boardings on weekdays, averaging 28 total inbound

3 MBTA, *Service Delivery Policy, 2017 Update*, Approved January 23, 2017.

4 MBTA, Average Fleet Seating – CY2017. Note that the capacities displayed are rounded down to the nearest whole number and maximum loads displayed are rounded to the nearest whole number. All calculations (including sums) do not round maximum loads so may differ from the numbers displayed.

5 MBTA, *Service Delivery Policy, 2017 Update*, Approved January 23, 2017.

6 MBTA, Route 51 Schedule effective September 2, 2018.

boardings and 73 total outbound boardings on weekday trips that serve the Project Site.[7]

Route 51 exceeds the MBTA's minimum criteria for passenger comfort, with 94.0% of bus-passenger minutes in comfortable conditions.[8] The temporal distribution of demand at the Route 51's maximum load points throughout the day for trips serving the Project Site is illustrated in Figures 5.13 and 5.14. For these trips, the route falls within recommended passenger loading thresholds as outlined by the MBTA Service Delivery Policy under existing conditions. There are no trips serving the Project Site in either direction that currently exceed policy capacity.

› **Route 57** provides bus service between Watertown Yard and Kenmore Station via Union Square in Allston, with only the first morning bus continuing to Haymarket. The nearest stops to the Project Site are Cambridge Street at Barrows Street and Brighton Avenue at Cambridge Street in the inbound direction, and Cambridge Street at North Beacon Street in the outbound direction. On weekdays, Route 57 operates from 4:33 a.m. to 1:30 a.m.,[9] with an average of 4,292 total inbound boardings and 4,491 total outbound boardings.[10] During peak hours, bus service on this route operates approximately every 10 minutes.[11] **Route 57A** is a variation on Route 57, and provides service between Oak Square and Kenmore Station, making the same stops as the Route 57 in the vicinity of the Project Site. On weekdays, Route 57A operates from 6:42 a.m. to 7:06 p.m.,[12] with 930 total inbound boardings and 844 total outbound boardings on weekdays.[13] During peak hours, bus service on this route operates approximately every 10 minutes, resulting in combined peak hour headways of approximately every 5 minutes on the shared portion of Routes 57 and 57A.[14]

  Routes 57 and 57A fall below the MBTA's minimum criteria for passenger comfort, with 87.8% of bus-passenger minutes in comfortable conditions across Route 57 and 57A trips, combined.[15] The temporal distribution of demand at the Route 57's maximum load points throughout the day is illustrated in Figures 5.15 and 5.16, and the temporal distribution of demand at the Route 57A's maximum load points throughout the day is illustrated in Figures 5.17 and 5.18. Both the inbound and outbound routes typically fall within recommended passenger loading thresholds as outlined by the MBTA Service Delivery Policy under existing conditions, with several exceptions during and near the peak periods as identified in Table 5-3 (11 trips totaling 47 passengers over capacity).

7 MBTA, Route 51 Ridership Data, Fall 2017.
8 MBTA, Route 51 Service Delivery Policy Comfort Metric Data, Fall 2017.
9 MBTA, Route 57/57A Schedule effective September 2, 2018.
10 MBTA, Route 57 Ridership Data, Fall 2017.
11 MBTA, Route 57/57A Schedule effective September 2, 2018.
12 MBTA, Route 57/57A Schedule effective September 2, 2018.
13 MBTA, Route 57A Ridership Data, Fall 2017.
14 MBTA, Route 57/57A Schedule effective September 2, 2018.
15 MBTA, Route 57/57A Service Delivery Policy Comfort Metric Data, Fall 2017.

Table 5-3 Existing Route 57 and 57A Trips Exceeding Crowding Thresholds

Route	Direction	Trip Start Time	Peak/Off-Peak	Maximum Load	Crowding Threshold
Route 57	Inbound	6:54 a.m.	Off-Peak	50	47
Route 57	Inbound	7:36 a.m.	AM Peak	54	53
Route 57	Inbound	7:46 a.m.	AM Peak	68	53
Route 57	Inbound	9:20 a.m.	Off-Peak	51	47
Route 57	Outbound	6:21 p.m.	PM Peak	56	53
Route 57	Outbound	9:14 p.m.	Off-Peak	51	47
Route 57A	Inbound	8:01 a.m.	AM Peak	57	53
Route 57A	Inbound	8:22 a.m.	AM Peak	57	53
Route 57A	Inbound	8:32 a.m.	AM Peak	55	53
Route 57A	Outbound	5:39 p.m.	PM Peak	59	53
Route 57A	Outbound	5:52 p.m.	PM Peak	54	53

Sources: MBTA Ridership Data, Fall 2017; MBTA, *Service Delivery Policy, 2017 Update*, Approved January 23, 2017; and MBTA, Average Fleet Seating – CY2017.

› **Route 64** provides bus service between Oak Square and University Park during off peak hours and between Oak Square and Kendall/MIT during peak hours. The route provides a stop at the Project Site in both the inbound and outbound directions, at Arthur Street and Guest Street. On weekdays, Route 64 operates between 5:31 a.m. and 1:13 a.m.,[16] with an average of 1,073 total inbound boardings and 734 total outbound boardings.[17] The final bus trip of the day does not serve the Arthur Street and Guest Street stop, but does serve the North Beacon Street and Saunders Street stop, which is within one-quarter mile of the Project Site. This route operates approximately every 15 minutes during morning peak hours and every 30 minutes during afternoon peak hours.[18]

  Route 64 falls below the MBTA's minimum criteria for passenger comfort with 90.6% of bus-passenger minutes in comfortable conditions.[19] The temporal distribution of demand at the Route 64's maximum load points throughout the day is illustrated in Figures 5.19 and 5.20. For all trips, the route falls within recommended passenger loading thresholds as outlined by the MBTA Service Delivery Policy under existing conditions. There are no trips in either direction that currently exceed policy capacity.

› **Route 66** provides service between Harvard Square and Dudley Station, with some variants providing service between Allston and Dudley Station. The nearest stops to the Project Site are at the intersection of Cambridge Street and Brighton

16 MBTA, Route 64/68 Schedule effective September 2, 2018.

17 MBTA, Route 64 Ridership Data, Fall 2017.

18 MBTA, Route 64/68 Schedule effective September 2, 2018.

19 MBTA, Route 64 Service Delivery Policy Comfort Metric Data, Fall 2017.

Avenue (Brighton Avenue at Cambridge Street in the inbound direction and Cambridge Street at Hano Street in the outbound direction). On weekdays, Route 66 operates from 5:00 a.m. to 1:34 am,[20] with an average of 5,993 total inbound boardings and 6,244 total outbound boardings.[21] During peak hours, this route operates approximately every 10 minutes.[22]

Route 66 falls below the MBTA's minimum criteria for passenger comfort, with 91.3% of bus-passenger minutes in comfortable conditions.[23] The temporal distribution of demand at the Route 66's maximum load points throughout the day is illustrated in Figures 5.21 and 5.22. Both the inbound and outbound routes typically fall within recommended passenger loading thresholds as outlined by the MBTA Service Delivery Policy under existing conditions, with a few exceptions during and near the peak periods as identified in Table 5-4 (four trips totaling nine passengers over capacity).

Table 5-4 Existing Route 66 Trips Exceeding Crowding Thresholds

Route	Direction	Trip Start Time	Peak/Off-Peak	Maximum Load	Crowding Threshold
Route 66	Inbound	6:00 a.m.	Off-Peak	49	47
Route 66	Inbound	2:58 p.m.	Off-Peak	48	47
Route 66	Outbound	7:51 a.m.	AM Peak	56	53
Route 66	Outbound	4:50 p.m.	PM Peak	56	53

Sources: MBTA Ridership Data, Fall 2017; MBTA, *Service Delivery Policy, 2017 Update*, Approved January 23, 2017; and MBTA, Average Fleet Seating – CY2017.

› **Route 70** provides bus service between Waltham and University Park, Cambridge via Western Ave. in Brighton. The nearest stop to the Project Site is Western Avenue at Everett Street in both the inbound and outbound directions. On weekdays, Route 70 operates from 5:11 a.m. to 1:19 a.m.,[24] with an average of 2,274 total inbound boardings and 2,539 total outbound boardings.[25] During peak hours, bus service on this route operates approximately every 15 minutes.[26] **Route 70A** is a variation on Route 70, and provides service between North Waltham and University Park, Cambridge, making the same stops as the Route 70 in the vicinity of the Project Site. On weekdays, Route 70A operates from 5:30 a.m. to 8:20 p.m.,[27] with 699 total inbound boardings and 1,027 total outbound boardings on weekdays.[28] During peak hours, bus service on this route operates

20 MBTA, Route 66 Schedule effective September 2, 2018.
21 MBTA, Route 66 Ridership Data, Fall 2017.
22 MBTA, Route 66 Schedule effective September 2, 2018.
23 MBTA, Route 66 Service Delivery Policy Comfort Metric Data, Fall 2017.
24 MBTA, Route 70/70A Schedule effective September 2, 2018.
25 MBTA, Route 70 Ridership Data, Fall 2017.
26 MBTA, Route 70/70A Schedule effective September 2, 2018.
27 MBTA, Route 70/70A Schedule effective September 2, 2018.
28 MBTA, Route 70A Ridership Data, Fall 2017.

approximately every 30 minutes, resulting in combined peak hour headways of approximately every 10 minutes on the shared portion of Routes 70 and 70A.[29]

Routes 70 and 70A exceed the MBTA's minimum and target criteria for passenger comfort, with 96.2% of bus-passenger minutes in comfortable conditions across Route 70 and 70A trips, combined.[30] The temporal distribution of demand at the Route 70's maximum load points throughout the day is illustrated in Figures 5.23 and 5.24, and the temporal distribution of demand at the Route 70A's maximum load points throughout the day is illustrated in Figures 5.25 and 5.26. Both the inbound and outbound routes typically fall within recommended passenger loading thresholds as outlined by the MBTA Service Delivery Policy under existing conditions, with two exceptions on Route 70 near the peak periods as identified in Table 5-5 (two trips totaling approximately two passengers over capacity).

Table 5-5 Existing Route 70 and 70A Trips Exceeding Crowding Thresholds

Route	Direction	Trip Start Time	Peak/Off-Peak	Maximum Load	Crowding Threshold
Route 70	Inbound	5:30 a.m.	Off-Peak	49	47
Route 70	Inbound	6:45 a.m.	Off-Peak	48	47

Sources: MBTA Ridership Data, Fall 2017; MBTA, *Service Delivery Policy, 2017 Update*, Approved January 23, 2017; and MBTA, Average Fleet Seating – CY2017.

› **Route 86** provides service between Reservoir and Sullivan Station. The nearest stops to the Project Site are at Market Street and Vineland Street in the inbound direction (towards Reservoir) and Market Street and Guest Street in the outbound direction (towards Sullivan). On weekdays, Route 86 operates between 5:00 a.m. and 1:15 a.m.,[31] with an average of 3,044 total inbound boardings and 3,104 total outbound boardings.[32] This route operates approximately every 10 minutes during morning peak hours and every 15-20 minutes during afternoon peak hours.[33]

Route 86 exceeds the MBTA's minimum criteria for passenger comfort, with 93.5% of bus-passenger minutes in comfortable conditions.[34] The temporal distribution of demand at the Route 86's maximum load points throughout the day is illustrated in Figures 5.27 and 5.28. Both the inbound and outbound routes typically fall within recommended passenger loading thresholds as outlined by the MBTA Service Delivery Policy under existing conditions, with a few exceptions during the peak periods as identified in Table 5-6 (five trips totaling 13 passengers over capacity).

29 MBTA, Route 70/70A Schedule effective September 2, 2018.

30 MBTA, Route 70/70A Service Delivery Policy Comfort Metric Data, Fall 2017.

31 MBTA, Route 86 Schedule effective September 2, 2018.

32 MBTA, Route 86 Ridership Data, Fall 2017.

33 MBTA, Route 86 Schedule effective September 2, 2018.

34 MBTA, Route 86 Service Delivery Policy Comfort Metric Data, Fall 2017.

Table 5-6 Existing Route 86 Trips Exceeding Crowding Thresholds

Route	Direction	Trip Start Time	Peak/Off-Peak	Maximum Load	Crowding Threshold
Route 86	Inbound	5:42 p.m.	PM Peak	55	53
Route 86	Outbound	7:22 a.m.	AM Peak	56	53
Route 86	Outbound	8:04 a.m.	AM Peak	54	53
Route 86	Outbound	8:15 a.m.	AM Peak	59	53
Route 86	Outbound	8:28 a.m.	AM Peak	54	53

Sources: MBTA Ridership Data, Fall 2017; MBTA, *Service Delivery Policy, 2017 Update*, Approved January 23, 2017; and MBTA, Average Fleet Seating – CY2017.

› **Route 501** provides express service between Brighton and Downtown Boston, with one route variant in each direction serving the Project Site. The nearest stops to the Project Site are at Cambridge Street opposite Hano Street in the inbound direction and at Cambridge Street and Emery Street in the outbound direction. On weekdays, the variants of Route 501 that serve the Project stops operate in the inbound (reverse peak) direction from 2:35 p.m. to 6:34 p.m. and in the outbound (reverse peak) direction from 6:34 a.m. to 9:24 a.m..[35] Route 501 has an average of 863 total inbound boardings and 796 total outbound boardings on weekdays, averaging 58 total inbound boardings and 197 total outbound boardings on weekday trips at the stops which the Project Site are primarily served by.[36] This route operates approximately every 10 minutes during peak hours.[37]

  Route 501 exceeds the MBTA's minimum criteria for passenger comfort, with 92.3% of bus-passenger minutes in comfortable conditions.[38] The temporal distribution of demand at the Route 501's maximum load points throughout the day for trips serving the Project Site is illustrated in Figures 5.29 and 5.30. For these trips, the route falls within recommended passenger loading thresholds as outlined by the MBTA Service Delivery Policy under existing conditions. There are no trips serving the Project Site in either direction that currently exceed policy capacity.

› **Route 503** provides express service between Brighton and Copley Station, with only one route variant in each direction serving the Project Site. The nearest stops to the Project Site are at Cambridge Street opposite Hano Street in the inbound direction and at Cambridge Street and Emery Street in the outbound direction. On weekdays, the variants of Route 503 that serve the project stops operate in the inbound (reverse peak) direction from 4:55 p.m. to 6:57 p.m. and in the outbound (reverse peak) direction from 7:04 a.m. to 8:55 a.m.,[39] Route 503 has an average of 218 total inbound boardings and 178 total outbound

35 MBTA, Route 501 Schedule effective September 2, 2018.

36 MBTA, Route 501 Ridership Data, Fall 2017.

37 MBTA, Route 501 Schedule effective September 2, 2018.

38 MBTA, Route 501 Service Delivery Policy Comfort Metric Data, Fall 2017.

39 MBTA, Route 503 Schedule effective September 2, 2018.

boardings on weekdays, averaging 10 total inbound boardings and 47 total outbound boardings on weekday trips that serve the Project Site.[40] This route operates approximately every 20 minutes during morning peak hours and every 30 minutes during afternoon peak hours.[41]

Route 503 exceeds the MBTA's minimum and target criteria for passenger comfort, with 96.6% of bus-passenger minutes in comfortable conditions.[42] The temporal distribution of demand at the Route 503's maximum load points throughout the day for trips serving the Project Site is illustrated in Figures 5.31 and 5.32. For these trips, the route falls within recommended passenger loading thresholds as outlined by the MBTA Service Delivery Policy under existing conditions. There are no trips serving the Project Site in either direction that currently exceed policy capacity.

Table 5-7 summarizes the existing conditions by route, including an assessment of each route's passenger comfort metric and existing trip-level crowding. As shown in Table 5-7, Routes 57/57A, 64, and 66 fall below the MBTA's minimum of 92% of bus passenger minutes in comfortable conditions, while Routes 51 and 86 exceed the minimum but fall below the MBTA's target of 96% of bus passenger minutes in comfortable conditions. Routes 57/57A, 66, 70, and 86 have a total of 22 trips serving the Project Site that exceed the MBTA's passenger crowding thresholds by a total of approximately 72 passengers under existing conditions. On average, the trips that exceed the MBTA's passenger crowding thresholds do so by approximately three passengers.

Table 5-7 Route-Level Summary of Passenger Comfort and Crowding

Route	Passenger Comfort Metric	Trips serving Project Site	Trips in Excess of Crowding Threshold	Total Passengers in Excess of Crowding Threshold
Route 51	94.0%	3	0	0
Route 57/57A	87.8%	259	11	47
Route 64	90.6%	72	0	0
Route 66	91.3%	205	4	9
Route 70/70A	96.2%	155	2	2
Route 86	93.5%	111	5	13
Route 501	92.3%	25	0	0
Route 503	96.6%	10	0	0
Total	**-**	**840**	**22**	**72**

Sources: MBTA Service Delivery Policy Comfort Metric Data, Fall 2017; MBTA Ridership Data, Fall 2017; MBTA, *Service Delivery Policy, 2017 Update*, Approved January 23, 2017; and MBTA, Average Fleet Seating – CY2017.

40 MBTA, Route 503 Ridership Data, Fall 2017.

41 MBTA, Route 503 Schedule effective September 2, 2018.

42 MBTA, Route 503 Service Delivery Policy Comfort Metric Data, Fall 2017.

Commuter Rail

Construction of the Boston Landing MBTA commuter rail station was recently completed next to the Project Site, and the station became operational in May 2017. The new commuter rail station serves the MBTA Framingham/Worcester Commuter Rail Line, which operates between Union Station in Worcester and South Station in Boston. This new station provides commuter rail access to the Project Site to and from the Back Bay and downtown Boston, as well as points to the west. The new Boston Landing MBTA commuter rail station has a similar general frequency of service as most of the other stations along this line, including the nearby Auburndale, West Newton, and Newtonville stops (with additional off-peak frequency compared to those stops). Specifically, the first of seven weekday morning peak-period inbound stops occurs at 6:04 a.m., with subsequent trains arriving at approximate 35-minute intervals.[43] Fifteen additional inbound stops are scheduled throughout the day with the last train arriving at 12:38 a.m.[44] In the outbound direction, there are eighteen total stops over the course of the day, with six occurring in the afternoon peak-period.[45] This includes three "flag" stops during the midday and four additional flag stops during the late evening hours. The headways between trains during the weekday afternoon peak period ranges from 25- to 60-minutes.[46] Weekend service also is offered at the Boston Landing MBTA commuter rail station using the same stopping pattern found at other stations along this line, with nine stops in each direction and headways of approximately two hours between trains.[47] The complete Framingham/Worcester Line schedule is provided for reference in Appendix D.

MassDOT released commuter rail ridership counts conducted by the Central Transportation Planning Staff (CTPS) of the Boston Region Metropolitan Planning Organization (MPO) on January 28, 2019, identifying boardings and alightings by trip and station for data collected during 2018. Prior to this release, the most recent publicly available commuter rail ridership data was from 2012 (daily boardings and alightings by trip and station) and 2013 (daily boardings by station).[48,49] Not only has Boston Landing MBTA commuter rail station opened since the 2012/2013 data collection, but the MBTA has also increased service on the Framingham/Worcester Line by approximately 33% since 2012. Because of these changes, the 2012/2013 data did not accurately represent the existing conditions on the Framingham/Worcester Line or at Boston Landing station. The Proponent will use the newly available 2018 CTPS counts to provide a detailed updated assessment of

43 MBTA, Framingham/Worcester Line Schedule effective October 29, 2018.

44 MBTA, Framingham/Worcester Line Schedule effective October 29, 2018.

45 MBTA, Framingham/Worcester Line Schedule effective October 29, 2018.

46 MBTA, Framingham/Worcester Line Schedule effective October 29, 2018.

47 MBTA, Framingham/Worcester Line Schedule effective October 29, 2018.

48 Central Transportation Planning Staff (CTPS), "MBTA Commuter Rail Passenger Count Results," December 21, 2012. This memo contains daily inbound boardings and alightings by trip and station from Winter/Spring 2012.

49 MBTA, *Ridership and Service Statistics, Fourteenth Edition*, 2014. This contains daily inbound boardings by station from April 2013.

existing conditions for commuter rail serving the Project Site in the next MEPA filing for the Project.

The Boston Landing MBTA commuter rail station also receives regular shuttle service from multiple entities operating in the area. These shuttles provide connections from nearby office developments to and from the station, and this activity is expected to increase in the future independent of the Project. Accordingly, the new Braintree Street Extension being constructed at the north end of the Site will include a 100-foot pick-up/drop-off area intended to supplement the existing accommodations provided on Arthur Street Extension west of an adjacent to the Site.

5.4.7 Future Public Transit

The future conditions analysis of transit operations involves evaluating future conditions both with and without the Project. The following section discusses potential transit-related improvements that may be implemented in the study area independent of the Project, and the subsequent evaluation of potential Project-related impacts.

Future Transit Improvements

In January 2019, the MBTA published 47 proposals for potential changes to its bus system. These suggested improvements to MBTA bus service were the result of an ongoing study by the MBTA's Better Bus project team. This study included analysis and public engagement throughout 2018, with suggested changes identified to reduce delays and enhance the overall efficiency of the MBTA bus system. The MBTA is planning to present these changes to its Fiscal and Management Control Board (FMCB) in April 2019 and, if approved, changes could be in place by fall of 2019. The potential changes being considered within the Project study area are as follows:

- **Route 64 –** as noted earlier, the MBTA Route 64 provides bus service between Oak Square and University Park during off peak hours and between Oak Square and Kendall/MIT during peak hours. Route 64 currently falls below the MBTA's minimum criteria for passenger comfort, but with all trips falling within the MBTA's recommended passenger loading thresholds on average. The Better Bus Project presented two proposals for this route. The first involves extending midday service (which currently is peak-period only) to Kendall Square. With that change, there would be a new all-day connection between Allston/Brighton and Kendall Square. This would benefit Project Site residents and workers by providing increased access to the Kendall Square MBTA Red Line station and other nearby destinations. While there will be associated route changes with this proposal, those are limited to segments of this route in Cambridge.

  The second proposal involves a minor route change just east of Oak Square. Specifically, Route 64 no longer would shift from Brooks Street onto Hobart Street to the northeast of the Faneuil Street/Brooks Street intersection. Instead, Route 64 would remain along Brooks Street only, which would result in shorter trip and wait times. If enacted, these changes would occur in September 2019.

› **Route 70/70A –** this bus route currently provides service between Waltham and University Park, Cambridge via Western Avenue in Brighton. The MBTA is proposing changes to this route to improve its frequency and reliability between Waltham and Central Square in Cambridge. These changes involve improved frequency for Route 70, which will allow for increased ridership and improved consistency within the Project study area. This will be accomplished by combining Routes 70 and 70A within the Project study area, and other associated changes in Waltham. Pending MBTA approval, these changes would be implemented in September 2019.

Project Trips

As noted in Section 5.4, CTPS recently updated the commuter rail counts by conducting full station counts and creating composite information to represent weekday ridership by line and station.[50] The Proponent will use these counts in the analysis for the next MEPA filing as an input in the future conditions analysis.

As described later in Section 5.5.2 and detailed in Table 5-11, the Proponent anticipates that the Project will generate 2,000 additional transit trips per day. Since understanding the existing commuter rail ridership is critical to the modal assignment of these transit trips, the Proponent will assign the projected trips and analyze future public transit conditions in a future MEPA filing, based on the recently released counts. This will ensure that the transit assignment incorporates the existing transit conditions and reflects ridership in the project area. The Proponent has coordinated with MassDOT and the MBTA on the appropriate methodology to use to assess future public transit conditions, and will continue to refine this methodology prior to the next MEPA filing.

5.4.8 Public Parking

The parking accommodations associated with the Proposed Project are discussed in detail in the Future Conditions section of this chapter. The Proposed Project has been designed so that its parking needs can fully be accommodated within the Project Site without affecting the availability of existing public parking in the surrounding area. That section also summarizes an inventory, which was conducted of the existing on-street public parking within the study area. This existing parking currently serves the various commercial and residential uses in the area. In conjunction with the recent reconstruction of Guest Street within the adjacent Boston Landing site, on-street parallel parking is now provided on that roadway between Life Street and Arthur Street. In total, there are currently almost forty parking spaces in this area with accompanying signage indicating a two-hour limit for parking between 8 AM and 6 PM, Monday through Saturday. On-street parallel parking with various time-of-day restrictions also is provided along North Beacon

50 Boston Region Metropolitan Planning Organization (MPO), "*Work Program:* MBTA Commuter Rail Passenger Counts," March 1, 2018.

Street throughout the study area. The overall existing on-street parking within the traffic study area is shown in Figure 5.33.

5.4.9 Crash Analysis

A detailed crash analysis was conducted to identify potential vehicle accident trends and/or roadway deficiencies in the traffic study area. The most current vehicle accident data for the traffic study area intersections were obtained from MassDOT for the years 2012 to 2016. The MassDOT database is comprised of crash data from the Massachusetts Registry of Motor Vehicles (RMV) Division primarily for use in traffic studies and safety evaluations. Data files are provided for an entire city or town for an entire year, though it is possible that some crash records may be omitted either due to individual crashes not being reported, or the city crash records not being provided in a compatible format for RMV use. It also should be noted that the location for some accidents cannot be precisely determined from the database. These locations typically involve interchange intersections. A summary of the study intersections vehicle accident history based on the available RMV data is presented in Table 5-8 and the detailed crash data is provided in Appendix D.

Crash rates are calculated based on the number of accidents at an intersection and the volume of traffic traveling through that intersection on a daily basis. Rates that exceed MassDOT's average for accidents at intersections in the district in which the town or city is located could indicate safety or geometric issues for a particular intersection. As Boston is in MassDOT's District 6, the calculated crash rates were compared to those of MassDOT District 6, which are 0.70 for signalized intersection and 0.53 for unsignalized intersections. These rates imply that, on average, 0.70 accidents occurred per million vehicles entering signalized intersections throughout District 6, and 0.53 accidents occurred per million vehicles entering unsignalized intersections.

Review of the accident data indicates that all the study area intersections are below the district crash rate averages. Market Street's intersections with North Beacon Street and Leo M. Birmingham Parkway/ Lincoln Street had the highest number of reported crashes in the study area with a total of nine and eleven reported crashes, respectively, occurring over the five-year period. The most common type of crashes at the two intersections were angle crashes. Two of the crashes at the intersection of Market Street/North Beacon Street involved non-motorists (pedestrians, bicyclists) while none of the crashes at the intersection of Market Street at Leo M. Birmingham Parkway/Lincoln Street involved non-motorists.

While some of the study area intersections may experience general congestion and other operational issues, based on the analysis summarized above there are no prevalent crash issues requiring further evaluation. However, as noted earlier, improvements to key locations will be implemented as part of the Proposed Project.

Highway Safety Improvement Program

In addition to calculating the crash rate, study area intersections should also be reviewed in the MassDOT's Highway Safety Improvement Program (HSIP) database.

An HSIP-eligible cluster is one in which the total number of "equivalent property damage only"[51] crashes in the area is within the top 5% of all clusters in that region. Being HSIP-eligible makes the location eligible for FHWA and MassDOT funds to address the identified safety issues at these locations.

As part of this effort, VHB reviewed this database and found that Cambridge Street's intersections with North Beacon Street/Brighton Avenue (Route 20) and Hano Street fell within an HSIP-eligible cluster based on the 2006-2015 HSIP bicycle cluster listing. As this location has not yet been subject to a Roadway Safety Audit (RSA) by MassDOT in this area, an RSA will be conducted by the Proponent as mitigation for this Project. The RSA will include a detailed analysis of the crash experience at the intersection, along with potential improvements which could be considered for implementation on a short-, mid-, or long-term basis.

51 Equivalent property damage only" is a method of combining the number of crashes with the severity of the crashes based on a weighted scale. Crashes involving property damage only are reported at a minimal level of importance, while collisions involving personal injury (or fatalities) are weighted more heavily.

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Table 5-8 Vehicular Crash Summary (2012 – 2016)

	Market Street at:						North Beacon Street at:							
	Birmingham Parkway/ Lincoln Street	Guest Street/ Stockyard Driveway	Vineland Street	North Beacon Street	Faneuil Street	Sparhawk Street/ Arlington Street	Life Street/ Etna Street	Murdock Street/ Self-Storage Driveway	Hichborn Street/ Dustin Street	Arthur Street/ Wingate Driveway	Saunders Street	Gordon Street	Everett Street/ KFC Driveway	North Beacon Street/Brighton Avenue at Cambridge Street
Signalized?	Yes	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes	No	No	Yes	Yes
MassDOT Average Crash Rate	0.70	0.70	0.53	0.70	0.70	0.70	0.70	0.53	0.53	0.70	0.53	0.53	0.70	0.70
Calculated Crash Rate	0.23	0.02	0.03	0.18	0.06	0.11	0.04	0.04	0.00	0.04	0.04	0.04	0.12	0.10
Exceeds Average?	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Year														
2012	2	0	0	1	0	1	0	0	0	1	1	0	1	2
2013	3	0	0	3	0	2	1	0	0	0	0	0	1	1
2014	2	0	1	1	0	0	0	1	0	0	0	0	0	0
2015	2	0	0	3	0	0	0	0	0	0	0	1	1	0
2016	2	1	0	1	2	1	0	0	0	0	0	0	1	2
Total	11	1	1	9	2	4	1	1	0	1	1	1	4	5
Collision Type														
Angle	5	1	1	5	0	2	0	0	0	1	0	0	2	0
Head-on	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Rear-end	0	0	0	1	1	0	0	0	0	0	0	0	0	2
Rear-to-rear	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sideswipe, opposite direction	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Sideswipe, same direction	2	0	0	1	0	0	0	0	0	0	0	0	0	0
Single Vehicle Crash	4	0	0	2	0	0	1	1	0	0	1	1	1	3
Not reported	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Severity														
Fatal Injury	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Non-Fatal Injury	5	1	0	5	0	3	0	0	0	0	0	1	0	1
Property Damage Only	5	0	1	2	1	0	0	1	0	0	0	0	1	1
Not Reported	1	0	0	2	1	1	1	0	0	1	1	0	3	3
Time of day													0	0
Weekday ,7:00 AM - 9:00 AM	1	0	0	3	1	0	0	0	0	0	0	1	0	1
Weekday, 4:00 – 6:00 PM	3	1	0	0	0	0	0	0	0	0	0	0	2	2
Saturday 11:00 AM – 2:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	1	2
Weekday, other time	4	0	1	4	1	2	0	1	0	1	1	0		
Weekend, other time	2	0	0	2	0	2	1	0	0	0	0	0		
Pavement Conditions													0	0
Dry	7	1	1	6	1	3	1	1	0	1	1	1	0	0
Wet	4	0	0	3	1	1	0	0	0	0	0	0	0	0
Snow	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ice	0	0	0	0	0	0	0	0	0	0	0	0	1	2
Slush	0	0	0	0	0	0	0	0	0	0	0	0		
Not reported	0	0	0	0	0	0	0	0	0	0	0	0	1	2
Non-Motorist (Bike, Pedestrian)	0	0	0	2	1	1	0	1	0	0	0	1		

Source: Crash data was obtained from MassDOT.

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Table 5-8 Vehicular Crash Summary (2012 – 2016) (Cont.)

	Cambridge Street at:						Braintree Street at	Everett Street at:						Guest Street at:	
	Hano Street	Denby Road	Harvard Avenue/ Franklin Street	Gordon Street	Eleanor Street	Dustin Street	Rugg Road	Western Avenue	Everett Street (north)	Stop & Shop Driveway	Everett Street (south)	Blaine Street	Braintree Street	Life Street	Stop & Shop Driveway at Arthur Street
Signalized?	No	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No	No	No	No	No
MassDOT Average Crash Rate	0.53	0.70	0.70	0.70	0.70	0.70	0.53	0.70	0.53	0.53	0.53	0.53	0.53	0.53	0.53
Calculated Crash Rate	0.19	0.05	0.18	0.04	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.09	0.00
Exceeds Average?	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Year				0	0	0									
2012	2	0	0	0	0	0	0	1	0	0	0	0	0	1	0
2013	1	0	1	0	0	0	0	2	0	0	0	0	0	0	0
2014	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0
2015	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
2016	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Total	4	1	7				0	4	0	0	0	0	0	1	0
Collision Type															
Angle	2	0	2	0	0	0	0	2	0	0	0	0	0	0	0
Head-on	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
Rear-end	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Rear-to-rear	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Sideswipe, opposite direction	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Sideswipe, same direction	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
Single Vehicle Crash	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0
Not reported	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity															
Fatal Injury	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Non-Fatal Injury	1	1	4	0	0	0	0	2	0	0	0	0	0	0	0
Property Damage Only	1	0	2	0	0	0	0	0	0	0	0	0	0	1	0
Not Reported	1	0	1	1	0	0	0	2	0	0	0	0	0	0	0
Time of day															
Weekday ,7:00 AM - 9:00 AM	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Weekday, 4:00 – 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Saturday 11:00 AM – 2:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Weekday, other time	2	1	4	1	0	0	0	3	0	0	0	0	0	1	0
Weekend, other time	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Pavement Conditions															
Dry	3	1	4	1	0	0	0	4	0	0	0	0	0	1	0
Wet	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Snow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ice	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Slush	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Not reported	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Non-Motorist (Bike, Pedestrian)	0	0	1				0	1	0	0	0	0	0	0	0

Source: Crash data was obtained from MassDOT.

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5.5 Future Conditions

5.5.1 2025 No-Build Condition

The 2025 No-Build Condition was developed to evaluate future transportation conditions in the traffic study area without consideration of the Proposed Project. In accordance with MassDOT guidelines, this future analysis year represents a seven-year horizon from 2018 existing conditions. The No-Build Condition provides insight to future traffic conditions caused by regional growth, as well as specific planned projects that are expected to affect the local roadway network.

A background growth rate of one-percent per year was applied to the traffic volumes. This growth rate is consistent with (and in some cases, higher than) growth rates utilized in other recent traffic studies for other developments in this area. As noted in BPDA's scoping determination, use of the one-percent growth rate is appropriate in this instance, as it will help to account for traffic generated by multiple other smaller developments in the area not included in the listing of larger development projects provided below.

In addition to the background growth rate, traffic projections for several specific projects were incorporated in the development of the No-Build Condition. These include the following planned or approved development projects:

- **Boston Landing** – involves the ongoing construction of approximately 1.455 million square feet (sf) of new development. Boston Landing is located directly west of the Project Site on both the north and south sides of Guest Street. This project includes the construction of a new world headquarters for New Balance, practice facilities for the Boston Bruins and the Boston Celtics, a track and field complex, a hotel, office space and retail/restaurant space. Boston Landing will also include up to 1,750 parking spaces. Overall, Boston Landing consists of approximately 900,000 sf of office space (including the 250,000 sf New Balance headquarters building), 175 hotel rooms, 64,000 sf of retail, a 275,000-sf sports facility building, and a new Boston Bruins practice facility. In May 2016, the Boston Landing project proponent reduced the planned building at 40 Guest Street to include approximately 90,000 sf of office space as compared to its originally proposed 225,000 sf size. The Boston Landing project also now includes a residential component, which is discussed under the "125 Guest Street" heading in the following section. As noted earlier, the new Boston Landing MBTA commuter rail station opened in May 2017 with full service to the Framingham/Worcester commuter rail line now being provided.

  While the Boston Landing development has been permitted, it has not yet been fully constructed. Accordingly, traffic associated with that fully-constructed project was assigned to the study area roadway network considering the projected volumes associated with that development as compared to the current volume of traffic generated by that site at the time of the 2018 traffic data collection for this study. Accordingly, the volume of that traffic associated with

the occupied office use was subtracted from the overall Boston Landing trip assignment to the study area roadway network. The approximately 600-seat practice arena for the Boston Bruins also opened since the prior evaluation for this Project, so the traffic generated by that use already is accounted for in the 2018 traffic data collection.

- **125 Guest Street** ("Lantera")– in the summer of 2018 this residential development, including 295 residential units and 16,000 sf of ground-floor retail, opened for occupancy. This site is located directly west of the Project Site on Guest Street across from the New Balance World Headquarters. Traffic associated with the unoccupied portion of that development at the time of the May 2018 traffic counts for this current Transportation evaluation was added to the study area networks.
- **31 North Beacon Street** – involves the construction of 20 residential units and 2,170 sf of ground-floor retail to be located adjacent to the intersection of North Beacon Street and Everett Street, south of the Project Site.
- **61 – 83 Braintree Street** – involves the construction of 80 residential units and 2,550 square feet of ground-floor retail to be located east of the Project Site on Braintree Street adjacent to the Turnpike and MBTA commuter rail tracks. This project has recently been completed with residents now occupying this building.
- **26 Hichborn Street** – consists of 20 residential units and 1,774 sf of ground-floor retail. This site is located southwest of the Project Site on Hichborn Street.
- **159 – 201 Washington Street** – involves the construction of 680 residential units on an 11.6-acre site currently occupied by St. Gabriel's Church and Monastery, a cemetery, and a Shrine to Our Lady Fatima, among other uses. This project will preserve and rehabilitate the Monastery and shrine while demolishing the rest of the site. This site is located south of the Project Site adjacent to St. Elizabeth's Medical Center.
- **139 – 149 Washington Street** – consists of approximately 250 apartments and 30 condominiums. This site is located south of the Project Site adjacent to the proposed development at 159-201 Washington Street.
- **Western Avenue Residences** – involves the construction of 132 residential units and 5,180 sf of ground-floor retail. This site is located northwest of the Project Site on the corner of Western Avenue and Leo M. Birmingham Parkway.
- **61 North Beacon Street** – as part of the original "District 9 at 61 North Beacon Street" development proposal, this site was approved to consist of 71 condominium units to be located within an historic five-story, 71,000 sf building. The building program has since been modified to include the relocation of the existing Boston Volvo Village dealership to the west, with approximately 28,000 sf of office and/or research and development space.
- **40 Rugg Road** – a proposed residential development is planned on a 1.89-acre site located between Rugg Road, Penniman Road, and Braintree Street to the east of the Project Site. A 262-unit development is proposed, with 3,485 sf of supporting retail space. A traffic study for that planned development was not available at the time the initial Transportation Study for the Proposed Project was

prepared for the PNF. Therefore, the 40 Rugg Road background traffic assignment was estimated and included as a background development project Since that analysis was conducted, a traffic study subsequently was prepared for the proposed 40 Rugg Road development, with traffic generation assumptions similar to those used for the Proposed Project background traffic projections.

- **530 Western Avenue** – 132 residential units and 5,180 sf of retail space.
- **305 Western Avenue and 250-280 Western Avenue** – 539,400 sf of research & development space, 40 residential units, 21,100 sf of retail/restaurant space, and 1,900 sf of civic space.
- **Allston Square** – this project is in the early City of Boston Article 80 permitting process and involves 334 residential units and 22,145 sf of retail space being constructed within multiple parcels surrounding the Cambridge Street/North Harvard Street intersection.
- **44 North Beacon Street** – 44 residential units
- **37-43 North Beacon Street –** 83 residential units
- **30 Penniman Road** – 46 residential units
- **392 Cambridge Street** – 32 residential units and 5,100 sf of retail space
- **46 Hichborn Street** – 46 residential units

The 2025 No-Build Condition peak-hour traffic volumes were developed by increasing the 2018 Existing Condition volumes to include general background traffic growth as previously described and adding traffic volumes associated with known traffic forecasts projected for other development projects in the area. As summarized above, this background traffic includes both the adjacent Boston Landing development as well as the other nearby projects described above.

Figures 5.34, 5.35, and 5.36 present the 2025 No-Build Condition traffic volumes for the weekday morning, weekday evening, and Saturday midday peak hours, respectively.

Future Roadway Improvements

In the Proponent's meetings to date with the BPDA, BTD, and MassDOT there were not any definitive planned municipal roadway improvement projects identified within the traffic study area.

While the Guest Street Planning Study identified various potential changes to the surrounding roadway network, none of those changes are expected to be implemented in the immediate future. However, the traffic studies prepared to date for the adjacent Boston Landing development had proposed an extension of Guest Street from Arthur Street to Everett Street, similar to what is currently proposed in conjunction with the Proposed Project. The prior Guest Street extension proposal (by the Boston Landing development) involved that roadway extension diverting in a southeasterly direction from Arthur Street and extending along the southerly Project Site property line. The connecting point to Everett Street was proposed to be located just south of the existing office building located at 38 Everett Street, which would have required the parking lot serving that building to be reconfigured. As

discussed in detail later in this chapter, the Proposed Project's Guest Street Extension is a direct link to Everett Street between the northerly and southerly sides of the development with a preferred design featuring ample multi-modal accommodations.

The Proposed Project allows for this essential piece of roadway infrastructure (the Guest Street Extension) to be implemented as part of the initial construction of the Project Site. If the Project Site was not proposed to be redeveloped, then this connection would not be feasible, which in turn would not allow for the full development potential of the surrounding development sites to be achieved.

5.5.2 Future Trip Generation

Proposed Project-generated Trips

To assess the traffic impacts of the Proposed Project, trip estimates were based on standard data from the Institute of Transportation Engineers (ITE) Trip Generation.[52] Trip generation for the proposed mixed-use development was estimated based on ITE Land Use Codes (LUC) for the primary Project Site components. The rate at which any development generates traffic is dependent upon several factors such as size, location and concentration of surrounding development.

Estimating the traffic associated with the Proposed Project is a complicated exercise due to the variety of uses involved, recent changes in transit service in the area, and other factors. Accordingly, trip generation for each of the major proposed uses is discussed below in separate sections. The effect of shared trips, transit amenities, pedestrian/bicycle travel, and other factors are also noted and incorporated into the overall analysis where appropriate.

Table 5-9 summarizes the anticipated trip generation for each of the major proposed uses.

Table 5-9 Trip Generation Land Use Codes

Land Use	ITE Land Use Code (LUC)	Independent Variable	Component Size
Residential	220 – Apartments	Dwelling units	895 units
Office	710 – General Office Building	Square feet (sf)	375,000 GSF
Retail/Restaurant	820 – Shopping Center	Square feet	50,000 GSF
Supermarket	850 – Supermarket	Square feet	67,000 GSF

GSF Gross Square Feet including mechanical/unusable space.

52 Trip Generation Manual; Tenth Edition; Institute of Transportation Engineers; Washington, D.C.; 2017.

- **Apartments** – ITE LUC 220 "Apartment." ITE provides data for alternate residential land use codes (such as "Mid-Rise Apartment" and "High-Rise Apartment") that closely match the definition of the apartments proposed. However, this study was conducted using ITE data for standard apartments. This approach was taken due to both the greater number of data points in the "Apartment" database, along with the resulting higher overall trip generation. Therefore, by using the higher-generating apartment use, the analysis results presented in this assessment are somewhat conservative.
- **Office space** – ITE LUC 710 "General Office Building." Traffic generated by the proposed office component of the Project Site was estimated utilizing standard ITE data for general office space.
- **Grocery store** – ITE LUC 850 "Supermarket." The proposed 67,000 sf of grocery store space will accommodate the new grocery store which will replace the existing facility on the Project Site. Accordingly, as this existing store has a similar total size and already has an established customer base, it is expected that the same existing customer base will continue to visit the store, regardless of the slight reduction in the actual internal grocery space size compared to existing conditions. Any increase in grocery activity likely will be limited to walk-in trips by residents and workers within the Project Site, and not additional off-site vehicle trips. Accordingly, the grocery store trip generation (as calculated using the ITE Supermarket data for the existing slightly larger total store size) is expected to be maintained under future conditions with development of the Proposed Project.
- **Retail shops/restaurants** – ITE LUC 820 "Shopping Center." While the proposed street-oriented retail shops and restaurants more closely match ITE's definition of a "Specialty Retail Center", there are only limited data available for that land use code (LUC 826). Accordingly, initial trip generation estimates for the 50,000 sf of general retail/restaurant space were conducted using ITE's shopping center trip generation data. The ITE definition for land use code notes that various types of businesses may be included, such as retail shops, restaurants, health clubs, and banks, among others. Calculating trip generation in this manner also accounts for the likely occurrence of internal shared trips between the retail, restaurant, and grocery uses.

The resulting "base" trip generation estimates are provided in Table 5-10.

Following this calculation of the "base" trip generation estimates, the volumes summarized in Table 5-10 were further categorized into internal/shared trips, transit trips, and trips made by bicycle or walking. The following section discusses the methodology used for this analysis, and the calculation worksheets are provided in Appendix D for reference.

Table 5-10 Unadjusted Vehicular Trip Generation Summary

	Proposed					Existing			
Use	Residential Units	Office	Retail/ Restaurants	Grocery	Total	Retail/ Restaurants	Grocery	Total	Change
Size	895 units	375,000 sf	50,000 sf	67,000 sf[1]		34,584 sf	77,764 sf		
Weekday Daily (vpd)[2]	3,760	3,820	2,780	8,310	**18,670**	2,000	8,310	**10,310**	**8,360**
Morning Peak Hour (vph)									
Enter	60	470	55	180	**765**	40	180	**220**	**545**
Exit	230	65	35	120	**450**	25	120	**145**	**305**
Total	290	535	90	300	**1,215**	65	300	**365**	**850**
Evening Peak Hour (vph)[3]									
Enter	205	85	120	330	**740**	90	330	**420**	**320**
Exit	125	395	135	320	**975**	95	320	**415**	**560**
Total	330	480	255	650	**1,715**	185	650	**835**	**880**
Saturday Daily (vpd)	3,860	830	4,060	13,810	**22,560**	2,950	13,810	**16,760**	**5,800**
Midday Peak Hour (vph)									
Enter	170	105	155	260	**690**	110	260	**370**	**320**
Exit	135	90	140	250	**615**	100	250	**350**	**265**
Total	300	195	295	510	**1,305**	210	510	**720**	**585**

Source: 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 BTD's guidelines for Zone 17.

1 As the existing grocery store has a slightly larger total size and established customer base, it is expected that the same existing customer base will continue to visit the store. Accordingly, grocery trip generation is expected to remain unchanged from existing conditions.

2 vpd = vehicles per day

3 vph = vehicles per hour

Mode Share and Vehicle Occupancy Rates

After the initial calculation of the "base" Proposed Project trip generation using ITE data, further adjustments were made to account for local mode share following guidelines provided by BTD for individual city zones. This mode share calculation is critical to the evaluation of overall Proposed Project-related traffic impacts, as there will be a mixture of automobile travel to the Project Site, along with residents and customers that utilize public transit or walk and/or bike. As the Proposed Project Site falls within Zone 17 (the Allston-Brighton neighborhood), data for this area were used for the assignment of Proposed Project trips to the study area roadway network. This methodology is consistent with that used in the traffic studies prepared for the adjacent Boston Landing development.

Transit and bike/pedestrian activity was further evaluated by considering local vehicle occupancy rates (VOR) derived from the 2001 National Household Travel Survey based on Census Tract data.

Based on BTD data for the surrounding neighborhood, a substantial portion of the Proposed Project-generated trips is expected to use the MBTA transit system, either in the form of MBTA bus trips or trips associated with the adjacent MBTA commuter rail stop which opened in May 2017.

The unadjusted Project vehicular trip generation was converted to person-trips based on the information discussed above as shown in Table 5-11.

Table 5-11 Project Person-Trip Summary

Time Period	Total Unadjusted Vehicle Trips	Person Trips 1			
		Total =	Transit	+ Bike/ Walk	+ Vehicle
Weekday Daily	8,360	9,738	2,000	2,640	**5,098**
Weekday Morning Peak Hour					
Enter	545	605	172	151	**282**
Exit	305	338	76	114	**148**
Total	850	943	248	265	**430**
Weekday Evening Peak Hour					
Enter	320	383	81	132	**170**
Exit	560	637	181	176	**280**
Total	880	1020	262	308	**450**
Saturday Daily	5,800	7,156	1,457	2,289	**3,410**
Saturday Midday Peak Hour					
Enter	320	381	68	108	**205**
Exit	265	325	66	91	**168**
Total	585	706	134	199	**373**

1 The base unadjusted trip generation estimates were subsequently converted into person trips and categorized as transit, biking/walking, or automobile trips following BTD's guidelines for Zone 17. Vehicle occupancy rates of 1.1 persons per vehicle for residential and office, and 1.8 person per vehicle for retail and supermarket were used to convert vehicle trips to person trips.

Trip Generation Summary

Once the unadjusted Project vehicle trips were converted to person trips, the projected number of people expect to travel to and from the Site by automobile were converted to vehicle trips, along with the expected cumulative breakdown of trips by transits, biking, walking, and internal shared traffic, as shown in Table 5-12.

Table 5-12 Adjusted Vehicular Trip Generation Summary

Time Period	Total Vehicle-Person Trips	Total Vehicle Trips[1]	Shared Trips[2]	Pass-by Trips[3]	Total New Vehicle Trips
Weekday Daily (vpd)[4]	5,098	4,390	150	90	4,150
Weekday Morning Peak Hour (vph)					
Enter	282	255	0	0	255
Exit	148	135	5	0	130
Total	430	390	5	0	385
Weekday Evening Peak Hour (vph)[5]					
Enter	170	145	5	5	135
Exit	280	245	5	5	235
Total	450	390	10	10	370
Saturday Daily (vpd)	3,410	2,740	160	120	2,460
Saturday Midday Peak Hour (vph)					
Enter	205	175	5	5	165
Exit	168	140	5	5	130
Total	373	315	10	10	295

1 Vehicle-person trips converted to vehicle trips using vehicle occupancy rates of 1.1 persons per vehicle for residential and office, and 1.8 person per vehicle for retail and supermarket were used to convert vehicle trips to person trips.
2 Shared-trips calculated using guidelines recommended by ITE's Trip Generation Handbook, 2nd Edition (2012).
3 25-percent pass-by rate assumed for retail and supermarkets uses.
4 vpd = vehicles per day
5 vph = vehicles per hour

As shown in Table 5-12, the Project at full-build will result in an additional 385 and 370 new vehicle trips during the weekday morning and evening peak hours, respectively, compared to existing conditions after appropriate adjustments for transit use, biking, walking, and internal shared trips. There also is expected to be an increase of 295 adjusted new vehicle trips during the Saturday midday peak hour following these same adjustments. These "new" trips represent the additional traffic that will be traveling to and from the Site after appropriate deductions for transit use, and travel by walking or biking.

With the Project, both the total size of the grocery store and retail space will be changing, within a new mixed-use setting. Specifically, there will be approximately 117,000 sf of total building space devoted to grocery store, retail, or restaurant uses compared to the existing 112,350 sf of combined grocery/retail space. Accordingly,

the increased vehicle trips shown in Table 5-12 will be more closely associated with the new residential and office uses.

When considering the internal trip-sharing and transit use associated with the Project there will be a negligible change in the amount of combined retail/grocery traffic generated by the Project. Accordingly, there should also be a negligible change in the amount of impulse/pass-by traffic drawn to the Site. Therefore, the analysis was conducted using a conservative 25-percent pass-by rate for all time periods studied. In fact, ITE[53] indicates that the pass-by rates for retail uses are 34- and 26-percent during the respective weekday evening and Saturday midday peak hours. ITE also documents a 36-percent pass-by rate for supermarkets during the weekday evening peak hour. Regardless, the analysis was conducted using the more conservative 25-percent pass-by rate, which slightly overstates the volume of net new trips generated by the Project.

The trip generation projections presented above assume internal traffic is being "captured" between the various uses proposed within the Project Site. For example, some of the future office workers may also live on-site. Likewise, some office workers may choose to walk to one of the supporting on-site retail shops or restaurants as opposed to having to drive off-site for this purpose. Based on standard ITE procedures[54], up to three-percent of the Project's peak-hour traffic will be internal shared trips. More recent ITE data[55] suggests that the level of trip sharing could be as high as six-percent during the weekday evening peak hour. To provide for a conservative analysis, the analysis was based on the three-percent internal sharing noted above. The most notable form of trip sharing typically occurs between retail/restaurants establishments and offices or residences located on the same site. In this instance, the overall Project trip generation was calculated considering the difference in existing and proposed retail space (a 15,416 SF increase). With that limited increase in retail/restaurant space, the ITE-based analysis shows only nominal trip-sharing. However, with the mix of retail, restaurant, office, and residential uses there should be ample opportunities for people to visit multiple uses within the Site without needing to drive off-site. Ordinarily, these shared trips would involve drivers visiting one use within the Project Site also driving to another use as part of the same visit. In this instance, most of these trips should be in the form of people walking to a second use after initially driving to the Project Site. Accordingly, the overall Proposed Project trip generation was adjusted to reflect the shared trips between these uses, but without additional vehicle traffic resulting from people driving from one internal use to another.

Phase 1 Development – Building A Trip Generation

As noted earlier, the Proposed Project will be developed through a long-term multi-phased approach over several years. With the initial construction of Building A, or Phase 1 of the Proposed Project, the Stop & Shop supermarket will move from its

53 Trip Generation Handbook; Third Edition; Institute of Transportation Engineers; Washington, D.C.; 2017.

54 Trip Generation Handbook; Second Edition; Institute of Transportation Engineers; Washington, D.C.; 2004.

55 Trip Generation Handbook; Third Edition; Institute of Transportation Engineers; Washington, D.C.; 2017.

current location to this new building, along with 25,000 sf of additional retail space and approximately 176 newly constructed residential units. The total external vehicle trips associated with Building A will not differ significantly from the current Project Site development. While new residential development will be introduced as part of this initial construction, there will be a corresponding decrease in the amount of retail space within the Project Site. Accordingly, with the changes in the amount of retail space, there should be a negligible change in external traffic during the weekday evening and Saturday midday peak hours.

Regardless of the negligible change in Site traffic generation during this initial phase of work, Guest Street Extension will be constructed connecting Arthur Street to Everett Street. As part of this work, a new full-access signalized intersection will be constructed at Guest Street's intersection with Everett Street and Old Everett Street. Likewise, the Arthur Street/Guest Street intersection at the west end of the Project Site also will be reconfigured and signalized as part of Phase 1. Work at this intersection will include the installation of a new traffic signal with associated physical improvements to address long-standing geometric deficiencies. These improvements are sufficient to accommodate both the Proposed Project traffic at full-build and the vehicle trips estimated to be generated by the adjacent Boston Landing project and other nearby projects. The benefits associated with these improvements are discussed in greater detail in Section 5.6.

5.5.3 Traffic Distribution

While the mode-share splits are largely dependent on existing land uses within a given BTD city section, the arrival/departure patterns are more closely associated with the existing roadway infrastructure. Accordingly, trip distribution was based on BTD's guidelines for Zone 17 (where the Project Site is located). These guidelines, based on 2010 census data, provide information on where area residents work and where area employees live. Using these data, vehicle trips can then be assigned to the roadway network. Trip distribution patterns were established separately for the residential and the retail/commercial uses. A summary of the primary roadways of origin of vehicles traveling to the Proposed Project is summarized in Table 5-13 and shown in Figures 5.37 and 5.38.

The net-new Proposed Project-generated vehicle trips were added to the No-Build traffic networks using the distribution patterns summarized in Table 5-13 above. Traffic volume network worksheets are provided in Appendix D. The resulting 2025 Build Condition networks are shown in Figures 5.39, 5.40, and 5.41 for the weekday morning, weekday evening, and Saturday midday peak hours, respectively.

A comprehensive operational and capacity analysis of the study area intersections is presented later in this chapter.

Table 5-13 Geographic Trip Distribution

Corridor	Trip Distribution	
	Residential	Commercial
Market Street (to/from north)	5%	9%
North Beacon Street (to/from west)	10%	12%
Faneuil Street (to/from west)	4%	4%
Sparhawk Street (to/from west)	2%	2%
Market Street (to/from south)	16%	17%
Dustin Street/Murdock Street (to/from south)	3%	3%
Cambridge Street (to/from southwest)	3%	2%
Brighton Avenue (to/from east)	4%	3%
Cambridge Street (to/from northeast)	29%	26%
Harvard Avenue (to/from south)	4%	3%
Everett Street (to/from north)	20%	19%
Total	**100%**	**100%**

5.6 Proposed Site Access Plan

5.6.1 Existing Site Access

While the Project Site abuts, or is near multiple prominent local roadways, existing access is constrained through restrictions at some of the existing driveways. Specifically, while the Project Site directly abuts Everett Street, only entering right-turn movements currently are allowed at the existing Project Site driveway. The traffic counts conducted as part of this evaluation indicated that between 10 and 15 vehicles per hour still were turning left from Everett Street to enter the Project Site at this location. Furthermore, during these same peak hours, between 15 and 20 vehicles per hour were observed to use this right-turn, enter-only driveway to exit the Project Site. With the ongoing delivery of components of the Boston Landing master plan, and the additional development proposed on the Project Site, the need for full access to and from Everett Street will become even more critical.

The existing northerly access driveway to the Project Site is located opposite Braintree Street at its intersection with the lower portion of Everett Street. Similar to the existing Everett Street intersections, this driveway currently is restricted to entering traffic only. However, the traffic data collection for this study revealed that between 5 to 35 vehicles per hour were using this driveway to exit the Project Site.

Primary access to the Project Site currently is provided by way of the North Beacon Street (Route 20)/Arthur Street intersection. Access to/from the west is provided by Guest Street, which connects to Market Street. Both access/egress connections will remain in place as part of this Proposed Project. However, they will be improved and

formalized through the reconstruction and signalization of the Guest Street/ Arthur Street intersection.

5.6.2 Proposed Project Site Access

The Proposed Project will involve new enhanced connections to Everett Street, Arthur Street, and Braintree Street. The new West Street and East Street roadways within the Project Site will enhance the use of these new connections by providing multiple options for internal traffic to circulate within this area. With these new full access/egress connections, along with the existing Market Street and North Beacon Street connections being maintained, Project traffic will have multiple options to enter and exit the Project Site. This improved Site access and egress will not be limited to just automobile traffic, but also will involve significant improvements to bicycle and pedestrian accommodations, as well as the potential for new MBTA bus stops along Guest Street Extension. These enhancements to the Project Site are highlighted in Figure 5.42. Additional discussion regarding the details of these improvements are provided in the following sections.

Guest Street Extension

Guest Street Extension will be constructed in conjunction with the development of Building A. This new roadway will be consistent with the vision of the Guest Street Planning Study and will provide a new connection between existing Guest Street and Everett Street. The road is being designed to provide a full multi-modal "Complete Streets" environment consistent with the City of Boston's goals for this area. The Proposed Project allows for this essential piece of roadway infrastructure to be implemented as part of the initial construction of the Project Site. If the Project Site were not redeveloped, then this connection would not be feasible, which in turn would not allow for the full development potential of the adjacent Boston Landing development site, or other sites, to be achieved. Construction of this roadway also will address the current deficient condition of the two intersections at the end of this segment. Specifically, the existing Guest Street/Arthur Street intersection will be reconstructed as a standard four-way signalized intersection which will replace the current non-standard intersection configuration of this location. Likewise, with the signalization of the newly created Everett Street/Guest Street Extension intersection, the existing unsignalized Everett Street/Old Everett Street intersection will be eliminated. Both improvements are discussed in greater detail later in this section.

Figure 5.43 presents the proposed construction of the Guest Street Extension and other associated improvements. Guest Street Extension will be almost 800 feet in length extending between Arthur Street and Everett Street. The general roadway cross-section will consist of single 11-foot wide through-lanes in each direction, along with an 11-foot wide center width to be used for left-turn lanes at key intersections. Eight-foot wide parallel parking spaces also will be provided along both sides of the road for most of its length, except in the immediate vicinity of intersections or bus stops. In addition to automobile traffic, the roadway has been designed to provide enhanced accommodations for both pedestrians and bicyclists.

Five-foot wide separated bicycle lanes will be provided along both sides of the length of the newly constructed roadway. The bike lanes will be designed to follow current City- and industry standards and will have a 3-foot physical separation between the bike lane and adjacent parking lane. Ample sidewalk space will be provided along both sides of the roadway between the new bike lane and the new buildings.

The Proponent has engaged in multiple ongoing discussions with the MBTA regarding bus service currently provided at the Site. Guest Street Extension may provide opportunities for enhanced bus service to be provided beyond the current bus stop location on Arthur Street. Potential enhancements that were discussed included new bus stops for MBTA Route 64 on both sides of Guest Street Extension near the midpoint of the Project Site to help accommodate the demand associated with both the existing grocery customer base, as well as new Site residents and workers. This potential new service and other aspects of the Project Site will continue to be discussed as part of the ongoing dialogue between the Project team and the MBTA.

Everett Street/Old Everett Street/Guest Street Extension Intersection

One of the key benefits of the Guest Street Extension will be the new full access and egress provided for the Project Site and other nearby developments. This will provide improved connectivity between the Project Site and the surrounding area, while helping to disperse traffic generated by the Project and other nearby planned or potential development. The improvements to this location will involve both geometric changes and the installation of a traffic signal. The following sections discuss the existing, deficient conditions which will be addressed by these improvements, and the general nature of these access improvements.

Existing Conditions

As noted earlier, the existing Project Site driveway on Everett Street allows only for entering right-turn movements. This restriction is enforced through signage on the northbound Everett Street approach to the intersection, and "Do Not Enter" signs facing traffic that might wish to exit the Project Site onto Everett Street.

The existing Project Site driveway is located approximately 100 feet to the north of Everett Street's intersection with "Old" Everett Street, which is the lower roadway connection extending to the north to Braintree Street. That intersection currently features a wide expanse of pavement, with the Old Everett Street southbound approach to the intersection operating under Stop-sign control. Signalizing the modified Everett Street/Old Everett Street/Guest Street Extension intersection also will allow for additional improvements to address existing deficient conditions at this intersection. Specifically, these improvements will help to address the current difficult unsignalized maneuvering of vehicles from Old Everett Street southbound to Everett Street northbound.

The newly constructed Guest Street Extension will intersect Everett Street at the same general location of this existing intersection. However, the new intersection

now will allow full access and egress to and from the Project Site under signal control as discussed below.

Physical Geometric Improvements

The proposed intersection improvements will involve realigning Old Everett Street to intersect Everett Street, opposite Guest Street Extension. To do this, an approximately 100-foot section of the existing median separating Everett Street from Old Everett Street will need to be removed. This will allow for the grade of Old Everett Street to be modified to meet the existing Everett Street grade without impacting the residential properties to the east of Old Everett Street.

At this newly reconstructed intersection, Guest Street Extension will feature an exclusive left-turn lane with a shared through-/right-turn lane. The eastbound separated bike lane also will be transitioned from the west to a standard bike lane to be located between these two lanes to allow bicyclists to pass through the intersection. A single entering lane will be provided from Everett Street heading westbound into the Project Site. The northbound Everett Street approach will consist of a single shared through-/right-turn lane, and an exclusive left-turn lane. The southbound approach will be comprised of a shared left-/through-lane and a short exclusive right-turn lane. The realigned Old Everett Street to the east still will provide single travel lanes in each direction. However, the new intersection will provide improved delineation compared to the poorly defined, wide-open configuration of the existing intersection with Everett Street. Graphics depicting the newly reconfigured intersection superimposed upon an aerial photograph of existing conditions is provided in Figure 5.44.

With the geometric changes shown in Figure 5.44, changes to the grading of Old Everett Street and Everett Street also will be required as noted earlier in this section. Currently, the southbound Old Everett Street approach to its intersection with Everett Street is at a generally flat grade. When the existing median is cut back, the grade of Old Everett Street will be raised to meet Everett Street further to the north of where that intersection occurs today. The grade of the private roadway at the southeast corner of this intersection also will be raised to meet Everett Street at the new intersecting point. That existing residential driveway is located roughly 50 feet to the north of the Everett Street/Old Everett Street intersection. This driveway extends 100 feet to the east of this intersection to where it meets Blaine Street, a public, residential roadway extending 350 feet to the north to its terminus at Braintree Street. The driveway will be realigned within the existing right of way as part of the intersection construction so that it intersects Everett Street just south of the Old Everett Street approach. This will result in a fifth leg being created to the intersection. A graphic depicting the resulting grading at this intersection is shown in Figure 5.45, and street-level renderings of this location also are discussed and presented later in this section. The newly reconstructed intersection geometry will be a notable improvement over the deficient existing conditions and will operate efficiently with the signal operations described in the following section.

Signal Installation

Traffic at the newly-created, full-access intersection will be under traffic signal control. The signal phasing will involve an initial phase with a northbound "lead" phase on Everett Street during which opposing southbound traffic will be stopped. This will be followed by an Everett Street northbound/southbound phase during which left-turns still will be allowed into the Site permissively. The next phase in the sequence will be for the Guest Street Extension approach. With its minimal volume, the opposing westbound approach extending from Blaine Street also will run during this same signal phase. Finally, Old Everett Street traffic will operate under its own exclusive phase. New crosswalks with concurrent pedestrian signal phasing will be provided as discussed later in this section. This signal will be interconnected with the North Beacon Street/Everett Street intersection located 700 feet to the south and can be incorporated into BTD's central signal control system if desired. The signal also will be designed to be adaptive-ready, so that BTD eventually can remove it from the system and allow it to operate under fully-adaptive control as part of any wider system that may be provided in the future. In addition to these provisions, additional Transit Signal Priority ("TSP") features will be implemented. Following discussions with the MBTA it also was determined that the Proponent will include TSP components with this newly signalized intersection in conjunction with a potential modification of MBTA Route 64 through the Site. This feature will allow for buses to receive either extended signal green time or reduced red (stopped) time, depending on which approach to an intersection they are arriving. The combination of this feature and the overall adaptive signal control will improve the operation of buses traveling to, from, and within the Site.

The existing residential driveway extending from Blaine Street noted above also will be included in the new signal operation. However, the signal phase for this newly created fifth leg to the intersection will be called infrequently due to the low volume of traffic currently utilizing that street. The reconstructed and improved Everett Street/Old Everett Street/Guest Street Extension improvements can be implemented within the limits of the existing right-of-way and land within the Project Site. The resulting intersection operations are discussed in detail in Section 5.9.

Graphics depicting the northbound view from Everett Street looking towards this intersection are shown for existing and proposed conditions in Figure 5.46 and 5.47, respectively. As shown in these graphics, the proposed improvements will help reduce the excessive pavement width that currently exists at this location. This will allow for improved pedestrian crossings and also will result in additional green space along the easterly side of the intersection.

Through the combination of the geometric improvements and signal installation, this newly created intersection will provide new access/egress opportunities for the Project Site and other nearby developments. These improvements will address notable existing deficiencies at the Everett Street/Old Everett Street intersection while also accommodating traffic generated by the Proposed Project and expected traffic growth which could occur due to known development projects and regular traffic growth.

Pedestrian and Bicycle Enhancements

The Everett Street/Guest Street modifications described above also will feature improved pedestrian accommodations. Specifically, new crosswalks will be provided across each intersecting leg of the intersection. The pedestrian crossings will occur as part of a concurrent operation under which pedestrians will be able to cross a roadway during an appropriate vehicular phase of the signal operation. New AAB-compliant sidewalks also will be constructed connecting to each of these newly created crosswalks. Under existing conditions, crosswalks only are provided across Everett Street to the south of the existing Site driveway and across Old Everett Street. The proposed enhanced sidewalks under signal control will be a significant improvement compared to the poorly-defined condition that presently exists.

With the geometric changes noted earlier, the downward grade of Everett Street approaching from the north will decrease slightly to approximately 4.5-percent, while the Old Everett Street approach will be modified from its current flat configuration to a 5.0-upgrade to the intersection. To provide an AAB-compliant, comfortable walking conditions, a 135-foot long switchback ramp will be provided within the median area separating these two roadways. The Old Everett Street end of this ramp will connect to a new mid-block crosswalk on that roadway allowing pedestrians to cross if they choose not to continue in either direction on the westerly Old Everett Street sidewalk. The existing sidewalk along the easterly side of Old Everett Street will remain unchanged along the frontage to the abutting properties. However, a new 60-foot long ramp will be provided from the Everett Street/Old Everett Street intersection extending to the north to the existing sidewalk.

Compared to the PNF Project Site plan, Building B is set back slightly further from the corner of the Everett Street/Old Everett Street/Guest Street Extension intersection. With this change the sidewalk area at the northwest corner of the intersection will be more expansive and pedestrian-friendly compared to the previously-proposed condition.

Under existing conditions, a striped bike lane is provided along the easterly side of Everett Street through this intersection, while southbound bicycle traffic functions with a shared-lane condition. With the physical reconfiguration of this intersection, all bike traffic now will function with a shared-lane treatment. Regardless, this still should be a considerable improvement compared to the poorly-defined unsignalized condition that presently exists. Braintree Street/Old Everett Street

The existing driveway at the northeasterly end of the Project Site currently intersects Old Everett Street directly opposite Braintree Street. As noted earlier, this driveway is restricted to only westbound, entering traffic. Both the westbound Braintree Street and northbound Everett Street approaches to the intersection currently operate under Stop-sign control. A paved approach from the north currently used by 119 Braintree Street at the northeast corner of the intersection forms the northerly leg of this four-way intersection. While signage is not provided on that approach, it was observed to function as if it also is under Stop-control.

As part of Phase 1 of the Proposed Project, this four-way intersection will remain in its same current configuration, but with improved signage, striping, and curbing to provide better definition of the intersection. Within the Site, the alignment of Braintree Street Extension will be shifted to the north. Approximately 150 feet to the west of Old Everett Street, this gentle curved roadway segment will connect to the newly constructed Braintree Street Extension that will run along the northerly property line of the Project Site. The general connections resulting from the Braintree Street driveway now being available for use by both entering and exiting Project Site traffic is shown in the previously presented Figure 5.42.

Pedestrian and Bicycle Enhancements

While the Braintree Street/Old Everett Street intersection will maintain its same general geometric configuration, new crosswalks will be provided across each leg of the intersection with four-way Stop control. Under existing conditions, no crosswalks are provided along the Site driveway passing under the Everett Street overpass. As part of the Project, new sidewalks connecting to the internal Site pedestrian network will be provided along both sides of the new Braintree Street Extension. New 5-foot wide bike lanes also will be provided on both sides of Braintree Street Extension within the Project Site.

Braintree Street Extension

As noted earlier, the existing Braintree Street enter-only driveway will be modified to allow for both entering and exiting traffic. The details of the configuration of the Braintree Street/Old Everett Street/Project Site driveway intersection are discussed later in this section. The new Braintree Street Extension will provide a clearly defined roadway accommodating automobile, bicycle, and pedestrian traffic in a multi-modal setting. The roadway will extend Braintree Street westerly through the Project Site with intersections located at East Street and West Street, which will provide connections to Guest Street Extension. A pedestrian connection to the adjacent Boston Landing development and new Boston Landing MBTA commuter rail station will be provided at the western terminus of this roadway just east of the property line for these two sites.

Braintree Street has been designed as a standard two-way roadway using City-design guidelines. Ultimately, it is expected that this roadway may connect to Arthur Street Extension to the west under future conditions. However, as that connection falls beyond the limits of the Project Site, Braintree Street Extension currently is designed to terminate at the westerly property line, with the segment between that point and Arthur Street serving as access to Building D. The analysis presented later in this Chapter indicates that the Project Site can operate acceptably without any connection to Arthur Street Extension, but the Site design has been developed to allow for such a connection in the future if desired.

Pedestrian and Bicycle Enhancements

Since the prior proposal, the bicycle accommodations also now have been enhanced to include standard bicycle lanes on both sides of the roadway connecting the Boston Landing MBTA commuter rail station to and from the east. As previously noted,

sidewalks also are proposed along both sides of the full length of Braintree Street Extension. With these improvements and the proposed access enhancements to the MBTA station, there will be significantly improved pedestrian and bicycle connectivity to the neighborhood surrounding the Project Site.

Arthur Street/Guest Street/Guest Street Extension

The existing four-way intersection of Arthur Street with Guest Street and the Stop & Shop driveway will be reconstructed as part of the initial Project Site development. A conceptual improvement plan is provided in Figure 5.48. This work will entail reconstructing the intersection to include the new easterly leg of the intersection (Guest Street Extension) which will be constructed from this location heading easterly to Everett Street. The reconstruction of this intersection also will involve the installation of a traffic signal. To help minimize delays for the MBTA Route 64 bus passing through this intersection TSP features will be implemented. This feature will allow for buses to receive either extended signal green time or reduced red (stopped) time on the Guest Street or Guest Street Extension approaches to the signal.

The westbound Guest Street Extension approach will feature an exclusive left-turn lane with a shared through-/right-turn lane. The opposing eastbound Guest Street approach will feature a single shared lane. The northbound Arthur Street approach will feature a shared left-/through-lane with an adjacent exclusive right-turn lane, while the opposing southbound approach will feature a single shared lane.

Pedestrian and Bicycle Enhancements

In addition to the intersection improvements noted above, new bicycle accommodations also will be provided on the intersecting roadways. This will involve the new separated bicycle lanes proposed on Guest Street Extension, as well as new separated bike lanes to be provided on Arthur Street within the Project Site. Pedestrians will be accommodated at this intersection via crosswalks on each leg of the intersection and signalized pedestrian crossings as part of the signal operation.

West Street Extension

In conjunction with the initial Site construction, a new "West Street Extension" will be constructed opposite the newly created West Street to the north. This new roadway initially will serve as the primary access driveway for Building A.

5.7 Parking

The parking needs for the Proposed Project will be accommodated by up to 1,400 structured parking spaces. The Proponent's analysis of parking demand focused on not providing too much parking so as to discourage single occupancy vehicle trips and encourage alternative means of travel (walking, bike, public transit). The Proponent's analysis also has focused on providing the minimum number of spaces necessary to meet market demand to ensure that the Proposed Project can accommodate parking on site. The resulting number of parking spaces provides a

parking ratio necessary to meet tenant, resident, and customer demand based on the Proponent's experience with other mixed-use developments, reviewing parking ratios at adjacent developments (including Boston Landing), and input from office brokers and potential tenants.

When analyzing the appropriate number of parking spaces, the types of uses must be considered. With the proposed combination of retail, restaurant, grocery, residential, and office uses, the combined peak parking demand for the Project will occur on a weekday, with weekend activity being lower due to the minimal office activity. Due to the various land uses proposed, the peak parking demand for the overall Project differs from that of the various individual uses within the Proposed Project Site. The parking needs for the Project will be lessened due to the nearby availability of public bus and train service, and amenities within the Project Site that will promote bicycle and pedestrian travel.

There also will be internal trip-sharing between the various uses within the Project Site. As an example, some residents of the Project Site may choose to walk to the various on-site retail uses that will be available. Therefore, the resulting parking demand can be accommodated on-site by the maximum 1,400-space parking supply (with an additional approximately 21 on-street spaces), leaving sufficient open spaces to accommodate fluctuations in demand.

As noted, the Proponent is also focused on not providing too much parking. An excess of parking would discourage alternate means of transportation such as MBTA bus or train services, walking, biking, taxi, or other ride services. To advance this goal, the Proposed Project design continues to advance a shared-parking approach.

Specifically, due to the varying peak times for the office and residential uses, there may be opportunities for some parking spaces to be shared between residents and workers. For example, the peak residential parking demand should occur outside of normal office working hours. Due to these offsetting peak times, there should be opportunity for shared parking between the residential and office uses. This could be in the form of the Building B office parking supply being made partly available to residents or visitors outside of normal office working hours. One option could involve "reverse-commuter" passes being made available to residents to allow parking throughout the evening within designated hours can be an effective way or utilizing parking for multiple uses. Programs such as this can be evaluated as the Project is developed and adapts over time. This type of shared-parking activity is preferable to providing excessive parking for each use within the Project Site.

The Proponent will also consider incorporating other methods to reduce parking spaces. For example, residential parking will be unbundled from the purchase or lease of a unit, which will further reduce demand. In addition, with the Proposed Project being continuously developed over a several-year period there should continue to be less reliance by residents and workers on private automobile ownership. This ongoing trend is the result of increased transit usage, and improved accommodations for bicycle and pedestrian travel throughout the City of Boston. Alternate means of travel, such as taxi or private ride services (Uber, Lyft, and others)

should continue to reduce the parking needs for this area. As the Proposed Project will be developed on a phased basis over multiple years, the future phase parking needs can be evaluated and, if necessary, the parking ratios can be adjusted accordingly to match market conditions at that time.

With this approach, an overall residential parking ratio of 0.5 spaces per residential unit (33-60% lower than BTD residential parking guidelines) is proposed and 2.0 spaces per 1,000 sf of office parking (well below the 3.0 spaces per 1,000 sf typically sought by office tenants outside the City core) is proposed. The Stop & Shop store and retail space within Building A will be constructed with a parking ratio of approximately 2.7-space per 1,000 sf of grocery/retail space. This proposed supply will be considerably lower than the 4.0+ spaces per 1,000 square feet ratio currently provided at the existing Project Site.

While the Project will be located in a transit-oriented, mixed-use setting, by their nature grocery stores require more parking than soft-goods retail stores. Accordingly, the proposed grocery/retail parking supply was developed to accommodate the expected demand while appropriately reducing the supply to reflect that some customers and employees may be utilizing public transportation. In addition to the designated Building A retail/grocery parking, retail customers will be able to utilize the proposed on-street parking that will be provided along both sides of Guest Street. With the most of that retail space being provided as small shops within Buildings B-D, most of the customer traffic should be in the form of residents, office workers, or grocery customers already on-site as opposed to destination retail traffic.

5.7.1 Parking Demand

To estimate parking demands associated with the Project, the Institute of Transportation Engineers ("ITE") *Parking Generation Manual, 5th Edition*[56] was used. These rates provide a relatively conservative start point for estimating parking demands in a denser, urban location, and, therefore, require adjustment for alternative modes of transportation (transit services, walking and bicycling), and parking pricing. As with the trip generation estimates, mode share adjustments were applied to the parking demand projections for the various Project components. With the combination of residential, office, grocery store, and retail/restaurant uses, the critical parking demand should occur on a weekday. The results of the adjusted weekday parking demand analysis are presented in Table 5-14.

56 Parking Generation Manual; Fifth Edition; Institute of Transportation Engineers; Washington, D.C.; 2019.

Table 5-14 Project Parking Demand Estimate

Land use	ITE Land Use Code (LUC)	# units/ area	85th Percentile Weekday Demand (non-December) Peak Demand (unadjusted)	Vehicular Share	Internal shared	Peak Demand (Adjusted)	Average Weekday Demand (non-December) Peak Demand (unadjusted)	Vehicular Share	Internal shared	Peak Demand (Adjusted)
Residential	LUC 222 (High-Rise Apartment)	895	1,066	43%	3.5%	442	1,014	43%	3.5%	421
Office	LUC 701 (Office Building)	375,000 sf	1,238	62%	3.5%	741	841	62%	3.5%	504
	Residential/office subtotal		2,304			1,183	1,855			925
Retail[1]	LUC 820 (Shopping Center)	50,000 sf	184	51%	3.5%	91	98	51%	3.5%	48
Retail[1]	LUC 850 (Supermarket	67,000 sf	273	51%	3.5%	135	190	51%	3.5%	94
	Retail/grocery subtotal		457			226	288	43%		142
Total:			**2,761**			**1,409**	**2,143**			**1,067**

Source: Parking Generation Manual, 5th Edition, Institute of Transportation Engineers, Washington D.C. (2019). Land Use Codes (LUC) 222 (High-Rise Apartment), LUC 701 (Office Building), LUC 820 (Shopping Center), and LUC 850 (Supermarket) used to estimate parking generation. The base parking demand estimates were subsequently categorized into vehicular trips after adjustments for non-automobile travel (biking, walking, and internal shared trips).

1 Peak demand considered as parking demand under typical non-holiday season conditions.

As shown in Table 5-14, based on standard ITE-based calculations, the Project would be expected to have a total peak parking demand of 1,409 spaces during the critical weekday peak hour. As noted earlier, a total of up to 1,400 parking spaces are proposed, indicating that there will be only a slight shortfall considering the critical 85th percentile demand. However, this calculated shortfall is partly due to the residential demand forecast by the ITE data. Unlike retail demand, which can vary based on public demand, the residential parking use will be controlled in conjunction with residential lease or unit deeds. With the transit-oriented nature of the Project, not all residents will want/need or have access to an individual parking space. Accordingly, the effective residential parking demand will be capped by the number of spaces made available for residential use, including visitors. As noted earlier, the residential parking will be unbundled from the leasing or purchase of an individual unit. Therefore, as noted above in Section 5.7, the Proposed Project's parking ratio is sufficient to meet demand without overbuilding parking and dissuading alternative modes of travel.

5.8 MBTA Public Transportation Enhancements

5.8.1 Boston Landing Access Enhancements

Currently, there is not a direct connection provided from the Site to the adjacent Boston Landing MBTA commuter rail station. Under existing conditions this does not

create a significant hardship. However, with the development of office and residential uses within the Site there is a need for enhanced access to this station. In response to requests that the Proposed Project facilitate improved connections to the Boston Landing MBTA commuter rail station for pedestrians, bicyclists, automobile traffic, and buses (particularly shuttles and pick-up/drop-offs) the Proponent has coordinated extensively with the BPDA and MBTA since the filing of the PNF to advance these goals. In the absence of any improvements, residents and workers within Buildings B, C and D would need to walk south to Guest Street Extension, continue west to Arthur Street Extension, and then walk to the gate opening at the northerly end of that roadway. Building A occupants also would need to use Arthur Street Extension due to the lack of a direct connection from the Project Site. Instead of using this circuitous route, the Proponent instead is seeking to create a direct connection between the Project Site and the Boston Landing MBTA commuter rail station. Taking advantage of the Project Site's proximity to the station will help promote transit use from the Project while also addressing the lack of connectivity to the station from the surrounding neighborhoods.

Over the past two years, the Proponent has been engaged in an ongoing dialogue with the MBTA regarding this proposal. This undertaking will involve relocating the existing chain link fence that currently extends along the Project Site's northerly property line. To improve the walkability of this area, the Proponent will construct a new sidewalk along the northerly side of Braintree Street Extension within the MBTA-controlled property north of and adjacent to the Site. The exact type of easement or agreement required, as well as the exact dimensions of the area to be used, will be determined through further consultation with the MBTA and MassDOT.

In addition to the pedestrian enhancements noted above, a new 100-foot long short-term pick-up/drop-off area will be constructed along the northerly side of the newly-created Braintree Street Extension. This area is primarily intended for use as a "kiss-and-ride" area to supplement the one already provided on Arthur Street Extension. This area also has been designed to accommodate shuttle busses, which may be picking up or dropping off passengers at the station independent of the Proposed Project. The general proposed layout of this area as compared to existing conditions is shown in Figure 5.49. The Proponent will work with the MBTA, MassDOT, and other stakeholders to implement these improvements as feasible.

5.8.2 Bus Enhancements

The Proponent also has engaged in multiple ongoing discussions with the MBTA regarding bus service currently provided at the Project Site. Guest Street Extension may provide opportunities for enhanced bus service to be provided beyond the current bus stop location on Arthur Street. Potential enhancements that were discussed included new bus stops being provided on both sides of Guest Street Extension near the midpoint of the Project Site to help accommodate the demand associated with both the existing grocery customer base, as well as new Site residents and workers. This potential new service and other aspects of the Project Site will continue to be discussed as part of the ongoing dialogue between the Project team and the MBTA.

Based on initial discussions with the MBTA, rerouting MBTA Route #64 to run along Guest Street Extension to Everett Street to North Beacon Street appears appropriate to serve the anticipated development density in this area. Under this proposal, the bus will no longer run along Arthur Street south of Guest Street and on North Beacon Street between Arthur Street and Everett Street. This new route is shorter than the current path of Route 64 between these two points, which will help to minimize any travel-time impacts to the route. Likewise, the new route does not require the bus to pass through any additional signalized intersections compared to current conditions. Additional measures to help minimize delays along this route are discussed in the following section.

The Project Site plan and accompanying mitigation package both are consistent with MassDOT's recent "Allston Early Action Transit Study". That planning effort identified existing issues with bus overcrowding and route delays resulting from general traffic congestion. Recommendations resulting from that effort included implementing TSP measures at key locations, and installing real-time bus arrival signs, among other operational improvements. In conjunction with the rerouting of MBTA Route 64 along Guest Street Extension through the Project Site the Proponent will install real-time bus arrival signs at the new bus stops to be installed on both sides of the road. TSP features to be installed in conjunction with the new Guest Street Extension signals at that roadway's intersection with Arthur Street and Everett Street are discussed in the following section, as well as at the North Beacon Street/Everett Street intersection.

5.8.3 Transit Signal Priority

Following initial consultation with MassDOT and the MBTA, the Proponent has agreed to install transit signal priority (TSP) equipment at three locations: Guest Street Extension's newly proposed signal at Arthur Street/Arthur Street Extension, Everett Street/old Everett Street, and at North Beacon Street/Everett Street. This feature will allow for buses to receive either extended signal green time or reduced red (stopped) time, depending on which approach to these intersections that they are arriving at. This feature will improve the operation of the MBTA Route 64 bus traveling to and from the Site. TSP is expected to reduce intersection delays for buses. Other systems have found TSP to reduce running times by a range of 2-18%,[57] although a number of variables may impact the total benefit.

5.8.4 Pedestrian Access

The Project Site is effectively flat along the south, west and northern property line, along which there is complete pedestrian accessibility off-site and to the proposed program within the Project Site limits. The eastern edge of the Project Site follows the slope of Everett Street and there is no direct access from the building program to the public walk along the street edge. The proposed public accessible walkways along all streets will have complete pedestrian accessibility to and from the Project

57 A Better City, "Surface Transportation Optimization and Bus Priority Measures: The City of Boston Context," March 2013.

Site. Refer to Section 3.5.1 of Chapter 3, *Urban Design* for information on accessibility.

With its location immediately adjacent to the Boston Landing MBTA commuter rail station, and nearby available MBTA bus service, the Project will function as a transit-oriented development. To maximize the use of the Boston Landing MBTA commuter rail station the Proponent is proposing pedestrian access enhancements to the station. These will involve the relocation of the fencing currently running along the northerly Site property line which currently prevents access to that station. Since the filing of the PNF, the Proponent has maintained an ongoing dialogue with the MBTA regarding the logistics of these proposed access improvements. As part of this Project, a new sidewalk is proposed to be installed on MBTA property north of and adjacent to the Project Site property line. This sidewalk (and the sidewalk on the opposite side of Braintree Street Extension) will provide a new pedestrian connection between Arthur Street Extension and Braintree Street to the east. In the absence of this improvement, pedestrians wishing to us the commuter rail would need to walk to Guest Street Extension and then north on Arthur Street Extension. By opening up the access to this station as improved, there will be a reduced need for vehicular traffic associated with the Project, and the viability of the station will be increased through its improved connections to the surrounding area.

Everett Street – Boston Landing MBTA Commuter Rail Station access

Access to the Boston Landing MBTA commuter rail station platform also is available via the Everett Street overpass extending over the commuter rail line and I-90. Specifically, an elevator to the platform is provided on the westerly side of Everett Street just north of the proposed Braintree Street Extension, with stairs leading to the platform located on the opposite side of the road. The sidewalks near these connections are seven- and five feet wide on the westerly and easterly sides of the roadway, respectively. Approximately 225 feet to the south there also is a stairway on the easterly side of the roadway which leads to Old Everett Street, just south of Braintree Street/Braintree Street Extension. This stairway frequently is used by MBTA riders walking to and from the neighborhoods to the east. With the access enhancements discussed earlier, these riders now will be able to walk directly to the station through the Site without needing to take the stairs to Everett Street.

In response to feedback received at public meetings, the Proponent has been exploring the possibility of widening the Everett Street sidewalks adjacent to the Site to provide an improved walking environment for pedestrians traveling to and from Boston Landing MBTA commuter rail station. The segment of Everett Street to the north of Braintree Street Extension is a bridge structure which extends over the commuter rail line and I-90. The sidewalks on the bridge overhang the exterior beam by 2’3,” which is just below the 3-foot overhang typically allowed by MassDOT on bridges. Accordingly, widening the sidewalks on the bridge structure would require the construction of a new narrow adjoining bridge structure to support an expanded sidewalk. This would involve substantial infrastructure changes including additional bridge girders and modifications to the existing bridge piers, while only providing a

slightly wider sidewalk. This expense is beyond the scope of this Project. Instead, the Proponent is focusing its efforts on the ground-level access improvements adjacent to the Boston Landing MBTA commuter rail station. As noted earlier, that work will eliminate the need for pedestrians from the east to travel on Everett Street to access the station. Furthermore, with the revised configuration of Building B, the sidewalk at the northwesterly corner of the Everett Street/Old Everett Street/Guest Street Extension will be wider than with the prior plan, allowing for a most prominent and pedestrian-friendly access connection to the Project Site.

5.8.5 Bicycle Accommodations

The potential bicycle parking needs for the Proposed Project were evaluated based on BTD guidelines, as presented in its "Off-Street Bicycle Parking Guidelines."[58] The resulting bicycle parking accommodations have been designed to meet these standards. These requirements will be memorialized as part of the subsequent Transportation Access Plan Agreement (TAPA) for the Proposed Project, or individual phases as appropriate. As requested in MassDOT's Transportation Scoping memorandum, the Proponent has developed a bicycle access plan following a thorough review of existing conditions in and around the Site. While Guest Street to the west of the Site features only standard bike lanes, the design of the new Guest Street Extension features separated bike lanes on both sides of the road from Arthur Street to Everett Street. Likewise, the Proponent also will be providing separated bike lanes on both sides of Arthur Street within the Project limits. With the proximity of the Boston Landing MBTA commuter rail station and neighborhoods to the east, there also is the need for improved bicycle access between these two areas. Accordingly, the Proponent will be opening up ground-level access to the station from the northerly end of the Site. As noted earlier, new dedicated bike lanes also will be provided on both sides of Braintree Street Extension between the station and the Old Everett Street/Braintree Street intersection to the east.

Bike-Sharing Stations

In addition to the on-site bicycle parking specified above, bike-share stations may be required in conjunction with the Proposed Project. These requirements can be waived if another bike share station is located within 200 yards. In this instance, the nearest Bluebikes bike share station is located at 20 Guest Street approximately ¼ mile to the west. While this is beyond the 200-yard standard, the Proponent will engage with the BTD bicycle staff regarding whether an additional station still is appropriate given the proximity of the 20 Guest Street facility. The Proponent is committed to installing a new station at the Proposed Project if desired by the City. With the increased development in the area, it is expected that this new bike station may be required. Therefore, as part of the new MBTA Boston Landing access enhancements space has been allocated both for additional bike racks, as well as a new Bluebikes station.

58 Off-Street Bicycle Parking Guidelines, Boston Transportation Department, Boston, MA (2010).

5.9 Service and Loading

The Project Site has been designed so that truck deliveries can be made via the new Guest Street Extension either to or from Arthur Street or Guest Street. As with current conditions for the grocery store, the new store will receive a variety of truck deliveries throughout the week. The exact number and timing of deliveries will vary depending on volume and seasonal demand. Currently, Stop & Shop is anticipating that there will be roughly ten to twelve dry-good deliveries made by tractor trailer per week. These are expected to occur in the early evening hours. Perishable food deliverables are scheduled to occur between 6 AM and 2 PM daily. There also will be various deliveries made to the Project Site daily between 6 AM and 10 AM, but those deliveries will be made by smaller, single-unit trucks. These are the same types of vehicles which are typically seen on a daily basis in Allston-Brighton making deliveries to other retail businesses and restaurants. Smaller single-unit trucks can easily be accommodated and are typically on Site for only a short time.

The grocery store delivery trucks are expected to follow the same delivery route used under existing conditions to travel to and from the Site. Specifically, trucks will use Arthur Street to enter the Site from North Beacon Street. After entering the Project Site, the Stop & Shop trucks will proceed to the one-way loading entry area to the east of Building A via the new truck entrance to be constructed on Guest Street Extension at the easterly end of this building. This driveway will lead to a fully enclosed loading area to be used by both Stop & Shop and the other retail space within the building. After unloading, trucks will continue in a counterclockwise direction through the enclosed loading area to the westerly end of the building. Trucks will then turn right from the building onto the newly created West Street Extension before turning left onto Guest Street Extension to exit the Site.

Deliveries to the other proposed uses are expected to follow the same general route to travel to and from the Project Site. Instead of using West Street Extension, delivery trucks traveling to either Building B, C, or D, will use either West Street or East Street to access the enclosed loading areas at the northerly end of each building. Due to the nature of the office, small retail, and residential uses, deliveries to these buildings should be less frequent, and should involve smaller trucks than the larger tractor trailers visiting the grocery store.

5.10 Traffic Operations Analysis

Measuring existing traffic volumes and projecting future traffic volumes quantifies traffic flow within the study area. To assess quality of flow, roadway capacity analyses were conducted with respect to Existing and projected No-Build and Build traffic volumes for both the roadway peak hours and the Proposed Project peak hours. Capacity analyses provide an indication of how well the roadway facilities serve the traffic demands placed upon them. Roadway operating conditions are classified by calculated levels of service.

5.10.1 Level-of-Service Criteria

The evaluation criteria used to analyze area intersections in this traffic study are based on the 2010 Highway Capacity Manual (HCM)[59]. The term "Level-of-Service", or LOS, is used to denote the different operating conditions that occur on a given roadway segment under various traffic volume loads. It is a qualitative measure that considers several factors including roadway geometry, speed, travel delay and freedom to maneuver. LOS provides an index to the operational qualities of a roadway segment or an intersection. LOS designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions.

In addition to LOS, two other measures of effectiveness (MOEs) are typically used to quantify the traffic operations at intersections; volume-to-capacity ratio (v/c) and delay (expressed in seconds per vehicle). For example, an existing v/c ratio of 0.9 for an intersection indicates that the intersection is operating at 90 percent of its available capacity. A delay of 15 seconds for a vehicular movement or approach indicates that vehicles on the movement or approach will experience an average additional travel time of 15 seconds. For a given LOS letter designation there may be a wide range of values for both v/c ratios and delay. Comparison of intersection capacity results therefore requires that, in addition to the LOS, the other MOEs should also be considered.

The LOS designations, which are based on delay, are reported differently for signalized and unsignalized intersections. For signalized intersections, the analysis considers the operation of all traffic entering the intersection and the LOS designation is for overall conditions at the intersection. For unsignalized intersections, however, the analysis assumes that traffic on the mainline is not affected by traffic on the side streets. Thus, the LOS designation is for the critical movement exiting the side street, which is generally the left turn out of the side street or site driveway. Table 5-15 shows the LOS criteria for both signalized intersections and unsignalized intersections.

Table 5-15 Level-of-Service Criteria

Level of Service	Signalized Intersection	Unsignalized Intersection
A	0 to 10 seconds	0 to 10 seconds
B	10 to 20 seconds	10 to 15 seconds
C	20 to 35 seconds	15 to 25 seconds
D	35 to 55 seconds	25 to 35 seconds
E	55 to 80 seconds	35 to 50 seconds
F	Greater than 80 seconds	Greater than 50 seconds

Source: 2010 Highway Capacity Manual Exhibits 18-4 and 19-1

In general traffic engineering practices, conditions of LOS D or better are generally considered acceptable for signalized intersections. However, in balancing the needs of vehicular traffic with those of pedestrians this can be difficult to achieve in all

59 HCM 2010 - Highway Capacity Manual; Transportation Research Board (Washington, D.C.), 2010.

instances in an urban setting. The analytical methodologies typically used for the analysis of unsignalized intersections use conservative analysis parameters, such as long critical gaps. Actual field observations indicate that drivers on minor streets generally accept shorter gaps in traffic than those used in the analysis procedures and therefore experience less delay than reported by the analysis software. The analysis methodologies also do not fully consider the beneficial grouping effects caused by nearby signalized intersections. The net effect of these analysis procedures is the over-estimation of calculated delays at unsignalized intersections in the study area. Cautious judgment should therefore be exercised when interpreting the capacity analysis results at unsignalized intersections.

5.10.2 Signalized Capacity Analysis

The LOS analysis was conducted for the 2018 Existing, 2025 No-Build, and 2025 Build conditions for the study-area intersections during the weekday morning, weekday evening, and Saturday midday peak hours. The results of this analysis are summarized in Table 5-16 for the signalized study area intersections. The capacity analysis worksheets are provided in Appendix D along with diagrams depicting the average and 95th percentile queue lengths.

Table 5-16 Signalized Intersection Capacity Analysis

		2018 Existing Conditions					2025 No-Build Conditions					2025 Build Conditions				
	Movement	v/c[a]	Delay[b]	LOS[c]	50th % Queue[d]	95th % Queue[e]	v/c	Delay	LOS	50th % Queue	95th % Queue	v/c	Delay	LOS	50th % Queue	95th % Queue
Market Street at Leo M. Birmingham Parkway/ Lincoln Street																
Weekday Morning																
Birmingham Parkway	EB L/R	0.69	44	D	104	143	0.71	44	D	110	151	0.71	44	D	110	151
Lincoln Street	WB L	0.65	43	D	105	166	0.64	42	D	104	#178	0.64	42	D	104	#178
	WB T/R	1.00	95	F	174	#315	1.00	95	F	174	#345	1.00	95	F	174	#345
Market Street	NB L/T	0.58	22	C	163	222	0.66	24	C	185	259	0.66	24	C	188	263
Birmingham Parkway	SB T	0.94	56	E	249	#330	1.01	70	E	~275	#407	0.97	61	E	258	#383
	SB R	0.05	19	B	0	6	0.05	18	B	0	7	0.05	18	B	0	7
	OVERALL		**46**	**D**				**50**	**D**				**47**	**D**		
Weekday Evening																
Birmingham Parkway	EB L/R	0.44	42	D	49	73	0.46	42	D	52	77	0.46	42	D	52	77
Lincoln Street	WB L	0.52	39	D	83	135	0.56	40	D	91	145	0.56	40	D	91	145
	WB T/R	1.12	>120	F	~229	#362	>1.20	>120	F	~262	#397	>1.20	>120	F	~262	#397
Market Street	NB L/T	0.80	26	C	202	#327	0.92	35	D	251	#435	0.87	31	C	233	#393
Birmingham Parkway	SB T	1.00	68	E	271	#403	>1.20	>120	F	~405	#531	>1.20	>120	F	~386	#512
	SB R	0.04	21	C	0	5	0.04	21	C	0	6	0.04	21	C	0	6
	OVERALL		**54**	**D**				**99**	**F**				**88**	**F**		
Saturday Midday																
Birmingham Parkway	EB L/R	0.36	43	D	31	44	0.34	42	D	35	48	0.34	42.1	D	35	48
Lincoln Street	WB L	0.64	46	D	84	123	0.68	48	D	91	132	0.68	47.8	D	91	132
	WB T/R	0.66	47	D	85	126	0.69	48	D	92	134	0.69	48.4	D	92	134
Market Street	NB L/T	0.38	13	B	104	200	0.50	15	B	131	242	0.5	15.4	B	131	242
Birmingham Parkway	SB T	0.97	62	E	252	#322	1.09	96	F	~346	#420	1.08	93.2	F	~342	#415
	SB R	0.04	23	C	0	4	0.04	21	C	0	5	0.04	21.4	C	0	5
	OVERALL		**40**	**D**				**54**	**D**				**53**	**D**		
Market Street at Guest Street/ Stockyard Driveway																
Weekday Morning																
Stockyard Driveway	EB L/T/R	0.13	38	D	10	18	0.06	37	D	5	20	0.05	36	D	5	20
Guest Street	WB L/T	0.11	38	D	6	19	0.21	37	D	15	37	0.52	39	D	41	81
	WB R	0.02	24	C	0	15	0.04	22	C	0	24	0.06	21	C	0	28
Market Street	NB L/T/R	0.48	2	A	38	m60	0.55	3	A	45	M57	0.59	4	A	67	m54
	SB L/T/R	0.65	6	A	55	121	0.88dl	8	A	63	142	0.7	8	A	80	140
	OVERALL		**5**	**A**				**6**	**A**				**8**	**A**		
Weekday Evening																
Stockyard Driveway	EB L/T/R	0.07	31	C	8	16	0.06	30	C	8	16	0.07	30	C	8	16
Guest Street	WB L/T	0.60	37	D	70	129	0.84	56	E	113	#234	1.10	>120	F	~175	#327
	WB R	0.62	23	C	133	247	0.79	29	C	225	#431	0.67	24	C	172	300
Market Street	NB L/T/R	0.39	14	B	110	151	0.47	16	B	130	177	0.52	17	B	145	198
	SB L/T/R	0.54	8	A	104	135	0.69	11	B	127	164	0.70	11	B	126	162
	OVERALL		**15**	**B**				**20**	**B**				**26**	**C**		
Saturday Midday																
Stockyard Driveway	EB L/T/R	0.08	33	C	5	13	0.06	30	C	5	13	0.05	29	C	5	13
Guest Street	WB L/T	0.28	34	C	16	28	0.57	35	C	52	66	0.79	49	D	92	102
	WB R	0.06	22	C	0	9	0.14	20	B	6	12	0.18	19	B	12	17
Market Street	NB L/T/R	0.36	8	A	81	146	0.46	11	B	116	180	0.49	13	B	137	187
	SB L/T/R	0.44	4	A	46	102	0.65	8	A	83	131	0.68	10	A	105	130
	OVERALL		**8**	**A**				**12**	**B**				**15**	**B**		

a volume to capacity ratio
b average delay in seconds per vehicle
c LOS = level-of-service
d 50th percentile queue length, measured in feet
e 95th percentile queue length, measured in feet
95th percentile volume exceeds capacity, queue may be longer
m Volume for 95th percentile queue is metered by upstream signal
~ volume exceeds capacity; queue is theoretically infinite
dl Defacto left lane

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Table 5-16 Signalized Intersection Capacity Analysis (Continued)

		2018 Existing Conditions					2025 No-Build Conditions					2025 Build Conditions				
	Movement	v/c[a]	Delay[b]	LOS[c]	50th% Queue[d]	95th% Queue[e]	v/c	Delay	LOS	50th% Queue	95th% Queue	v/c	Delay	LOS	50th% Queue	95th% Queue
Market Street at North Beacon Street																
Weekday Morning																
North Beacon Street	EB L/T/R	0.33	23	C	80	122	0.46	25	C	103	154	0.59	28	C	118	#195
	WB L/T/R	0.63	26	C	181	#274	0.72	28	C	211	#330	0.76	30	C	~218	#340
Market Street	NB L/T/R	>1.20	>120	F	~350	#429	>1.20	>120	F	~406	m#516	>1.20	>120	F	~343	m#503
	SB L/T/R	0.85	31	C	125	#210	0.95	43	D	147	#260	1.04	69	E	~190	#320
	OVERALL		**99**	**F**				**>120**	**F**				**>120**	**F**		
Weekday Evening																
North Beacon Street	EB L/T/R	0.47	29	C	132	184	0.60	32	C	161	223	0.72	36	D	175	#265
	WB L/T/R	0.72	26	C	168	#68	0.94	45	D	~75	#354	0.98	53	D	~112	#367
Market Street	NB L/T/R	0.93	58	E	188	#291	>1.20	>120	F	~300	m#328	>1.20	>120	F	~248	m#315
	SB L/T/R	1.07	81	F	~296	#468	>1.20	>120	F	~480	#639	>1.20	>120	F	~552	#686
	OVERALL		**54**	**D**				**>120**	**F**				**>120**	**F**		
Saturday Midday																
North Beacon Street	EB L/T/R	0.36	26	C	85	123	0.50	29	C	109	154	0.59	31	C	118	167
	WB L/T/R	0.74	35	C	169	#247	0.92	50	D	220	#350	0.92	50	D	212	#340
Market Street	NB L/T/R	0.70	32	C	180	247	0.96	55	E	~267	#387	1.04	75	E	~301	#423
	SB L/T/R	0.79	28	C	194	#289	0.98	51	D	~278	#443	1.03	66	E	~320	#493
	OVERALL		**31**	**C**				**49**	**D**				**>120**	**F**		
Market Street at Faneuil Street																
Weekday Morning																
Faneuil Street	EB L/R	0.87	54	D	158	#285	0.88	54	D	168	#331	0.88	52	D	173	#348
Market Street	NB L/T	0.70	23	C	233	m252	0.89	33	C	428	m236	1.00	49	D	478	m222
	SB T	0.55	6	A	15	m107	0.64	7	A	26	m217	0.67	7	A	47	m111
	SB R	0.05	1	A	0	m0	0.07	1	A	1	m0	0.07	1	A	0	m0
	OVERALL		**22**	**C**				**27**	**C**				**33**	**C**		
Weekday Evening																
Faneuil Street	EB L/R	0.78	49	D	157	185	0.81	48	D	181	205	0.82	49	D	186	211
Market Street	NB L/T	0.62	14	B	95	m106	1.04	54	D	312	m119	>1.20	>120	F	~370	m128
	SB T	0.65	5	A	21	m204	0.80	7	A	42	m330	0.85	7	A	48	m341
	SB R	0.17	1	A	0	m0	0.20	1	A	0	m0	0.21	1	A	0	m0
	OVERALL		**14**	**B**				**26**	**C**				**55**	**D**		
Saturday Midday																
Faneuil Street	EB L/R	0.75	34	C	79	196	0.80	37	D	95	#247	0.81	39	D	100	#262
Market Street	NB L/T	0.76	20	B	113	#525	1.20	>120	F	~286	#746	>1.20	>120	F	~344	#811
	SB T	0.66	16	B	115	#491	0.79	21	C	167	#621	0.83	23	C	186	#662
	SB R	0.12	3	A	0	16	0.14	3	A	0	18	0.14	3	A	0	18
	OVERALL		**18**	**B**				**58**	**E**				**90**	**F**		
Market Street at Sparhawk Street/ Arlington Street																
Weekday Morning																
Arlington Street	EB L/T/R	0.93	64	E	171	#303	0.94	63	E	177	#332	0.95	67	E	183	#345
Sparhawk Street	WB L/T/R	0.83	43	D	176	259	0.80	40	D	174	#291	0.78	38	D	174	#291
Market Street	NB L/T/R	>1.20	>120	F	~437	#632	>1.20	>120	F	~592	#796	>1.20	>120	F	~667	#795
	SB L	0.39	38	D	57	m#133	0.44	39	D	59	m#136	0.46	39	D	57	m#126
	SB T/R	0.76	44	D	275	m#436	0.84	49	D	319	m#502	0.90	54	D	261	m#515
	OVERALL		**>120**	**F**				**>120**	**F**				**>120**	**F**		

a volume to capacity ratio
b average delay in seconds per vehicle
c LOS = level-of-service
d 50th percentile queue length, measured in feet
e 95th percentile queue length, measured in feet
95th percentile volume exceeds capacity, queue may be longer
m Volume for 95th percentile queue is metered by upstream signal
~ volume exceeds capacity; queue is theoretically infinite
dl Defacto left lane

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Table 5-16 Signalized Intersection Capacity Analysis (Continued)

	Movement	2018 Existing Conditions v/c[a]	Delay[b]	LOS[c]	50th % Queue[d]	95th % Queue[e]	2025 No-Build Conditions v/c	Delay	LOS	50th % Queue	95th % Queue	2025 Build Conditions v/c	Delay	LOS	50th % Queue	95th % Queue
Market Street at Sparhawk Street/Arlington Street (Con'd.)																
Weekday Evening																
Arlington Street	EB L/T/R	0.87	52	D	211	256	0.92	60	E	229	287	0.92	60	E	229	287
Sparhawk Street	WB L/T/R	0.85	47	D	226	309	0.86	48	D	238	336	0.86	48	D	238	336
Market Street	NB L/T/R	>1.20	>120	F	~466	#586	>1.20	>120	F	~577	#711	>1.20	>120	F	~605	#741
	SB L	0.21	34	C	42	m84	0.26	35	C	45	m75	0.26	35	C	45	m70
	SB T/R	0.85	49	D	416	#669	1.05	84	F	~555	#854	1.12	108	F	~624	#928
	OVERALL		**>120**	**F**				**>120**	**F**				**>120**	**F**		
Saturday Midday																
Arlington Street	EB L/T/R	0.64	30	C	120	203	0.67	30	C	130	217	0.71	32	C	135	#227
Sparhawk Street	WB L/T/R	0.85	43	D	177	#277	0.87	46	D	190	#301	0.87	46	D	190	#301
Market Street	NB L/T/R	0.93	51	D	~292	#479	>1.20	>120	F	~495	#695	>1.20	>120	F	~548	#752
	SB L	0.17	16	B	21	45	0.23	18	B	23	49	0.24	18	B	23	49
	SB T/R	0.77	27	C	297	#481	0.91	40	D	380	#618	0.95	46	D	~406	#653
	OVERALL		**37**	**D**				**>120**	**F**				**>120**	**F**		
North Beacon Street at Life Street/Etna Street																
Weekday Morning																
North Beacon Street	EB L/T/R	0.37	7	A	11	m217	0.48	7	A	13	m253	0.49	6	A	4	m238
	WB L/T/R	0.46	8	A	58	305	0.53	8	A	74	385	0.51	8	A	71	364
Life Street	SB L/T/R	0.29	39	D	16	34	0.30	40	D	15	62	0.30	40	D	15	62
	OVERALL		**11**	**B**				**10**	**A**				**10**	**A**		
Weekday Evening																
North Beacon Street	EB L/T/R	0.50	14	B	240	m363	0.61	17	B	261	m393	0.59	15	B	348	m385
	WB L/T/R	0.49	10	A	206	312	0.61	13	B	296	451	0.62	13	B	300	457
Life Street	SB L/T/R	0.57	45	D	60	111	0.70	48	D	101	159	0.69	48	D	96	154
	OVERALL		**15**	**B**				**19**	**B**				**18**	**B**		
Saturday Midday																
North Beacon Street	EB L/T/R	0.54	8	A	49	249	0.66	11	B	68	344	0.66	12	B	68	344
	WB L/T/R	0.55	8	A	51	273	0.65	11	B	67	366	0.63	11	B	64	346
Life Street	SB L/T/R	0.24	19	B	5	55	0.31	20	C	15	86	0.31	20	C	15	85
	OVERALL		**10**	**A**				**13**	**B**				**13**	**B**		
North Beacon Street at Arthur Street/Wingate Driveway																
Weekday Morning																
North Beacon Street	EB L	0.12	7	A	6	46	0.19	8	A	10	65	0.27	8	A	15	93
	EB T/R	0.40	7	A	49	282	0.49	9	A	74	377	0.46	8	A	62	341
	WB L/T	0.74	28	C	108	#414	0.90	51	D	155	#530	0.79	34	C	121	#466
	WB R	0.06	44	D	0	4	0.14	31	C	11	61	0.13	24	C	2	49
Wingate Driveway	NB L/T/R	0.21	49	D	4	23	0.18	49	D	4	22	0.18	49	D	4	22
Arthur Street	SB L/T	0.52	43	D	58	87	0.60	44	D	80	135	0.56	43	D	68	118
	SB R	0.06	40	D	0	0	0.05	38	D	0	0	0.07	39	D	0	19
	OVERALL		**22**	**C**				**29**	**C**				**22**	**C**		

a volume to capacity ratio
b average delay in seconds per vehicle
c LOS = level-of-service
d 50th percentile queue length, measured in feet
e 95th percentile queue length, measured in feet
95th percentile volume exceeds capacity, queue may be longer
m Volume for 95th percentile queue is metered by upstream signal
~ volume exceeds capacity; queue is theoretically infinite
dl Defacto left lane

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Table 5-16 Signalized Intersection Capacity Analysis (Continued)

	Movement	2018 Existing Conditions					2025 No-Build Conditions					2025 Build Conditions				
		v/c[a]	Delay[b]	LOS[c]	50th% Queue[d]	95th% Queue[e]	v/c	Delay	LOS	50th% Queue	95th% Queue	v/c	Delay	LOS	50th% Queue	95th% Queue
North Beacon Street at Arthur Street/ Wingate Driveway (Con'd.)																
Weekday Evening																
North Beacon Street	EB L	0.19	11	B	26	68	0.32	16	B	39	86	0.34	14	B	47	101
	EB T/R	0.50	12	B	190	390	0.67	19	B	283	515	0.59	15	B	251	458
	WB L/T	0.78	40	D	236	#438	1.19	>120	F	~401	#551	0.94	63	E	~340	m#485
	WB R	0.06	72	E	6	m20	0.13	55	E	25	m48	0.11	42	D	19	m39
Wingate Driveway	NB L/T/R	0.16	52	D	5	18	0.16	52	D	5	18	0.16	52	D	5	18
Arthur Street	SB L/T	0.72	51	D	135	206	0.90	63	E	~256	#448	0.89	67	E	211	#364
	SB R	0.12	40	D	0	57	0.25	35	D	25	97	0.23	38	D	10	85
	OVERALL		**31**	**C**				**62**	**E**				**40**	**D**		
Saturday Midday																
North Beacon Street	EB L	0.24	9	A	31	69	0.34	11	B	44	88	0.41	11	B	56	108
	EB T/R	0.45	10	A	139	256	0.53	11	B	190	325	0.50	11	B	170	292
	WB L/T	0.75	28	C	157	#344	0.84	37	D	219	#457	0.80	32	C	179	#379
	WB R	0.06	14	B	0	14	0.13	15	B	0	41	0.11	16	B	0	39
Wingate Driveway	NB L/T/R	0.01	41	D	0	0	0.01	47	D	0	0	0.01	44	D	0	0
Arthur Street	SB L/T	0.60	37	D	94	169	0.92	74	E	168	#332	0.74	45	D	135	#257
	SB R	0.11	32	C	0	52	0.15	36	D	3	59	0.15	33	C	0	58
	OVERALL		**21**	**C**				**30**	**C**				**24**	**C**		
North Beacon Street at Everett Street/KFC Driveway																
Weekday Morning																
North Beacon Street	EB L/T/R	1.10dl	34	C	247	301	>1.20dl	81	F	~337	#454	>1.20dl	53	D	281	#418
	WB T	0.40	20	C	130	193	0.61	25	C	222	327	0.54	23	C	186	276
	WB R	0.22	18	B	0	42	0.24	18	B	0	48	0.27	18	B	0	50
Everett Street	SB L/T/R	0.42	26	C	119	202	0.52	29	C	158	256	0.57	30	C	181	288
	OVERALL		**27**	**C**				**49**	**D**				**36**	**D**		
Weekday Evening																
North Beacon Street	EB L/T/R	0.79	28	C	274	270	>1.20dl	108	F	~487	m#602	1.02	58	E	~385	m#518
	WB T	0.45	7	A	52	m56	0.61	9	A	75	m95	0.55	9	A	70	m83
	WB R	0.15	1	A	0	m0	0.17	2	A	0	m3	0.20	4	A	0	m3
Everett Street	SB L/T/R	0.63	37	D	213	326	0.76	42	D	272	#445	0.84	48	D	314	#520
	OVERALL		**22**	**C**				**62**	**E**				**39**	**D**		
Saturday Midday																
North Beacon Street	EB L/T/R	0.75	16	B	67	193	0.98dl	23	C	104	#336	0.81	18	B	87	#283
	WB T	0.45	11	B	52	171	0.55	11	B	84	265	0.50	11	B	68	219
	WB R	0.14	10	A	0	34	0.15	9	A	0	36	0.18	9	A	0	39
Everett Street	SB L/T/R	0.52	20	B	48	#211	0.71	31	C	76	#251	0.78	33	C	93	#303
	OVERALL		**15**	**B**				**20**	**B**				**18**	**B**		

a volume to capacity ratio
b average delay in seconds per vehicle
c LOS = level-of-service
d 50th percentile queue length, measured in feet
e 95th percentile queue length, measured in feet
95th percentile volume exceeds capacity, queue may be longer
m Volume for 95th percentile queue is metered by upstream signal
~ volume exceeds capacity; queue is theoretically infinite
dl Defacto left lane

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Table 5-16 Signalized Intersection Capacity Analysis (Continued)

	Movement	2018 Existing Conditions v/c[a]	Delay[b]	LOS[c]	50th% Queue[d]	95th% Queue[e]	2025 No-Build Conditions v/c	Delay	LOS	50th% Queue	95th% Queue	2025 Build Conditions v/c	Delay	LOS	50th% Queue	95th% Queue
North Beacon Street/ Brighton Avenue at Cambridge Street																
Weekday Morning																
North Beacon Street	EB L/T/R	0.83	49	D	207	225	0.85	50	D	214	277	0.84	50	D	211	271
Brighton Avenue	WB L	0.36	43	D	68	126	0.38	43	D	71	130	0.38	43	D	71	130
	WB L/T/R	1.03	91	F	~236	#356	1.17	>120	F	~299	#423	1.17	>120	F	~303	#428
Cambridge Street	NB T	0.43	38	D	108	153	0.56	40	D	145	198	0.56	40	D	145	198
	NB R	0.09	34	C	0	0	0.10	34	C	0	4	0.10	34	C	0	4
	SB L/T	0.54	28	C	80	186	0.63	34	C	142	196	0.62	34	C	141	196
	SB R	0.41	37	D	42	118	0.89	71	E	176	#327	0.85	66	E	167	#310
	OVERALL		**52**	**D**				**68**	**E**				**68**	**E**		
Weekday Evening																
North Beacon Street	EB L/T/R	0.92	40	D	299	#391	>1.20	>120	F	~470	m#433	1.19	120	F	~457	m#498
Brighton Avenue	WB L	0.63	52	D	129	213	0.68	54	D	142	#241	0.68	54	D	142	#241
	WB L/T/R	0.95	72	E	210	#327	1.09	108	F	~271	#395	1.09	108	F	~271	#395
Cambridge Street	NB T	0.38	37	D	92	134	0.46	39	D	113	160	0.46	39	D	113	160
	NB R	0.13	35	C	0	27	0.14	35	C	0	35	0.14	35	C	0	35
	SB L/T	0.68	20	B	74	98	0.86	58	E	236	#335	0.86	53	D	238	m#336
	SB R	0.08	34	C	4	10	0.15	>120	F	52	109	0.14	>120	F	49	m83
	OVERALL		**43**	**D**				**95**	**F**				**94**	**F**		
Saturday Midday																
North Beacon Street	EB L/T/R	0.80	41	D	183	260	0.91	51	D	263	#371	0.89	49	D	253	#352
Brighton Avenue	WB L	0.50	40	D	97	185	0.57	46	D	116	196	0.57	45	D	116	196
	WB L/T/R	0.77	45	D	154	#268	0.96	70	E	207	#332	0.96	69	E	~210	#336
Cambridge Street	NB T	0.47	35	C	89	133	0.54	37	D	122	166	0.55	37	D	122	166
	NB R	0.12	32	C	0	5	0.12	34	C	0	13	0.12	33	C	0	13
	SB L/T	0.67	35	D	117	171	0.81	43	D	153	#214	0.81	43	D	153	#214
	SB R	0.11	32	C	0	0	0.19	34	C	1	68	0.17	34	C	0	46
	OVERALL		**39**	**D**				**49**	**D**				**48**	**D**		
Cambridge Street at Denby Road																
Weekday Morning																
Cambridge Street	EB L/T	0.32	3	A	72	m100	0.49	7	A	143	282	0.51	8	A	164	321
	WB T/R	0.38	8	A	253	455	0.54	2	A	30	40	0.55	4	A	31	41
Denby Road	SB L/T/R	0.05	50	D	3	10	0.73	47	D	142	m210	0.76	46	D	177	249
	OVERALL		**6**	**A**				**11**	**B**				**13**	**B**		
Weekday Evening																
Cambridge Street	EB L/T	0.32	3	A	55	m243	0.62	19	B	416	m459	0.67	26	C	422	m463
	WB T/R	0.39	2	A	18	24	0.64	15	B	463	691	0.70	22	C	507	672
Denby Road	SB L/T/R	0.12	45	D	11	25	0.84	48	D	294	224	0.91	49	D	371	302
	OVERALL		**4**	**A**				**24**	**C**				**31**	**C**		
Saturday Midday																
Cambridge Street	EB L/T	0.41	3	A	0	165	0.54	10	A	181	296	0.55	11	B	191	282
	WB T/R	0.50	3	A	0	221	0.61	12	B	426	583	0.61	15	B	421	564
Denby Road	SB L/T/R	0.06	14	B	1	9	0.85	50	D	194	m193	0.95	62	E	249	m248
	OVERALL		**3**	**A**				**19**	**B**				**25**	**C**		

a volume to capacity ratio
b average delay in seconds per vehicle
c LOS = level-of-service
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e 95th percentile queue length, measured in feet
95th percentile volume exceeds capacity, queue may be longer
m Volume for 95th percentile queue is metered by upstream signal
~ volume exceeds capacity; queue is theoretically infinite
dl Defacto left lane

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Table 5-16 Signalized Intersection Capacity Analysis (Continued)

	Movement	2018 Existing Conditions v/c[a]	Delay[b]	LOS[c]	50th% Queue[d]	95th% Queue[e]	2025 No-Build Conditions v/c	Delay	LOS	50th% Queue	95th% Queue	2025 Build Conditions v/c	Delay	LOS	50th% Queue	95th% Queue
Cambridge Street at Harvard Avenue/Franklin Street																
Weekday Morning																
Cambridge Street	EB L/T/R	0.49	38	D	143	236	>1.20	>120	F	~401	#544	>1.20	>120	F	~451	#583
	WB L	0.80	28	C	198	#371	0.93	49	D	~297	#494	0.92	49	D	~297	#494
	WB T	0.63	22	C	267	417	0.80	26	C	353	#530	0.78	25	C	340	499
	WB R	0.08	15	B	8	39	0.13	14	B	23	56	0.22	15	B	39	86
Harvard Avenue	NB L/T	0.30	42	D	34	70	0.30	39	D	40	81	0.34	39	D	46	91
	NB R	0.49	44	D	0	#153	0.59	21	C	71	225	0.59	21	C	72	227
Franklin Street	SB L/T/R	0.69	52	D	92	145	0.00	0	A	0	0	0.00	0	A	0	0
	OVERALL		**34**	**C**				**>120**	**F**				**>120**	**F**		
Weekday Evening																
Cambridge Street	EB L/T/R	0.58	37	D	153	201	>1.20	>120	F	~470	#508	>1.20	>120	F	~435	#672
	WB L	0.89	46	D	181	#383	0.78	34	C	204	#328	0.79	35	C	204	#329
	WB T	0.69	29	C	282	404	0.72	22	C	315	444	0.69	21	C	300	423
	WB R	0.03	20	B	0	16	0.11	13	B	16	41	0.16	13	B	25	56
Harvard Avenue	NB L/T	0.50	41	D	66	121	0.76	65	E	92	#190	0.83	74	E	100	#210
	NB R	0.21	38	D	0	74	0.20	22	C	0	53	0.20	22	C	0	53
Franklin Street	SB L/T/R	0.86	69	E	137	#244	0.00	0	A	0	0	0.00	0	A	0	0
	OVERALL		**40**	**D**				**94**	**F**				**111**	**F**		
Saturday Midday																
Cambridge Street	EB L/T/R	0.72	38	D	144	207	>1.20	>120	F	~368	#494	>1.20	>120	F	~404	m#504
	WB L	0.78	32	C	134	#214	0.82	31	C	130	#276	0.83	33	C	130	#276
	WB T	0.74	31	C	255	386	0.87	33	C	309	459	0.84	30	C	290	431
	WB R	0.03	20	B	0	13	0.10	15	B	11	38	0.18	16	B	25	61
Harvard Avenue	NB L/T	0.53	39	D	60	132	0.68	46	D	75	#149	0.72	49	D	82	#167
	NB R	0.27	37	D	0	92	0.23	20	C	0	56	0.23	20	C	0	56
Franklin Street	SB L/T/R	0.74	52	D	84	#185	0.00	0	A	0	0	0.00	0	A	0	0
	OVERALL		**36**	**D**				**>120**	**F**				**>120**	**F**		
Everett Street at Western Avenue																
Weekday Morning																
Western Avenue	EB L/T	0.64	20	B	110	#451	0.73	23	C	132	#529	0.73	23	C	132	#529
	EB R	0.12	12	B	6	54	0.15	12	B	10	65	0.15	12	B	10	65
	WB L	0.46	19	B	24	#132	0.55	24	C	26	#161	0.77	39	D	42	#229
	WB T/R	0.59	18	B	101	#381	0.62	19	B	108	#448	0.62	19	B	108	#448
Everett Street	NB L	0.39	25	C	32	73	0.49	26	C	37	84	0.61	32	C	39	#106
	NB T/R	0.97	65	E	210	#396	1.10	102	F	~277	#464	1.17	>120	F	~313	#503
	SB L/T/R	1.13	>120	F	~144	#269	>1.20	>120	F	~236	#389	>1.20	>120	F	~319	#436
	OVERALL		**43**	**D**				**118**	**F**				**>120**	**F**		

a volume to capacity ratio
b average delay in seconds per vehicle
c LOS = level-of-service
d 50th percentile queue length, measured in feet
e 95th percentile queue length, measured in feet
95th percentile volume exceeds capacity, queue may be longer
m Volume for 95th percentile queue is metered by upstream signal
~ volume exceeds capacity; queue is theoretically infinite
dl Defacto left lane

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Table 5-16 Signalized Intersection Capacity Analysis (Continued)

	Movement	2018 Existing Conditions v/c[a]	Delay[b]	LOS[c]	50th% Queue[d]	95th% Queue[e]	2025 No-Build Conditions v/c	Delay	LOS	50th% Queue	95th% Queue	2025 Build Conditions v/c	Delay	LOS	50th% Queue	95th% Queue
Everett Street at Western Avenue (Con'd.)																
Weekday Evening																
Western Avenue	EB L/T	0.55	21	C	212	312	0.62	23	C	245	#390	0.62	23	C	245	#390
	EB R	0.14	15	B	17	57	0.17	15	B	23	66	0.17	15	B	23	66
	WB L	0.47	23	C	66	#150	0.61	29	C	82	#195	0.67	32	C	93	#219
	WB T/R	0.63	23	C	258	#428	0.69	25	C	298	#499	0.69	25	C	298	#499
Everett Street	NB L	0.74	49	D	47	#112	>1.20	>120	F	~85	#171	>1.20	>120	F	~93	#179
	NB T/R	0.78	39	D	181	252	0.94	61	E	234	#357	>1.20	>120	F	~420	#544
	SB L/T/R	>1.20	>120	F	~377	#498	>1.20	>120	F	~500	#623	>1.20	>120	F	~624	#747
	OVERALL		**109**	**F**				**>120**	**F**				**>120**	**F**		
Saturday Midday																
Western Avenue	EB L/T	0.54	24	C	176	273	0.66	28	C	204	#345	0.66	28	C	204	#345
	EB R	0.11	17	B	9	47	0.13	18	B	13	53	0.13	18	B	13	53
	WB L	0.43	24	C	53	101	0.56	30	C	64	#135	0.68	37	D	83	#178
	WB T/R	0.61	25	C	207	292	0.69	28	C	244	339	0.69	28	C	244	339
Everett Street	NB L	0.44	29	C	40	78	0.54	31	C	44	88	0.62	35	C	45	#100
	NB T/R	0.76	38	D	175	247	0.88	50	D	216	#332	0.97	69	E	246	#385
	SB L/T/R	0.97	79	E	147	#251	>1.20	>120	F	~265	#370	>1.20	>120	F	~341	#447
	OVERALL		**35**	**D**				**79**	**E**				**>120**	**F**		
Cambridge Street at Gordon Street																
Weekday Morning																
Cambridge Street	EB L/T/R	0.60	15	B	215	139	0.75	21	C	306	#568	0.77	22	C	314	#582
	WB L/T/R	0.53	18	B	187	334	0.59	19	B	211	378	0.59	19	B	211	378
Gordon Street	NB L/T/R	0.78	48	D	156	204	0.77	48	D	152	218	0.77	48	D	152	218
	SB L/T/R	0.41	24	C	39	52	0.26	12	B	9	44	0.26	15	B	12	53
	OVERALL		24	C				**24**	**C**				25	C		
Weekday Evening																
Cambridge Street	EB L/T/R	0.49	12	B	173	126	0.59	15	B	227	166	0.61	16	B	235	173
	WB L/T/R	0.68	19	B	300	474	0.81	25	C	417	#681	0.82	25	C	421	#681
Gordon Street	NB L/T/R	0.67	47	D	90	148	0.68	46	D	95	158	0.67	45	D	95	158
	SB L/T/R	0.76	54	D	104	162	0.80	56	E	115	180	0.80	56	E	117	#187
	OVERALL		**25**	**C**				**29**	**C**				**29**	**C**		
Saturday Midday																
Cambridge Street	EB L/T/R	0.56	13	B	199	81	0.69	17	B	257	107	0.72	18	B	263	117
	WB L/T/R	0.57	17	B	194	263	0.70	21	C	257	342	0.71	22	C	257	343
Gordon Street	NB L/T/R	0.79	51	D	102	#184	0.82	54	D	115	#214	0.80	51	D	115	#215
	SB L/T/R	0.34	34	C	37	80	0.36	33	C	43	90	0.36	33	C	44	91
	OVERALL		**23**	**C**				**26**	**C**				**26**	**C**		

a volume to capacity ratio
b average delay in seconds per vehicle
c LOS = level-of-service
d 50th percentile queue length, measured in feet
e 95th percentile queue length, measured in feet
95th percentile volume exceeds capacity, queue may be longer
m Volume for 95th percentile queue is metered by upstream signal
~ volume exceeds capacity; queue is theoretically infinite
dl Defacto left lane

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Table 5-16 Signalized Intersection Capacity Analysis (Continued)

	Movement	2018 Existing Conditions					2025 No-Build Conditions					2025 Build Conditions				
		v/c[a]	Delay[b]	LOS[c]	50th % Queue[d]	95th % Queue[e]	v/c	Delay	LOS	50th % Queue	95th % Queue	v/c	Delay	LOS	50th % Queue	95th % Queue
Cambridge Street at Eleanor Street / Saint Joseph High School Driveway																
Weekday Morning																
Cambridge Street	EB L/T	0.42	6	A	64	284	0.48	6	A	82	358	0.48	6	A	82	363
	WB T/R	0.38	2	A	21	101	0.40	3	A	23	123	0.40	3	A	24	132
Eleanor Street	NB L/T/R	0.02	44	D	0	0	0.02	45	D	0	0	0.02	45	D	0	0
St Joseph HS Driveway	SB L/R	0.04	44	D	0	0	0.02	45	D	0	0	0.02	45	D	0	0
	OVERALL		**7**	**A**				**6**	**A**				**6**	**A**		
Weekday Evening																
Cambridge Street	EB L/T	0.36	5	A	0	244	0.41	5	A	0	300	0.41	5	A	0	300
	WB T/R	0.42	2	A	0	108	0.51	2	A	0	135	0.52	2	A	0	143
Eleanor Street	NB L/T/R	0.01	47	D	0	0	0.01	47	D	0	0	0.01	47	D	0	0
St Joseph HS Driveway	SB L/R	0.00	47	D	0	0	0.00	47	D	0	0	0.00	47	D	0	0
	OVERALL		**4**	**A**				**4**	**A**				**4**	**A**		
Saturday Midday																
Cambridge Street	EB L/T	0.37	6	A	55	235	0.44	6	A	71	301	0.44	6	A	71	301
	WB T/R	0.37	4	A	44	107	0.45	6	A	74	m194	0.45	6	A	74	195
Eleanor Street	NB L/T/R	0.03	41	D	0	0	0.03	41	D	0	0	0.03	41	D	0	0
St Joseph HS Driveway	SB L/R	0.07	41	D	4	14	0.07	41	D	4	14	0.07	41	D	4	14
	OVERALL		**7**	**A**				**8**	**A**				**8**	**A**		
Everett Street at Guest Street Extension/Old Everett Street/ Blaine Street																
Weekday Morning																
Guest Street	EB L											0.38	39	D	32	66
	EB T/R											0.62	46	D	47	90
Blaine Street	WB L/T/R											0.03	36	D	2	9
Everett Street	NB L	*Intersection does not exist under Existing Conditions*										0.16	12	B	17	36
	NB T/R											0.76	20	B	343	#602
	SB L/T/R											0.93	45	D	~357	#568
"Old" Everett Street	SWB L/T/R											0.70	48	D	72	#166
	OVERALL												**32**	**C**		
Weekday Evening																
Guest Street	EB L											0.80	60	E	103	#203
	EB T/R											0.82	65	E	94	#195
Blaine Street	WB L/T/R											0.02	37	D	3	13
Everett Street	NB L	*Intersection does not exist under Existing Conditions*										0.17	14	B	13	30
	NB T/R											0.56	15	B	202	298
	SB L/T/R											0.97	53	D	421	#682
"Old" Everett Street	SWB L/T/R											0.99	111	F	~125	#251
	OVERALL												**47**	**D**		

a volume to capacity ratio
b average delay in seconds per vehicle
c LOS = level-of-service
d 50th percentile queue length, measured in feet
e 95th percentile queue length, measured in feet
95th percentile volume exceeds capacity, queue may be longer
m Volume for 95th percentile queue is metered by upstream signal
~ volume exceeds capacity; queue is theoretically infinite
dl Defacto left lane

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Table 5-16 Signalized Intersection Capacity Analysis (Continued)

	Movement	2018 Existing Conditions v/c[a]	Delay[b]	LOS[c]	50th% Queue[d]	95th% Queue[e]	2025 No-Build Conditions v/c	Delay	LOS	50th% Queue	95th% Queue	2025 Build Conditions v/c	Delay	LOS	50th% Queue	95th% Queue
Everett Street at Guest Street Extension/Old Everett Street/ Blaine Street (Cont'd.)																
Saturday Midday																
Guest Street	EB L											0.37	37	D	37	75
	EB T/R											0.61	42	D	64	115
Blaine Street	WB L/T/R											0.02	34	C	3	12
Everett Street	NB L	*Intersection does not exist under Existing Conditions*					*Intersection does not exist under Existing Conditions*					0.19	14	B	19	43
	NB T/R											0.50	14	B	176	290
	SB L/T/R											0.76	29	C	262	#481
"Old" Everett Street	SWB L/T/R											0.71	47	D	82	#155
	OVERALL												**27**	**C**		
Arthur Street at Guest Street / Guest Street Extension																
Weekday Morning														0.		
Guest Street	EB L/T/R											0.60	36	D	118	183
Guest Street Extension	WB L											0.17	29	C	27	51
	WB T/R											0.36	24	C	115	169
Arthur Street	NB L/T	*Intersection does not exist under Existing Conditions*					*Intersection does not exist under Existing Conditions*					0.29	11	B	49	99
	NB R											0.07	10	A	0	25
	SB L/T/R											0.08	10	A	11	35
	OVERALL												**23**	**C**		
Weekday Evening																
Guest Street	EB L/T/R											0.77	26	C	128	209
Guest Street Extension	WB L											0.37	11	B	25	49
	WB T/R											0.33	9	A	55	96
Arthur Street	NB L/T	*Intersection does not exist under Existing Conditions*					*Intersection does not exist under Existing Conditions*					0.36	17	B	40	09
	NB R											0.04	14	B	0	6
	SB L/T/R											0.31	16	B	45	91
	OVERALL												**17**	**B**		
Saturday Midday																
Guest Street	EB L/T/R											0.71	40	D	137	203
Guest Street Extension	WB L											0.35	33	C	39	69
	WB T/R											0.49	26	C	124	178
Arthur Street	NB L/T	*Intersection does not exist under Existing Conditions*					*Intersection does not exist under Existing Conditions*					0.19	9	A	42	87
	NB R											0.05	8	A	0	18
	SB L/T/R											0.10	9	A	21	51
	OVERALL												**25**	**C**		

a	volume to capacity ratio	d	50th percentile queue length, measured in feet	m	Volume for 95th percentile queue is metered by upstream signal
b	average delay in seconds per vehicle	e	95th percentile queue length, measured in feet	~	volume exceeds capacity; queue is theoretically infinite
c	LOS = level-of-service	#	95th percentile volume exceeds capacity, queue may be longer	dl	Defacto left lane

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As shown in Table 5-16 several of the signalized study area intersections currently function with long delays and queues under peak-hour conditions. These same general operations are expected to continue in the future both with and without the Proposed Project. However, with the access enhancements implemented as part of the Project, existing congestion at some of these locations will be alleviated. Specifically, the new Guest Street Extension and Braintree Street Extension both will provide additional options for access and egress at the Project Site. These benefits will not only be limited to the Project but, instead, also will provide improved circulation for other nearby existing and planned developments. For example, with exiting traffic being allowed onto both Everett Street and Braintree Street, the amount of new traffic added to North Beacon Street will be limited compared to what otherwise would occur. Some degree of existing traffic currently using Arthur Street to exit onto North Beacon Street and head to points to the east may now choose to use either the new Everett Street or Braintree Street connections. With this improved connectivity, the resulting reassignment of traffic from constrained locations along North Beacon Street (such as Market Street, Everett Street, and Cambridge Street) should help address existing periodic congestion along this corridor.

The key component of the proposed Project Site access plan involves a new signalized intersection being created at the newly created intersection of Guest Street Extension with Everett Street/Old Everett Street. As shown in Table 5-12, this intersection is projected to operate at LOS D or better during the critical peak hours analyzed. As noted earlier, LOS D conditions are considered to be acceptable, and that LOS can be very difficult to achieve in urban areas due to the combination of vehicular and pedestrian traffic. In the surrounding urban setting, this represents good operations for an intersection serving multiple roadways and developments under signal control. This new signalized intersection will be interconnected with the North Beacon Street/Everett Street intersection located 700 feet to the south and can be incorporated into BTD's central signal control system if desired. The signal also will be designed to be adaptive-ready, so that BTD eventually can remove it from the system and allow it to operate under fully-adaptive control as part of any wider system that may be provided in the future. As noted earlier, additional TSP features will be implemented at this location.

Proposed Traffic Signal Timing Adjustments

As noted above, the analysis of future conditions reveals that some existing signalized intersections are expected to operate with increased delays. To help offset Project-related traffic impacts at these locations, the Proponent will implement signal timing adjustments at the following locations:

- Market Street at Faneuil Street
- Market Street at North Beacon Street
- Market Street at Guest Street

The details of the signal timing plans will be coordinated with BTD. With these planned signal timing adjustments, operating conditions at these locations will be improved from that shown in Table 5-16. The resulting expected operations for these intersections are summarized in Table 5-17, as compared to both the 2025 No-Build conditions and 2025 Build conditions without mitigation.

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Table 5-17 Signalized Intersection Capacity Analysis – With Mitigation

					2025 No-Build Conditions				2025 Build Conditions				2025 Build Conditions with Mitigation			
	Movement	v/c[a]	Delay[b]	LOS[c]	50th % Queue[d]	95th % Queue[e]	v/c	Delay	LOS	50th % Queue	95th % Queue	v/c	Delay	LOS	50th % Queue	95th % Queue
Market Street at Guest Street/Stockyard Driveway																
Weekday Morning																
Stockyard Driveway	EB L/T/R	0.06	37	D	5	20	0.05	36	D	5	20	0.05	36	D	5	20
Guest Street	WB L/T	0.21	37	D	15	37	0.52	39	D	41	81	0.52	39	D	41	81
	WB R	0.04	22	C	0	24	0.06	21	C	0	28	0.06	21	C	0	29
Market Street	NB L/T/R	0.55	3	A	45	m57	0.59	4	A	67	m54	0.58	4	A	80	m67
	SB L/T/R	0.88dl	8	A	63	142	0.70	8	A	80	140	0.70	8	A	80	140
	OVERALL		**6**	**A**				**8**	**A**				**8**	**A**		
Weekday Evening																
Stockyard Driveway	EB L/T/R	0.06	30	C	8	16	0.07	30	C	8	16	0.05	26	C	7	14
Guest Street	WB L/T	0.84	56	E	113	#234	1.10	>120	F	~175	#327	0.83	48	D	139	#258
	WB R	0.79	29	C	225	#431	0.67	24	C	172	300	0.69	26	C	171	303
Market Street	NB L/T/R	0.47	16	B	130	177	0.52	17	B	145	198	0.49	16	B	137	187
	SB L/T/R	0.69	11	B	127	164	0.70	11	B	126	162	0.82	18	B	176	#253
	OVERALL		**20**	**B**				**26**	**C**				**22**	**C**		
Saturday Midday																
Stockyard Driveway	EB L/T/R	0.06	30	C	5	13	0.05	29	C	5	13	0.05	28	C	5	13
Guest Street	WB L/T	0.57	35	C	52	66	0.79	49	D	92	102	0.75	42	D	89	99
	WB R	0.14	20	B	6	12	0.18	19	B	12	17	0.16	21	C	7	12
Market Street	NB L/T/R	0.46	11	B	116	180	0.49	13	B	137	187	0.47	11	B	124	175
	SB L/T/R	0.65	8	A	83	131	0.68	10	A	105	130	0.72	11	B	111	144
	OVERALL		**12**	**B**				**15**	**B**				**14**	**B**		
Market Street at North Beacon Street																
Weekday Morning																
North Beacon Street	EB L/T/R	0.46	25	C	103	154	0.59	28	C	118	#195	0.72	35	D	~132	#234
	WB L/T/R	0.72	28	C	211	#330	0.76	30	C	~218	#340	0.91	45	D	~260	#383
Market Street	NB L/T/R	>1.20	>120	F	~406	m#516	>1.20	>120	F	~343	m#503	>1.20	>120	F	~409	m#453
	SB L/T/R	0.95	43	D	147	#260	1.04	69	E	~190	#320	0.97	45	D	167	#270
	OVERALL		**>120**	**F**				**>120**	**F**				**115**	**F**		

a volume to capacity ratio
b average delay in seconds per vehicle
c LOS = level-of-service
d 50th percentile queue length, measured in feet
e 95th percentile queue length, measured in feet
95th percentile volume exceeds capacity, queue may be longer
m Volume for 95th percentile queue is metered by upstream signal
~ volume exceeds capacity; queue is theoretically infinite
dl Defacto left lane

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Table 5-17 Signalized Intersection Capacity Analysis – With Mitigation (Cont'd.)

					2025 No-Build Conditions				2025 Build Conditions				2025 Build Conditions with Mitigation			
	Movement	v/c[a]	Delay[b]	LOS[c]	50th % Queue[d]	95th % Queue[e]	v/c	Delay	LOS	50th % Queue	95th % Queue	v/c	Delay	LOS	50th % Queue	95th % Queue
Market Street at North Beacon Street (Cont'd)																
Weekday Evening																
North Beacon Street	EB L/T/R	0.60	32	C	161	223	0.72	36	D	175	#265	0.93	58	E	~213	#325
	WB L/T/R	0.94	45	D	~75	#354	0.98	53	D	~112	#367	>1.20	>120	F	~288	#412
Market Street	NB L/T/R	>1.20	>120	F	~300	m#328	>1.20	>120	F	~248	m#315	1.09	75	E	~288	m#281
	SB L/T/R	>1.20	>120	F	~480	#639	>1.20	>120	F	~552	#686	>1.20	>120	F	~444	#639
	OVERALL		**>120**	**F**				**>120**	**F**				**110**	**F**		
Saturday Midday																
North Beacon Street	EB L/T/R	0.50	29	C	109	154	0.59	31	C	118	167	0.70	37	D	125	178
	WB L/T/R	0.92	50	D	220	#350	0.92	50	D	212	#340	1.04	80	F	~251	#369
Market Street	NB L/T/R	0.96	55	E	~267	#387	1.04	75	E	~301	#423	0.86	38	D	246	#372
	SB L/T/R	0.98	51	D	~278	#443	1.03	66	E	~320	#493	0.95	43	D	~268	#434
	OVERALL		**49**	**D**				**59**	**E**				**50**	**D**		
Market Street at Faneuil Street																
Weekday Morning																
Faneuil Street	EB L/R	0.88	54	D	168	#331	0.88	52	D	173	#348	0.88	53	D	173	#348
Market Street	NB L/T	0.89	33	C	428	m236	1.00	49	D	478	m222	1.00	49	D	478	m222
	SB T	0.64	7	A	26	m217	0.67	7	A	47	m111	0.67	10	A	66	m233
	SB R	0.07	1	A	1	m0	0.07	1	A	0	m0	0.07	3	A	0	m2
	OVERALL		**27**	**C**				**33**	**C**				**34**	**C**		
Weekday Evening																
Faneuil Street	EB L/R	0.81	48	D	181	205	0.82	49	D	186	211	0.89	60	E	183	#262
Market Street	NB L/T	1.04	54	D	312	m119	>1.20	>120	F	~370	m128	1.12	84	F	~276	m49
	SB T	0.80	7	A	42	m330	0.85	7	A	48	m341	0.83	8	A	101	m279
	SB R	0.20	1	A	0	m0	0.21	1	A	0	m0	0.21	1	A	0	m0
	OVERALL		**26**	**C**				**55**	**D**				**37**	**D**		
Saturday Midday																
Faneuil Street	EB L/R	0.80	37	D	95	#247	0.81	39	D	100	#262	1.03	90	F	119	#347
Market Street	NB L/T	1.20	>120	F	~286	#746	>1.20	>120	F	~344	#811	1.04	63	E	211	#701
	SB T	0.79	21	C	167	#621	0.83	23	C	186	#662	0.75	17	B	163	#575
	SB R	0.14	3	A	0	18	0.14	3	A	0	18	0.14	3	A	0	18
	OVERALL		**58**	**E**				**90**	**F**				**43**	**D**		

a volume to capacity ratio
b average delay in seconds per vehicle
c LOS = level-of-service
d 50th percentile queue length, measured in feet
e 95th percentile queue length, measured in feet
95th percentile volume exceeds capacity, queue may be longer
m Volume for 95th percentile queue is metered by upstream signal
~ volume exceeds capacity; queue is theoretically infinite
dl Defacto left lane

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With the signal timing changes proposed to be implemented by the Project, operating conditions can be improved to that shown in Table 5-17.

The intersection of Market Street at Guest Street is expected to experience either reduced or similar delays to those projected under the 2025 No-Build condition without the Project. However, with the current signal operation the westbound Guest Street approach is projected to operate at LOS F under the 2025 Build condition. With minor signal timing adjustments this approach can be improved to LOS D, while maintaining the overall LOS C operations for the intersection.

The North Beacon Street/Market Street intersection is projected to operate at LOS F during the weekday morning and evening peak hours with or without the Project. During the Saturday midday peak hour, the intersection is projected to operate at LOS D under the 2025 No-Build condition, and LOS E under the 2025 Build condition. With the suggested signal timing revisions, delays on some approaches to the intersection can be somewhat reduced. While the overall intersection will remain at LOS F during the weekday morning and evening peak hour, the intersection is capable of operating at LOS D during the Saturday midday peak hour.

The Market Street/Faneuil Street intersection is projected to operate at LOS C during the weekday morning peak hour with and without the Project. The overall intersection operates at LOS C and E during the respective weekday evening and Saturday midday peak hours under the No-Build condition and will degrade slightly to LOS D and F during these same peak hours, respectively. With the suggested signal timing changes, the intersection will remain at LOS C during the weekday morning peak hour, and LOS D during both the weekday evening and Saturday midday peak hours with reduced delays on certain approaches.

5.10.3 Unsignalized Capacity Analysis

Capacity analyses also were conducted for the unsignalized study area intersections for the 2018 Existing, 2025 No-Build, and 2025 Build conditions during the weekday morning, weekday evening, and Saturday midday peak hours. The results of this analysis are summarized in Table 5-18. The capacity analysis worksheets are provided in Appendix D.

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Table 5-18 Unsignalized Intersection Capacity Analysis

		2018 Existing Conditions				2025 No-Build Conditions				2025 Build Conditions			
	Movement	v/c[a]	Delay[b]	LOS[c]	95th % Queue[d]	v/c	Delay	LOS	95th % Queue	v/c	Delay	LOS	95th % Queue
Market Street at Vineland Street													
Weekday Morning													
Vineland Street	EB L/R	0.17	20	C	15	0.15	22	C	13	0.17	24	C	15
Weekday Evening													
Vineland Street	EB L/R	0.16	21	C	13	0.20	26	D	18	0.23	30	D	20
Saturday Midday													
Vineland Street	EB L/R	0.12	18	C	10	0.15	22	C	13	0.16	23	C	15
North Beacon Street at Murdock Street/Self-Storage Driveway													
Weekday Morning													
North Beacon Street	EB L	0.00	0	A	0	0.00	0	A	0	0.00	0	A	0
	WB L	0.04	9	A	3	0.05	9	A	5	0.06	9	A	5
Self-Storage Driveway	SB L/T/R	0.01	12	B	0	0.01	13	B	0	0.01	13	B	0
Weekday Evening													
North Beacon Street	EB L	0.00	9	A	0	0.01	9	A	0	0.01	9	A	0
	WB L	0.13	10	A	13	0.17	10	B	15	0.18	10	B	18
Self-Storage Driveway	SB L/T/R	0.13	30	D	10	0.22	50	F	20	0.22	52	F	20
Saturday Midday													
North Beacon Street	EB L	0.00	9	A	0	0.00	9	A	0	0.00	9	A	0
	WB L	0.07	9	A	5	0.10	9	A	8	0.10	9	A	8
Self-Storage Driveway	SB L/T/R	0.03	15	C	3	0.03	19	C	3	0.03	18	C	3
North Beacon Street at Hichborn Street/Dustin Street													
Weekday Morning													
North Beacon Street	EB L	0.01	8	A	0	0.01	9	A	0	0.01	9	A	0
Dustin Street	NB L/T/R	0.94	69	F	243	>1.20	>120	F	465	>1.20	>120	F	490
Hichborn Street	SB L/R	0.04	14	B	3	0.07	18	C	5	0.05	15	B	3
Weekday Evening													
North Beacon Street	EB L	0.01	9	A	0	0.01	10	A	0	0.01	10	A	0
Dustin Street	NB L/T/R	0.80	60	F	150	>1.20	>120	F	310	>1.20	>120	F	313
Hichborn Street	SB L/R	0.19	27	D	18	0.29	44	E	28	0.30	45	E	30
Saturday Midday													
North Beacon Street	EB L	0.00	8	A	0	0.01	9	A	0	0.01	9	A	0
Dustin Street	NB L/T/R	0.73	41	E	138	1.09	>120	F	298	1.06	112	F	287

a v/c = volume to capacity ratio
b delay = average intersection delay, measured in seconds
c LOS = level-of-service
d 95th Percentile queue measured in feet

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Table 5-18 Unsignalized Intersection Capacity Analysis (Cont'd)

		2018 Existing Conditions				2025 No-Build Conditions				2025 Build Conditions			
	Movement	v/c[a]	Delay[b]	LOS[c]	95th % Queue[d]	v/c	Delay	LOS	95th % Queue	v/c	Delay	LOS	95th % Queue
North Beacon Street at Saunders Street													
Weekday Morning													
Saunders Street	NB L/R	0.16	14	B	15	0.20	17	C	18	0.18	16	C	18
Weekday Evening													
Saunders Street	NB L/R	0.19	18	C	18	0.29	28	D	30	0.25	23	C	25
Saturday Midday													
Saunders Street	NB L/R	0.15	15	B	13	0.21	19	C	20	0.18	17	C	18
North Beacon Street at Gordon Street													
Weekday Morning													
North Beacon Street	WB L	0.10	9	A	8	0.12	10	A	10	0.13	10	A	10
Gordon Street	NB L/R	0.72	36	E	138	1.12	>120	F	325	1.03	98	F	283
Weekday Evening													
North Beacon Street	WB L	0.14	10	B	13	0.20	12	B	18	0.19	11	B	18
Gordon Street	NB L/R	0.81	62	F	155	>1.20	>120	F	390	>1.20	>120	F	338
Saturday Midday													
North Beacon Street	WB L	0.07	9	A	5	0.09	10	B	8	0.09	10	A	8
Gordon Street	NB L/R	0.58	29	D	88	0.93	85	F	200	0.81	57	F	163
Cambridge Street at Hano Street													
Weekday Morning													
Cambridge Street	EB L	0.04	9	A	3	0.05	10	A	5	0.05	10	A	5
Hano Street	SB L/R	0.16	19	C	15	0.24	28	D	23	0.23	27	D	23
Weekday Evening													
Cambridge Street	EB L	0.05	9	A	5	0.08	10	B	8	0.08	10	B	8
Hano Street	SB L/R	0.17	19	C	15	0.30	28	D	30	0.29	27	D	28
Saturday Midday													
Cambridge Street	EB L	0.04	9	A	3	0.07	10	A	5	0.06	10	A	5
Hano Street	SB L/R	0.16	22	C	15	0.36	42	E	38	0.34	39	E	35

a v/c = volume to capacity ratio
b delay = average intersection delay, measured in seconds
c LOS = level-of-service
d 95th Percentile queue measured in feet

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Table 5-18 Unsignalized Intersection Capacity Analysis (Cont'd.)

		2018 Existing Conditions				2025 No-Build Conditions				2025 Build Conditions			
	Movement	v/c[a]	Delay[b]	LOS[c]	95th % Queue[d]	v/c	Delay	LOS	95th % Queue	v/c	Delay	LOS	95th % Queue
Braintree Street at Rugg Road													
Weekday Morning													
Braintree Street	EB L	0.00	8	A	0	0.00	8	A	0	0.00	8	A	0
	WB L	0.01	8	A	0	0.04	8	A	3	0.04	8	A	3
Rugg Road	NB L/T/R	0.04	10	A	3	0.00	0	A	0	0.00	0	A	0
61-83 Braintree Street Driveway	SB L/T/R	0.02	11	B	3	0.01	13	B	0	0.01	14	B	0
Weekday Evening													
Braintree Street	EB L	0.00	7	A	0	0.00	8	A	0	0.00	8	A	0
	WB L	0.01	8	A	0	0.09	8	A	8	0.10	8	A	8
Rugg Road	NB L/T/R	0.07	10	B	5	0.00	0	A	0	0.00	0	A	0
61-83 Braintree Street Driveway	SB L/T/R	0.01	10	A	0	0.02	13	B	3	0.02	15	B	3
Saturday Midday													
Braintree Street	EB L	0.00	7	A	0	0.00	8	A	0	0.00	8	A	0
	WB L	0.01	8	A	0	0.08	8	A	8	0.08	8	A	8
Rugg Road	NB L/T/R	0.05	10	A	5	0.00	0	A	0	0.00	0	A	0
61-83 Braintree Street Driveway	SB L/T/R	0.02	10	B	3	0.02	14	B	3	0.03	16	C	3
Everett Street at "Old" Everett Street (north)													
Weekday Morning													
Driveway	EB L/T/R	0.03	17	C	3	0.03	20	C	3	0.04	24	C	3
"Old" Everett Street	WB L/T/R	0.50	36	E	65	0.60	54	F	83	0.76	87	F	113
Everett Street	NB L	0.01	8	A	0	0.01	8	A	0	0.01	9	B	0
	SB L	0.09	9	A	8	0.11	10	A	10	0.11	10	A	10
Weekday Evening													
Driveway	EB L/T/R	0.13	23	C	10	0.17	30	D	15	0.23	40	E	20
"Old" Everett Street	WB L/T/R	0.47	30	D	58	0.67	52	F	100	0.90	105	F	155
Everett Street	NB L	0.02	9	A	3	0.02	9	A	3	0.01	9	A	3
	SB L	0.05	9	A	5	0.06	9	A	5	0.07	9	A	5
Saturday Midday													
Driveway	EB L/T/R	0.08	13	B	5	0.09	15	B	8	0.10	16	C	8
"Old" Everett Street	WB L/T/R	0.31	22	C	33	0.43	30	D	50	0.50	37	E	63
Everett Street	NB L	0.01	8	A	0	0.02	8	A	0	0.02	9	A	0
	SB L	0.04	8	A	3	0.04	9	A	3	0.05	9	A	3

a v/c = volume to capacity ratio
b delay = average intersection delay, measured in seconds
c LOS = level-of-service
d 95th Percentile queue measured in feet

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Table 5-18 Unsignalized Intersection Capacity Analysis (Cont'd)

	Movement	2018 Existing Conditions v/c[a]	Delay[b]	LOS[c]	95th % Queue[d]	2025 No-Build Conditions v/c	Delay	LOS	95th % Queue	2025 Build Conditions v/c	Delay	LOS	95th % Queue
Everett Street at Stop and Shop Driveway													
Weekday Morning													
Stop and Shop Driveway	EB L/R	0.11	21	C	8	0.10	24	C	8				
Everett Street	NB L	0.01	8	A	0	0.01	8	A	0				
Weekday Evening													
Stop and Shop Driveway	EB L/R	0.08	20	C	5	0.09	23	C	8	*Intersection does not exist under Build Conditions*			
Everett Street	NB L	0.02	9	A	3	0.02	9	A	3				
Saturday Midday													
Stop and Shop Driveway	EB L/R	0.09	15	C	8	0.10	17	C	8				
Everett Street	NB L	0.02	8	A	0	0.02	9	A	0				
Everett Street at "Old" Everett Street (south)													
Weekday Morning													
"Old" Everett Street	SB T/R	0.16	18	C	15	0.21	23	C	20				
Everett Street	SEB L	0.06	10	A	5	0.08	10	B	8				
Weekday Evening													
"Old" Everett Street	SB T/R	0.23	17	C	23	0.32	21	C	35	*Intersection does not exist under Build Conditions*			
Everett Street	SEB L	0.08	9	A	8	0.10	9	A	8				
Saturday Midday													
"Old" Everett Street	SB T/R	0.18	14	B	18	0.25	17	C	25				
Everett Street	SEB L	0.04	8	A	3	0.04	9	A	3				
"Old" Everett Street at Blaine Street													
Weekday Morning													
Blaine Street	SB L	0.00	0	A	0	0.00	0	A	0				
"Old" Everett Street	WB L/R	0.01	10	A	0	0.00	10	A	0				
Weekday Evening													
Blaine Street	SB L	0.00	8	A	0	0.00	8	A	0	*Intersection does not exist under Build Conditions*			
"Old" Everett Street	WB L/R	0.01	10	B	0	0.01	10	B	0				
Saturday Midday													
Blaine Street	SB L	0.00	0	A	0	0.00	0	A	0				
"Old" Everett Street	WB L/R	0.01	10	A	0	0.01	10	A	0				

a v/c = volume to capacity ratio
b delay = average intersection delay, measured in seconds
c LOS = level-of-service
d 95th Percentile queue measured in feet

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Table 5-18 Unsignalized Intersection Capacity Analysis (Cont'd)

		2018 Existing Conditions				2025 No-Build Conditions				2025 Build Conditions			
	Movement	v/c[a]	Delay[b]	LOS[c]	95th % Queue[d]	v/c	Delay	LOS	95th % Queue	v/c	Delay	LOS	95th % Queue
"Old" Everett Street at Braintree Street													
Weekday Morning													
Braintree Street	EB L/T/R	0.02	7	A	3	0.02	8	A	3	0.04	8	A	3
	WB L/T/R	0.15	8	A	13	0.15	8	A	13	0.28	9	A	28
"Old" Everett Street	NB L/T/R	0.14	7	A	13	0.13	7	A	10	0.20	8	A	18
	SB L/T/R	0.01	8	A	0	0.00	8	A	0	0.00	8	A	0
Weekday Evening													
Braintree Street	EB L/T/R	0.06	8	A	5	0.09	8	A	8	0.13	9	A	10
	WB L/T/R	0.17	8	A	15	0.22	9	A	20	0.35	11	B	40
"Old" Everett Street	NB L/T/R	0.18	8	A	18	0.22	8	A	20	0.34	10	A	38
	SB L/T/R	0.03	8	A	3	0.03	8	A	3	0.03	8	A	3
Saturday Midday													
Braintree Street	EB L/T/R	0.03	7	A	3	0.06	8	A	10	0.08	8	A	5
	WB L/T/R	0.16	8	A	13	0.19	8	A	18	0.33	10	A	35
"Old" Everett Street	NB L/T/R	0.11	7	A	10	0.13	8	A	13	0.23	8	A	23
	SB L/T/R	0.01	8	A	0	0.01	8	A	0	0.01	8	A	0
Guest Street at Life Street													
Weekday Morning													
Guest Street	EB L/T/R	0.22	8	A	20	0.34	10	A	38	0.49	12	B	68
	WB L/T/R	0.17	9	A	15	0.19	9	A	18	0.39	11	B	45
Life Street	NB L/T/R	0.06	8	A	5	0.12	9	A	10	0.14	9	A	13
	SB L/T/R	0.01	10	A	0	0.05	10	A	5	0.04	10	B	3
Weekday Evening													
Guest Street	EB L/T/R	0.33	9	A	35	0.56	14	B	88	0.89	36	E	270
	WB L/T/R	0.40	10	B	48	0.56	15	B	88	0.83	30	D	218
Life Street	NB L/T/R	0.06	8	A	5	0.12	10	A	10	0.14	11	B	13
	SB L/T/R	0.00	8	A	0	0.24	10	B	23	0.27	12	B	28
Saturday Midday													
Guest Street	EB L/T/R	0.19	8	A	18	0.45	13	B	58	0.62	17	C	108
	WB L/T/R	0.26	9	A	25	0.48	13	B	65	0.67	19	C	128
Life Street	NB L/T/R	0.06	8	A	5	0.15	10	B	13	0.16	11	B	13
	SB L/T/R	0.01	8	A	0	0.36	11	B	40	0.37	12	B	43

a v/c = volume to capacity ratio
b delay = average intersection delay, measured in seconds
c LOS = level-of-service
d 95th Percentile queue measured in feet

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Table 5-18 Unsignalized Intersection Capacity Analysis (Cont'd)

		2018 Existing Conditions				2025 No-Build Conditions				2025 Build Conditions			
	Movement	v/c[a]	Delay[b]	LOS[c]	95th % Queue[d]	v/c	Delay	LOS	95th % Queue	v/c	Delay	LOS	95th % Queue
Guest Street/Stop & Shop Driveway at Arthur Street													
Weekday Morning													
Guest Street	EB L/T/R	0.15	8	A	13	0.18	9	A	15				
Stop and Shop Driveway	WB L/T/R	0.14	8	A	13	0.18	9	A	18				
Arthur Street	NB L/T/R	0.13	8	A	10	0.30	10	A	30				
	SB L/T/R	0.05	8	A	5	0.09	8	A	8				
Weekday Evening													
Guest Street	EB L/T/R	0.19	9	A	18	0.47	14	B	63				
Stop and Shop Driveway	WB L/T/R	0.27	10	A	28	0.42	14	B	53	*Intersection under Signalized Control in 2025 Build Conditions*			
Arthur Street	NB L/T/R	0.17	9	A	15	0.44	14	B	55				
	SB L/T/R	0.17	9	A	15	0.51	15	C	73				
Saturday Midday													
Guest Street	EB L/T/R	0.14	8	A	13	0.26	10	A	25				
Stop and Shop Driveway	WB L/T/R	0.21	9	A	20	0.32	11	B	33				
Arthur Street	NB L/T/R	0.13	8	A	10	0.35	11	B	35				
	SB L/T/R	0.03	8	A	3	0.19	10	A	18				
Cambridge Street at Dustin Street													
Weekday Morning													
Cambridge Street	EB L	0.20	10	A	18	0.22	10	A	20	0.23	10	A	23
Weekday Evening													
Cambridge Street	EB L	0.17	10	A	15	0.22	11	B	20	0.23	11	B	23
Saturday Midday													
Cambridge Street	EB L	0.12	9	A	10	0.16	10	A	15	0.17	10	A	15

a v/c = volume to capacity ratio
b delay = average intersection delay, measured in seconds
c LOS = level-of-service
d 95th Percentile queue measured in feet

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As shown in Table 5-14, several of the unsignalized study area intersections are expected to have critical movements that operate at LOS F under the 2025 Build condition with the Proposed Project. However, each of these critical movements also operate at a LOS F during their corresponding No-Build conditions and, therefore, these deficiencies are largely unrelated to Proposed Project. Furthermore, at several of the unsignalized intersections, the *demand* along the side street remains unchanged from the No-Build to the Build conditions. The proposed development is not expected to add significant amounts of traffic to the critical side-street movements. Instead, most Proposed Project-generated traffic is expected mostly to utilize primary roadways whose intersections are generally under signal control. Under the future conditions analysis, the stop-controlled approaches at these intersections would continue to experience lengthy delays, *with or without* the proposed development. It should be noted that these operations are projected for the "STOP" controlled approaches only and not the mainline free movements. As requested by MassDOT, the volumes and operating conditions at these locations also were evaluated relative to potential traffic signal control, but none of the required traffic signal warrants are satisfied.

Besides enhancing access to the Project Site and other existing and proposed developments, the proposed signalized intersection of Everett Street with Old Everett Street and Guest Street Extension will help nearby residents to the south on Everett Street to exit and enter their driveways by creating gaps in the Everett Street traffic stream which currently do not exist. Most importantly, this new signalized intersection allows for the continued advancement of the adjacent Boston Landing developments and other nearby planned or potential development sites.

5.10.3.1 Traffic Signal Warrant Analysis

In conjunction with the unsignalized capacity analyses, traffic signal warrant analyses were conducted at various locations. The analysis revealed that signalization was warranted at the newly created Guest Street Extension's intersections with Everett Street/Old Everett Street and Guest Street/Arthur street. The expected operations of both locations were presented earlier in this section in Table 5.16.

5.10.3.2 Exclusive Turn Lane Warrant Analysis

The potential need for exclusive left- or right-turn lanes also was evaluated as part of the 2025 Build conditions analysis. The analysis revealed that exclusive lanes are not necessary or appropriate at any of the existing unsignalized study area intersections. However, in conjunction with the new Guest Street Extension an exclusive left-turn lane will be provided on the westbound approach to Guest Street Extension's intersection with West Street Extension. The resulting operation of that intersection was summarized earlier in this section in Table 5.18.

5.11 Transportation Demand Management

Transportation Demand Management (TDM) measures are most often directed at commuter travel and implemented at office sites. However, due to the mixed-use and transit-orientated nature of the Proposed Project, there are opportunities to bring TDM programs to the Proposed Project's other land uses, including the grocery store, retail stores, and residential housing.

The Proposed Project is being developed with the goal of achieving Boston Green Building Credits as outlined under Article 37 of the City of Boston Code. Specifically, the TDM program summarized in this section has been developed to include key components of the "Modern Mobility" Boston Green Building Credit, per Article 37. In addition to complying with the required BTD standards for bicycle parking accommodations, the Proposed Project also will provide multiple accommodations beyond the required prerequisites.

The following sections discuss the land use types for which TDM measures will be implemented. A description of the TDM elements is presented in this section along with information on how those elements aid shoppers, employees, visitors, and residents getting to and from the Project Site.

The following plan first addresses general TDM measures that apply to the whole Project Site, then special programs for the residents, the future office building, the grocery store, and retail shops and restaurants.

5.11.1 General Measures

A Better City – TMA involvement

As requested by the BPDA, elected officials, and MassDOT, the Proponent will become a member of "A Better City", which is the local Transportation Management Association (TMA) in this area. The mission of the TMA is to enhance the economic vitality of Allston-Brighton by improving mobility and air quality through incentives, programs, events, and advocacy promoting sustainable commuting. As an active member of this organization, 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. Participation in the TMA also will help to provide a framework to offer alternative transportation services and ensure the provision of the multiple TDM strategies and programs outlined in this plan. Monitoring and evaluation of TDM programs will also be the responsibility of the TMA and its staff.

Transportation Coordinator

In conjunction with Phase 1 of the development, an overall on-site TDM coordinator will be designated to oversee all TDM programs for each building of the Proposed Project, and the Project Site in its entirety. The person(s) in this role will coordinate

with organizations within the area evaluated in the Guest Street Planning Study to help promote a reduced reliance on single-occupant motor-vehicle travel to the Project Site. To that end, the TDM measures identified in the following sections will be implemented under the direction and supervision of this person.

The final job description for this role will be determined by the TMA upon its inception. The duties of the on-site TDM coordinator may include, but not be limited to:

- Acting as a liaison with site employers and MassRIDES.
- Assisting site employees and residents with ride matching and transportation planning.
- Developing and implementing appropriate TDM measures.
- Disseminating information on alternate modes of transportation and developing transportation related marketing and education materials, including a website.
- Developing and maintaining information pertaining to pedestrian and cycling access to and from the Project Site.
- Hosting occasional transportation-related events to promote the use of commuting alternatives.
- Distributing transit maps and passes.
- Advocating with the state and local governments to improve transportation infrastructure and services.
- Monitoring the effectiveness of TDM measures through surveys and other tools.
- Completing regulatory reports to state and city agencies.
- Implementing a website providing travel-related information and promoting awareness of the items listed above.

Promoting Transit Use

Access to public transportation will significantly reduce demand for vehicular travel and parking spaces. This should be particularly effective in relation to the new Boston Landing MBTA commuter rail station, which opened in May 2017. To serve visitors, employees, and residents, the Proponent and the TMA will work with the MBTA to identify appropriate locations for new or relocated bus stops within the Project Site and other possible amenities, including bus shelters and real-time transit information. Multiple meetings have been held with the MBTA to date, and this dialogue will continue to work out these and other details. Potential bus stop locations are shown in the Guest Street Extension plan referenced earlier (Figure 5.42).

Currently the northerly and westerly ends of the Project Site are bound by fencing which does not allow for convenient travel to and from the new MBTA station. As noted earlier, the Proponent has met with the Boston Landing development team on multiple occasions to discuss the Proposed Project. While a direct vehicular connection will not be provided between the two properties at the northern boundary, it was mutually agreed that the fencing along the westerly end of both

properties will be modified to allow for a direct pedestrian connection between the Project Site and the Boston Landing site to provide more direct access to the new MBTA commuter rail station, subject to approval by MassDOT and the MBTA.

The on-site TDM coordinator will provide a central commuter information center within the Project Site near the entrance to the Boston Landing MBTA commuter rail station. This will provide employees, residents, and visitors with transit maps and schedules and route information for pedestrians and cyclists. One or two smaller centers also may be provided at central locations within the overall development, or possibly within each building. This could include one of the lobbies of a residential building, or at the entrance of the planned office building among other possible locations that would be identified by the on-site TDM coordinator in consultation with the TMA.

As noted earlier, the new Braintree Street Extension being constructed at the north end of the Site will include a 100-foot long pick-up/drop-off area suitable both for passenger vehicles, as well as additional shuttle busses which may soon be visiting the Boston Landing MBTA commuter rail station as mitigation for other local development projects. While this shuttle service is not needed for the Project, providing these on-site accommodations will help enhance the viability of shuttle service in the area by adding to the pick-up/drop-off area currently already available on Arthur Street Extension. Through its involvement with the TMA, Site residents also may be able to utilize shuttle service between the Boston Landing MBTA commuter rail station and other nearby MBTA train stations.

Facilitating Bicycle and Pedestrian Travel

A variety of constraints currently exist that limit pedestrian and bicycle travel to, from, and throughout the Project Site. Travel to the Project Site by cycling or walking will be promoted by the Proponent through the provision of improved bicycle and pedestrian connections within the Project Site, including a new separated bike lane to be provided within the new Guest Street Extension between Arthur Street and Everett Street. In addition to secured, covered bike storage within each building, bicycle racks also will be provided at locations near various buildings within the overall development. The exact location will be determined through the City of Boston Article 80 permitting and BPDA design processes. Walking to and from, and throughout the Project Site will be encouraged by the provision of a pedestrian-friendly site layout, which features sidewalks and crosswalks at key points both within the site and connecting to adjacent planned developments. The bicycle and pedestrian infrastructure improvements will help to promote non-vehicular travel to the Project Site.

5.11.2 Grocery Store

Stop & Shop will build upon existing TDM programs which are already in place at the Project Site as established during the initial permitting of the grocery store and adjacent retail uses in the 1990s. With this new and expanded TDM program, the following measures will be implemented:

Employees

Stop & Shop will designate an Employee Transportation Coordinator who will work with store employees to assist with ride matching, transit pass sales and schedules, and the management of all on-site TDM features and transportation programs.

To discourage employee vehicle trips to the Project Site, Stop & Shop will provide a 50-percent subsidy for MBTA transit passes for its employees. For employees that must drive to the Project Site, Stop & Shop will work with MassRIDES to offer carpool and vanpool incentives, including discount tolls, insurance, and registration to discourage single-occupancy vehicle trips from employees. MassRIDES also offers a program for leasing vans for vanpools and to cover some of the administrative and operational costs of the vanpool.

The Stop & Shop Employee Transportation Coordinator will be responsible for coordinating these benefits and will work with MassRIDES to offer ride-matching and other services. While not a requirement, the Stop & Shop Employee Transportation Coordinator may also be the on-site TDM coordinator for the overall Project Site. If a different person fills that role for the overall Project Site, the Stop & Shop Employee Transportation Coordinator also will coordinate with the on-site TDM coordinator described previously. The Employee Transportation Coordinator will help ensure that transit information is available to all employees during orientation, in lunchrooms, building lobbies, and at the on-site transportation center.

Stop & Shop, through MassRIDES, will offer an "Emergency Ride Home Program" (i.e., Guaranteed Ride Home) for employees who normally take transit, carpool, vanpool, bike, or walk to work. This ride, provided by taxi, rental car, or company vehicle, is offered to employees who have a personal or family illness or emergency that requires them to leave work during the day, and to employees who are unexpectedly required to work late. To use the program, employees must pre-register and must commit to using alternate modes of transportation for an agreed upon number of days per week. A cap on the number of times an employee can use the service would be set. Those who bike or walk regularly will also be eligible for the program in adverse weather conditions. Building A also will include secure, covered bicycle parking, as previously discussed.

To limit trips off-site for Stop & Shop employees during work breaks, a variety of convenient meal options will be available, including restaurants and café either within the building, or within short walking distance within the overall Project Site. A refrigerator and microwave will also be available for employee use. Other services, like an on-site automated teller machine and direct deposit of paychecks will help reduce trips.

Customers

Stop & Shop will have parking spaces dedicated to a shared vehicle service, such as Zipcar, in a prominent location with visible signage. The Zipcar spaces will provide convenient parking to customers who travel to the Project Site via a Zipcar vehicle. Additional Zipcars are anticipated to be based on the Project Site to serve residents and office workers.

In compliance with BTD requirements, to further reduce GHG emissions associated with vehicles, Electric Vehicle (EV) charging stations will be provided within in the structured parking across the Project, 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.

As noted above, the Proponent will coordinate with the MBTA to determine if either new or relocated MBTA bus stops can be provided along Guest Street Extension, which could further help promote the use of public transportation, by employees and customers.

Design Parking Accommodations

The overall Project will be constructed over multiple phases based on market conditions. With the initial construction of Building A, both the Stop & Shop and other retail to be located within the building will have access to temporary surface parking that will be available at the location of the current stores, which will be demolished. While this surface parking will be eliminated with subsequent phases of construction, providing this parking during the initial phase will help the transition from the current suburban-style retail Site, to the urban transit-oriented mixed-use development proposed.

5.11.3 Offices

Office employers within the Project Site will be encouraged to implement appropriate TDM measures by the on-site TDM coordinator. As not every TDM program will be suitable for every type of employer, such as telecommuting or flexible work hours, the TMA and on-site TDM coordinator will offer technical assistance to employers to evaluate potential programs and implement them when appropriate. Employer-based TDM measures may include the following programs:

- Preferential carpool and vanpool parking within the parking garage and spaces near office building entrances within the parking garage as a convenience to commuters and to promote ride-sharing.
- Ride matching assistance managed by the on-site TDM coordinator or by MassRIDES so that employees find appropriate carpool and vanpool partners.
- Disseminating information on alternate modes of transportation and developing transportation.
- Sponsored vanpools and subsidized expenses.
- Employees can use pre-tax dollars for the purchase of MBTA passes. The pre-tax purchase is free from both federal and state income and payroll taxes.
- Provide telecommuting options for employees in appropriate jobs.
- Provide incentives for bicycle and pedestrian commutes, like covered bicycle storage, changing rooms, and shower facilities.

- Hold promotional events for transit-riders, cyclists, and pedestrians.
- Offer direct deposit to employees.
- The Proponent will consider providing preferred parking for low-emitting fuel-efficient vehicles and/or electric vehicle charging stations within each of the garages serving the buildings comprising the Proposed Project.
- In compliance with BTD requirements, to further reduce GHG emissions associated with vehicles, Electric Vehicle (EV) charging stations will be provided within in the structured parking across the Project, 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.

5.11.4 Retail/Restaurants

The Proponent will seek to attract a variety of retail shops, restaurants, and service tenants on the ground floor of each building. These shops will potentially include restaurants, fitness uses, apparel, furnishings, general merchandise, and service uses. As most of these businesses will be small shops, there will not be the same levels of TDM opportunities internal to each individual business as will be available with larger employers, but employees who work on the Project Site will be able to take advantage of the transportation guidance and programs coordinated by the transportation coordinator.

The suite of TDM measures to be implemented in association with the retail shops are fewer than for traditional offices but will still have an impact in reducing single-occupant vehicle travel. The retail TDM program may include the following:

- Improved site amenities, like cycling paths and pedestrian crossings which enhance the ability of employees to walk or cycle to work.
- Ride matching services and transit information provided by the on-site TDM coordinator or MassRIDES.
- Hold promotional events for cyclists, pedestrians, and transit-riders.
- Offer direct deposit to employees.
- In compliance with BTD requirements, EV charging stations will be provided within in the structured parking across the Project, 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.

5.11.5 Residential

In addition to providing a pedestrian friendly, mixed-use transit-orientated environment, the Proponent will enact a variety of additional strategies to reduce the need for auto trips by residents. This will include working with a car-sharing service (such as Zipcar) to provide cars for periodic use by residents.

Several of the TDM measures to be implemented for the entire Project Site will be attractive to new residents. Specifically, the provision of secured bicycle storage, bicycle racks, pedestrian walkways, and proximity to public transportation, including several bus lines and the new Boston Landing MBTA commuter rail station should help to minimize the need for vehicular travel and parking spaces. In compliance with BTD requirements, EV charging stations will be provided within in the structured parking across the Project, 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.

5.12 Traffic Monitoring Program

As requested by MassDOT, the Proponent will conduct annual post-opening data collection and surveys for five years starting six months after the occupancy of the full development. This will consist of 24-hour automatic traffic recorder counts at each Site driveway and turning movement counts at mitigated intersections and Site driveways. Updated transit ridership data also will be provided in conjunction with each count interval if available through the MBTA. Surveys of Site employees also will be conducted through coordination with the "A Better City" Transportation Management Association. This information will be summarized in reports to be submitted to MassDOT on an annual basis so that the results of this monitoring program can be compared to the analysis presented as part of this Project's MEPA review process.

5.13 Conclusion

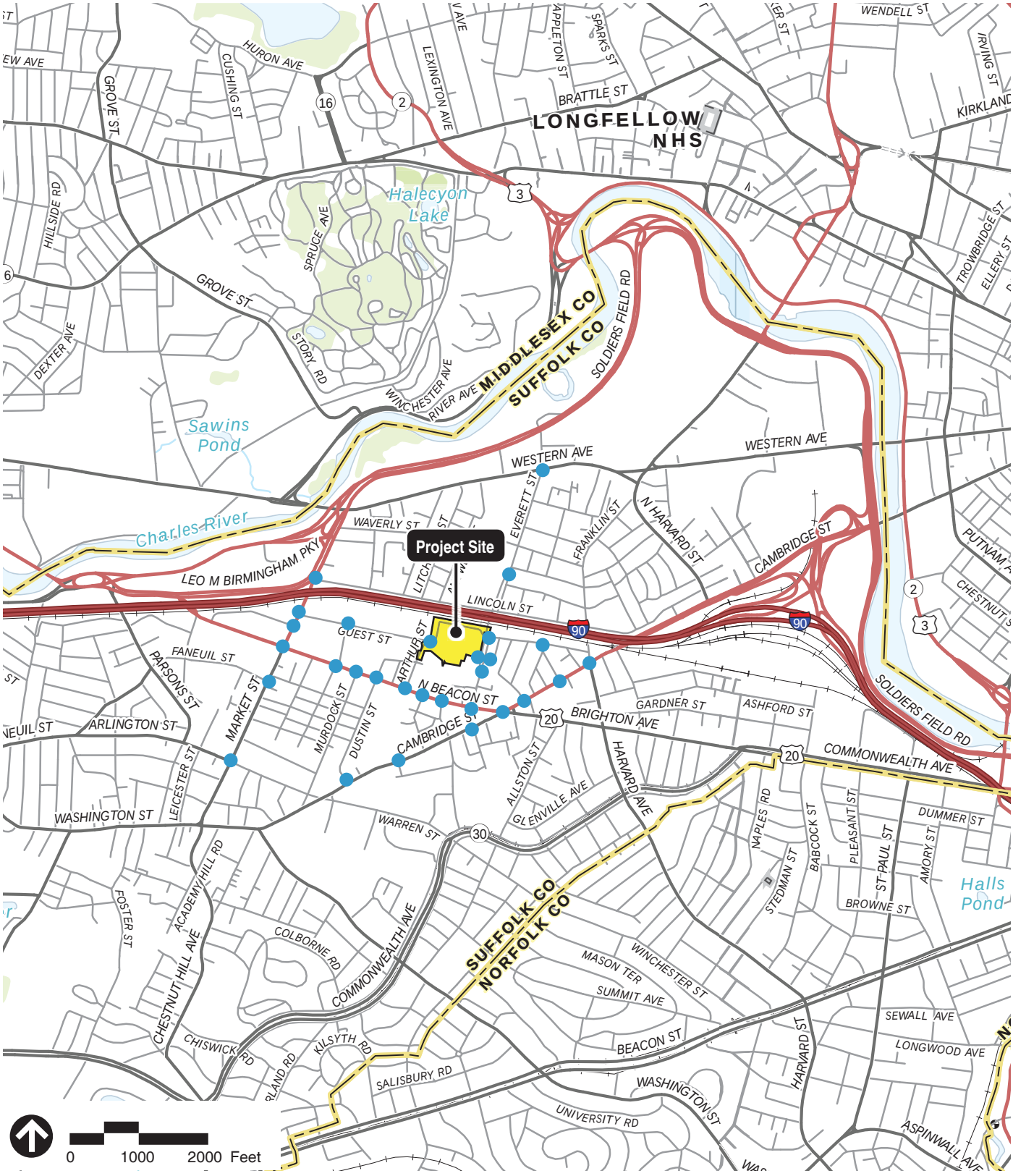
The Proposed Project is consistent with the City of Boston's transportation-related goals outlined in the Guest Street Planning Study and has been designed to accommodate Project-generated traffic, as well as traffic other nearby planned or potential developments, such as Boston Landing, which is under continued development. The Proposed Project transportation improvements have been designed to accommodate the full build-out of the Project (as well as multiple other surrounding developments) but will be provided **as part of Phase 1 of the Proposed Project**. While these access enhancements are designed to accommodate the full build-out of the Project, implementing them with Phase 1 will help address existing deficiencies in the area while also allow other nearby planned or potential developments to advance. In summary, these improvements provide the following benefits:

- The new Guest Street Extension, a multi-modal roadway, will provide a new connection between the existing Guest Street/Arthur Street intersection at the west end of the Project Site and Everett Street.
- The installation of a new full-access traffic signal at Everett Street's intersection with Old Everett Street and the newly constructed Guest Street Extension will

help accommodate Project-generated traffic while also enhancing access and egress options for other planned developments in the area.

- The new Arthur Street/Guest Street signalized intersection will address long-standing deficiencies.
- Signal timing improvements to be implemented at five key study area intersections will allow these intersections to operate at similar, or even improved, conditions compared to future conditions without the Project in place.
- As part of the Project, transit signal priority (TSP) equipment will be installed at three locations: Guest Street Extension's newly proposed signal at Arthur Street/Arthur Street Extension, Everett Street/old Everett Street, and at North Beacon Street/Everett Street. The measures will help improve the efficiency of MBTA Route 64, which the Proponent is proposing to relocate through the Site along Guest Street Extension.
- The new signals to be installed as part of the Project will be designed to meet the City's new Smart Utilities Pilot Policy. This will involve both Guest Street's new signals at Arthur Street and Everett Street being designed to allow for conversion to adaptive control signal control if desired by the City.
- The conversion of the existing Braintree Street enter-only driveway also will help to dissipate Project-related traffic while helping to avoid other access/egress points from being overburdened.
- The new pedestrians and bicycle accommodations, including direct connections to the new Boston Landing MBTA commuter rail station will not only reduce vehicle trips, but generate new ridership, thus, further ensuring the success of the new station.
- Since the development of the Project Site plan presented in the PNF, additional bicycle accommodations have been proposed. These include new separated bike lanes on Arthur Street to the south of Guest Street within the Site, and new bike lanes on Braintree Street Extension between the Boston Landing MBTA commuter rail station and the neighborhoods to the east of the Site. As part of the new MBTA access enhancements proposed, additional bike racks will be installed, and space has been allocated for a new Bluebikes station which will be installed by the Proponent if desired.
- The parking needs for the Proposed Project will be accommodated by up to 1,400 structured parking spaces proposed. With the mixed-use nature of the Site there also may be opportunities for shared parking between the various uses proposed, particularly with the possibility of some office parking being made available to residents during non-working hours.

Overall, the additional new traffic generated by the Proposed Project can be accommodated on the surrounding roadway network and, with the Proposed Project's transportation infrastructure improvements, minimal impacts are expected from the Proposed Project.



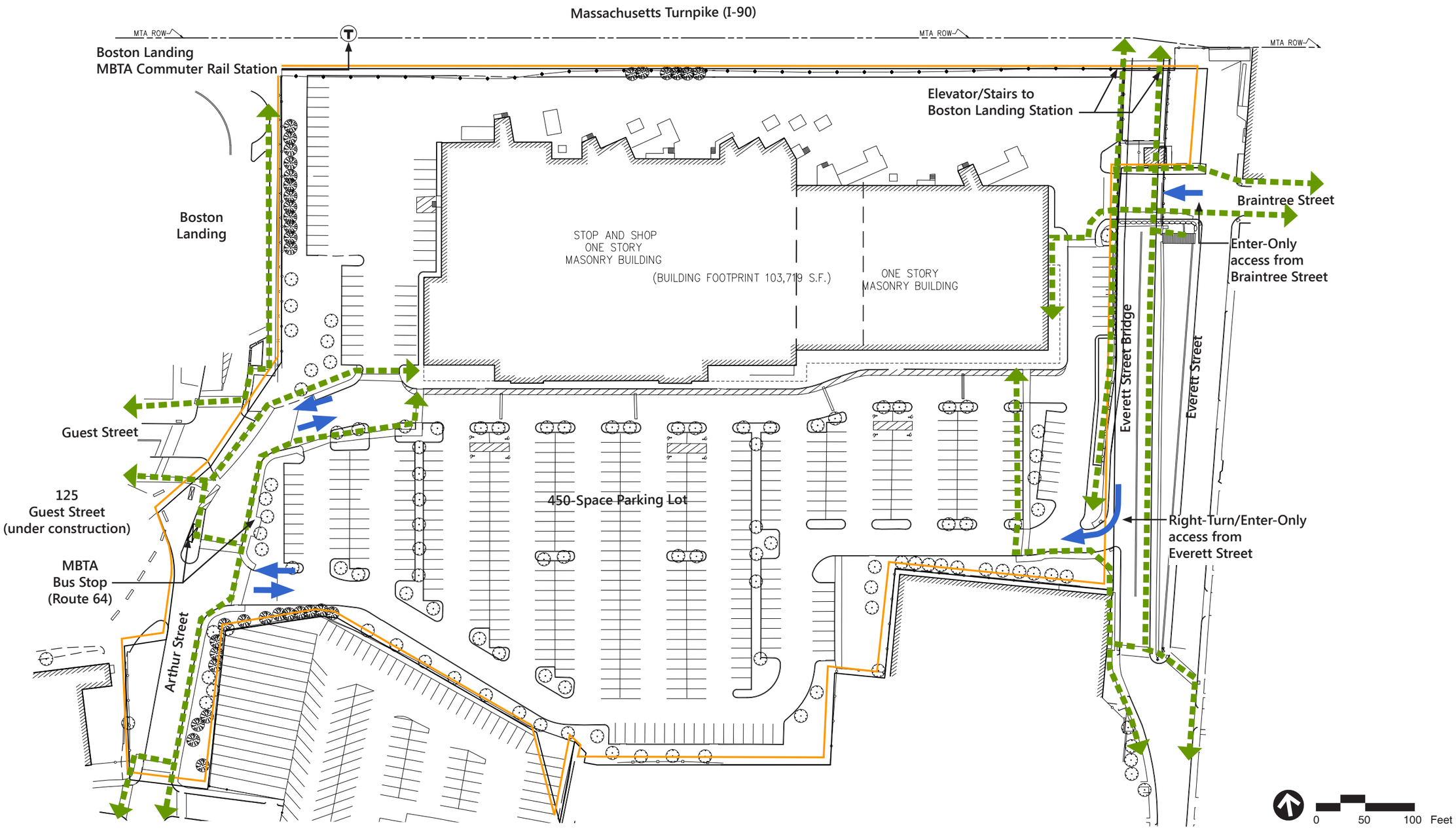
Source 2015 USGS

● Study Area Intersection

Figure 5.1

Traffic Study Area

Allston Yards
Boston, Massachusetts



Source: VHB Survey

Prepared By: VHB

Project Site Boundary

Pedestrian Path/Sidewalk

Vehicular Access/Egress

Figure 5.2

Site Access and Circulation

Allston Yards
Boston, Massachusetts

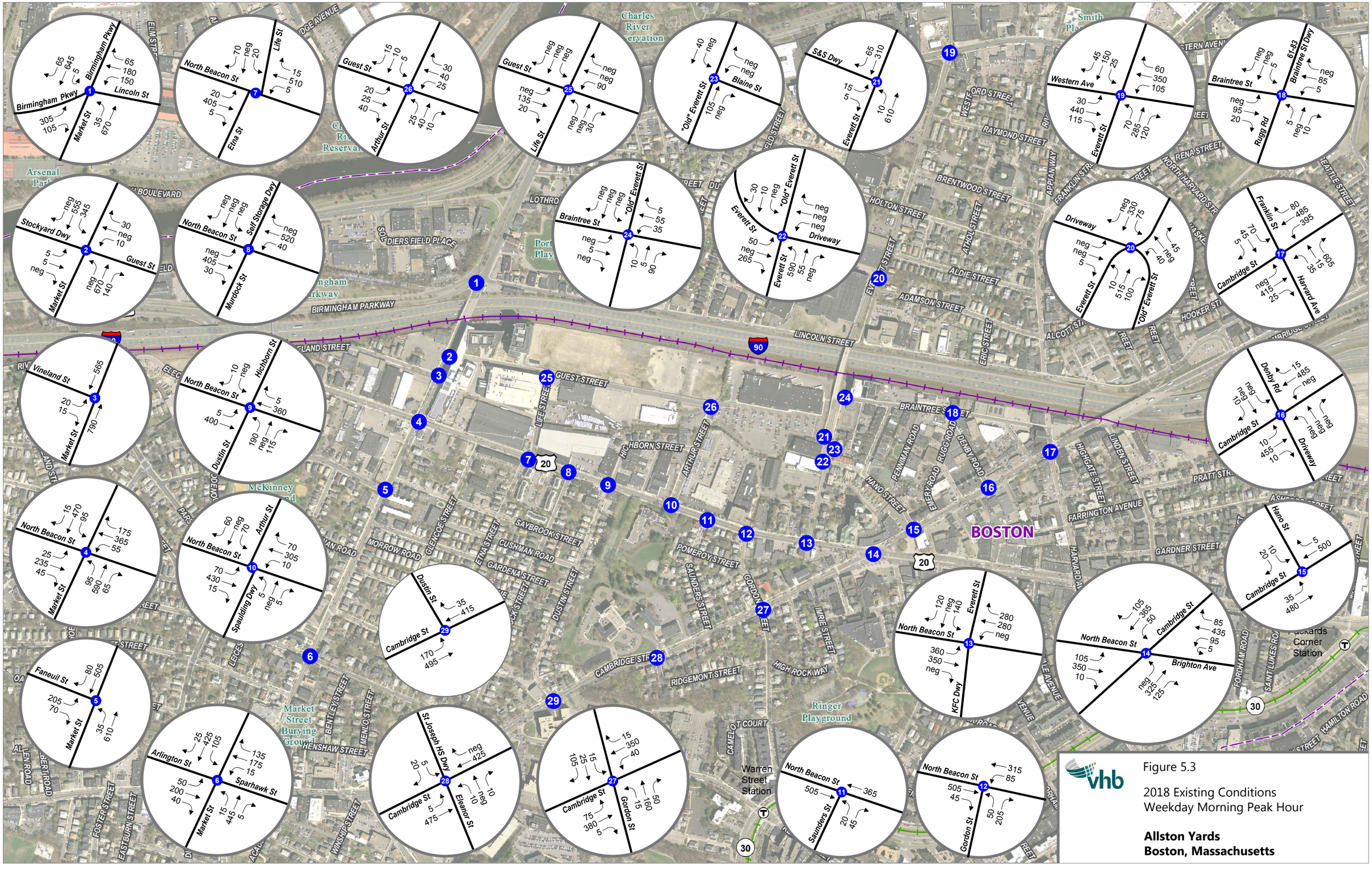


Figure 5.3

2018 Existing Conditions
Weekday Morning Peak Hour

Allston Yards
Boston, Massachusetts

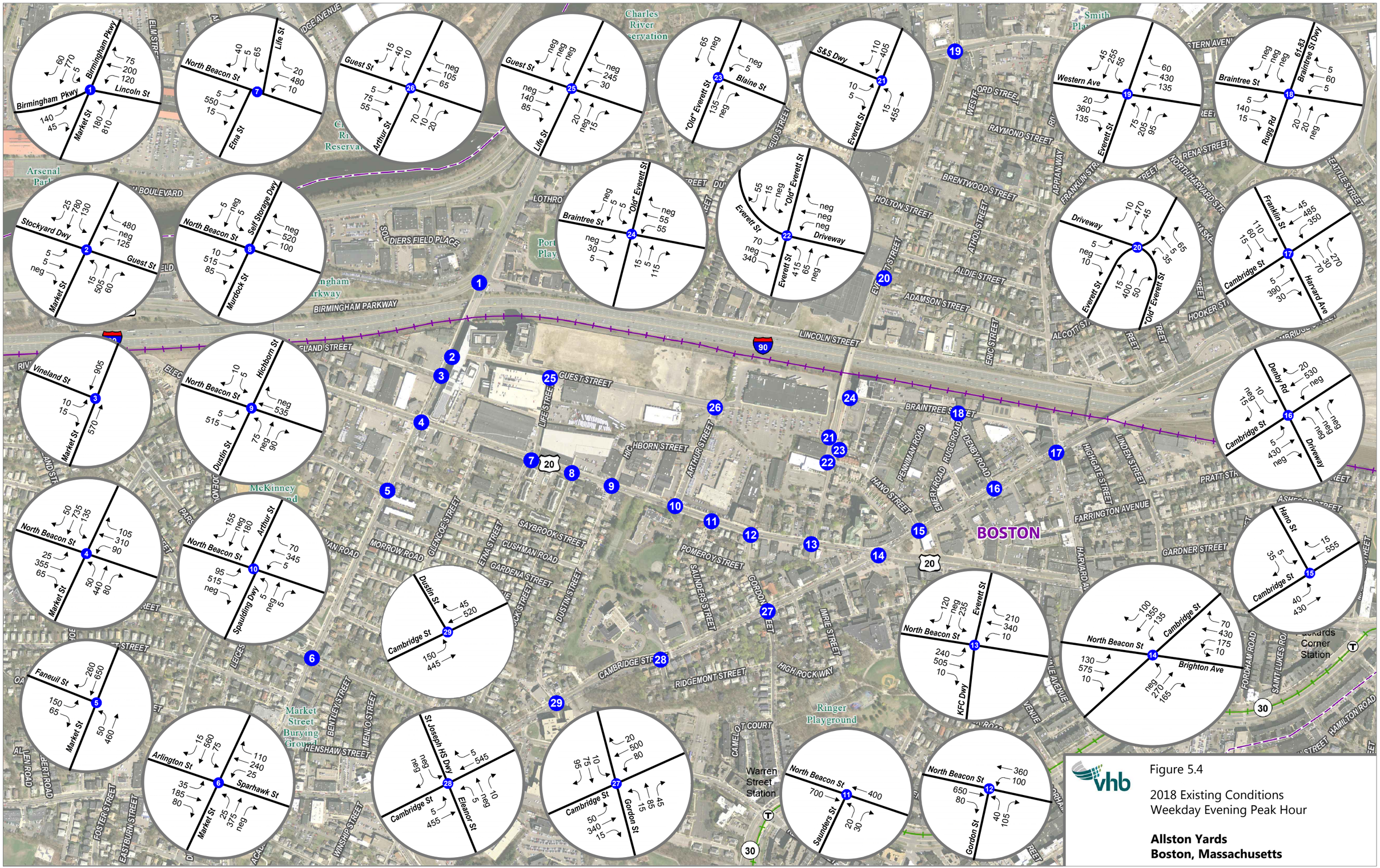
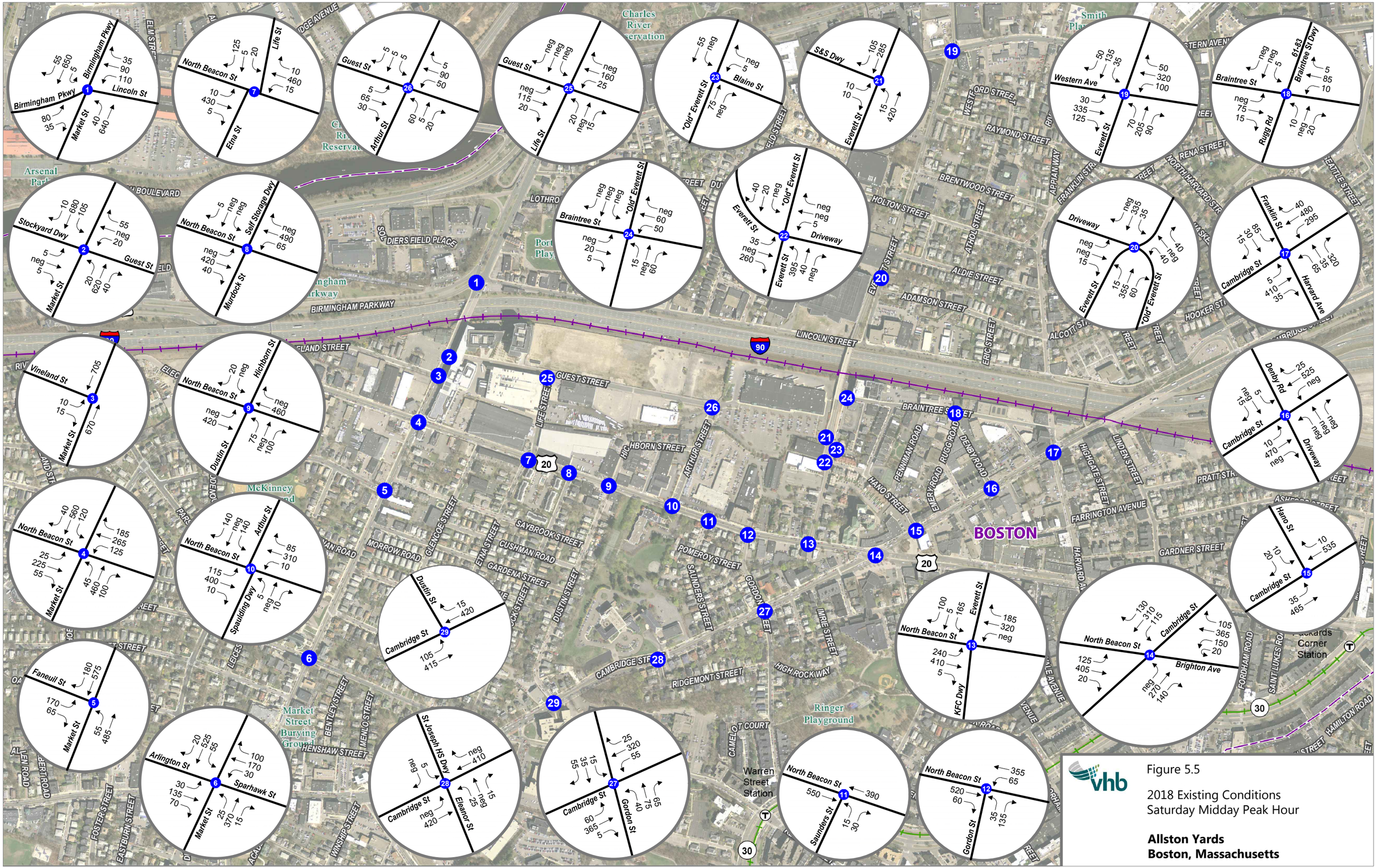
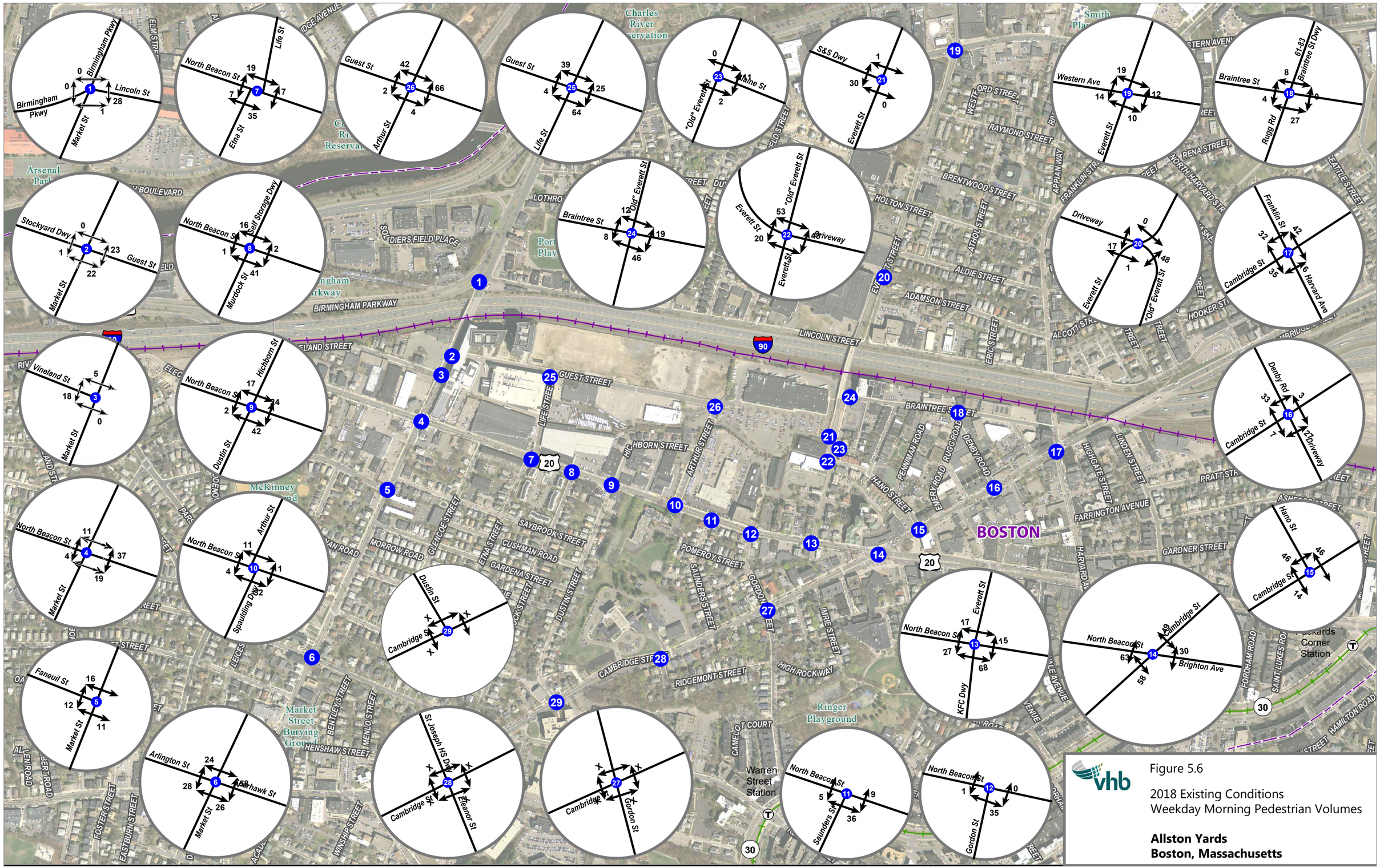


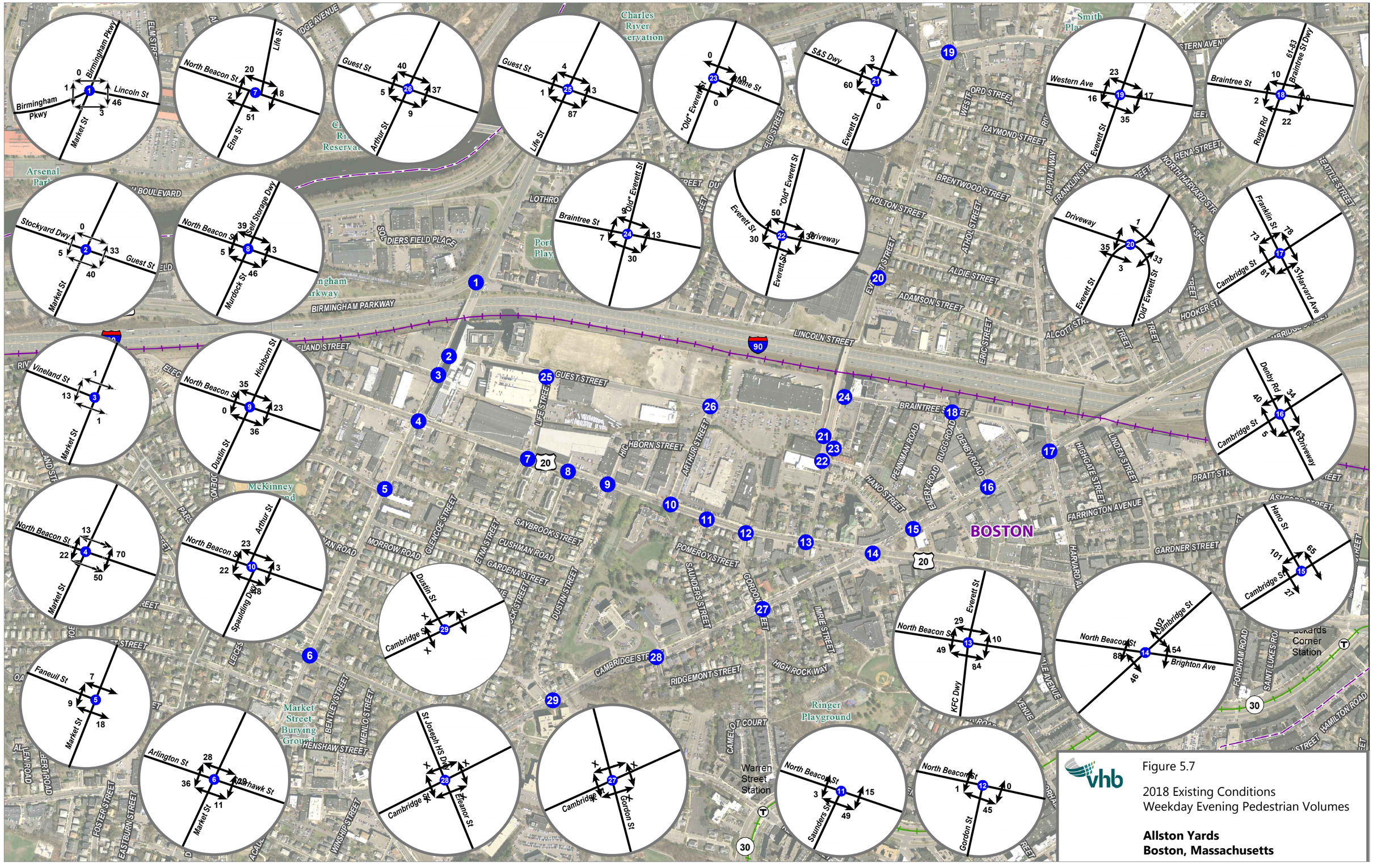
Figure 5.4

2018 Existing Conditions
Weekday Evening Peak Hour

Allston Yards
Boston, Massachusetts


Birmingham Pkwy
Lincoln St
Market St
North Beacon St
Life St
Etna St
Guest St
Arthur St
Stockyard Dwy
Guest St
Market St
North Beacon St
Self Storage Dwy
Murdock St
Braintree St
"Old" Everett St
Everett St
Blaine St
S&S Dwy
Everett St
Western Ave
Everett St
Braintree St
Braintree St Dwy
Rugg Rd
Driveway
Everett St
"Old" Everett St
Franklin St
Harvard Ave
Cambridge St
Vineland St
Market St
North Beacon St
Hichborn St
Dustin St
Sparhawk St
Arlington St
Market St
Faneuil St
Market St
North Beacon St
Arthur St
Spaulding Dwy
Dustin St
Cambridge St
St Joseph HS Dwy
Cambridge St
Eleanor St
Cambridge St
Gordon St
North Beacon St
Saunders St
North Beacon St
KFC Dwy
North Beacon St
Cambridge St
Brighton Ave
Hano St
Cambridge St
Denby Rd
Cambridge St
Driveway
Charles River Reservation
Arsenal Park
Soldiers Field Place
Birmingham Parkway
Lothrop Street
Port Playground
Lincoln Street
Guest Street
Life Street
Hichborn Street
Arthur Street
Etna Street
Saybrook Street
Cushman Road
Gardena Street
Dustin Street
Glencoe Street
Morrow Road
Pomeroy Street
Saunders Street
Gordon Street
Imrie Street
Cambridge Street
Ridgemont Street
High Rock Way
Braintree Street
Penniman Road
Rugg Road
Denby Road
Emery Road
Hano Street
Harvard Street
Gardner Street
Farrington Avenue
Highgate Street
Linden Street
Pratt Street
Ashford Street
Raymond Street
Brentwood Street
Holton Street
Atholl Street
Aldie Street
Adamson Street
Eric Street
Everett Street
Franklin Street
Appian Way
Rena Street
North Harvard Street
Seattle Street
Hooker Street
Alcott Street
Fordham Road
Saint Lukes Road
Hamilton Road
Leicester Street
Bentley Street
Menlo Street
Henshaw Street
Foster Street
Eastburn Street
Winship Street
Camelot Court
Boston
Packards Corner Station
Warren Street Station
Ringer Playground
Market Street Burying Ground
McKinney
Smith Pla
Figure 5.5
2018 Existing Conditions
Saturday Midday Peak Hour
Allston Yards
Boston, Massachusetts


Birmingham Pkwy
Lincoln St
Market St
Birmingham Pkwy
North Beacon St
Life St
Etna St
Guest St
Arthur St
Life St
"Old" Everett St
Blaine St
S&S Dwy
Everett St
Western Ave
Everett St
Braintree St
61-83
Braintree St Dwy
Rugg Rd
Stockyard Dwy
Guest St
Market St
North Beacon St
Self Storage Dwy
Murdock St
Braintree St
"Old" Everett St
Everett St
"Old" Everett St
Driveway
Everett St
"Old" Everett St
Franklin St
Cambridge St
Harvard Ave
Vineland St
Market St
North Beacon St
Hichborn St
Dustin St
North Beacon St
Market St
Arthur St
Spaulding Dwy
Dustin St
Cambridge St
Faneuil St
Market St
Arlington St
Market St
Marshawk St
St Joseph HS Dwy
Cambridge St
Eleanor St
Cambridge St
Gordon St
North Beacon St
Saunders St
North Beacon St
Gordon St
Everett St
North Beacon St
KFC Dwy
North Beacon St
Cambridge St
Brighton Ave
Derby Rd
Cambridge St
Driveway
Hano St
Cambridge St
Charles River Reservation
Arsenal Park
Soldiers Field Place
Birmingham Parkway
Lothrop
Port Playground
Lincoln Street
Guest Street
Braintree Street
Life Street
Hichborn Street
Arthur Street
Pomeroy Street
Saunders Street
Gordon Street
Imrie Street
Ridgemont Street
High Rock Way
Cambridge Street
Holton Street
Adamson Street
Aldie Street
Athol Street
Eric Street
Brentwood Street
Raymond Street
Westford Street
Rena Street
North Harvard Street
Seattle Street
Hooker Street
Alcott Street
Appian Way
Franklin Street
Braintree Street
Rugg Road
Denby Road
Emery Road
Penniman Road
Hano Street
Linden Street
Highgate Street
Farrington Avenue
Gardner Street
Harvard Ave
Pratt Street
Ashford Street
Fordham Road
Saint Lukes Road
Hamilton Road
Lenox Street
Glencoe Street
Etna Street
Saybrook Street
Cushman Road
Gardena Street
Dustin Street
Morrow Road
Bentley Street
Menlo Street
Henshaw Street
Foster Street
Eastburn Street
Winship Street
Camelot Court
Ringer Playground
Market Street Burying Ground
McKinney
Warren Street Station
Richards Corner Station
BOSTON
90
93
20
Driveway
Driveway
Driveway


Birmingham Pkwy
Lincoln St
Market St
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Life St
Etna St
Guest St
Arthur St
Life St
"Old" Everett St
Lamme St
S&S Dwy
Everett St
Western Ave
Everett St
Braintree St
Braintree St Dwy
Rugg Rd
Stockyard Dwy
Guest St
Market St
North Beacon St
Self Storage Dwy
Murdock St
Braintree St
"Old" Everett St
Everett St
"Old" Everett St
Everett St
Driveway
Everett St
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Franklin St
Cambridge St
Harvard Ave
Vineland St
Market St
North Beacon St
Hichborn St
Dustin St
North Beacon St
Arthur St
Spaulding Dwy
Dustin St
Cambridge St
Faneuil St
Market St
Arlington St
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Hawthorn St
St Joseph HS Dwy
Cambridge St
Eleanor St
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Gordon St
North Beacon St
Saunders St
North Beacon St
Gordon St
North Beacon St
KFC Dwy
North Beacon St
Cambridge St
Brighton Ave
Denby Rd
Cambridge St
Driveway
Hano St
Cambridge St
BIRMINGHAM PARKWAY
LINCOLN STREET
GUEST STREET
BRAINTREE STREET
HICHBORN STREET
RAYMOND STREET
BRENTWOOD STREET
HOLTON STREET
ALDIE STREET
ADAMSON STREET
SOLDIERS FIELD PLACE
SAYBROOK STREET
CUSHMAN ROAD
GARDENA STREET
MORROW ROAD
POMEROY STREET
SAUNDERS STREET
IMRIE STREET
RIDGEMONT STREET
HIGH ROCK WAY
CAMBRIDGE STREET
HENSHAW STREET
FARRINGTON AVENUE
GARDNER STREET
HARVARD AVENUE
BOSTON
Arsenal Park
McKinney Playground
Market Street Burying Ground
Ringer Playground
Warren Street Station
Packards Corner Station
Charles River Reservation
Smith Playground
90
20
Figure 5.7
2018 Existing Conditions
Weekday Evening Pedestrian Volumes
Allston Yards
Boston, Massachusetts

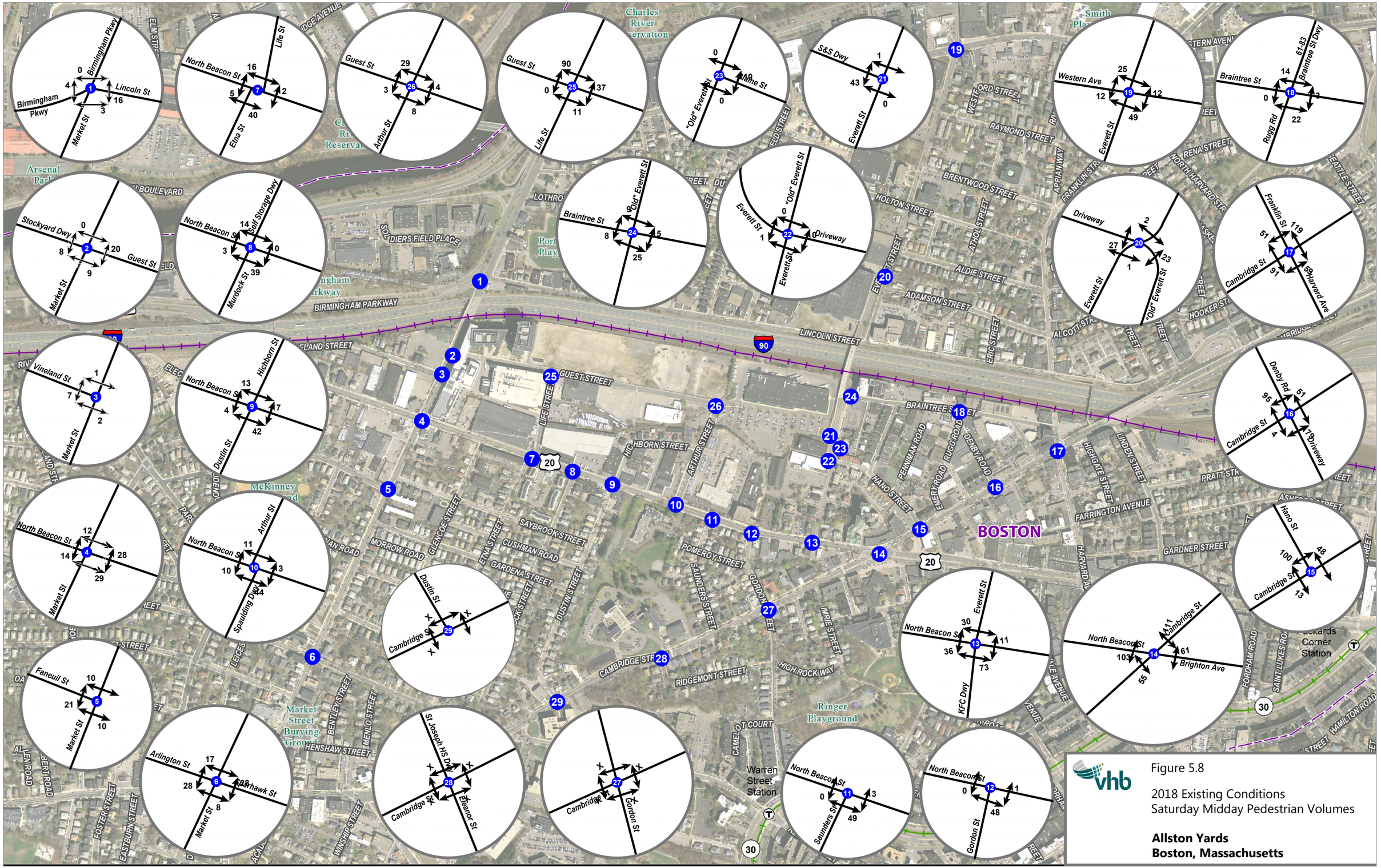

Figure 5.8

2018 Existing Conditions
Saturday Midday Pedestrian Volumes

Allston Yards
Boston, Massachusetts

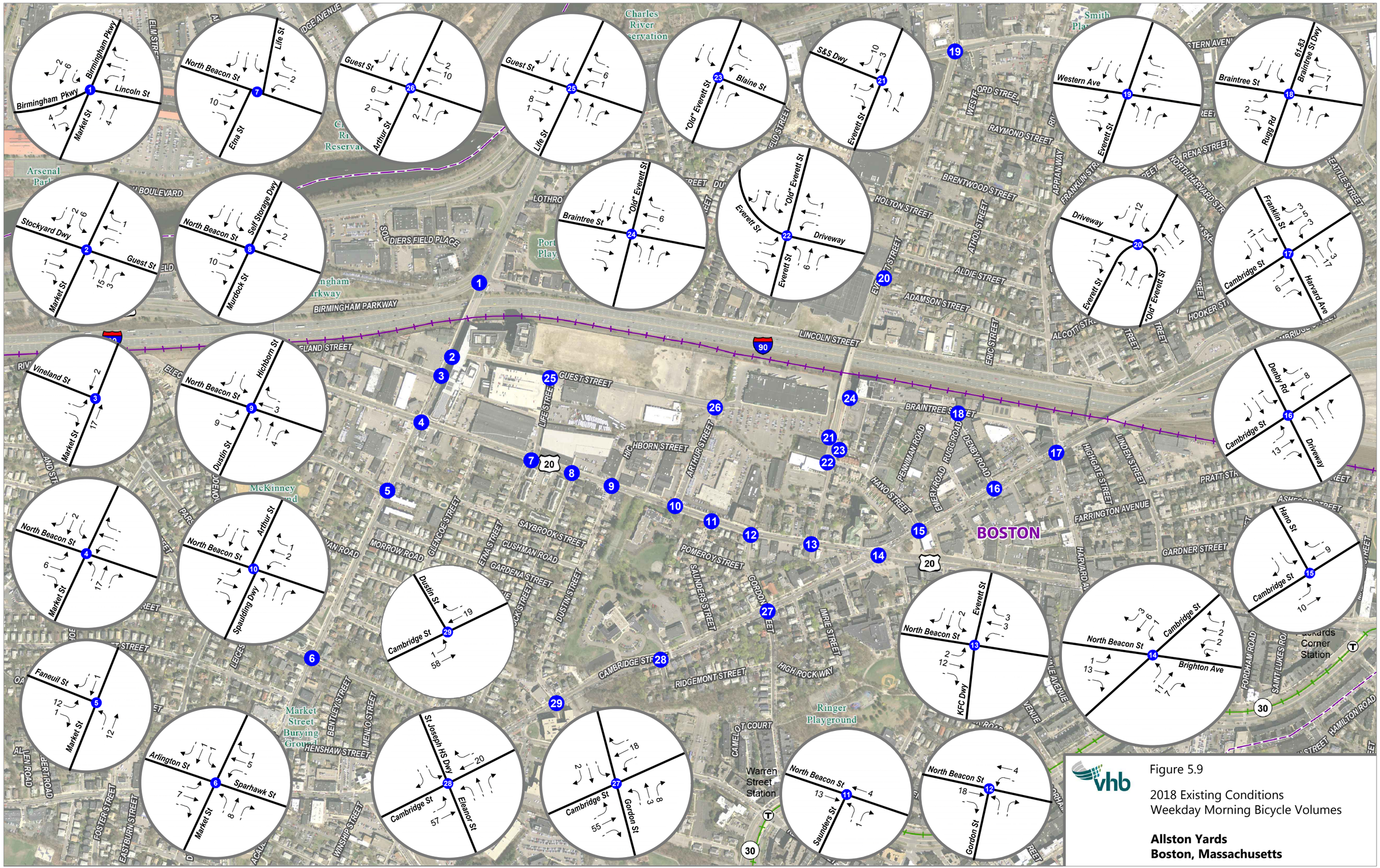

Figure 5.9

2018 Existing Conditions
Weekday Morning Bicycle Volumes

Allston Yards
Boston, Massachusetts

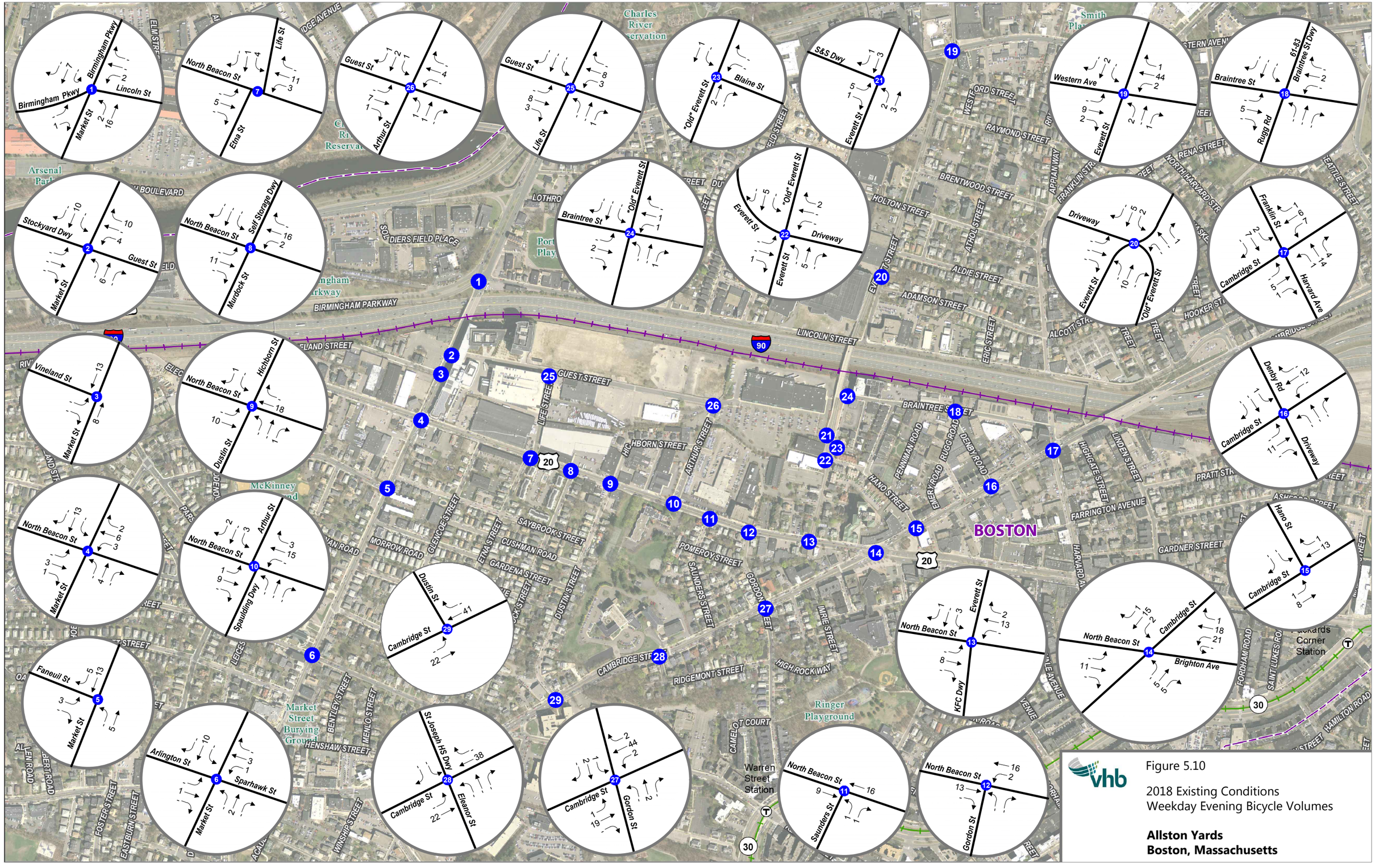

Figure 5.10

2018 Existing Conditions
Weekday Evening Bicycle Volumes

Allston Yards
Boston, Massachusetts

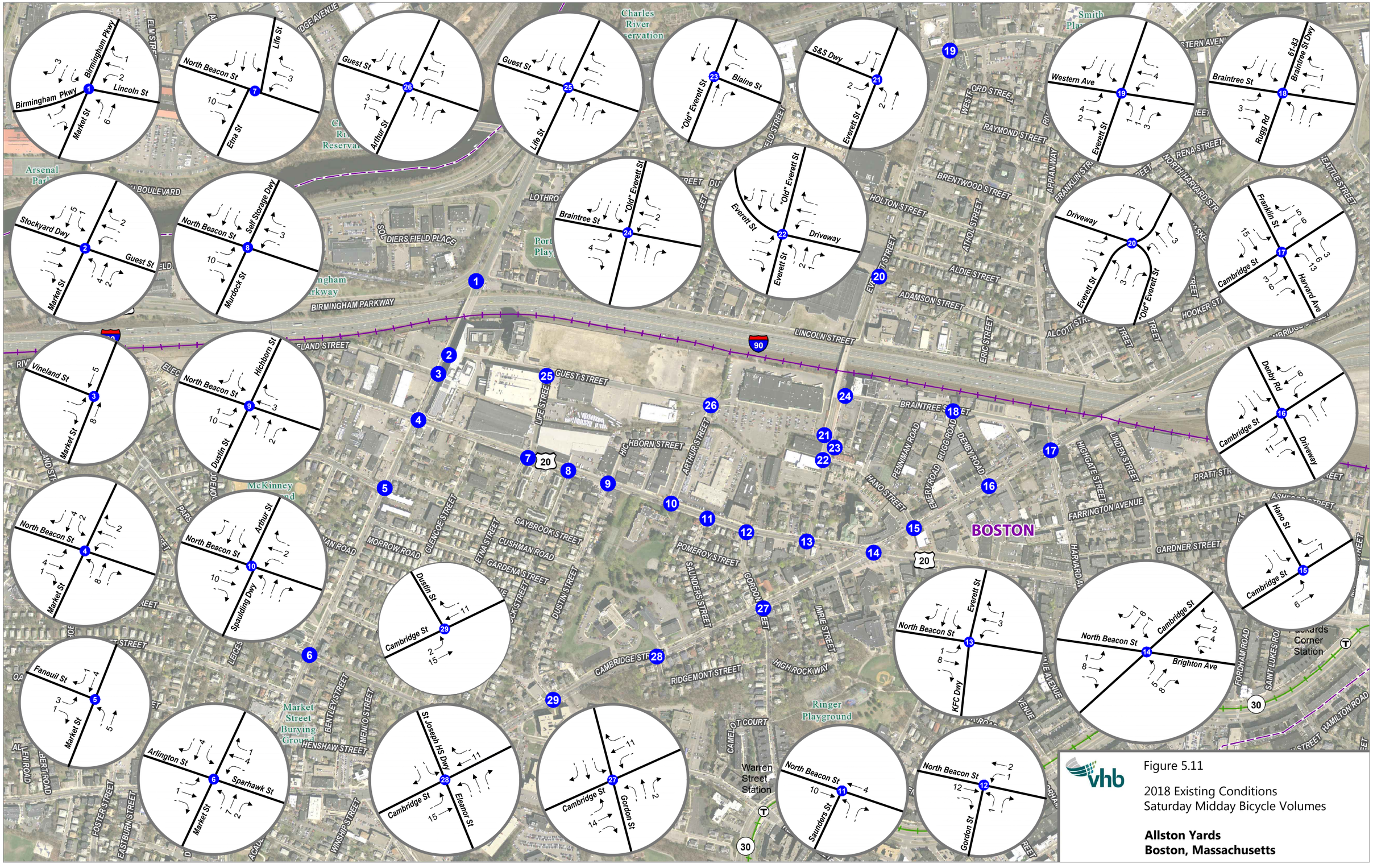

Figure 5.11

2018 Existing Conditions
Saturday Midday Bicycle Volumes

Allston Yards
Boston, Massachusetts

\\vhb\proj\Wat-LD\12305.00\graphics\FIGURES\EENF-DPIR\PNF-Chapter5.indd

Bus Stop

Bus Route Number

WATERTOWN

Charles River Reservation

Arsenal Park

Portsmouth Playground

Birmingham Parkway

Smith Playground

Boston Landing

Project Site

McKinney Playground

Market Street Burying Ground

Ringer Playground

Fidelis Way Park

Warren Street Station

Allston Street Station

Griggs Street Station

Harvard Avenue Station

Packards Corner Station

0 300 600 Feet

Figure 5.12

Existing Public Transportation

Allston Yards
Boston, Massachusetts

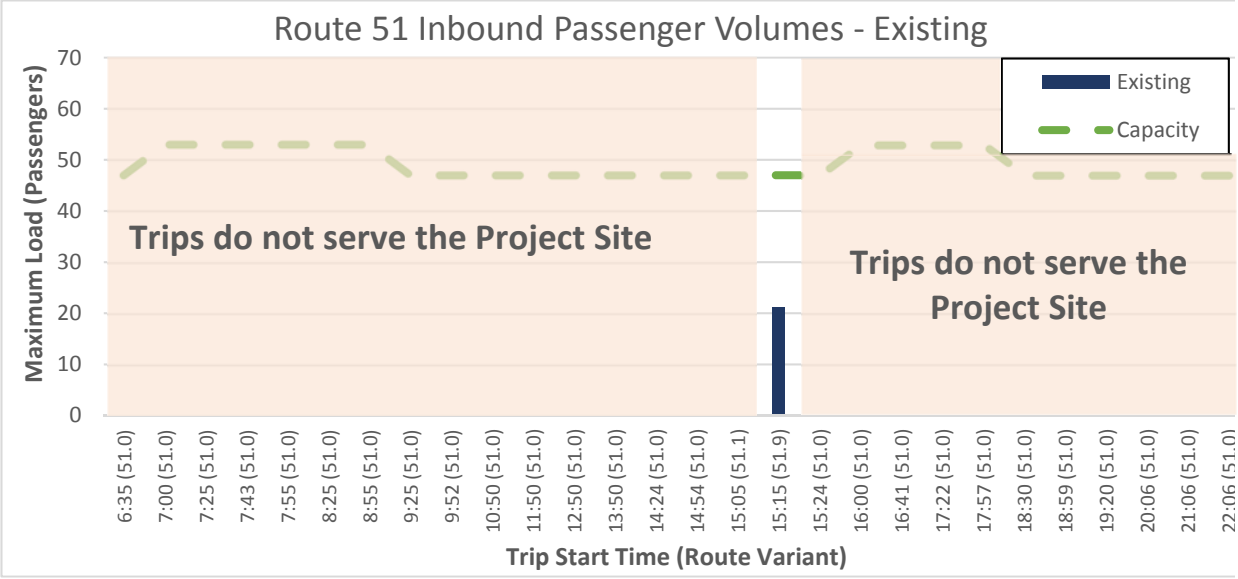

Figure 5.13: Route 51 Inbound Passenger Volumes - Existing

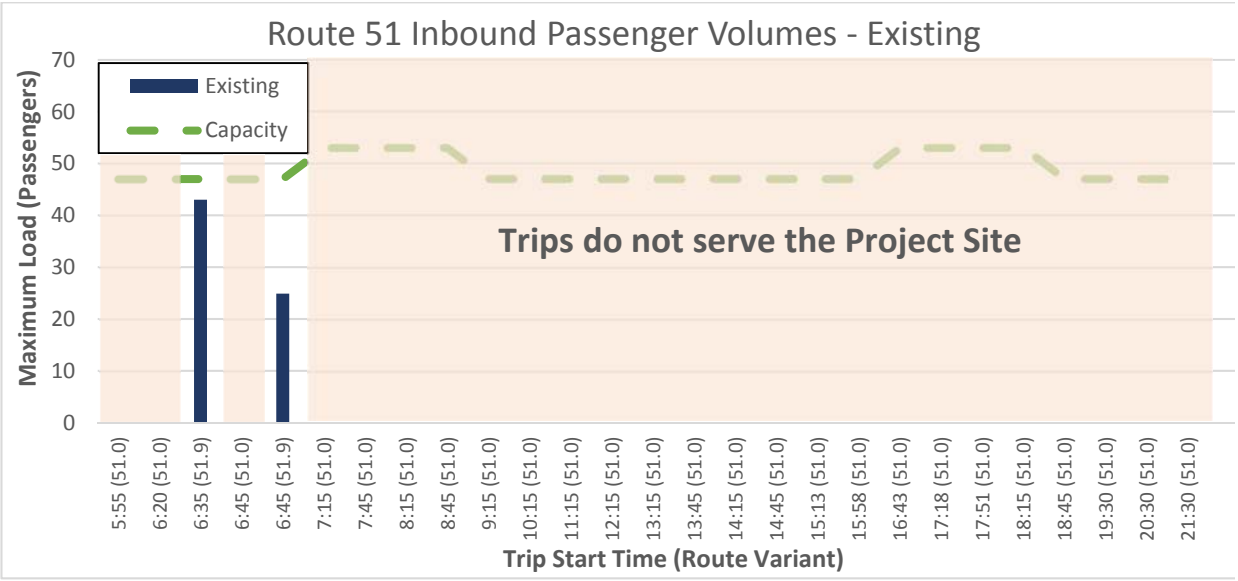

Figure 5.14: Route 51 Outbound Passenger Volumes - Existing

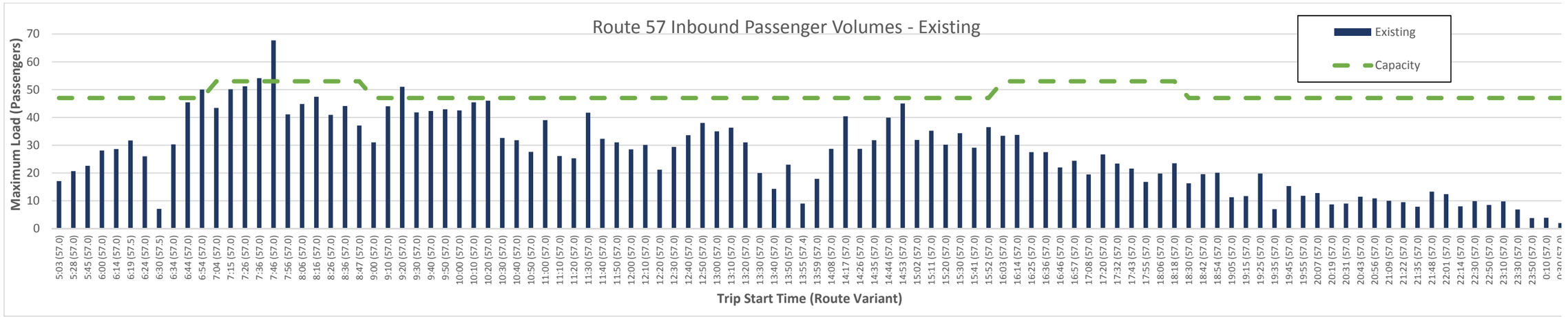

Figure 5.15: Route 57 Inbound Passenger Volumes - Existing

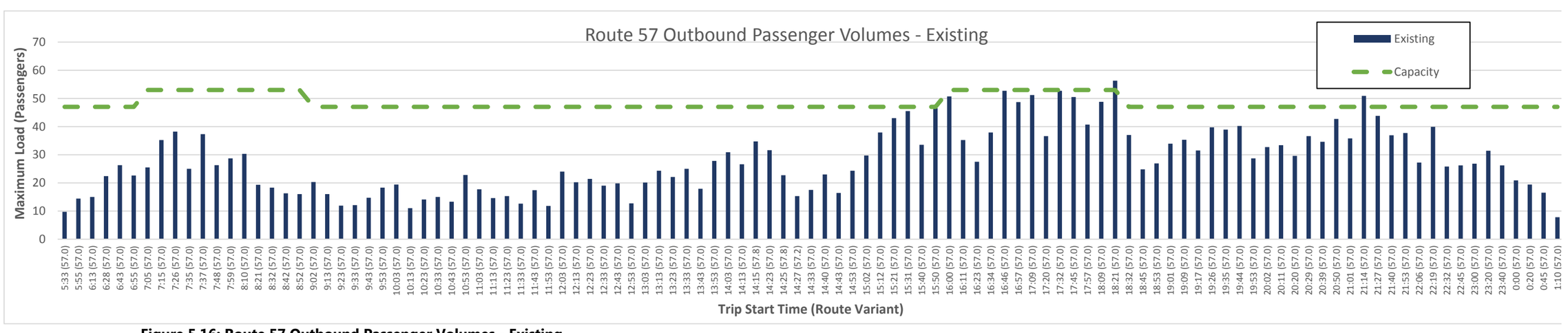

Figure 5.16: Route 57 Outbound Passenger Volumes - Existing

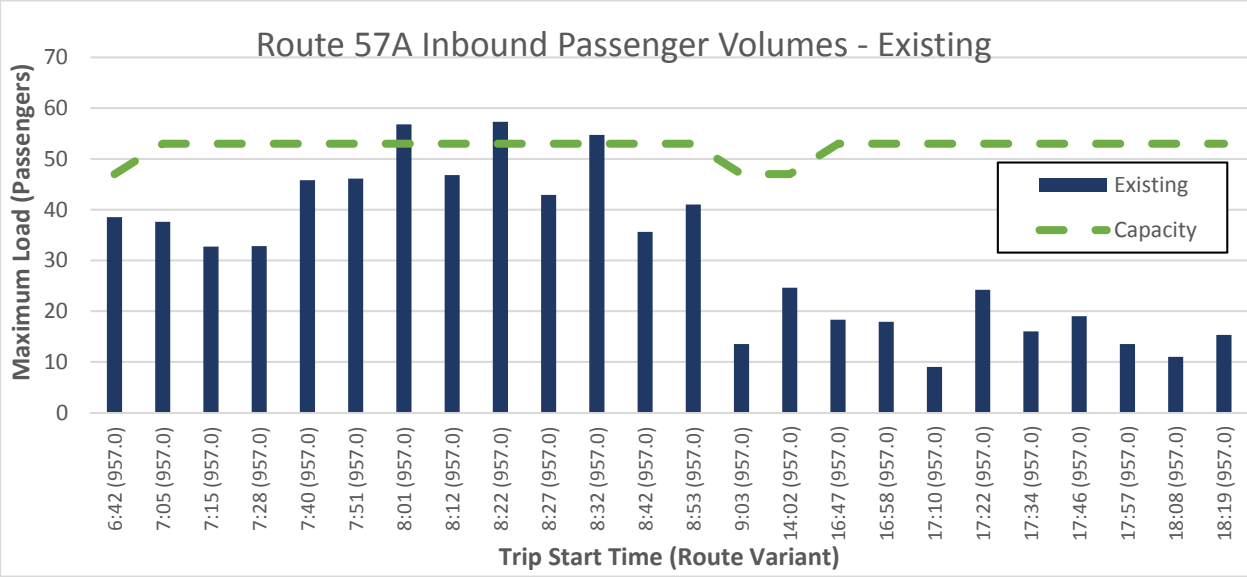

Figure 5.17: Route 57A Inbound Passenger Volumes - Existing

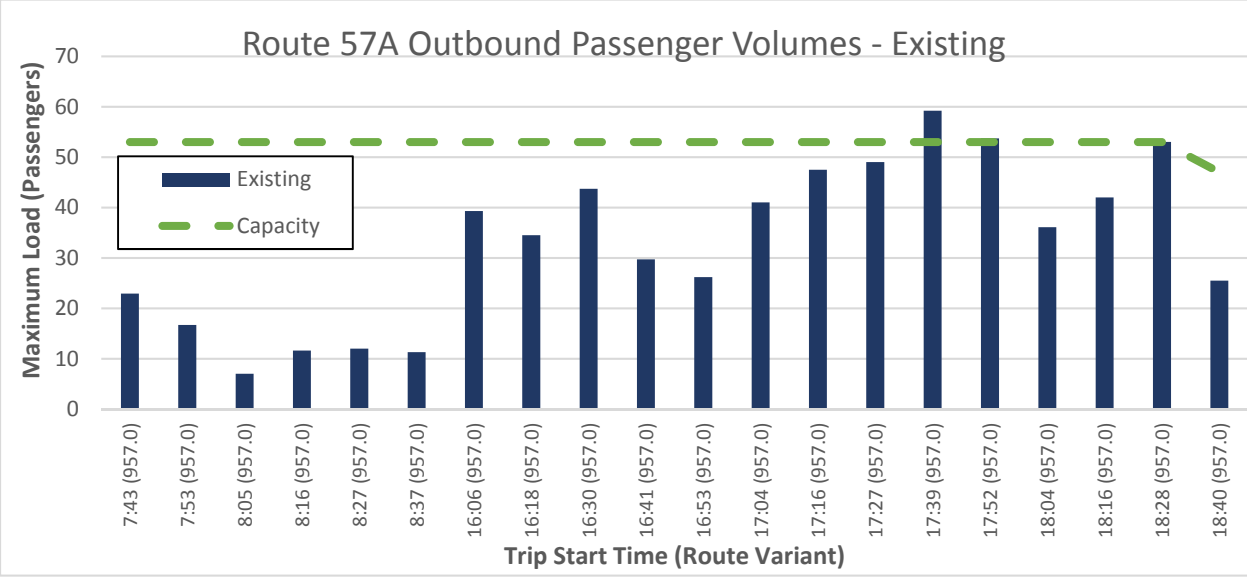

Figure 5.18: Route 57A Outbound Passenger Volumes – Existing

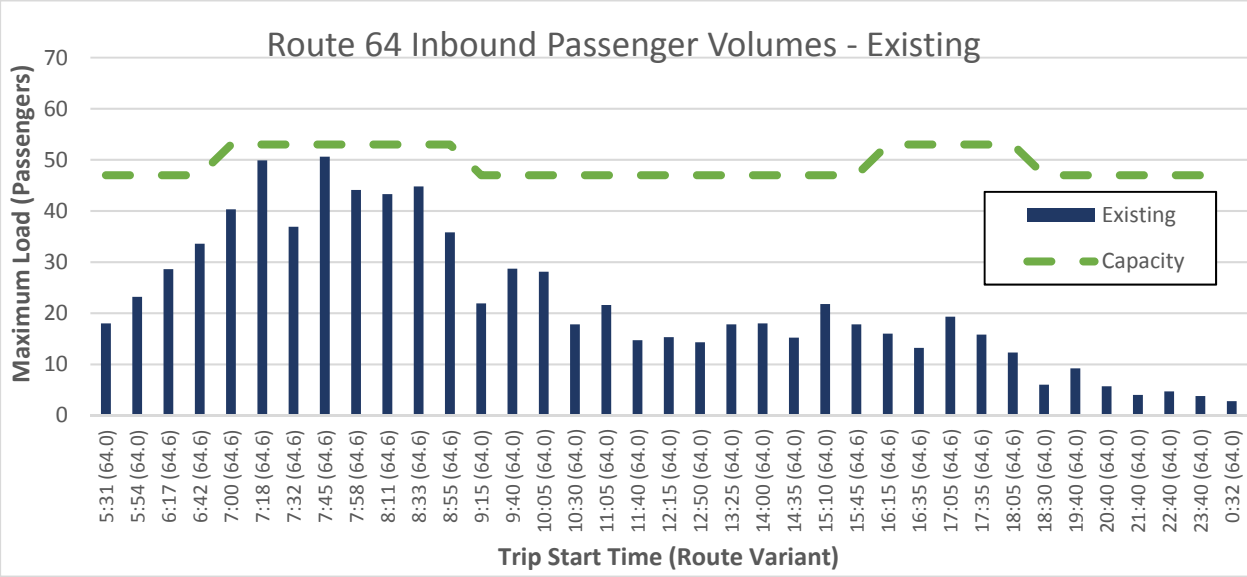

Figure 5.19: Route 64 Inbound Passenger Volumes - Existing

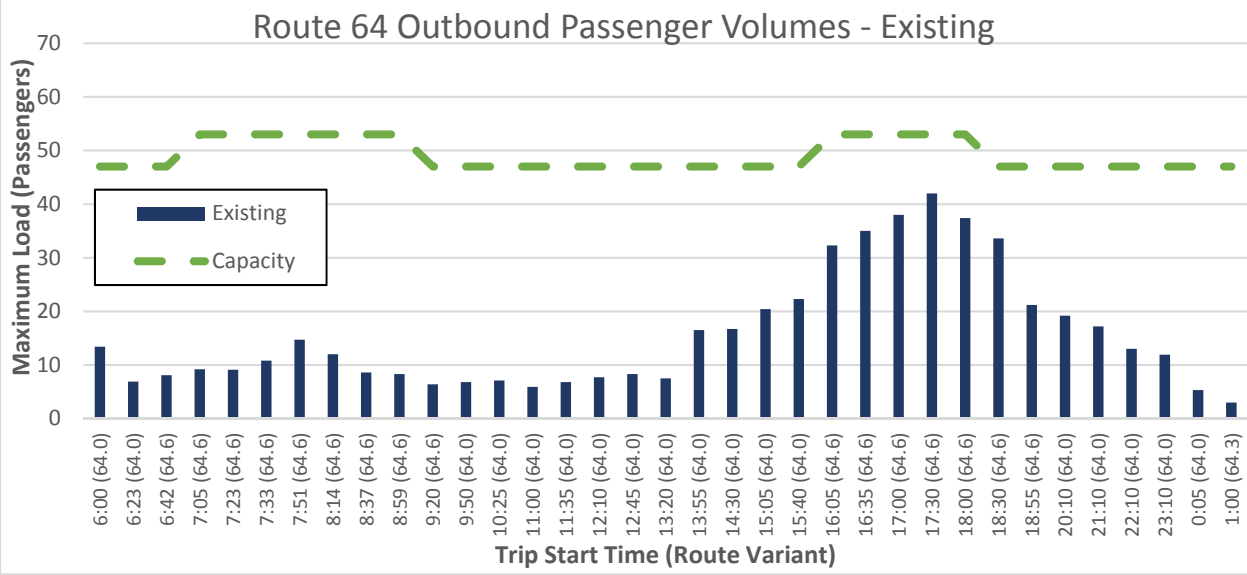

Figure 5.20: Route 64 Outbound Passenger Volumes - Existing

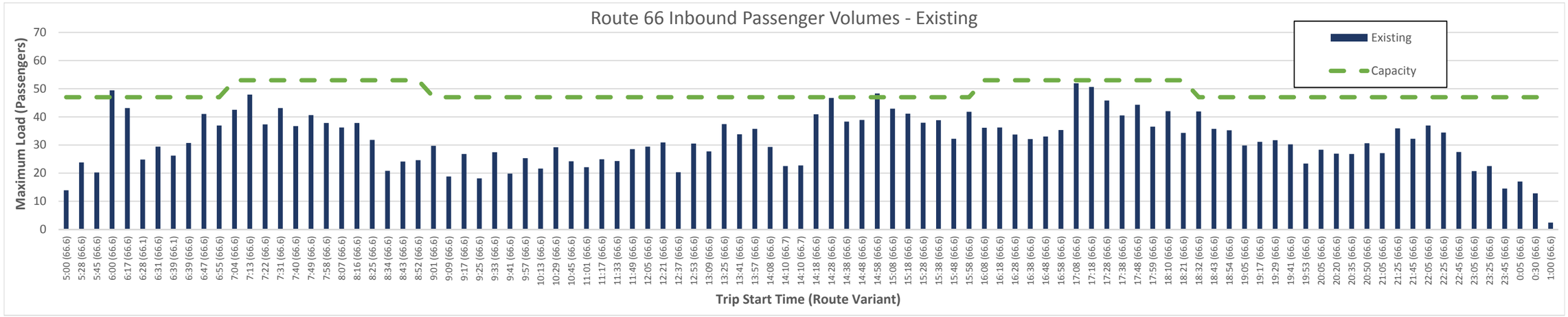

Figure 5.21: Route 66 Inbound Passenger Volumes - Existing

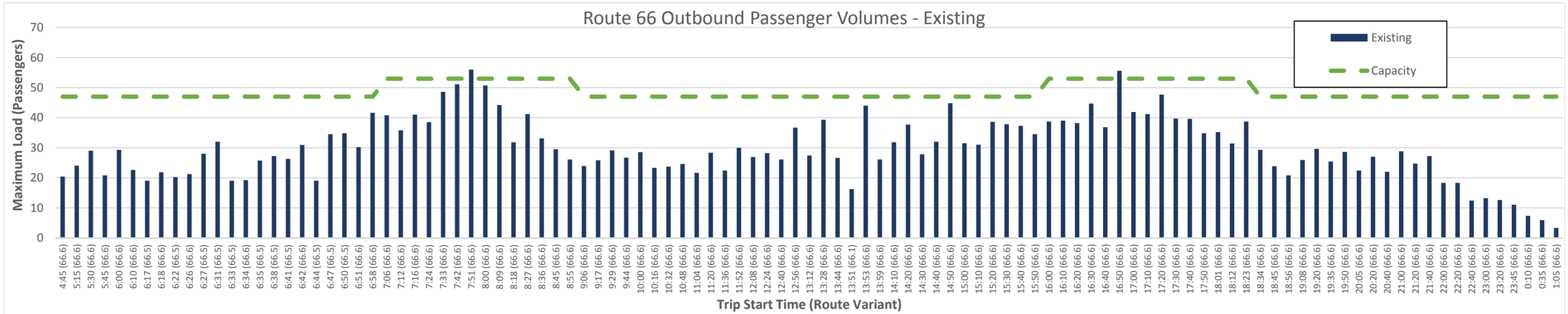

Figure 5.22: Route 66 Outbound Passenger Volumes - Existing

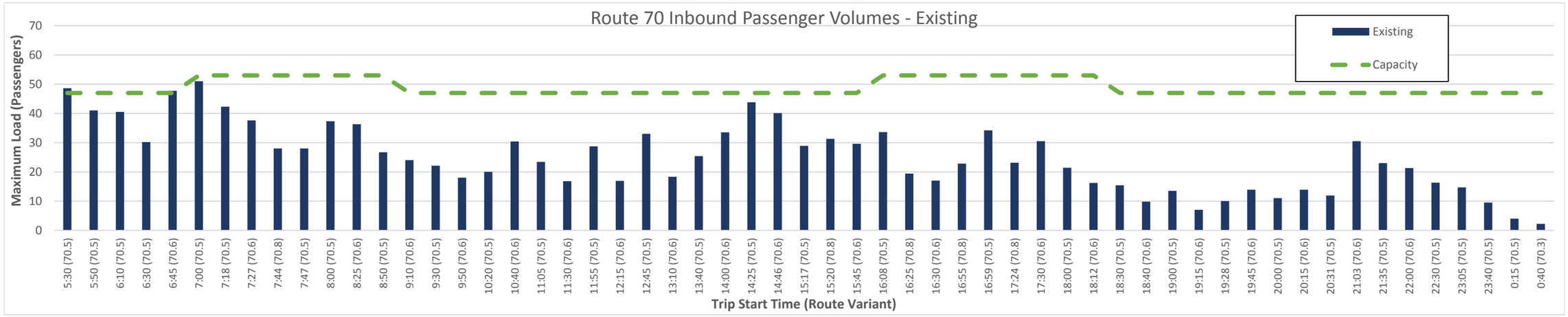

Figure 5.23: Route 70 Inbound Passenger Volumes - Existing

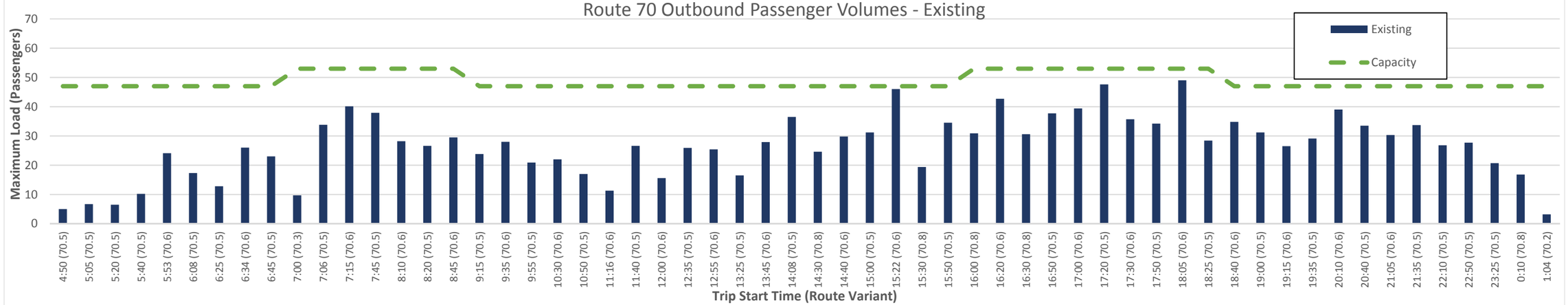

Figure 5.24: Route 70 Outbound Passenger Volumes - Existing

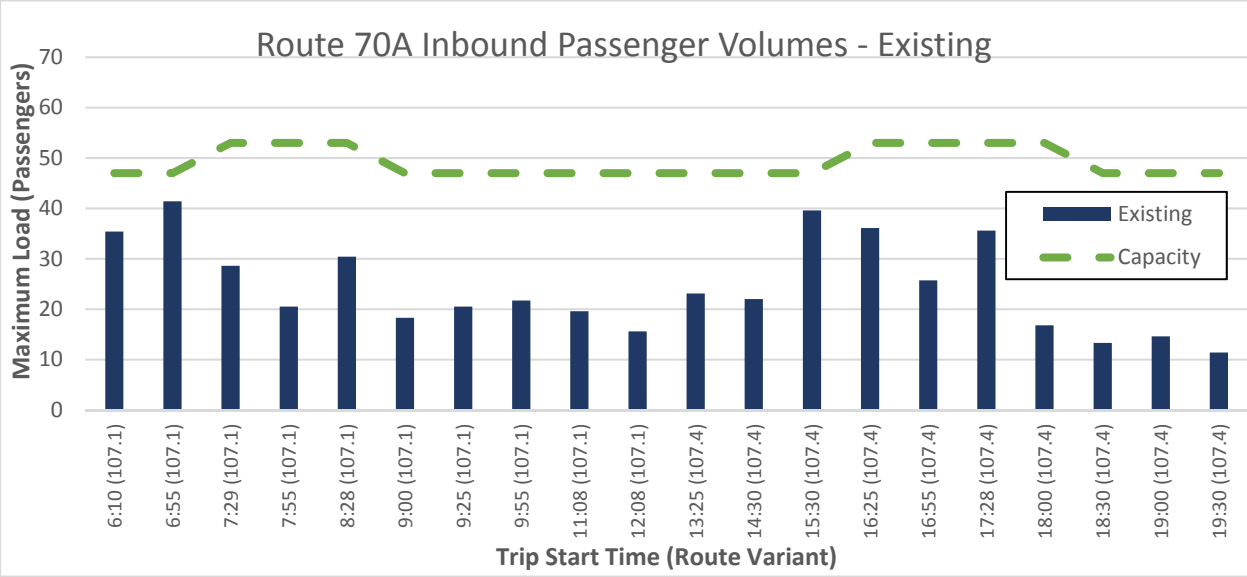

Figure 5.25: Route 70A Inbound Passenger Volumes - Existing

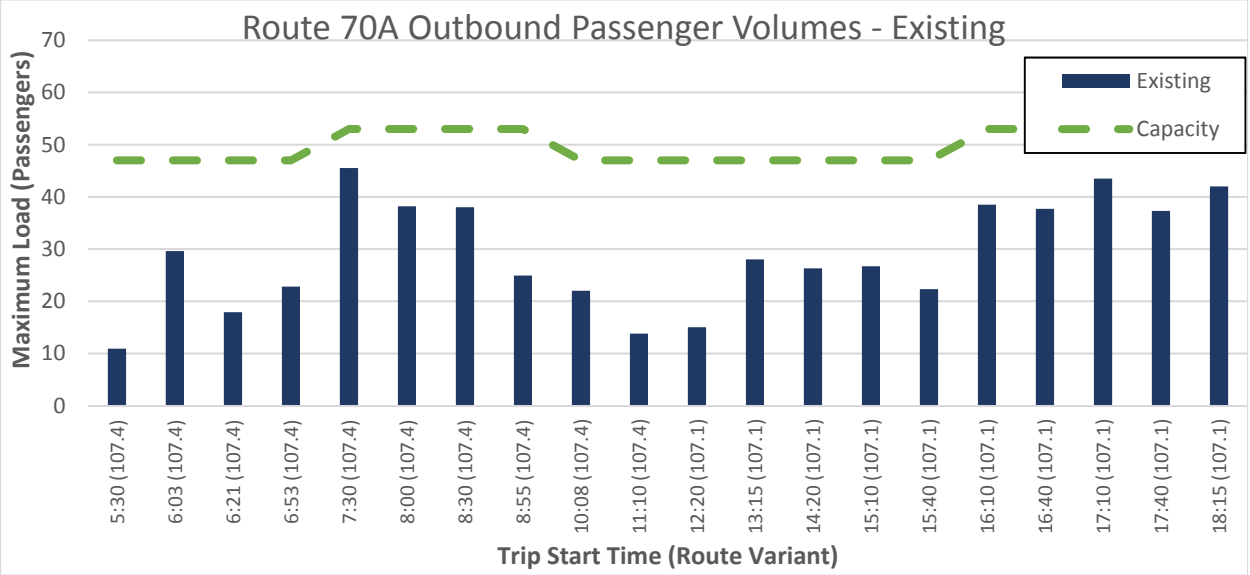

Figure 5.26: Route 70A Outbound Passenger Volumes - Existing

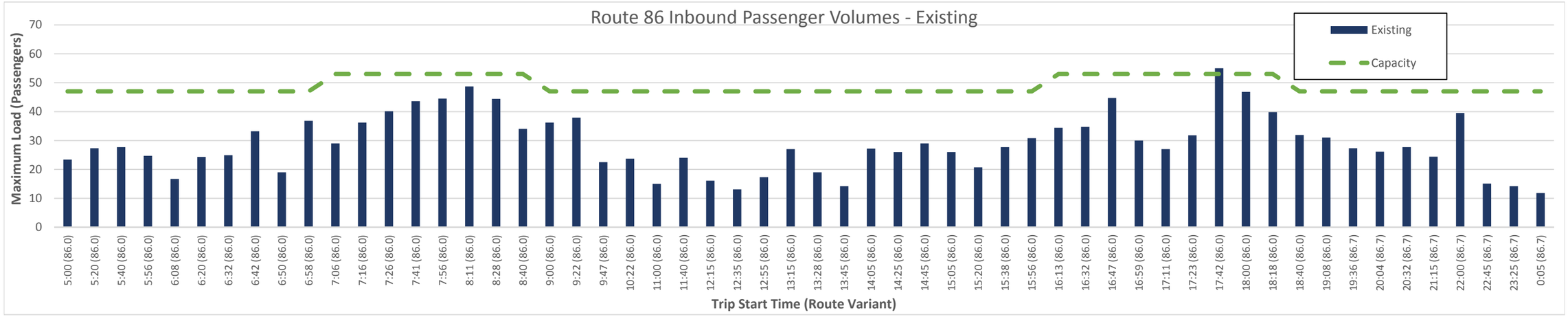

Figure 5.27: Route 86 Inbound Passenger Volumes - Existing

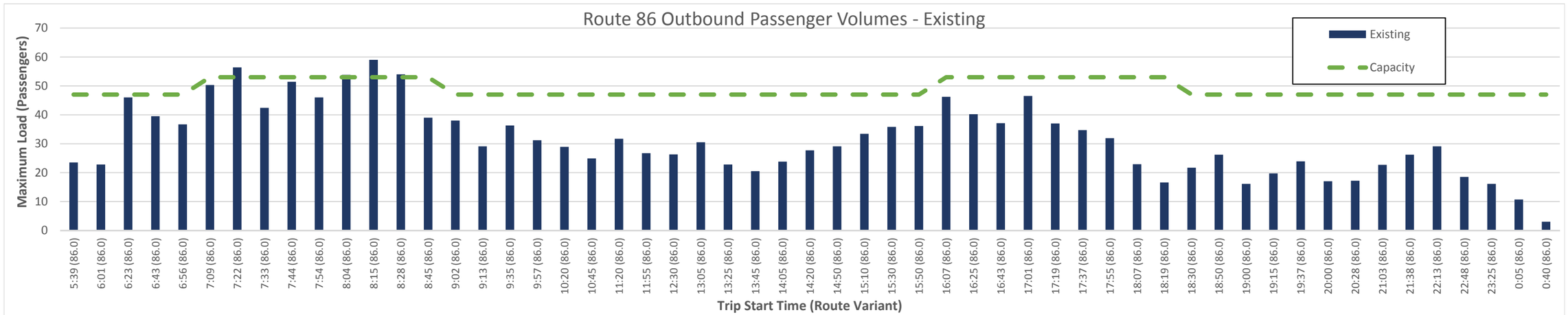

Figure 5.28: Route 86 Outbound Passenger Volumes - Existing

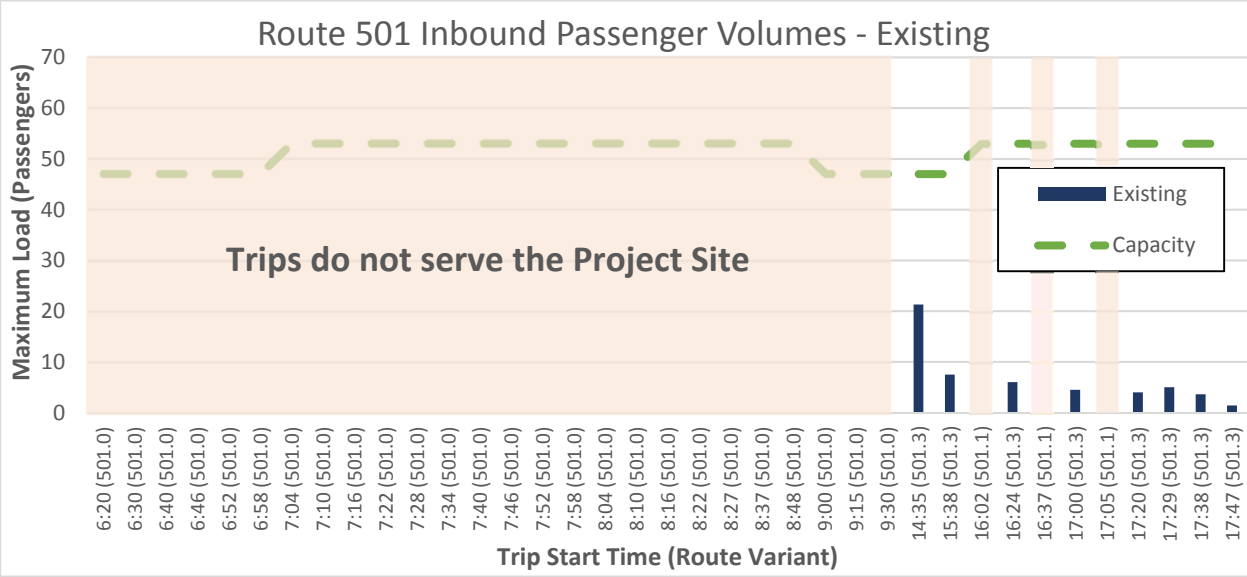

Figure 5.29: Route 501 Inbound Passenger Volumes - Existing

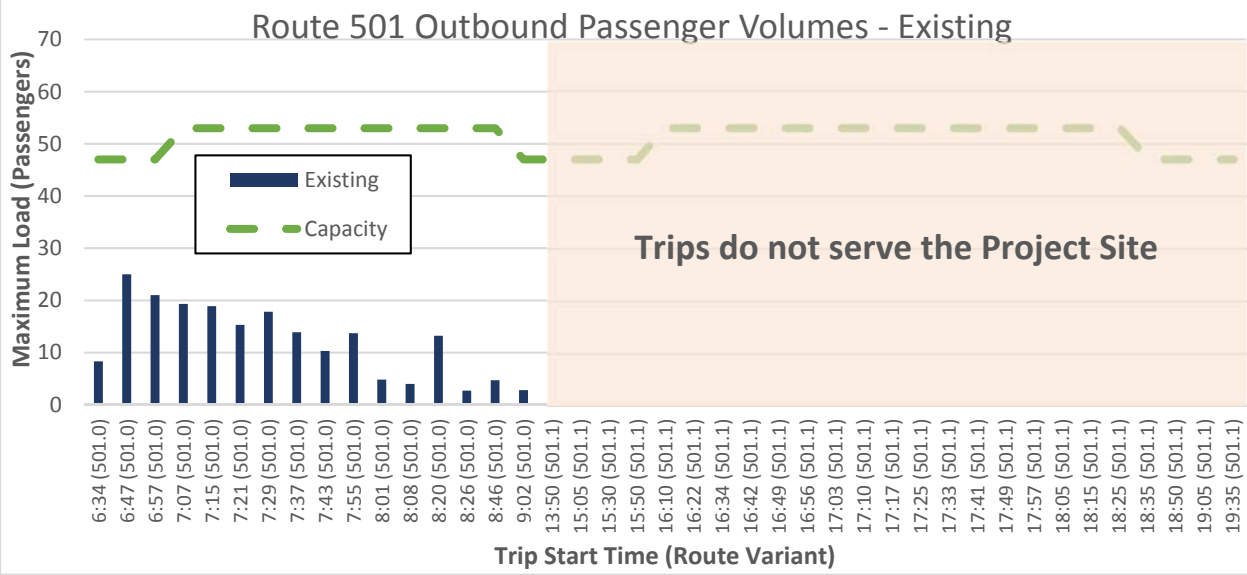

Figure 5.30: Route 501 Outbound Passenger Volumes - Existing

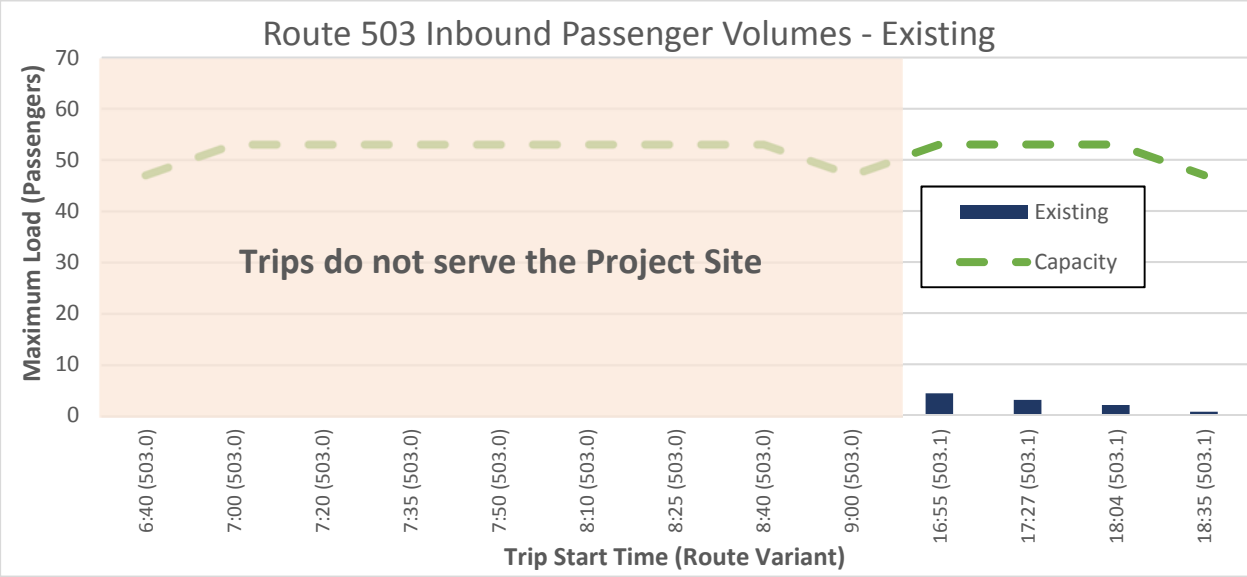

Figure 5.31: Route 503 Inbound Passenger Volumes - Existing

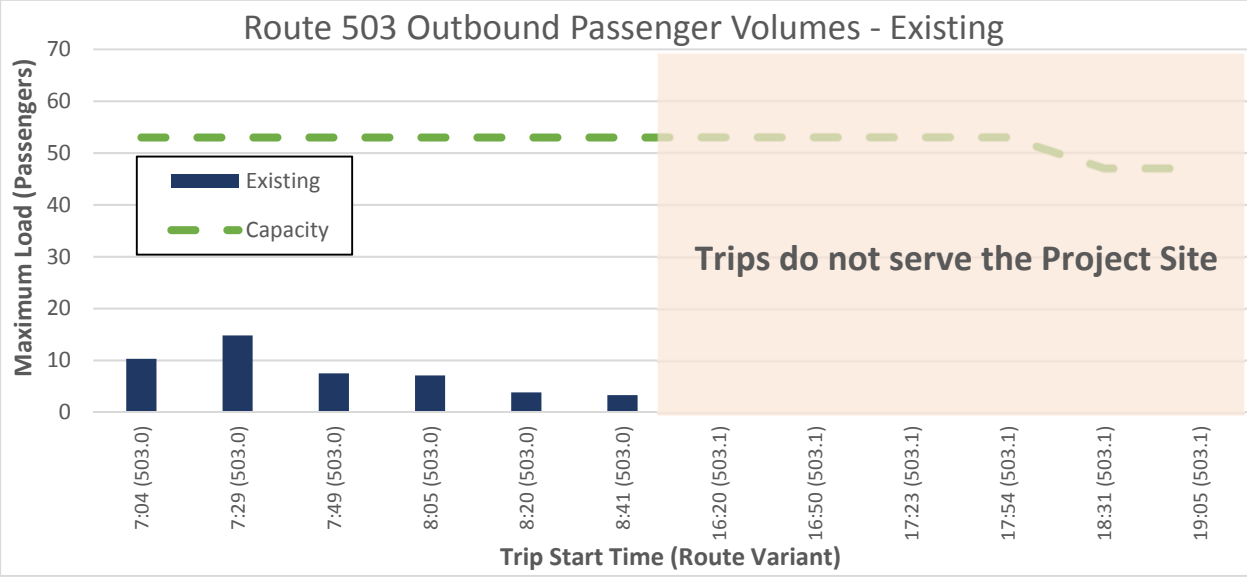

Figure 5.32: Route 503 Outbound Passenger Volumes - Existing

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- No Parking
- Unrestricted Parking
- No Parking 4 PM - 6 PM
- Parking 2 Hour Limit 8 AM - 6 PM Mon - Sat
- Allston/Brighton Residential Permit Parking 6 PM - 8 AM
- Drop-off Only - 5-minute Limit
- Parking 30-minute Limit Mon - Sat
- No Stopping Weekdays 7 AM - 9:30 AM
- No Parking 8 AM - 6 PM Except Sat and Sun
- Allston/Brighton 2 Hour Parking Limit (Except Residential Permit) 8 AM - 6 PM Mon - Fri

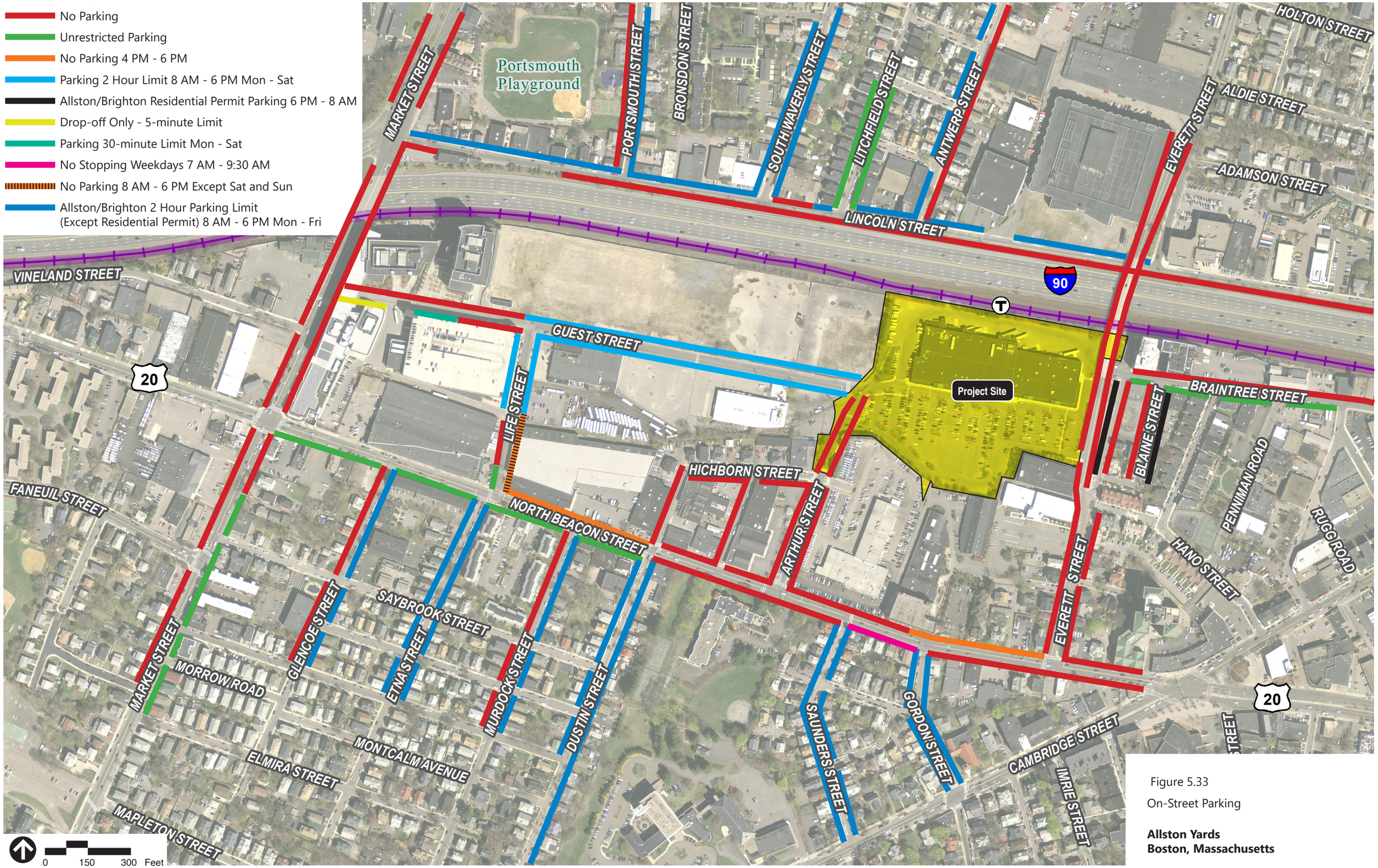

Figure 5.33
On-Street Parking

Allston Yards
Boston, Massachusetts

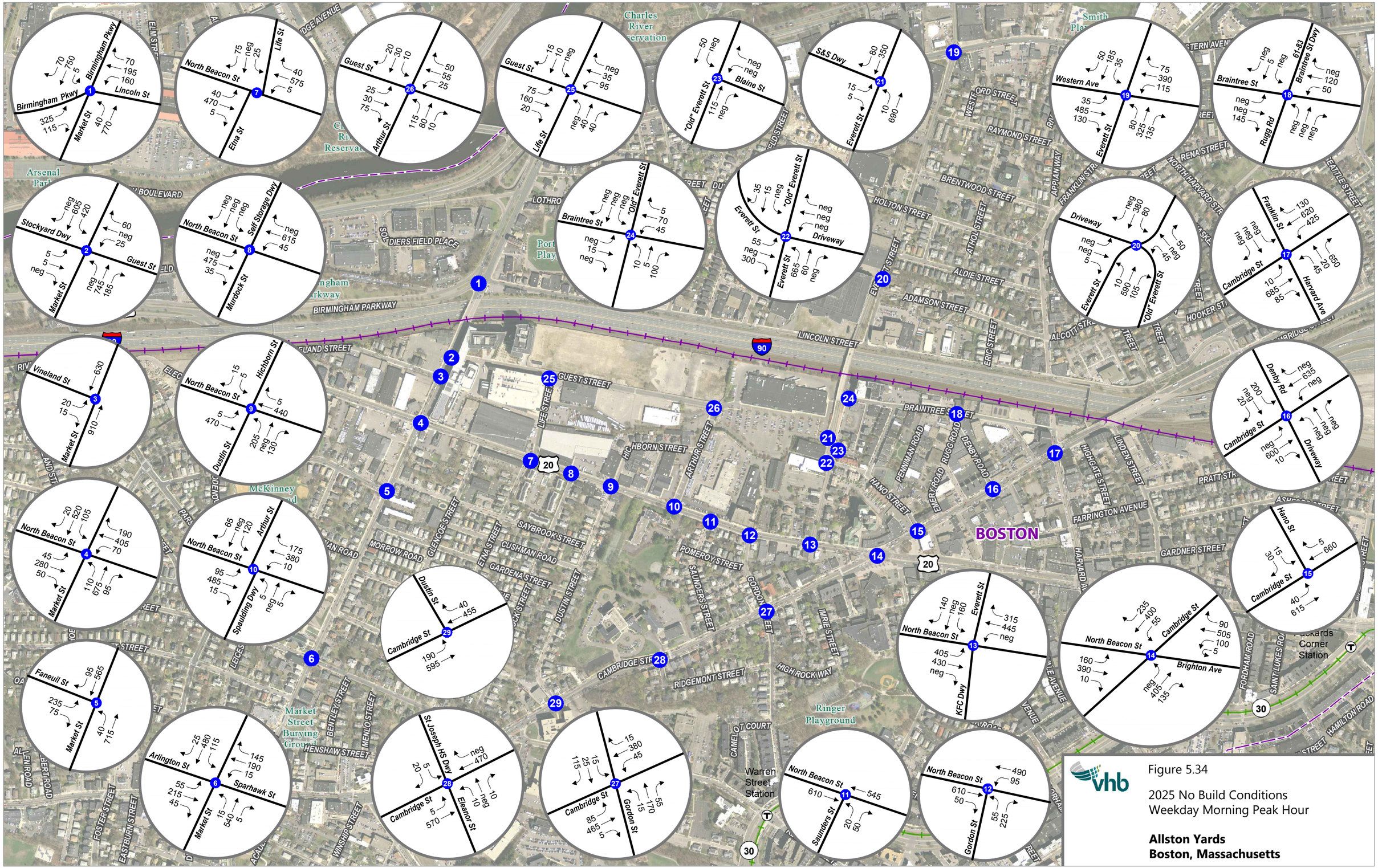

Figure 5.34

2025 No Build Conditions
Weekday Morning Peak Hour

Allston Yards
Boston, Massachusetts

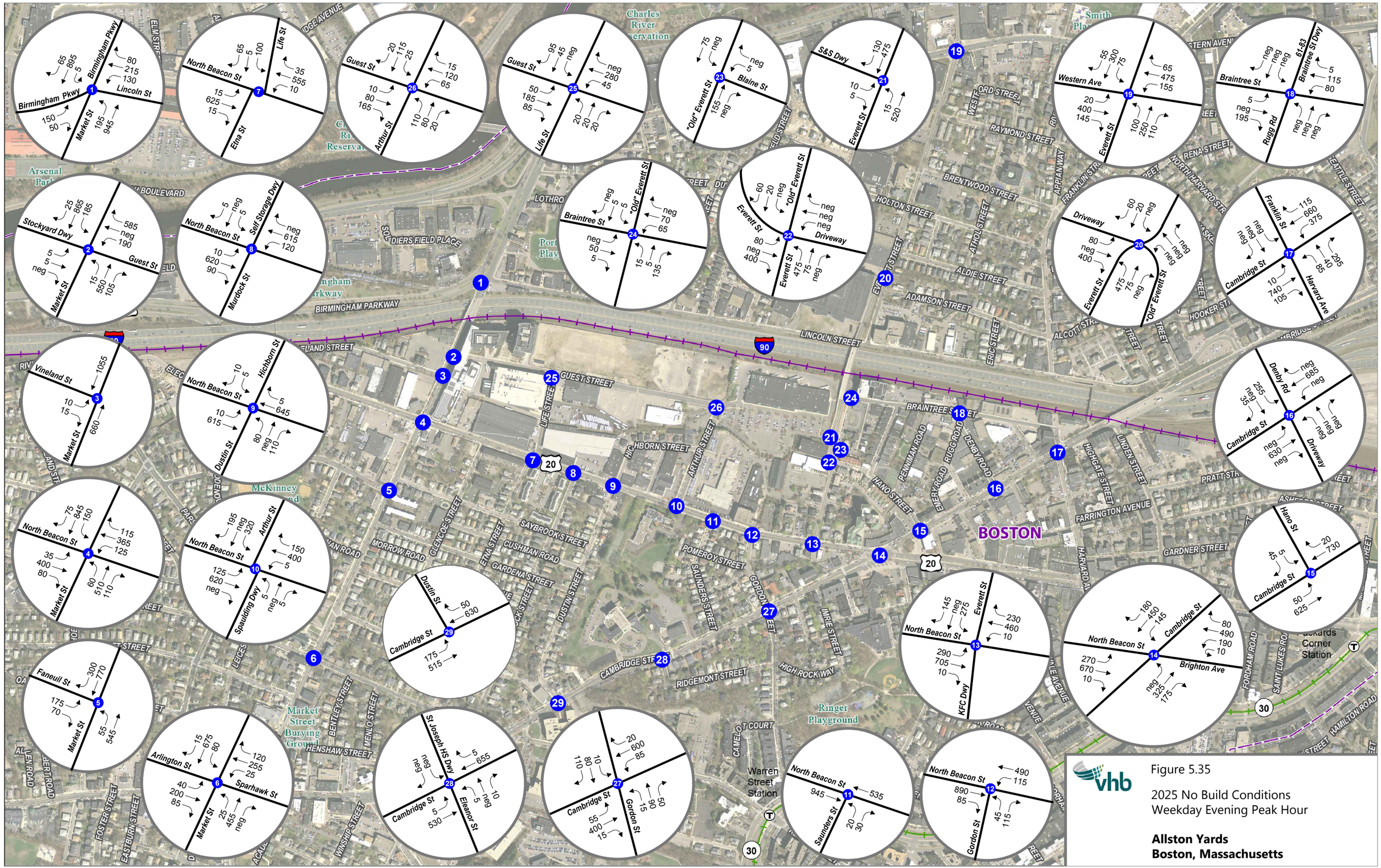

Figure 5.35

2025 No Build Conditions
Weekday Evening Peak Hour

Allston Yards
Boston, Massachusetts

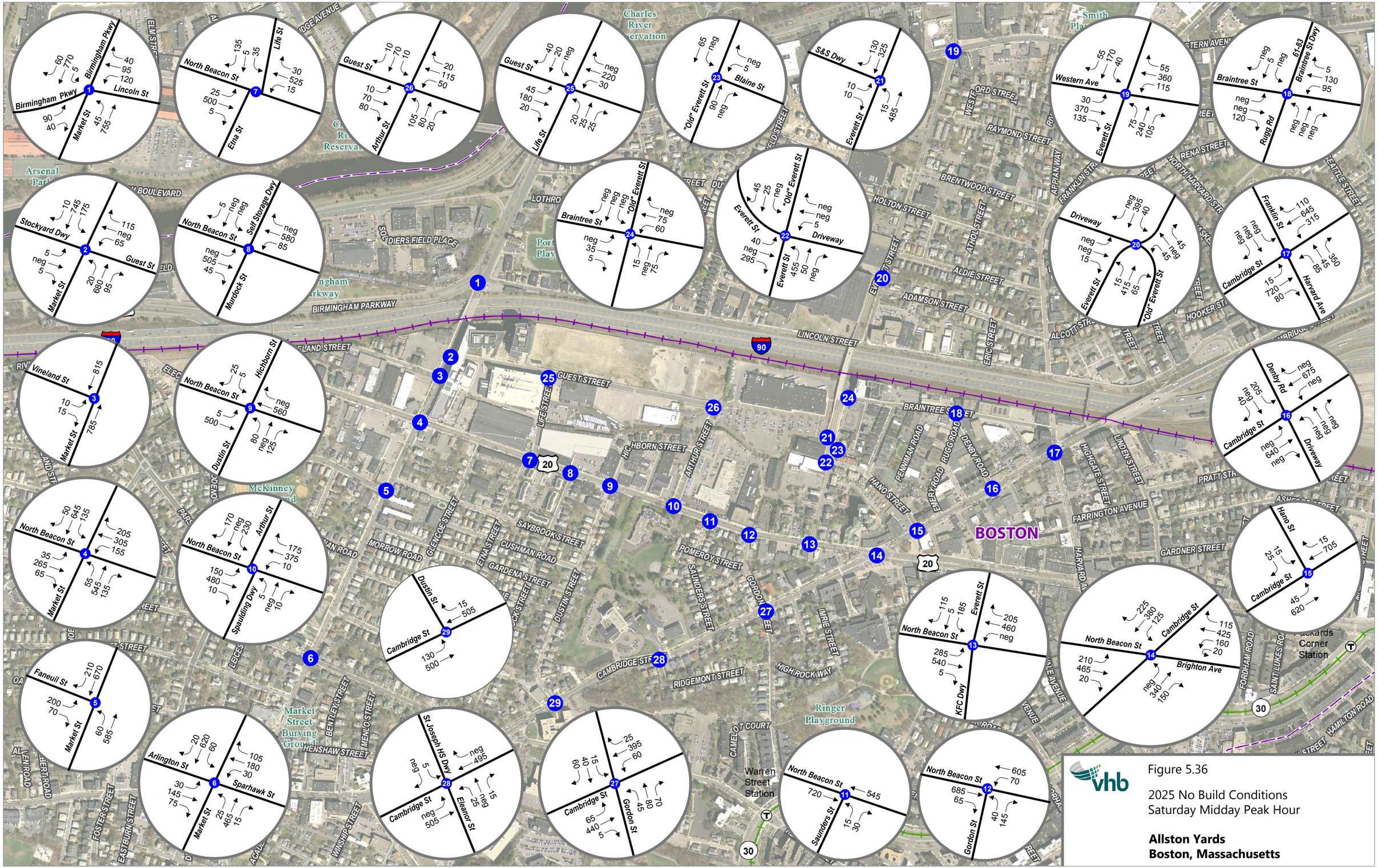

Figure 5.36

2025 No Build Conditions
Saturday Midday Peak Hour

Allston Yards
Boston, Massachusetts

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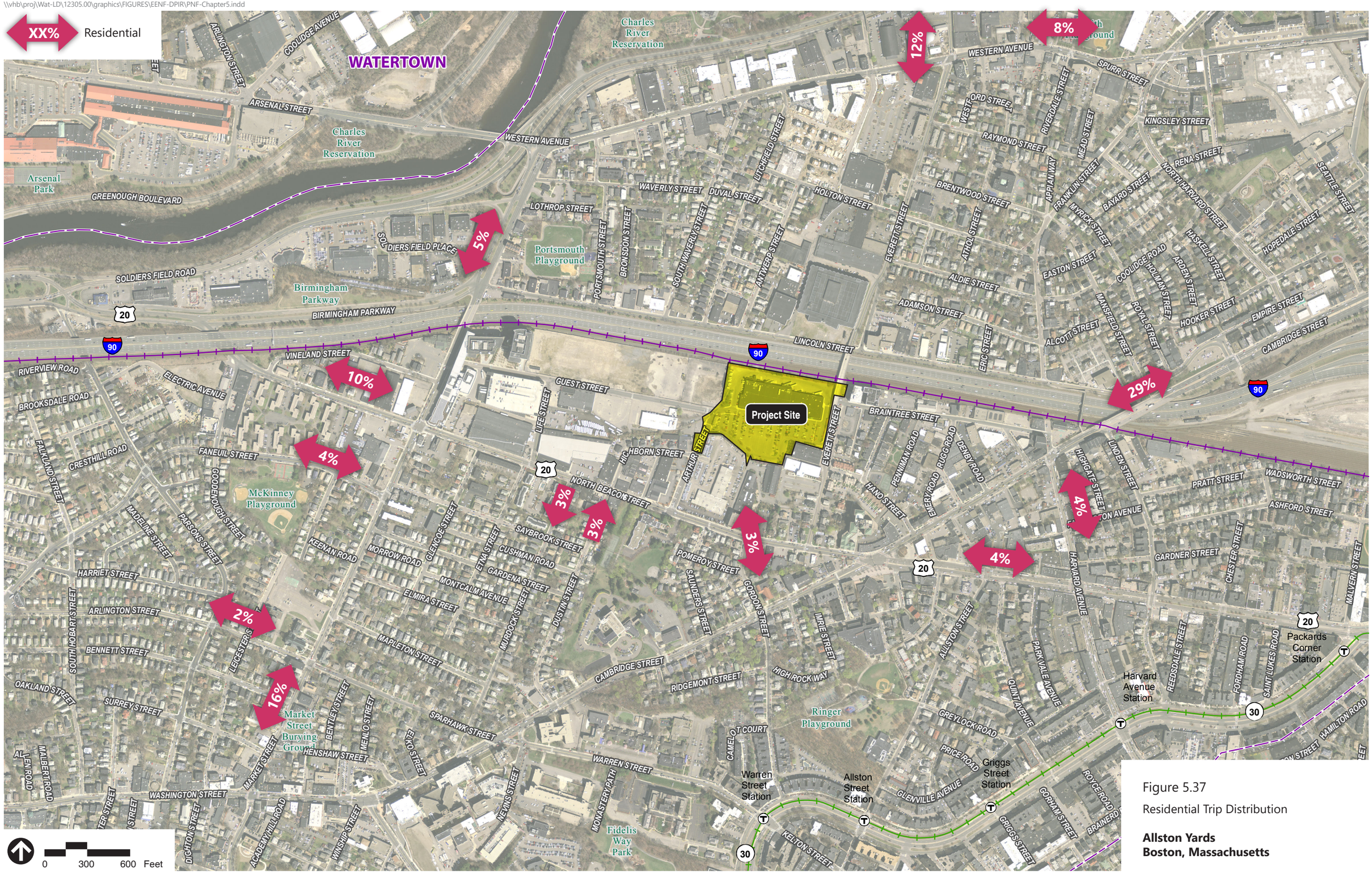

Figure 5.37

Residential Trip Distribution

Allston Yards
Boston, Massachusetts

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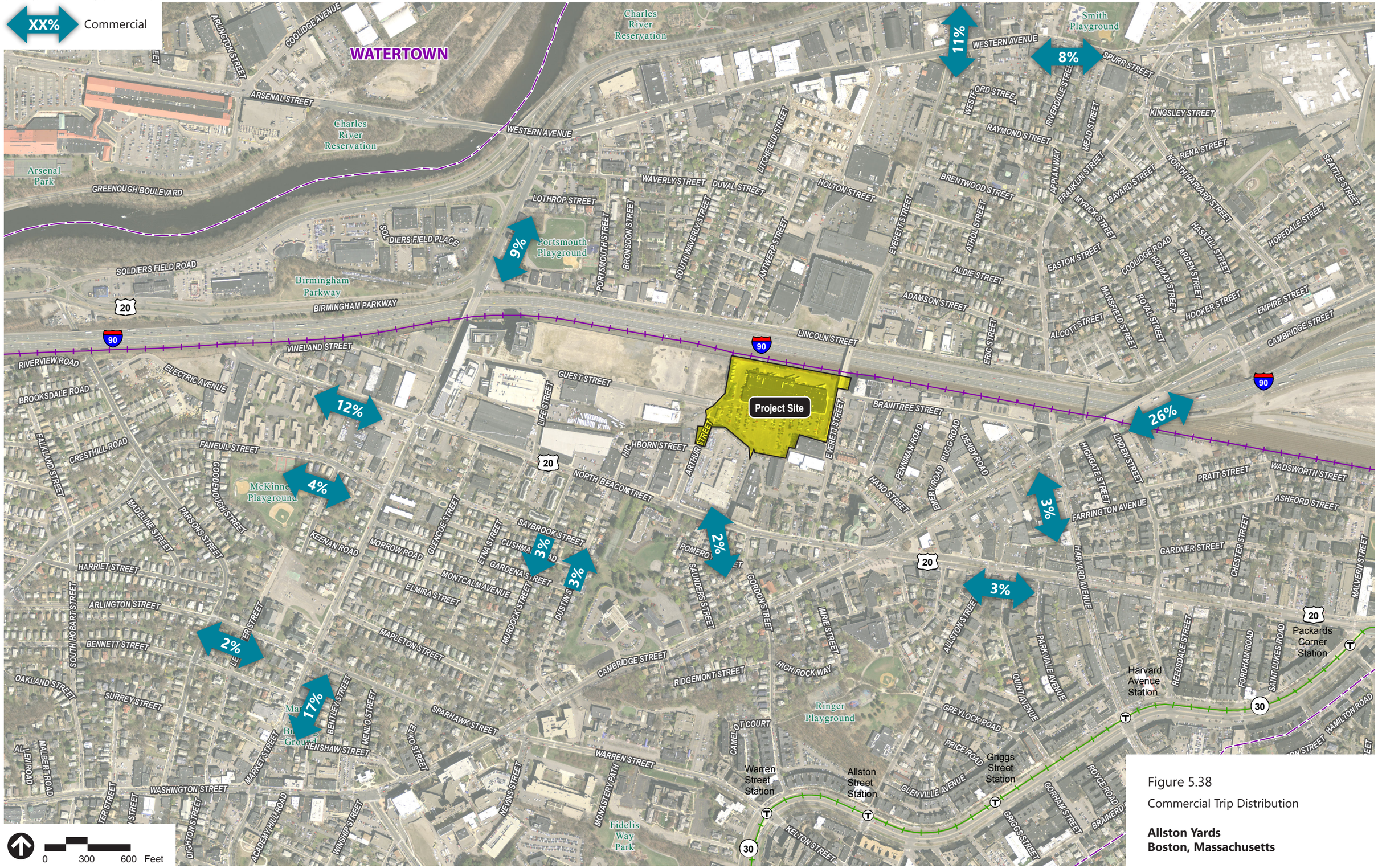
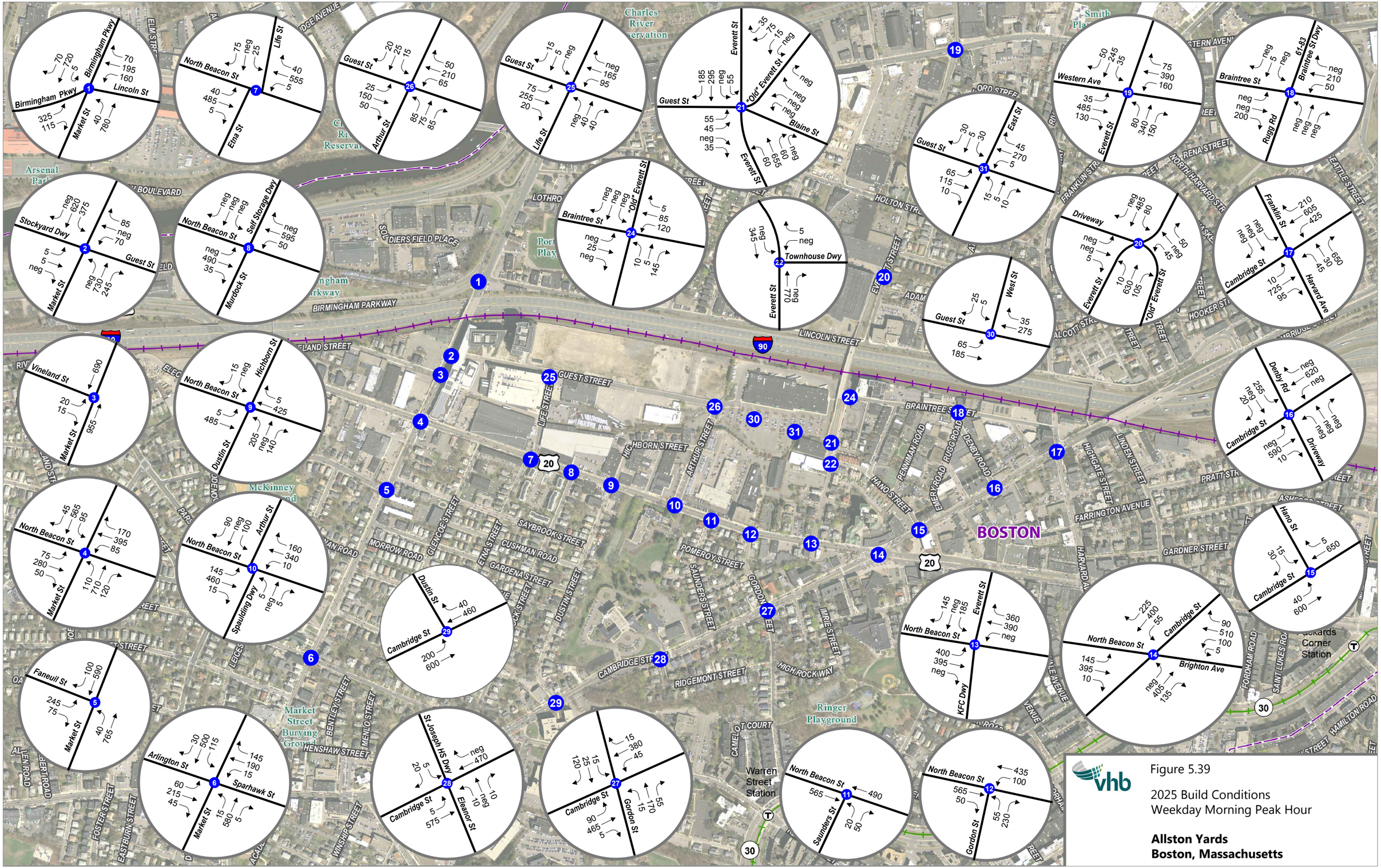
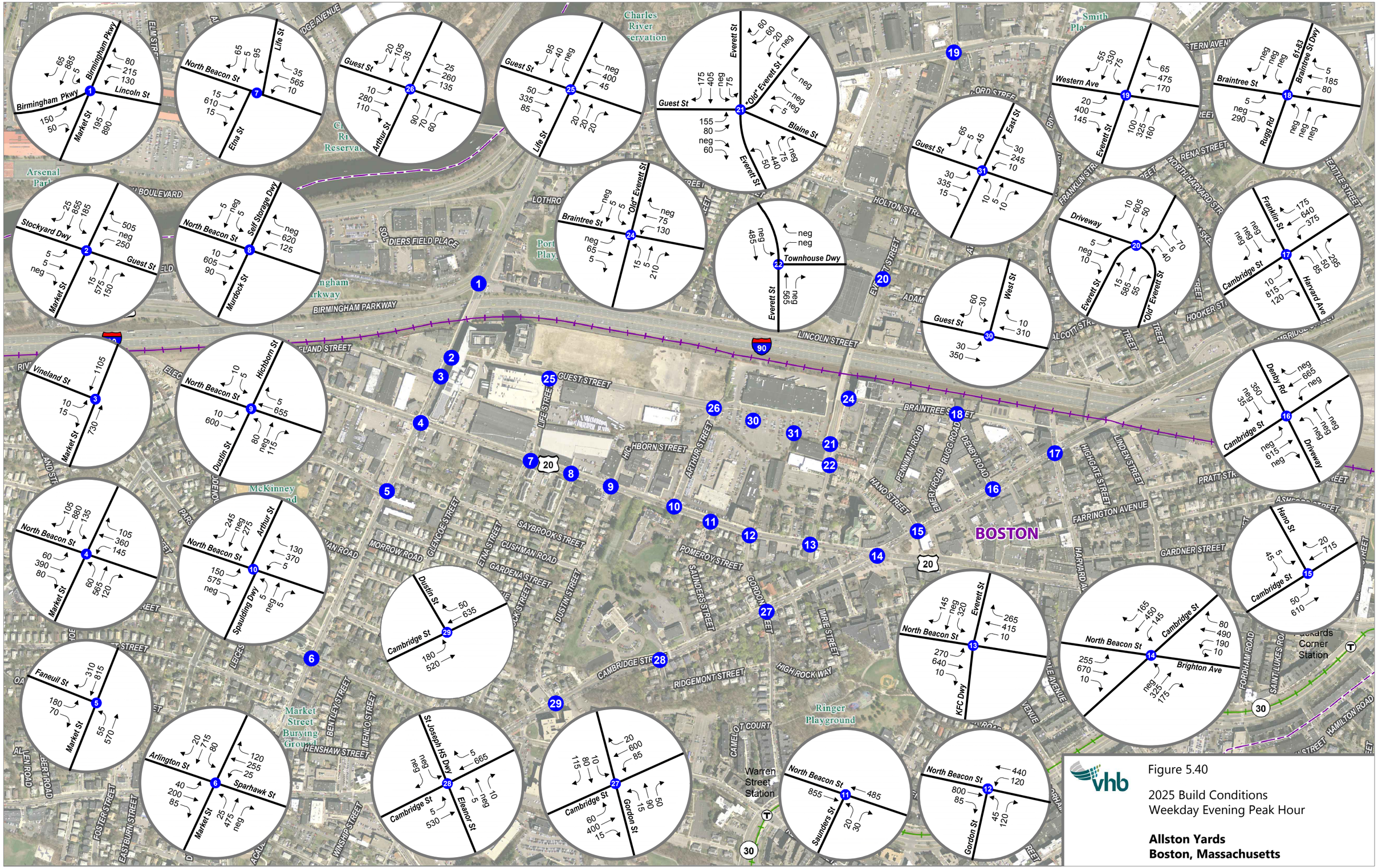


Figure 5.38
Commercial Trip Distribution

Allston Yards
Boston, Massachusetts


Birmingham Pkwy
Lincoln St
Market St
North Beacon St
Life St
Etna St
Guest St
Arthur St
Everett St
"Old" Everett St
Blaine St
Western Ave
Braintree St
Braintree St Dwy
Rugg Rd
Stockyard Dwy
Guest St
Self Storage Dwy
Murdock St
Braintree St
"Old" Everett St
Everett St
Townhouse Dwy
Guest St
East St
Everett St
Driveway
"Old" Everett St
Franklin St
Cambridge St
Harvard Ave
Vineland St
Market St
North Beacon St
Hichborn St
Dustin St
Faneuil St
Market St
North Beacon St
Arthur St
Spaulding Dwy
Arlington St
Market St
Sparhawk St
Cambridge St
St Joseph HS Dwy
Eleanor St
Cambridge St
Gordon St
Saunders St
North Beacon St
Gordon St
North Beacon St
Everett St
KFC Dwy
Guest St
West St
Cambridge St
Hano St
Denby Rd
Driveway
North Beacon St
Cambridge St
Brighton Ave
BIRMINGHAM PARKWAY
LINCOLN STREET
GUEST STREET
BRAINTREE STREET
BOSTON
Charles River Reservation
Arsenal Park
McKinney Playground
Ringer Playground
Warren Street Station
Packards Corner Station
Figure 5.39
2025 Build Conditions
Weekday Morning Peak Hour
Allston Yards
Boston, Massachusetts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Life St
Etna St
Guest St
Arthur St
Everett St
"Old" Everett St
Blaine St
Braintree St
Rugg Rd
Western Ave
East St
Stockyard Dwy
Guest St
Self Storage Dwy
Murdock St
Townhouse Dwy
Driveway
Franklin St
Cambridge St
Harvard Ave
Vineland St
Hichborn St
Dustin St
West St
Braintree St Dwy
Denby Rd
Faneuil St
Arlington St
Sparhawk St
St Joseph HS Dwy
Eleanor St
Gordon St
Saunders St
Hano St
Spaulding Dwy
KFC Dwy
Brighton Ave
BIRMINGHAM PARKWAY
LINCOLN STREET
GUEST STREET
BRAINTREE STREET
BOSTON
Charles River Reservation
Arsenal Park
Port Playground
McKinney Burying Ground
Market Street Burying Ground
Ringer Playground
Warren Street Station
Packards Corner Station
Figure 5.40
2025 Build Conditions
Weekday Evening Peak Hour
Allston Yards
Boston, Massachusetts

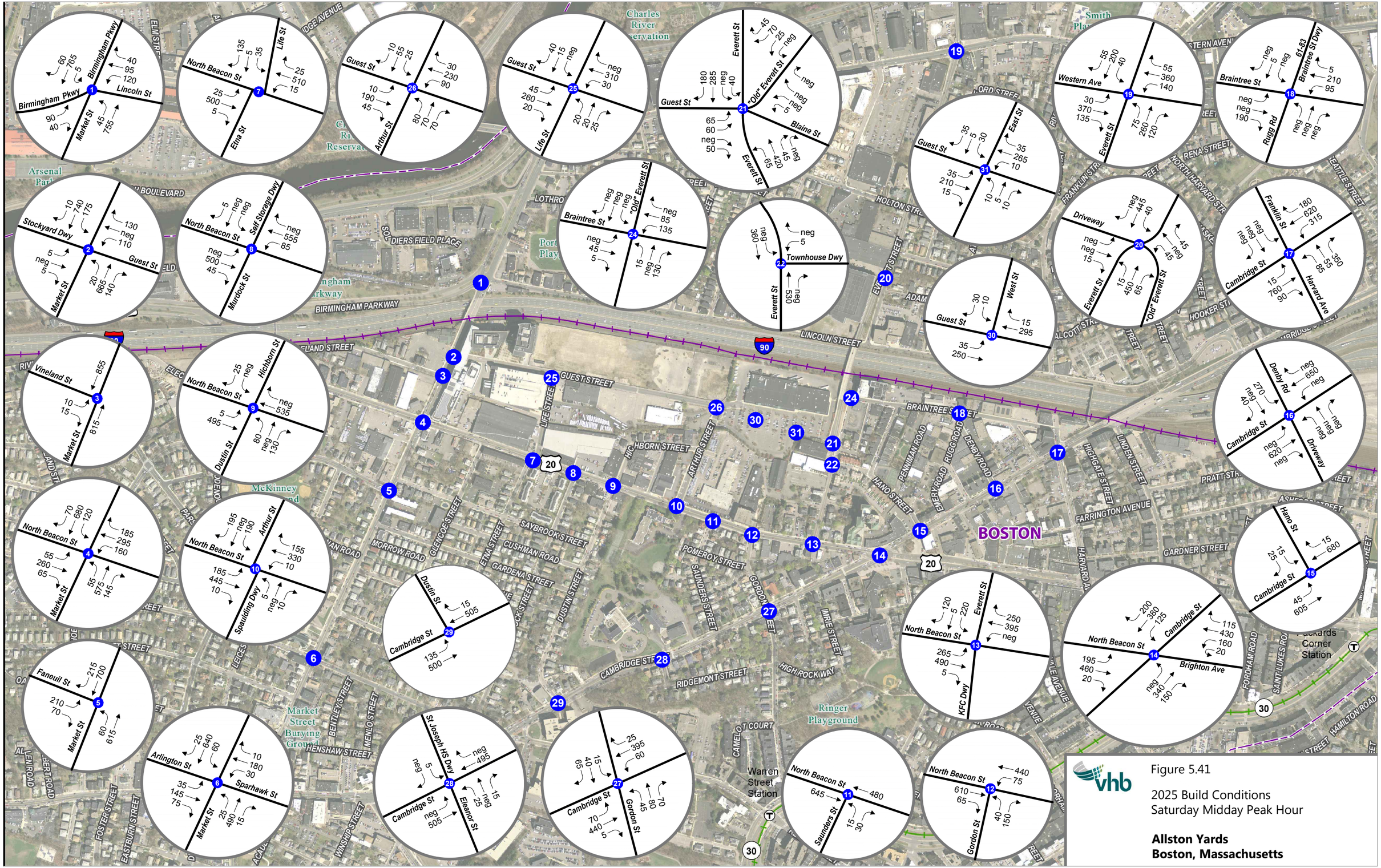
Birmingham Pkwy
Lincoln St
Market St
North Beacon St
Life St
Etna St
Guest St
Arthur St
Everett St
"Old" Everett St
Blaine St
Braintree St
Rugg Rd
Western Ave
Driveway
East St
Stockyard Dwy
Guest St
Self Storage Dwy
Murdock St
Townhouse Dwy
Braintree St Dwy
Vineland St
Hichborn St
Dustin St
Faneuil St
Arlington St
Sparhawk St
Spaulding Dwy
Cambridge St
St Joseph HS Dwy
Eleanor St
Gordon St
Saunders St
West St
Frankin St
Harvard Ave
Cambridge St
Denby Rd
Hano St
KFC Dwy
Brighton Ave
Arsenal Park
Charles River Reservation
Smith Plaza
Port Playground
Ringer Playground
Warren Street Station
Packards Corner Station
BOSTON
BIRMINGHAM PARKWAY
LINCOLN STREET
GUEST STREET
BRAINTREE STREET
HOLTON STREET
ADAMS STREET
HOOKER STREET
NORTH HARVARD STREET
SOLDIERS FIELD PLACE
LOTHROP STREET
RENA STREET
SEATTLE STREET
FRANKLIN STREET
ELM STREET
LIFE STREET
ARTHUR STREET
HIGHBORN STREET
SAYBROOK STREET
CUSHMAN ROAD
GARDENA STREET
MORROW ROAD
GLENCOE STREET
ETNA STREET
DUSTIN STREET
SAUNDERS STREET
POMEROY STREET
GORDON STREET
IMRIE STREET
CAMBRIDGE STREET
RIDGEMONT STREET
HIGH ROCK WAY
CAMELOT COURT
HENSHAW STREET
BENTLEY STREET
MENLO STREET
WINSHIP STREET
FOSTER STREET
EASTBURN STREET
LEICES
HANO STREET
PENIMAN ROAD
EMERY ROAD
RUGG ROAD
DENBY ROAD
HIGHGATE STREET
LINDEN STREET
FARRINGTON AVENUE
GARDNER STREET
PRATT STREET
HARVARD AVENUE
FORDHAM ROAD
SAINT LUKES ROAD
HAMILTON ROAD
ALCOTT STREET
ELECTRIC AVENUE
Market Street Burying Ground
McKinney
1
2
3
4
5
6
7
8
9
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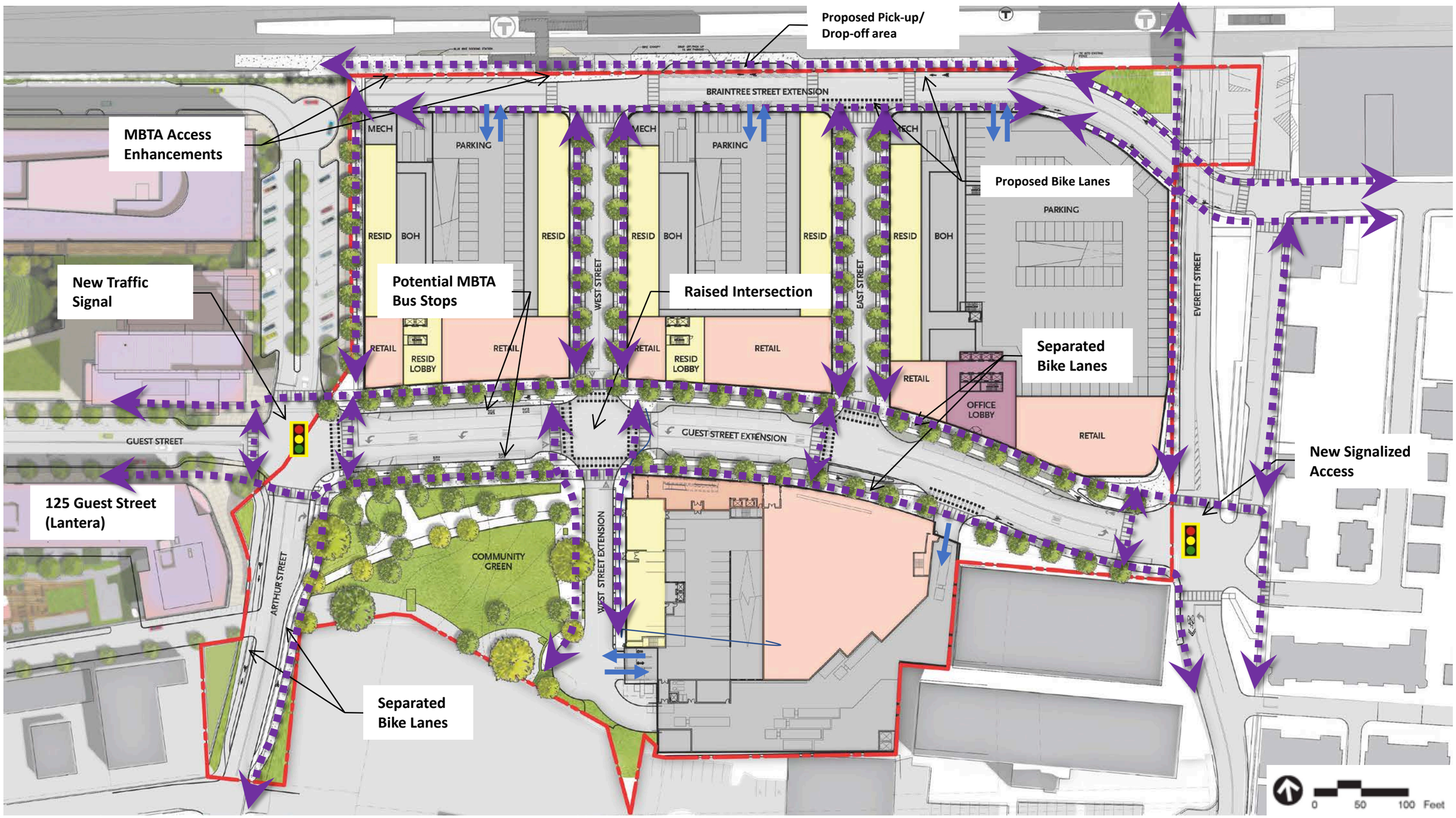
Figure 5.41
2025 Build Conditions
Saturday Midday Peak Hour
Allston Yards
Boston, Massachusetts

\\MAWALD\ld\12305.00\graphics\SLIDES\2019-02-01 Figure 5.42.pptx



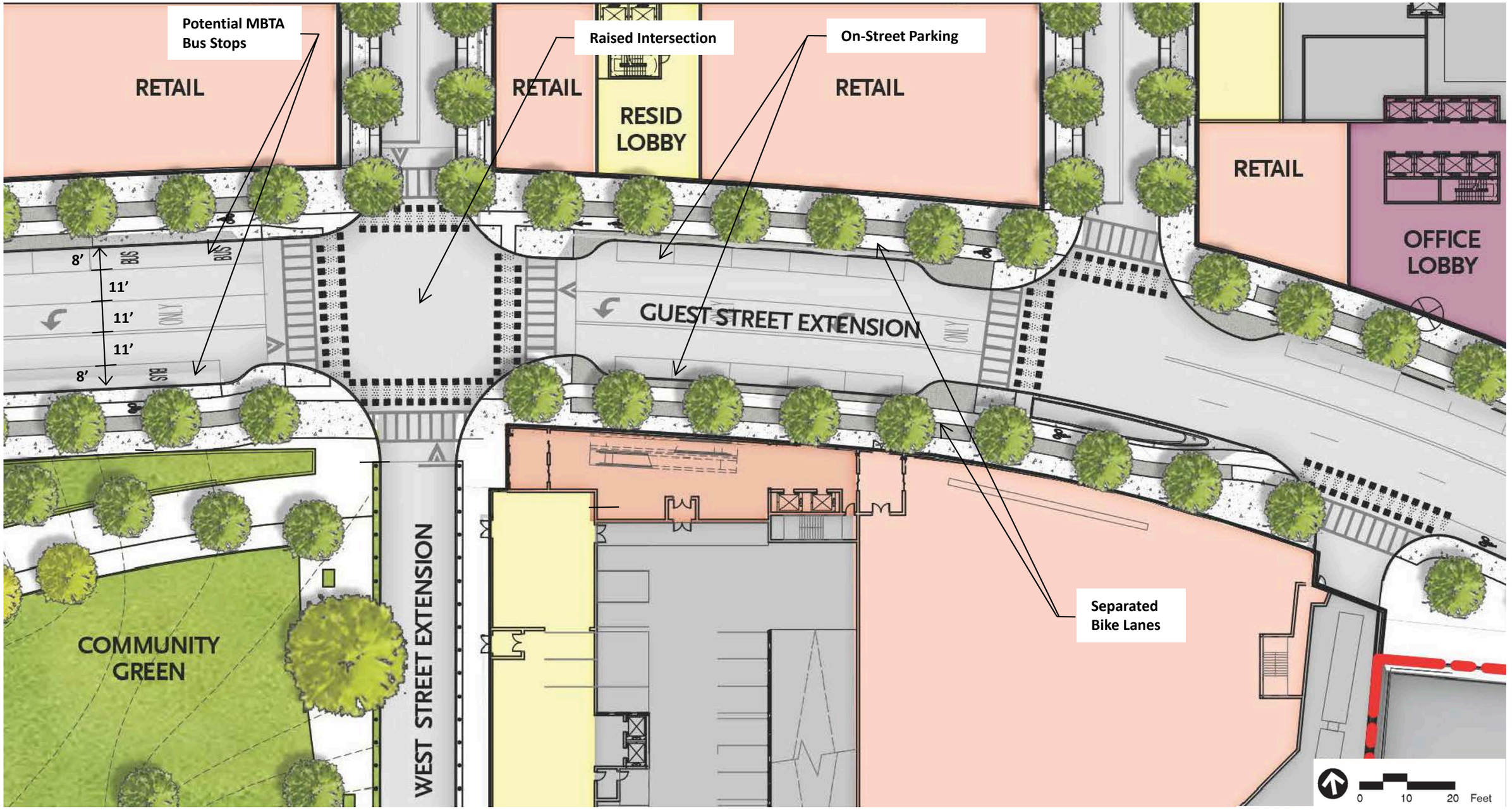
Project Site Boundary
Traffic Signal
Pedestrian Path/Sidewalk
Vehicular Access/Egress

Base plan prepared by Elkus Manfredi Architects

Figure 5.42

Proposed Site Transportation and Access Improvements

Allston Yards
Boston, Massachusetts



Prepared By: VHB

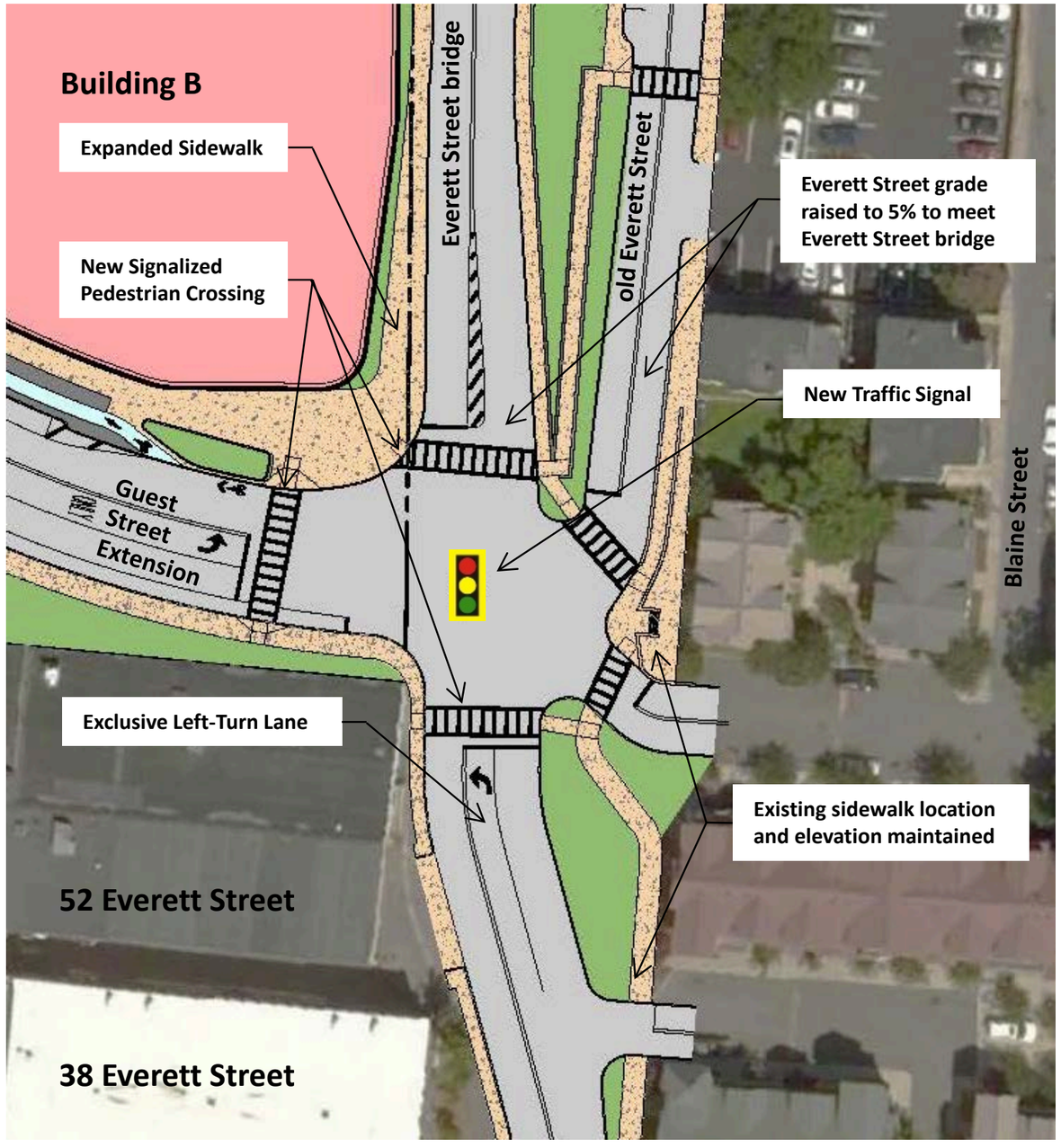
Figure 5.43

Proposed Guest Street Extension

Allston Yards
Boston, Massachusetts

Base plan prepared by Elkus Manfredi Architects

\\MAWALD\ld\12305.00\graphics\SLIDES\2019-02-01 Figure 5.44.pptx



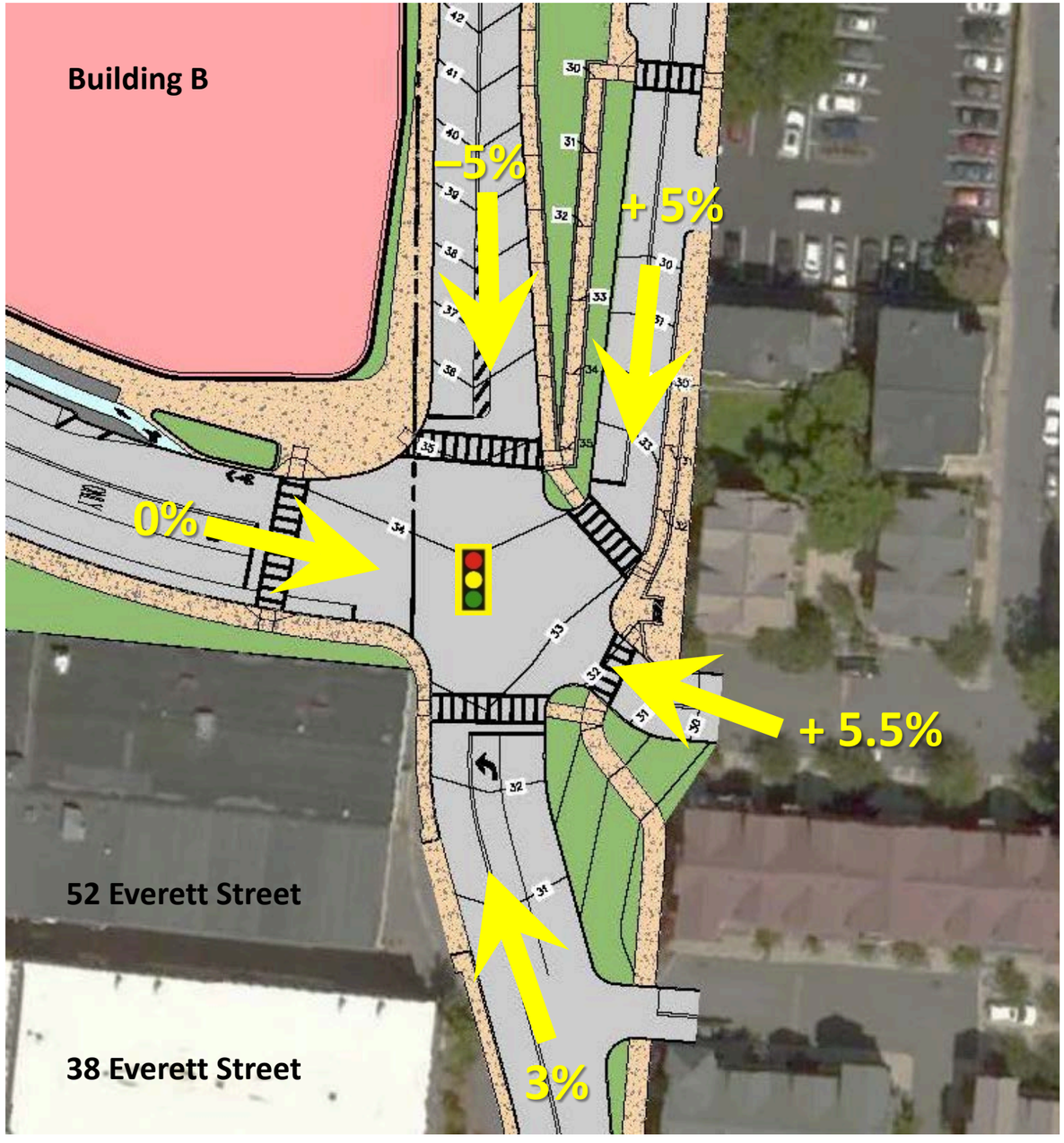
Prepared By: VHB

Figure 5.44

Guest Street/Everett Street Old Everett Street Improvements

Allston Yards
Boston, Massachusetts

\\MAWALD\ld\12305.00\graphics\SLIDES\2019-02-01 Figure 5.44.pptx



Prepared By: VHB

Figure 5.45

Guest Street at Everett Street/
old Everett Street Grading Improvements

Allston Yards
Boston, Massachusetts

Prepared By: VHB

Figure 5.46

Proposed Guest Street/Everett Street/
Old Everett Street Improvements -
Existing Northbound View

Allston Yards
Boston, Massachusetts

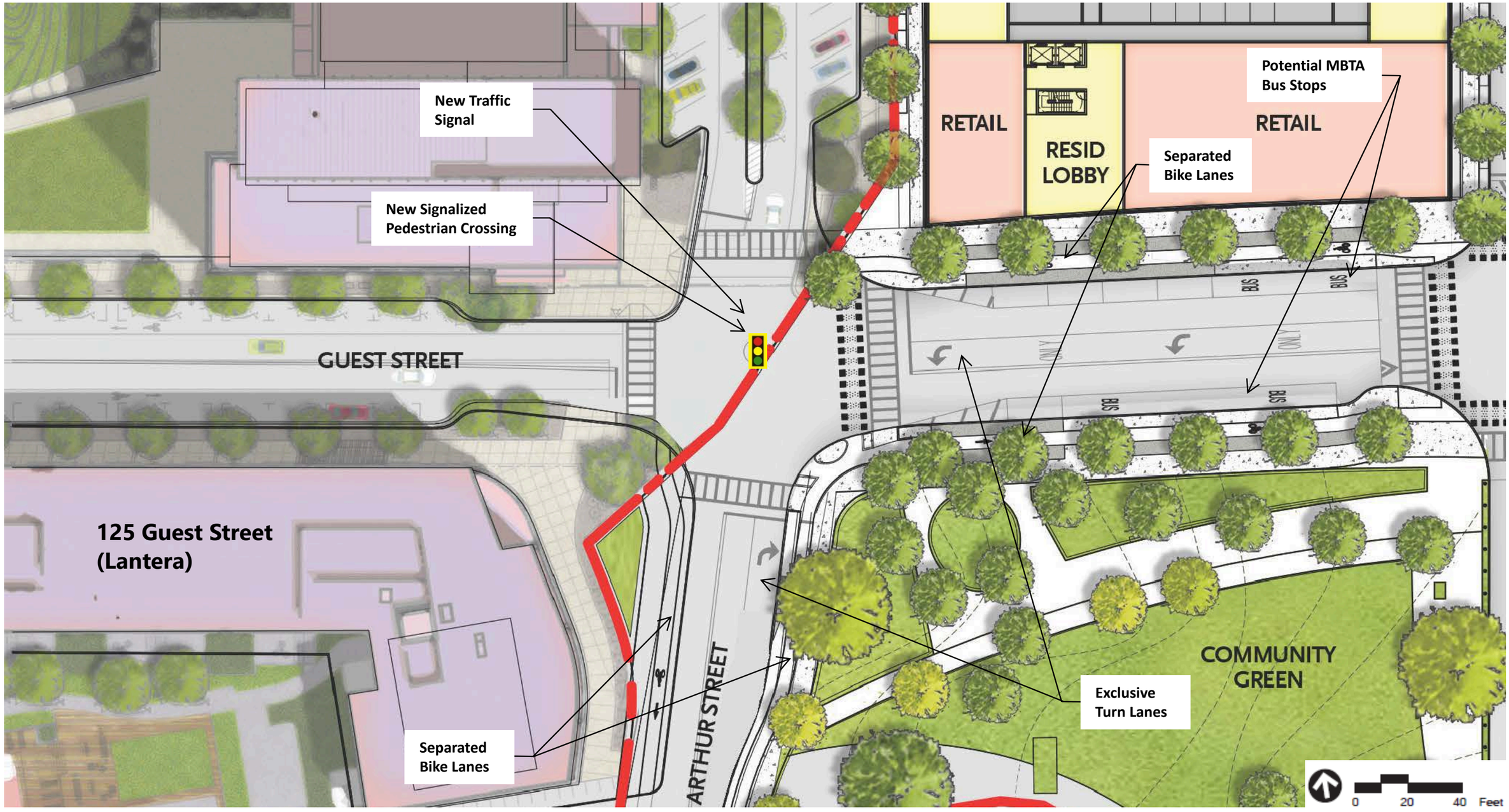
Prepared By: VHB

Figure 5.47

Proposed Guest Street/Everett Street/
Old Everett Street Improvements -
Proposed Northbound View

Allston Yards
Boston, Massachusetts

\\MAWALD\ld\12305.00\graphics\SLIDES\2019-02-01_Figure 5.48.pptx



Prepared By: VHB

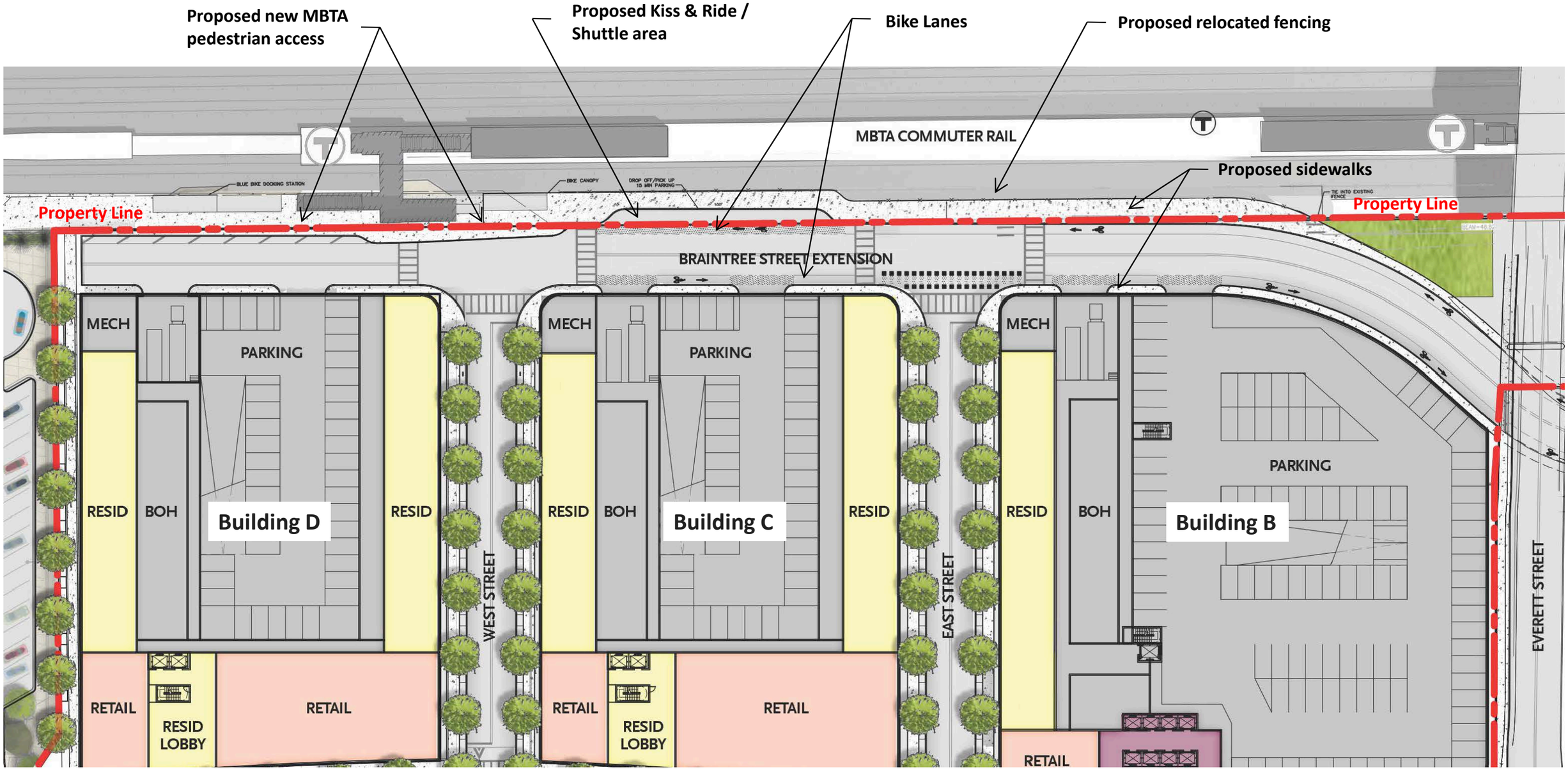
Figure 5.48

Arthur Street/Guest Street Improvements

Allston Yards
Boston, Massachusetts

Base plan prepared by Elkus Manfredi Architects

\\MAWALD\ld\12305.00\graphics\SLIDES\2019-02-01 Figure 5.49.pptx



Note: all improvements shown are subject to obtaining necessary permits and approvals.

Base plan prepared by Elkus Manfredi Architects

Prepared By: VHB

Figure 5.49

Proposed MBTA Boston Landing Station Access Improvements

Allston Yards
Boston, Massachusetts

6

Environmental Protection

This chapter describes the existing environmental conditions on and near the Project Site and the potential changes that may occur as a result of the Proposed Project. A Greenhouse Gas Assessment is provided separately in Chapter 7, *Greenhouse Gas Emissions* Assessment. A goal of the Proposed Project is to better utilize the Project Site and complement adjacent uses while avoiding, minimizing, and/or mitigating potential adverse environmental impacts to the surrounding area to the greatest extent feasible. As discussed in more detail below, the Proposed Project-related environmental impacts, which are to be expected in any development of this scale, are counterbalanced by the significant benefits for the adjacent neighborhoods, the City, and the region. Temporary construction period impacts will be managed to minimize disruption to the surrounding neighborhoods. A Construction Management Plan (CMP) will be developed and submitted to the BPDA for approval prior to the start of construction of each phase of the Proposed Project.

The Proposed Project will address potential environmental impacts in the following categories:

- Wind
- Shadow
- Daylight
- Solar Glare
- Air Quality
- Water Quality
- Flood Hazard
- Groundwater
- Geotechnical
- Solid & Hazardous Waste
- Noise
- Construction
- Rodent Control Post-Construction

The study of potential impacts related to these categories are provided for the Full Build Condition, or the Proposed Project. Impacts associated with the first phase are also discussed for several categories to better understand the interim conditions of constructing Building A only. Wind and shadow impacts were also assessed for the Build Alternative, as required by the BPDA Scoping Determination for comparison purposes.

As other phases advance, the Proponent will conduct updated studies during the design review process for each phase on a cumulative basis, with considerations for mitigation for each future proposed building.

6.1 Summary of Key Findings and Benefits

The key findings related to environmental protection include:

- **Wind** – The Project is not expected to result in unsafe wind conditions that would limit pedestrian access. With the implementation of mitigation measures, such as

landscaping, locating entrances, pick-up/drop-offs, outdoor cafes, etc., away from the building corners, and/or incorporating canopies, recessed entrances, windscreens, planters, etc., it is expected that the Project will further improve conditions for sitting, standing, and walking throughout the Project Site.

- **Shadow** – The incremental shadows produced are consistent with the existing urban shadow pattern and are not expected to have any noticeable effect on pedestrian use or enjoyment.
- **Daylight** – The Project is expected to result in some impact to daylight levels where a low-rise supermarket building, and open parking lot are being replaced with multiple taller buildings.
- **Solar Glare** – No high or damaging conditions or significant thermal impacts are predicted as a result of the Project.
- **Water Quality** – The Project represents an opportunity to improve the quality and reduce the quantity of site stormwater runoff compared to existing conditions through the implementation of improved stormwater management practices. The Proponent will also assist in educating the public and further improving the water quality of local water bodies by permanently installing plaques that bear the warning "Don't Dump - Drains to Charles River" adjacent to all existing, modified, and new catch basins.
- **Flood Hazard** – The Project is not located in a designated flood hazard zone as indicated by a review of the most recent flood insurance rate maps (FIRMs) available from the Federal Emergency Management Agency (FEMA) (dated September 25, 2009).
- **Groundwater** – The Project Site is located outside the limits of the Groundwater Conservation Overlay District (GCOD) and therefore is not required to comply with Article 32; however, as noted elsewhere, the Proposed Project will capture and infiltrate stormwater.
- **Geotechnical** – The type and design of both the temporary earth support system and foundation system will provide for adequate support of the structures and utilities and be compatible with the subsurface conditions.
- **Solid and Hazardous Waste** – Management of soil will be in accordance with applicable local, state, and federal laws and regulations.
- **Noise** – The sound levels associated with the Project's mechanical equipment are expected to have no adverse noise impacts at nearby sensitive receptor locations.
- **Construction** – The Project will develop a detailed Construction Management Plans (CMP) for each phase of work for approval by Boston Transportation Department (BTD) prior to construction.

6.2 Wind

Pursuant to Section B.1 of the BPDA Development Review Guidelines, a wind tunnel analysis to study pedestrian-level wind conditions was conducted for the Project to determine the suitability of particular locations to various activities (i.e., walking,

sitting, eating, etc.). Based on the study results, the Proponent will provide recommendations for minimizing any potential adverse effects, if required.

The following conditions were simulated:

- **No Build Condition:** includes all existing buildings and BPDA-approved buildings within the project area; and
- **Future Build Condition – Full Build:** the No-Build Condition plus the Proposed Project without landscaping.
- **Future Build Condition – Phase 1:** the No-Build Condition plus the proposed first phase of development (Building A) without landscaping.
- **Build Alternative Condition:** represents conceptual massing plan that aligns with the Guest Street Planning Study without landscaping, as requested by the BPDA for comparison purposes.

The wind sensor locations (as shown on Figures 6.1 through 6.4) were verified with BPDA staff prior to running the wind tunnel simulation. Appendix E provides additional detail on the pedestrian wind assessment of the Project Site.

6.2.1 Methodology

A scale model was utilized with specially designed wind speed sensors at 168 grade-level locations, chosen in consultation with the BPDA, which estimated the mean and fluctuating components of wind speed at a full-scale height of five feet above grade in pedestrian areas throughout the Project Site. Wind speed results were combined with long-term meteorological data, recorded during the years 1991 to 2015 at Boston's Logan International Airport, in order to estimate full scale wind conditions. Meteorological data summarizing the annual and seasonal wind climates in the Boston area is based on the data from Logan Airport.

Pedestrian Wind Comfort Criteria

The BPDA has adopted two standards for assessing the relative wind comfort of pedestrians. First, the BPDA wind design guidance criterion states that an effective gust velocity of 31 mph should not be exceeded more than one percent of the time. The second criteria used by the BPDA to determine the acceptability of the wind conditions on site is used to determine the relative level of pedestrian wind comfort for activities, such as sitting, standing, or walking. The criteria are expressed in terms of benchmarks for the one-hour mean wind speed exceeded one percent of the time (i.e., the 99^{th} percentile mean wind speed) and are presented in Table 6-1.

Table 6-1 BPDA Mean Wind Criteria[1]

Dangerous	> 27 mph
Uncomfortable for Walking	> 19 and ≤ 27 mph
Comfortable for Walking	> 15 and ≤ 19 mph
Comfortable for Standing	> 12 and ≤ 15 mph
Comfortable for Sitting	< 12 mph

1 Applicable to the hourly mean wind speed exceeded one percent of the time.

The wind climate in a typical downtown location in Boston is generally comfortable for the pedestrian use of sidewalks and thoroughfares and meets the BPDA effective gust velocity criterion of 31 mph. However, without any mitigation measures, this wind climate is likely to be frequently uncomfortable for more passive activities such as sitting.

6.2.2 No Build Wind Impacts

Mean Wind Speed

The pedestrian-level mean speed wind conditions for the No Build Condition are shown on Figure 6.1a. Under the No Build Condition, pedestrian wind conditions on-site are typically comfortable for sitting, standing, and walking. The area surrounding the Project Site shows generally comfortable wind conditions, primarily for sitting or standing along the western edge and for walking along the eastern edge. There are three off-site locations along Guest Street that are considered an Uncomfortable level (Locations 124, 125, and 166).

Effective Gust Speed

The No Build Condition annual effective gust speeds are shown in Figure 6.1b and are found to be acceptable at all locations monitored in and around the Project Site with the exception of one off-site location on Guest Street (Location 166).

6.2.3 Future Build Wind Impacts – Full Build

Mean Wind Speed

The anticipated wind conditions for the Full Build, or the Proposed Project, do not change significantly, compared to the No Build Condition, as shown on Figure 6.2a. Overall, the Proposed Project is not anticipated to generate any Dangerous wind conditions at or near the Project Site. The ground level environment on-site will benefit from the sheltering effects provided by the multiple new buildings. As detailed in the wind study report provided in Appendix E, the proposed buildings help create a continuity along Guest Street, and as a result, wind conditions along Guest Street and Guest Street Extension are mostly considered comfortable for walking, sitting, and standing throughout. Such anticipated wind conditions should

not present any issue for the new proposed bus stops on Guest Street Extension near the mid-point of the Project Site.

Some increased wind speeds may be experienced, resulting in Uncomfortable conditions, specifically at the northwest corner of the Community Green (Location 144), southeast corner of Building D (Location 42), along West Street between Building C and D (Location 32), and at the northeast corner of Building A (Location 67). All of these conditions are within 1-2 mph of an acceptable level. This is likely due to the interaction of winds with major buildings, especially those that protrude above their surroundings, which often cause increased horizontal wind speeds at the pedestrian level.

Proposed Wind Mitigation

For Location 67, potential mitigation that would improve wind conditions to an acceptable level would include street trees and/or coniferous landscaping, locating entrances, pick-up/drop-offs, outdoor cafes, etc., away from the building corner, and/or building design measures, including rounding or "notching" the building corner and incorporation of horizontal projections on the building (screens or retail banners).

For Locations 32 and 42, potential wind mitigation to improve wind conditions to an acceptable level for these locations could include ground level improvements, including street trees and/or planters. Additionally, for the west-facing edge of Building C the incorporation of canopies, recessed entrances, and/or windscreens, etc., will be considered as the building design advances.

For Location 114, the incorporation of landscaping at the northwest corner of the Community Green is expected to improve wind conditions to an acceptable level. Note, this location is more an entry-way to the Community Green and not expected to be usable for passive recreation where wind conditions would be of concern.

At this planning stage of the Project, with the exception of Building A, the rest of the buildings (B, C, and D) are not fully designed and represent conceptual building height and massing only. As the building design advances, buildings are anticipated to be shaped. At that time, under future design review, wind conditions will be re-studied and mitigation measures will be assessed, as needed, to reduce and minimize any negative wind impacts.

Effective Gust Speed

The annual effective gust speeds are shown in Figure 6.2b and are found to be acceptable at all locations monitored in and around the Project Site. The Proposed Project is anticipated to improve the single Unacceptable location under the Full Build Condition (Location 166).

6.2.4 Future Build Wind Impacts – Phase 1 Build Condition (Building A)

Mean Wind Speed

The predicted wind conditions for the Phase 1 Build Condition (Building A) are shown in Figure 6.3a and are similar to those under the No Build Condition (comfortable for sitting, standing, and walking) in the Community Green, around Building A, as well as throughout the rest of the Project Site.

The three off-site locations on Guest Street east of the Project Site (Locations 124, 125, and 166) are predicted to remain at Uncomfortable level as they are under the No Build Condition. Predicted wind conditions along the Guest Street Extension on-site are mostly considered comfortable for walking, sitting, and standing. Therefore, such anticipated wind conditions should not present any issues for the new proposed bus stops on Guest Street Extension near the mid-point of the Project Site.

Effective Gust Speed

The annual effective gust speeds are shown on Figure 6.3b and are found to be Acceptable at all locations monitored in and around the Project Site with the exception of one off-site location along Guest Street (Location 166), which remains Unacceptable from the No Build Condition.

6.2.5 Future Build Wind Impacts – Build Alternative

Mean Wind Speed

Under the Build Alternative Condition, as shown in Figure 6.4a, the anticipated wind conditions are expected to be similar to the Full Build Condition. Some increased wind speeds could be experienced, resulting in Uncomfortable conditions, at the corner of Arthur Street and Guest Street (Locations 46 and 114), the side street between the two buildings north of the Guest Street Extension (Location 18), and at the building corner of Everett and Braintree Streets (Location 4).

Effective Gust Speed

Overall, the annual effective gust speeds are shown on Figure 6.4b and are found to be acceptable at all locations monitored in and around the Project Site with the exception of one on-site location between the two buildings north of Guest Street Extension (Location 18), which is a change from the No Build Condition. Conversely, Location 166 wind gust is improved from the No Build Condition under the Build Alternative.

6.3 Shadow

A preliminary shadow impact assessment was conducted for the Proposed Project, as required by Section 80B-2(c) of the Code. At this planning stage of the Project, with the exception of Building A, the rest of the buildings (B, C, and D) are not fully

designed and represent conceptual building height and massing; therefore, the results of this shadow analysis for future buildings are preliminary and approximate and subject to update. As the design progresses to a more detailed level through future design review process, mitigation measures will be assessed to reduce and minimize any negative shadow impacts as necessary.

6.3.1 Methodology

The shadow analysis, which provides a comparison of the No-Build, Full Build Condition, Phase 1 Build Condition, and Build Alternative Condition, was prepared in accordance with the requirements of Section B.2 of the BPDA Development Review Guidelines. The analysis is based on the BPDA's 3D massing model for the project area neighborhood and includes planned and currently approved projects. Using "clear sky" solar data at Boston's Logan International Airport (meaning the assumption that no cloud cover ever occurs; therefore, providing a "worst case" scenario showing the full extent of when and where shadow could occur), the shadow study was completed using standard sun altitude and azimuth data for each study date estimated to occur at N 42 degrees 21'23.05" latitude and W 71 degrees 8'21.709" longitude. Shadows cast by the proposed buildings have been plotted for three-time intervals (9:00AM, 12:00PM, 3:00PM) and are represented for the Vernal Equinox (March 21st), Summer Solstice (June 21st), Autumnal Equinox (September 21st) and Winter Solstice (December 21st), and 6:00PM for June 21st and September 21st. These shadows are compared to shadows from all surrounding existing buildings and permitted projects (shown in gray) at the same times to create illustrations of net new shadow (shown in blue) on Figures 6.5a through 6.5d. The analysis focuses on the net new shadow cast onto public ways, open space, above-grade public transit stops/stations and historic resources adjacent to and in the vicinity of the Project Site. (Note: Nearby historic properties are listed on the Inventory of Historic and Archaeological Assets of the Commonwealth. None of the resources are listed on the National or State Registers of Historic Places.)

6.3.2 Full Build Condition Shadows

The shadow study results for the Full Build Condition are presented in Figures 6.5a through 6.5d. The incremental shadows produced are consistent with the existing urban shadow pattern and are not expected to have any noticeable effect on pedestrian use or enjoyment. A summary of the shadow analysis results for each respective period is provided below.

March 21

As shown on Figure 6.5a, at 9AM on March 21, Building A would create shadow over the Community Green proposed at the corner of Guest Street Extension and Arthur Street. By 12PM the shadow would move off the Community Green over portions of the northern edge of the Project Site and over Guest Street Extension and Braintree Street Extension. At 3PM, the net new shadow associated with the Proposed Project

would extend northeast towards the Turnpike edge of the Project Site over Guest Street Extension, Building B, and Everett Street.

June 21

Shadows are generally shorter during the summer months. As shown on Figure 6.5b, at 9AM and 12PM net new shadow from the Proposed Project would remain mostly on-site, including on a portion of the Community Green from Building A in the morning. By 3PM and 6PM, net new shadow would extend east over Everett Street and Guest Street Extension.

September 21

As shown on Figure 6.5c at 9AM, similar to March 21, net new shadow from Building A would extend over a portion of the Community Green proposed at the corner of Guest Street Extension and Arthur Street. By 12PM, the net new shadow would move off the Community Green and extend over portions of the northern edge of the Project Site, and over Guest Street Extension and Braintree Street Extension. At 3PM, the net new shadow would extend northeast towards the Turnpike edge of the Project Site, over Guest Street Extension, Building B, and Everett Street. At 6PM, due to the neighborhood context and, especially the taller Boston Landing buildings, the Project Site would be in shadow due to the existing buildings.

December 21

Shadows are generally longest during the winter months. As shown on Figure 6.5d at 9AM, net new shadow would extend northwest over the commuter train tracks and Boston Landing station, as well as the surrounding streets and the Turnpike. By 12PM, net new shadow would extend north over portions of the commuter train tracks and Turnpike. At 3PM, net new shadow would extend northeast over and beyond the commuter train tracks, Boston Landing Station, the surrounding streets and the Turnpike.

6.3.3 Phase 1 Build Condition Shadows

The shadow study results for the Phase 1 Build Condition (Building A) are presented in Figures 6.6a through 6.6d. Building A is proposed to be the initial phase of development and, therefore, was studied as an interim condition prior to full build-out of the Project Site. As demonstrated by the shadow study for the Phase 1 Build Condition, the potential shadow impact will be minimal as the majority net new shadows will be cast within the Project Site. A summary of the shadow analysis results for each respective period is provided below.

March 21

As shown on Figure 6.6a, at 9AM on March 21, Building A would create shadow over the existing parking lot on the site. By 12PM the new shadow would cover a smaller

portion of the existing parking lot. At 3PM, the net new shadow would extend to the northeast, still contained almost entirely within the parking lot.

June 21

Shadows are generally shorter during the summer months. As shown on Figure 6.6b, at 9AM and 12PM net new shadow from the Proposed Project would remain entirely on-site on a small portion of the existing parking lot. By 3PM, net new shadow would be limited to incremental portions of the internal site. At 6PM, net new shadows would extend over a small portion of the adjacent property to the east.

September 21

As shown on Figure 6.6c from 9AM to 3PM, similar to March 21, net new shadow would extend over the existing parking lot on site. At 6PM, due to the neighborhood context and, especially the taller Boston Landing buildings, the Project Site would be in shadow due to the existing buildings.

December 21

Shadows are generally longest during the winter months. As shown on Figure 6.6d at 9AM, net new shadow would extend northwest over the internal Project Site. By 12PM, net new shadow would extend north over a portion of the existing parking lot on site. At 3PM, net new shadow would extend northeast, primarily over a portion of the existing parking lot.

6.3.4 Build Alternative Condition Shadows

The shadow study results for the Build Alternative Condition are presented in Figures 6.7a through 6.7d. The incremental shadows produced under the Build Alternative Condition are consistent with the shadows produced under the Full Build Condition of the Proposed Project, as well as with the overall existing urban shadow pattern, and are not expected to have any noticeable effect on pedestrian use or enjoyment. A summary of the shadow analysis results for each respective period is provided below.

March 21

As shown on Figure 6.7a, at 9AM on March 21, the Build Alternative Condition would create shadow over the public open space proposed at the corner of Guest Street Extension and Arthur Street, as well as Braintree Street Extension, Guest Street Extension, and Boston Landing Station. By 12PM the shadow would move off the public open space over portions of the northern edge of the Project Site and over Guest Street Extension, Braintree Street Extension, and Boston Landing Station. At 3PM, the net new shadow associated with the Build Alternative Condition would extend northeast towards the Turnpike edge of the Project Site over Guest Street Extension and Everett Street.

June 21

Shadows are generally shorter during the summer months. As shown on Figure 6.7b, at 9AM, 12PM, and 3PM net new shadow of the Build Alternative Condition would remain mostly on-site, including on a portion of the public open space in the morning. By 6PM, the net new shadow would extend east over Everett Street and Guest Street Extension.

September 21

As shown on Figure 6.7c at 9AM, similar to March 21, the Build Alternative Condition's net new shadow would extend over the public open space proposed at the corner of Guest Street Extension and Arthur Street, as well as Braintree Street Extension, Guest Street Extension, and Boston Landing Station. By 12PM, the net new shadow would move off the public open space and extend over portions of the northern edge of the Project Site, and over Guest Street Extension, Braintree Street Extension, and Boston Landing Station. At 3PM, the net new shadow would extend northeast towards the Turnpike edge of the Project Site, over Guest Street Extension, Braintree Street Extension, Boston Landing Station, and Everett Street. At 6PM, due to the neighborhood context and, especially the taller Boston Landing buildings, the Project Site would be in shadow due to the existing buildings.

December 21

Shadows are generally longest during the winter months. As shown on Figure 6.7d at 9AM, the Build Alternative Condition's net new shadow would extend northwest over the commuter train tracks and Boston Landing station, as well as the surrounding streets and the Turnpike. By 12PM, the net new shadow would extend north over portions of the commuter train tracks and Turnpike. At 3PM, the net new shadow would extend northeast over and beyond the commuter train tracks, Boston Landing Station, the surrounding streets and the Turnpike.

6.4 Daylight

The following section describes the anticipated effect on daylight coverage at the Project Site as a result of the Project. An analysis of the percentage of skydome obstructed under the No Build and Full Build Conditions is a requirement of Article 80B (Section 80B-2(c)). The daylight analysis was prepared using the BRA's Daylight Analysis Program ("BRADA") and has been completed in accordance with the requirements of Article 80B.

6.4.1 Methodology

BRADA Software

The BRADA program was developed in 1985 by the Massachusetts Institute of Technology to estimate the pedestrian's view of the skydome taking into account

the massing and building materials used. The software approximates a pedestrian's view of a site based on input parameters such as location of viewpoint, length and height of buildings, and the relative reflectivity of the building facades. The model typically uses the midpoint of an adjacent right-of-way or sidewalk as the analysis viewpoint. Based on these data, the model calculates the perceived skydome obstruction and provides a graphic depicting the analysis conditions.

The daylight model inputs for the study will be from a combination of the BPDA's City of Boston model data, an existing conditions survey, and schematic design plans prepared by the project architect. The daylight analysis represents existing and proposed building façades viewed from the adjacent public way. The daylight obstruction will be evaluated at the centerline of each of the four buildings along Guest Street Extension, Braintree Street Extension, Arthur Street and Everett Street. As described above, the BRADA software considers the relative reflectivity of building facades when calculating perceived daylight obstruction. Highly reflective materials are thought to reduce the perceived skydome obstruction when compared to non-reflective materials. For the purposes of this daylight analysis, the building facades are considered non-reflective, resulting in a conservative estimate of daylight obstruction.

Viewpoints

The following viewpoints were used for this daylight analysis:

- **Arthur Street –** This viewpoint is located on the centerline of Arthur Street, centered on the western side of the Project Site.
- **Braintree Street Extension –** This viewpoint is located on the centerline of Braintree Street Extension, centered along the northern side of the Project Site.
- **Everett Street –** This viewpoint is located on the centerline of Everett Street, centered on the eastern side of the Project Site.
- **Guest Street Extension (North) –** This viewpoint is located on the centerline of Guest Street Extension, looking north, centered on the southern side of the Project Site.
- **Guest Street Extension (South) –** This viewpoint is located on the centerline of Guest Street Extension, looking south, centered on the southern side of the Project Site.

These points represent existing and proposed building façades when viewed from the adjacent public ways.

6.4.2 Daylight Analysis Findings

The Proposed Project-related daylight impacts for the viewpoints are presented in Figure 6.8a through 6.8e. Given the planning goals for the area (e.g., mixed-use development of higher densities), the Project is expected to result in some impact to daylight levels where a low-rise supermarket building, and open parking lot are being replaced with multiple taller buildings. This section provides quantitative

analysis for the Full Build Condition, as well a qualitative analysis for the Build Alternative and Phase 1 Build Conditions.

Arthur Street Viewpoint

- **Full Build Condition –** The skydome obstructed from the Arthur Street study point will increase from 2.3 percent to 52.8 percent. The increased skydome obstruction resulting from the Full Build Condition of the Proposed Project at this study point is shown in Figure 6.8a.
- **Phase 1 Build Condition –** The skydome obstruction for the Phase 1 Build Condition at this study point would include the existing low-rise supermarket building and Building A of the Proposed Project. Because under this condition Building D would not yet be constructed, the level of impact to daylight for the Phase 1 Build Condition is expected to be less than the Full Build Condition at this study point.
- **Build Alternative Condition –** The skydome obstruction for the Build Alternative Condition at this study point would include a high-rise and mid-rise buildings with relatively similar heights to Building D and Building A, respectively, of the Proposed Project. Therefore, the level of impact to daylight for the Build Alternative Condition would be similar to the Full Build Condition's result at this study point.

Braintree Street Extension Viewpoint

- **Full Build Condition –** The skydome obstructed at the Braintree Street Extension study point will increase from 12.2 percent to 94.6 percent. The increased skydome obstruction resulting from the Full Build Condition of the Proposed Project at this study point is shown in Figure 6.8b.
- **Phase 1 Build Condition –** The skydome obstruction for the Phase 1 Build Condition at this study point would include the existing low-rise supermarket building (Buildings B, C, and D would not yet be constructed under this condition). Therefore, the level of impact to daylight for the Phase 1 Build Condition would be less than the level presented by the Full Build Condition at this study point, given lower height of the existing supermarket building.
- **Build Alternative Condition –** The skydome obstruction for the Build Alternative Condition at this study point would include two high-rise buildings with relatively similar heights to Building B, C, and D of the Proposed Project. Therefore, the level of impact to daylight for the Build Alternative Condition would be similar to the Full Build Condition's result at this study point.

Everett Street Viewpoint

- **Full Build Condition –** The skydome obstructed from the Everett Street study point will increase from zero percent to 52.9 percent. The increased skydome obstruction resulting from the Full Build Condition of the Proposed Project at this study point is shown in Figure 6.8c.

› **Phase 1 Build Condition** - The skydome obstruction for the Phase 1 Build Condition at this study point would include the existing low-rise supermarket building (Buildings B, C, and D would not be constructed). Therefore, the level of impact to daylight for the Phase 1 Build Condition would be less than the level presented by the Full Build Condition at this study point, given lower height of the existing supermarket building.

› **Build Alternative Condition –** The skydome obstruction for the Build Alternative Condition at this study point would include a high-rise tall building with relatively similar height to Building B of the Proposed Project. Therefore, the level of impact to daylight would be similar to the Full Build Condition's result at this study point.

Guest Street Extension – North Viewpoint

› **Full Build Condition –** The skydome obstructed from the Guest Street Extension study point looking North will increase from 32.4 percent to 86.6 percent. The increased skydome from the Full Build Condition of the Proposed Project at this study point is shown in Figure 6.8d.

› **Phase 1 Build Condition –** The skydome obstruction for the Phase 1 Build Condition at this study point would include the existing low-rise supermarket building to the north. Therefore, the level of impact to daylight for the Phase 1 Build Condition would be less than the level presented by the Full Build Condition at this study point, given lower height of the existing supermarket building compared to the proposed heights of Buildings B, C, and D.

› **Build Alternative Condition –** The skydome obstruction for the Build Alternative Condition at this study point would include two high-rise buildings with relatively similar heights to Building B, C, and D of the Proposed Project. Therefore, the level of impact to daylight for the Build Alternative Condition would be similar to the Full Build Condition's result at this study point.

Guest Street Extension – South Viewpoint

› **Full Build Condition –** The skydome obstructed from the Guest Street Extension study point looking south will increase from 0.1 percent to 86.8 percent. The increased skydome from the Full Build Condition of the Proposed Project is shown in Figure 6.8e.

› **Phase 1 Build Condition –** The skydome obstruction for the Phase 1 Build Condition at this study point would include Building A of the Proposed Project. Therefore, the level of impact to daylight for the Phase 1 Build Condition would be the same as the Full Build Condition at this study point.

› **Build Alternative Condition –** The skydome obstruction for the Build Alternative Condition would include a mid-rise building with relatively similar height to Building A of the Proposed Project. Therefore, the level of impact to daylight for the Build Alternative Condition would be similar to the Full Build Condition's result at this study point.

6.5 Solar Glare

Given the Proposed Project's proximity to the Turnpike, potential solar glare impacts have been studied. The solar glare conditions were modeled for the Full Build based on conceptual design and a qualitative discussion is provided for Building A as an Phase 1 Build Condition. Solar glare impacts will be studied further as part of the Design Review of each individual building when the exterior design and potential façade details are further defined.

The objective of the solar glare study is to assess the impact of solar reflections emanating from the building façades on the surrounding key roadways, urban terrain and buildings. This study will also evaluate the potential for summer heat gain at the facades of nearby buildings that can be caused by the selective reflection of infrared frequencies of the sun's light by a building's glazing. Heat gain is most associated with south and southwest facing facades and can be mitigated through design. Refer to Appendix E for the complete solar glare analysis.

6.5.1 Methodology

A 3D computer model of the Proposed Project and surrounding urban area was developed using RWDI's in-house proprietary *Eclipse* software. Consistent with the wind and shadow methodologies, based on guidance from the BPDA, the solar glare study assumes future/planned developments, or background projects, surrounding the Project Site.

The solar glare analysis used 'clear sky' solar data at Logan International Airport and assumes no cloud cover ever occurs to provide a "worst case" scenario showing in the full extent of when and where glare could occur. Finally, a statistical analysis was performed to assess the frequency, intensity and duration of the glare events.

This analysis is only applicable to the thermal and visual impacts of solar radiation (i.e. ultraviolet, visible and infrared wavelengths) on people and property in the vicinity of the development.

Visual Glare Criteria

- **Low:** Either no significant reflections occur or the reflections will have a minimal effect on a viewer.
- **Moderate:** The reflections can cause some visual nuisance only to viewers looking directly at the source.
- **High:** The reflections can cause safety issues to viewers who are unable to look away from the source, such as drivers.
- **Damaging:** The brightest glare source is bright enough to permanently damage the eye for a viewer looking directly at the source.

Thermal Impact Criteria

- **Low:** Either no significant reflections occur, or the reflection intensity is below the short-term exposure threshold of 1500 W/m^2.
- **Moderate:** The reflection intensity is above the short-term exposure threshold of 1500 W/m^2 but below the safety threshold of 2500 W/m^2. Such reflections would quickly cause thermal discomfort in people.
- **High:** The reflection intensity is above the safety threshold of 2500 W/m^2 but below 3500 W/m^2. This level of exposure to bare skin would lead to the onset of pain within 30 seconds.
- **Very High:** The reflection intensity is above 3500 W/m^2. This level of exposure would lead to second degree burns on bare skin within 1 minute.

6.5.2 Full Build Condition Solar Glare Conditions

Study findings of potential solar glare impacts for the Full Build Condition are as follows:

Visual Glare

- Overall, the reflection impacts predicted from the Proposed Project are typical of other developments studied in Boston.
- Reflections are generally confined to within 350 feet of the proposed buildings, which typically do not result in safety issue or excessive heat gains, which can be remedied by utilizing internal blinds.
- At the pedestrian level, reflections are predicted to fall most frequently onto the area immediately west of Building D and in the areas between the buildings; however, significant safety risk is not anticipated as this condition is common in typical urban centers.
  - The maximum frequency of glare occurrence found at the pedestrian level is approximately 28% of daytime hours, which occur primarily in the area immediately south of Buildings B, C, and D.
- As with the addition of any glazed building, drivers traveling in the vicinity of the buildings are expected to experience an increased level of visual glare impact, most notably when travelling east on Guest Street approaching Arthur Street and west on Harvey Steel Road. However, these impacts occur for very brief periods of time and also at times when the sun would be expected to be within a driver's field of view, as such they would likely have already taking steps to minimize glare (i.e., putting on sunglasses or lowering a sun visor).
  - The maximum glare occurrence found at these locations is up to approximately 0.15% of the daytime annually.
- Eastbound MBTA train drivers approaching the Boston Landing station may also experience potential glare, but only for 3 minutes at a time on 5 days of the year.
  - The maximum glare occurrence found at this location is short in duration and is very infrequent, possible in less than 0.01% of the daytime annually.

› While some reflections are predicted to fall on the Turnpike, the frequency of their occurrence is very low and are likely to be emanating from directions outside where a driver would be facing for much of the time. These predicted solar glare impacts are much lower than a 'typical' design.

Thermal Impact

› Given preliminary design of the building façades, reflections are prevented from focusing or concentrating in any particular area; therefore, issues related to heat gain on people or property are not anticipated.

› Building A may be affected by potential reflections from Buildings B, C and D; however, these reflections are not anticipated to be a safety issue or create excessive heat gains, which can be remedied through utilizing internal blinds.

6.5.3 Phase 1 Build Condition Solar Glare Conditions

Building A will be the only building to be constructed as part of the initial phase of development. Given its location and reduced height, no significant glare and thermal impacts are anticipated, particularly to drivers on the Turnpike. Pedestrians and building occupants in the vicinity of Building A may experience intermittent reflections from mid-September to mid-April during the afternoons, however, this condition is common in typical urban areas and does not pose significant safety risk.

6.6 Air Quality

This section presents an air-quality assessment for the Project, updated from the PNF filing. The purpose of the air-quality assessment is to demonstrate that the Project will not result in a violation of applicable local, state, and federal air quality standards. Boston, in Suffolk County, is in attainment for all National Ambient Air Quality Standards ("NAAQS") criteria pollutants except for the 8-hour (1997 Revoked) and 1-hour (1979 Revoked) Ozone standards. The county is also in maintenance for carbon monoxide. Accordingly, the air quality analysis calculated emission inventories of the two pollutants that contribute to the violation of the Ozone NAAQS from mobile sources-VOC and NO_X.

As demonstrated in Section 6.6.1, the Project will include reasonable and feasible mitigation measures to reduce volatile organic compounds ("VOCs") and nitrogen oxide ("NO_X") emissions for the Full Build Condition, including TDM measures. Additionally, the air-quality study includes a microscale analysis of the Carbon Monoxide ("CO") per BPDA Development Review Guidelines under Section 6.6.2. Finally, potential stationary source permitting that may be required of the Project is discussed in Section 6.6.3.

6.6.1 Mesoscale Air Quality Analysis

The mesoscale analysis evaluated the change in emissions from Project-related traffic for the Existing, No Build, and Full Build Conditions. The air-quality analysis

demonstrates that the Project will meet DEP air-quality criteria of including all reasonable and feasible emission reduction mitigation measures.

Background

The purpose of the mesoscale analysis is to estimate the area-wide emissions of VOC and NO_x during a typical day in the peak ozone season (summer), consistent with the requirements of the State Implementation Plan ("SIP"). The mesoscale analysis evaluates the change in VOC and NO_X emissions from the average daily traffic volumes and vehicle emission rates. To demonstrate compliance with the SIP criteria, the air-quality study must show the Project's change in daily (24-hour period) VOC and NO_X emissions.

DEP has established guidelines that define the modeling and review criteria for air-quality studies prepared pursuant to review under MEPA. These guidelines require that mesoscale analyses be prepared for proposed development projects to determine the change in Project-related ozone precursor emissions. The predominant source of ozone precursor emissions anticipated from the Project is emissions from Project-related traffic. Ozone is not directly emitted by motor vehicles but is generated when VOC and NO_X emissions from motor vehicles, stationary sources, and area sources react in the atmosphere with sunlight and heat. Project-related ozone impacts are determined by assessing the changes in VOC and NO_X emissions of motor vehicles. DEP criteria require that proposed development projects include all reasonable and feasible emission reduction mitigation measures if the ozone emissions from the Build Condition are greater than the No-Build Condition. Massachusetts has incorporated this criterion into the SIP.

Methodology

The mesoscale analysis evaluates the change in emissions with and without the Project, specifically, daily (24-hour period) VOC and NO_X emissions from the average daily traffic volumes and vehicle emission rates. DEP guidelines require that the air-quality study utilizes traffic and emissions data for existing and future (No-Build and Build) conditions. The traffic and emissions data are incorporated into the Environmental Protection Agency ("EPA") and MassDEP air-quality models to generate emission's estimates that demonstrate whether the Project will have air-quality impacts.

The mesoscale air-quality analysis utilizes developed traffic data (volumes, speeds, and roadway geometry) and emission factor data for Existing, No-Build, Build, and Build with Mitigation Conditions. The mesoscale study area includes all links studied by the traffic analysis. Some of the major roadways that were included in the mesoscale analysis include North Beacon Street, Guest Street, Market Street, Cambridge Street and Everett Street.

The mesoscale analysis calculates the changes in VOC and NO_X emissions for the existing and future conditions within the study area. The mesoscale analysis traffic and emission factor data were developed for the aforementioned conditions. These

data were incorporated into air-quality model to evaluate the changes in VOC and NO_X emissions.

Analysis Conditions

Consistent with the traffic analysis, the following conditions were analyzed: the 2018 Existing Condition; and 2025 future No Build and Full Build Conditions. The analysis compares the future No Build and Full Build Conditions in order to identify the anticipated changes in traffic conditions and mobile source VOC and NO_X emissions as a result of the Project. Where applicable, the Existing Condition is considered for comparison purposes only.

Emission Factor Modeling

EPA's Office of Transportation and Air Quality ("OTAQ") has developed the Motor Vehicle Emission Simulator ("MOVES").[1] MOVES2014b is EPA's latest motor vehicle emissions model for state and local agencies to estimate VOCs, NO_X, and other emissions from cars, trucks, buses, and motorcycles.

All the vehicle emission factors used in the mesoscale analysis were obtained using EPA's MOVES2014b emissions model. MOVES2014b calculates emission factors from motor vehicles in mass per distance format (often grams per mile) for existing and future conditions and applies these factors to Vehicle Miles Travelled ("VMT") data to obtain emissions inventories. The emissions calculated for this air-quality assessment include Tier 3 emission standards, which is an EPA program that sets new vehicle emissions standards, including lowering the sulfur content of gasoline, heavy-duty engine, and vehicle greenhouse gas regulations (2014-2018), and the second phase of light-duty vehicle GHG regulations (2017-2025). It also includes Massachusetts-specific conditions, such as the state vehicle registration age distribution and the statewide Inspection and Maintenance ("I/M") Program.[2] These stringent emissions regulation programs often result in smaller emissions inventories with the passage of time when comparing similar scenarios.

The MOVES2014b model was run at a project-level to obtain emission factors for each link of the mesoscale analysis. The model was set to calculate the emissions burden by choosing to model emissions processes that are specifically related to on-road travel. Links were created that used the appropriate speeds and grades for each roadway segment.

Traffic Data

The air-quality study used traffic data (volumes) developed for each analysis condition. The mesoscale analysis uses typical daily peak and off-peak traffic volumes for the ozone summer season. The VMT data used in the air-quality analysis were developed based on the traffic data analyzed in this EENF/DPIR.

1 MOVES2014b (Motor Vehicles Emission Simulator), December 2017, US EPA, Office of Mobile Sources, Ann Arbor, MI.

2 T*he Stage II Vapor Recovery System* is the process of collecting gasoline vapors form vehicles as they are refueled. This requires the use of a special gasoline nozzle at the fuel pump.

Existing Mesoscale Emissions

The mesoscale analysis calculated the existing VOC and NO_X emissions for the Project inventory. These emissions are estimated to be 58.5 kilograms per day ("kg/day") of VOCs and 31.4 kg/day of NO_X establish an Existing Condition to which future emissions can be compared.

Future Mesoscale Emissions

Future Project-related emission calculations are based upon changes in traffic and emission factor data. The traffic data includes traffic volumes that were used to calculate VMT on the study network. The emission factor data included emission reduction programs, shifts in vehicle populations, and other factors. Under the No Build Condition, VOC emissions were estimated to be 57.1 kg/day and NO_X emissions were estimated to be 18.6 kg/day. The 2025 VOC and NO_X emission factors are lower than the 2018 emissions due to the implementation of emission control programs, such as the Federal Motor Vehicle Emission Control Program (Tier 3), the Stage II Vapor Recovery System, and the Massachusetts Vehicle Inspection and Maintenance program.

Under the Full Build Condition, as presented in Table 6-2, the VOC emissions are estimated to be 60.7 kg/day and the NO_X emissions are estimated to be 20.0 kg/day. The Full Build Condition emissions inventory was developed by considering the effects of the Project generated trips on the No Build network. The SIP requires that proposed projects with VOC and NO_X emissions under the Build Condition that are greater than the No Build Condition include all reasonable and feasible emission reduction measures.

Table 6-2 Mesoscale Air Quality Analysis Results (kg/day)

Pollutant	Existing Conditions	No Build Conditions[1]	Full Build Conditions	Project-related Emissions[2]
Volatile Organic Compounds (VOCs)	58.5	57.1	60.7	3.6
Oxides of Nitrogen (NO_X)	31.4	18.6	20.0	1.4

1 The future No Build condition emission factors are lower than the Existing conditions emission factors due to the implementation of state and federal emission control programs, such as the Federal Motor Vehicle Emission Control Program (Tier 3) and the Stage II Vapor Recovery System, and the Massachusetts Inspection and Maintenance program.

2 Represents the difference in emissions between the Build and No-Build Conditions

Proposed Mitigation Measures

The transportation improvement measures for the Proposed Project differ from a typical development in that the transportation infrastructure within the study area is provided/created to accommodate the future project traffic. The improvements to be implemented as part of the Proposed Project have been designed to accommodate traffic from the potential redevelopment of surrounding properties as well as the traffic anticipated to be generated by the Proposed Project. Overall, the

additional new traffic generated by the Proposed Project can be accommodated on the surrounding roadway network and, with the Proposed Project's transportation infrastructure improvements, minimal impacts are expected from the Proposed Project.

As discussed in Chapter 5, *Transportation,* the traffic improvements include signal improvements and timing modifications to the intersections of Market Street at Guest Street, North Beacon Street, and Faneuil Street. In addition to the intersection improvements the Proponent anticipates implementing a TDM program. A full description of these measures is provided in Chapter 5*, Transportation*.

The signal optimization improvements result in delay savings and consequentially a 0.7 kg/day reduction of VOCs and a 0.5 kg/day reduction of NO_X. Previous estimates of similar TDM programs in an urban area have ranged on the order of a two to five percent reduction in VMT, which is assumed to result in comparable pollutant emission savings. Assuming a two percent reduction, the TDM plan is expected to provide a 0.07 kg/day reduction of VOCs and a 0.03 kg/day reduction of NO_X. This results in final Project-related emissions of 2.9 kg/day of VOCs and 0.9 kg of NO_X. A summary of the mitigation emissions reduction is provided in Table 6-3.

Table 6-3 Mitigation Analysis Results (kg/day)

Pollutant	Project-related Emissions[1]	Estimated Reductions Due to TDM Measures[2]	Estimated Reductions Due to Roadway Improvements[3]	Resulting Project-related Emissions
Volatile Organic Compounds (VOCs)	3.6	0.07	0.7	2.9
Oxides of Nitrogen (NO_x)	1.4	0.03	0.5	0.9

1 Represents the difference in pollutant emissions between the Full Build and No Build Conditions.
2 Mitigation from TDM Measures estimated as 2 percent of unmitigated Project-related emissions.
3 Mitigation from roadway improvement measures, such as signal optimization.

6.6.2 Microscale Air Quality Analysis

The CAAA resulted in states being divided into attainment and non-attainment areas, with classifications based upon the severity of their air-quality problems. Air quality control regions are classified and divided into one of three categories: attainment, non-attainment, and maintenance areas, depending upon air quality data and ambient concentrations of pollutants. Attainment areas are regions where ambient concentrations of a pollutant are below the respective NAAQS; non-attainment areas are those where concentrations exceed the NAAQS. A maintenance area is an area that used to be non-attainment but has demonstrated that the air quality has improved to attainment. After 20 years of clean air quality, maintenance areas can be re-designated to attainment.

The Project is located within the City of Boston, Suffolk County, Massachusetts, which under the EPA designation is a CO Maintenance area. Projects located in a CO

maintenance area are required to evaluate their CO concentrations with the NAAQS, as has been done for this Project. The City of Boston is in attainment for the remainder of the criteria pollutants.

Air Quality Standards

The EPA has established the NAAQS to protect the public health. Massachusetts has adopted similar standards as those set by the EPA for CO. Table 6-4 presents the NAAQS for carbon monoxide.

Table 6-4 National Ambient Air Quality Standards

	Primary Standards		
Pollutant	**Level**	**Averaging Time**	**Form**
Carbon Monoxide	9 ppm (10 mg/m^3)	8-hour	Not to be exceeded more than once per year
	35 ppm (40 mg/m^3)	1-hour	

DEP maintains a network of air-quality monitors to measure background CO concentrations. Background concentrations are ambient pollution levels from all stationary, mobile, and area sources. Background CO concentrations are determined by choosing the maximum of the second-highest annual values from the previous three years. Looking at the air-quality monitor closest to the project site (Harrison Avenue) for the years 2015-2017, the CO background values are 2.4 ppm for the 1-hour averaging time and 1.3 ppm for the 8-hour averaging time. These values are much less than the 1-hour and 8-hour NAAQS. The background values are presented in Table 6-5.

Table 6-5 Air Quality Background Concentrations

	Background Concentrations		NAAQS	
Pollutant	**Level**	**Averaging Time**	**Level**	**Averaging Time**
Carbon Monoxide	1.3 ppm	8-hour	9 ppm	8-hour
	2.4 ppm	1-hour	35 ppm	1-hour

Monitoring Location: Harrison Avenue, Boston, MA. Years 2015-2017.

The potential CO concentrations from motor vehicle traffic related to the Project will be considered in conjunction with these background concentrations to demonstrate that the Project will comply with the NAAQS Standards.

BPDA Development Review Guidelines

The BPDA Development Review Guidelines require "a microscale analysis predicting localized carbon monoxide concentrations should be performed, including identification of any locations projected to exceed the National or Massachusetts Ambient Air Quality Standards, for projects in which:

- "Project traffic would impact intersections or roadway links currently operating at Level of Service ("LOS") D, E, or F or would cause LOS to decline to D, E, or F; or
- Project traffic would increase traffic volumes on nearby roadways by 10 percent or more (unless the increase in traffic volume is less than 100 vehicles per hour); or
- The Project will generate 3,000 or more new average daily trips on roadways providing access to a single location."

Several of the signalized study area intersections currently function with long delays and queues under peak-hour conditions. These same general operations are expected to continue in the future both with and without the Proposed Project. However, with the access enhancements implemented as part of the Project, existing congestion at some of these locations will be alleviated. As presented in Chapter 5, *Transportation*, the traffic analysis indicates that the LOS at multiple study intersections will remain at or decline to D, E, or F under the build condition and the Project will produce more than 3,000 average daily trips. As such, a microscale analysis was conducted pursuant to the BPDA Development Review Guidelines.

Microscale ("Hot Spot") Analysis Methodology

The modeling for the microscale analysis followed the EPA's guidelines. The traffic data was evaluated, and locations were selected based on the requirements of the BPDA Development Review Guidelines and the EPA modeling guidance.

The microscale analysis calculates maximum 1-hour and 8-hour CO concentrations in the Project area during the peak CO season (winter). EPA's OTAQ has developed the Motor Vehicle Emission Simulator ("MOVES2014b"). Emission factors were developed using the MOVES2014b program and were combined with the traffic data in EPA's computer model CAL3QHC Version 2.0[3] model to calculate the CO worst-case concentrations. EPA's CAL3QHC is an air quality dispersion model that applies emission factors obtained from MOVES2014b to projected traffic conditions in order to obtain localized pollutant concentrations at real-world locations.

The microscale analysis utilized the traffic (volumes and speeds) and emission factor data for the 2025 No-Build and 2025 Build Conditions. These data were incorporated into air quality models and demonstrate that the Project will meet the CAAA criteria. The microscale analysis calculated CO concentrations at congested intersections near the Project Site under the No-Build and Build conditions for comparison purposes. The worst-case CO concentrations were added to the background levels to determine if the Project's concentrations complied with the NAAQS.

Receptor locations were selected near the congested intersections based upon areas where the public may have access. The intersection receptors were placed at the edge of the roadway, but not closer than 10 feet (3 meters) from the nearest travel

3 User's Guide to CAL3QHC Version 2.0: A Modeling Methodology for Predicting Pollutant Concentrations Near Roadway Intersections, US Environmental Protection Agency, Office of Air Quality Planning and Standards, Technical Support Division; Research Triangle Park, NC; EPA-454/R-92-005; November 1992

lane; as required by the EPA. The results calculated at these receptor locations represent the highest concentrations at each intersection. Receptor locations were grouped into receptor quadrants, as presented in Figure 6.9, to simplify the presentation of the results. Receptor locations farther away from the intersections will have lower concentrations because of the dispersion characteristics. The receptor locations that are along other portions of the roadways in the study area are expected to have lower concentrations than the receptor locations at the intersection as the emission rates for vehicles traveling along these roadways are much lower than the emission rates for vehicles queuing at intersections.

Emission Rates

All the vehicle emission factors used in the microscale analysis were obtained using the EPA's MOVES2014b emissions model. MOVES2014b is EPA's latest motor vehicle emissions model for state and local agencies to estimate pollutants from cars, trucks, buses, and motorcycles. MOVES2014b calculates CO emission factors from motor vehicles for free-flow conditions in grams per vehicle mile and for idling conditions in grams per vehicle hour. The emission rates used in this study were developed with the data provided by DEP. The emission factors for the microscale analysis were based upon a morning peak hour on a typical weekday in the winter for Suffolk County and were calculated for idle and free-flow conditions based upon roadway travel speeds and grades.

The emissions calculated for this air quality assessment include Tier 3 emission standards, which is an EPA program that sets new vehicle emissions standards, including lowering the sulfur content of gasoline, heavy-duty engine, and vehicle GHG regulations (2014-2018), and the second phase of light-duty vehicle GHG regulations (2017-2025). It also includes Massachusetts specific conditions, such as the state vehicle registration age distribution and the statewide Inspection and Maintenance ("I/M") Program. These stringent emissions regulation programs often result in smaller emissions inventories with the passage of time when comparing similar scenarios.

Traffic Data

The air quality study evaluates the air quality impacts of vehicular traffic associated with the Project on the environment. The vehicle traffic represents the worst-case conditions, which includes the increase in traffic volumes due to specific developments proposed for the study area, projected traffic growth over time, and future traffic associated with the Project. The air quality study utilizes traffic and emissions data for the future No-Build and future Build Conditions. These data are incorporated into the EPA air quality models to generate air pollutant concentrations that demonstrate whether or not the Project would have air quality impacts. The scenarios modeled include:

› **No Build Condition (2025):** reflects background growth associated with other planned projects and general background regional growth.

› **Full Build Condition (2025):** assuming the 2025 No-Build Condition background growth with the Project fully constructed and in operation.

Traffic data (volumes, delays, and speeds) was developed for each analysis condition. The traffic volumes and level of-service for the study area were evaluated, and based on the BPDA Development Review Guidelines and EPA Guidelines, three intersections were selected for analysis:

› Market Street at North Beacon Street
› North Beacon Street/Brighton Avenue at Cambridge Street
› Cambridge Street at Harvard Avenue/Franklin Street

The intersections represent the top-ranking intersections in the study area based on intersection volumes and level of service. The analysis considered the worse of the morning or evening peak hour traffic conditions as determined by larger intersection volumes. If these intersections show concentrations below the NAAQS, then it is expected that all intersections would be below the NAAQS.

Microscale Air Quality Study Results

The CO concentrations for each intersection under the No Build and Full Build Conditions are presented in Table 6-6 and Table 6-6. The results show that there are minimal to no increases for 1-hour and 8-hour CO concentrations between the 2025 No Build and Full Build conditions due to the minor traffic volume increase and minimal intersection delays experienced at the study intersections. The 1-hour CO concentrations ranged from 2.6 to 2.8 parts per million (ppm), and the 8-hour CO concentrations ranged from 1.4 ppm to 1.6 ppm for the 2025 No-Build and Build conditions. The results of the microscale analysis demonstrate that the 2025 No Build and Full Build CO concentrations (both 1-hour and 8-hour values) for the Project are well below the NAAQS.

Table 6-6 Predicted Maximum 1-Hour CO Concentrations[1, 2]

No.	Intersection	Receptor Quadrant[3]	1-Hour CO Concentrations (ppm) 2025 No Build	2025 Full Build
1	Market Street at North Beacon Street	Northeast	2.7	2.7
		Northwest	2.6	2.7
		Southwest	2.6	2.6
		Southeast	2.6	2.7
2	North Beacon Street/ Brighton Avenue at Cambridge Street	East	2.7	2.7
		North	2.6	2.6
		South	2.6	2.6
		West	2.7	2.7
3	Cambridge Street at Harvard Avenue/ Franklin Street	Northeast	2.7	2.7
		Northwest	2.7	2.7
		Southwest	2.8	2.8
		Southeast	2.7	2.7

Source: VHB, Inc.
1 See Figure 6.9 for intersection and receptor locations.
2 The concentrations are expressed in parts per million (ppm) and include a 1-hour background concentration of 2.4 ppm. The 1-hour NAAQS for CO is 35 ppm.
3 Concentrations represent maximum concentrations within the grouping of receptors placed in the respective directions of each intersection.

Table 6-7 Predicted Maximum 8-Hour CO Concentration[1, 2]

No.	Intersection	Receptor Quadrant[3]	8-Hour CO Concentrations (ppm) 2025 No Build	2025 Full Build
1	Market Street at North Beacon Street	Northeast	1.5	1.5
		Northwest	1.4	1.5
		Southwest	1.4	1.4
		Southeast	1.4	1.5
2	North Beacon Street/ Brighton Avenue at Cambridge Street	East	1.5	1.5
		North	1.4	1.4
		South	1.4	1.4
		West	1.5	1.5
3	Cambridge Street at Harvard Avenue/ Franklin Street	Northeast	1.5	1.5
		Northwest	1.5	1.5
		Southwest	1.6	1.6
		Southeast	1.5	1.5

Source: VHB, Inc.
1 See Figure 6.9 for intersection and receptor locations.
2 The concentrations are expressed in parts per million ("ppm") and include an 8-hour background concentration of 1.3 ppm and a persistence factor of 0.7. The 8-hour NAAQS for CO is 9 ppm.
3 Concentrations represent maximum concentrations within the grouping of receptors placed in the respective directions of each intersection

Conclusion of Microscale Analysis

The air quality evaluation demonstrated that the development of the Project would not result in adverse localized air quality impacts. The microscale analysis evaluated Project-related vehicles traveling through congested intersections in the study area. This analysis demonstrates that all existing and future CO concentrations are below the NAAQS. Specifically:

- All the 1-hour CO concentrations ranged from 2.6 to 2.8 ppm and are well below the CO NAAQS of 35 ppm.
- All the 8-hour CO concentrations ranged from 1.4 to 1.6 ppm and are below the CO NAAQS of 9 ppm.

The microscale study demonstrates that the Project conforms to the CAAA and the SIP because:

- No violation of the NAAQS is expected to be created;
- No increase in the frequency or severity of any existing violations (none of which are related to this development) is anticipated to occur; and
- No delay in attainment of any NAAQS is expected to result due to the implementation of the proposed action.

Based upon the analysis presented herein and the conclusions summarized above, no significant adverse air quality impacts from the Project are anticipated on the microscale level.

6.6.3 Stationary Source Emissions Evaluation

Sizable combustion equipment with the potential to emit air pollutants at the Proposed Project may be subject to air permitting under 310 CMR 7.00. MassDEP has established the "Environmental Results Program" (ERP) to streamline the certification process of smaller combustion equipment subject to permitting regulations. The exact sizes, makes, models of equipment to be used by the Project is currently unknown and will be determined throughout the design process. However, equipment that is likely to be used at the Project, such as boilers or emergency generators, may be subject to permitting regulations. If a boiler with a rated capacity between 10 to 40 MMBtu per hour is used on the site, the Proponent will submit the appropriate self-certification forms under the ERP process before the installation of the boiler. Additionally, if an emergency generator with a rated capacity equal to or greater than 37 kW is used on the site, the Proponent will submit the appropriate self-certification forms under the ERP process within 60 days of generator startup.

6.7 Noise

The noise assessment evaluated the potential noise impacts associated with the Proposed Project's building design and activities, including mechanical equipment and loading activities. This section discusses the fundamentals of noise, noise impact criteria, noise analysis methodology, and potential noise impacts. A noise

monitoring program was developed for determining existing ambient conditions near the Project Site.

The analysis demonstrates that the Proposed Project will comply with City of Boston noise regulations and the United States Department of Housing and Urban Development's (HUD's) guidelines. Based on preliminary design, the Proposed Project's operations will have no adverse noise impacts at nearby sensitive receptor locations nor impacts on proposed residential units.

6.7.1 Fundamentals of Noise

Noise is defined as unwanted or excessive sound. Sound becomes unwanted when it interferes with normal activities such as sleep, communication, work, or recreation. How people perceive sound depends on several measurable physical characteristics, which include the following:

- **Intensity –** Sound intensity is often equated to loudness.
- **Frequency –** Sounds are comprised of acoustic energy distributed over a variety of frequencies. Acoustic frequencies, commonly referred to as tone or pitch, are typically measured in Hertz. Pure tones have all their energy concentrated in a narrow frequency range.

Sound levels are most often measured on a logarithmic scale of decibels (dB). The decibel scale compresses the audible acoustic pressure levels which can vary from the threshold of hearing (zero dB) to the threshold of pain (120 dB). Because sound levels are measured in dB, the addition of two sound levels is not linear. Adding two equal sound levels creates a 3 dB increase in the overall level. Research indicates the following general relationships between sound level and human perception:

- A 3-dB increase is a doubling of acoustic energy and is the threshold of perceptibility to the average person.
- A 10-dB increase is a tenfold increase in acoustic energy but is perceived as a doubling in loudness to the average person.

The human ear does not perceive sound levels from each frequency as equally loud. To compensate for this phenomenon in perception, a frequency filter known as A-weighted [dB(A)] is used to evaluate environmental noise levels. Table 6-8 presents a list of common outdoor and indoor sound levels.

Table 6-8 Common Outdoor and Indoor Sound Levels

Outdoor Sound Levels	Sound Pressure (μPa)*		Sound Level dB(A)**	Indoor Sound Levels
	6,324,555	-	110	Rock Band at 5 m
Jet Over Flight at 300 m		-	105	
	2,000,000	-	100	Inside New York Subway Train
Gas Lawn Mower at 1 m		-	95	
	632,456	-	90	Food Blender at 1 m
Diesel Truck at 15 m		-	85	
Noisy Urban Area—Daytime	200,000	-	80	Garbage Disposal at 1 m
		-	75	Shouting at 1 m
Gas Lawn Mower at 30 m	63,246	-	70	Vacuum Cleaner at 3 m
Suburban Commercial Area		-	65	Normal Speech at 1 m
	20,000	-	60	
Quiet Urban Area—Daytime		-	55	Quiet Conversation at 1 m
	6,325	-	50	Dishwasher Next Room
Quiet Urban Area—Nighttime		-	45	
	2,000	-	40	Empty Theater or Library
Quiet Suburb—Nighttime		-	35	
	632	-	30	Quiet Bedroom at Night
Quiet Rural Area—Nighttime		-	25	Empty Concert Hall
Rustling Leaves	200	-	20	
		-	15	Broadcast and Recording Studios
	63	-	10	
		-	5	
Reference Pressure Level	20	-	0	Threshold of Hearing

Source: Highway Noise Fundamentals. Federal Highway Administration, September 1980.

* μPA – MicroPascals, which describe pressure. The pressure level is what sound level monitors measure.

** dB(A) – A-weighted decibels, which describe pressure logarithmically with respect to 20 μPa (the reference pressure level).

A variety of sound level indicators can be used for environmental noise analysis. These indicators describe the variations in intensity and temporal pattern of the sound levels. The following is a list of common sound level descriptors used for environmental noise analyses:

- L90 is the sound level which is exceeded for 90 percent of the time during the time period. L90 is generally considered to be the ambient or background sound level.
- Leq is the A-weighted sound level, which averages the background sound levels with short-term transient sound levels and provides a uniform method for comparing sound levels that vary over time.

6.7.2 Methodology

The noise analysis evaluated the potential noise impacts associated with the Project's operations, which include mechanical equipment and loading/service activities. The noise analysis included measurements of existing ambient background

sound levels and an evaluation of potential noise impacts associated with the proposed mechanical equipment (e.g., HVAC units, cooling tower, etc.) and loading activities. The study area was evaluated and sensitive receptor locations in the vicinity of the Project were identified and examined. The site layout and building design, as it relates to the loading area and management of deliveries at the Project Site were also considered. The analysis considered sound level reductions due to distance, proposed building design, and obstructions from surrounding structures. The anticipated mechanical equipment associated with the proposed buildings are located on the rooftop of each building.

In addition, the noise study includes an assessment of potential impacts on the proposed residential use. The assessment followed HUD guidelines and procedures outlined in The Noise Guidebook (Guidebook)[4]. The noise study utilized HUD's Day-Night Noise Level (DNL) Calculator, which is a model used to calculate the DNL associated with roadway traffic and rail sources. The DNL Calculator takes into consideration traffic volume, travel speed, and the distance between the receptor and noise source.

Potential impacts associated with the proposed building structures on the traffic noise from Interstate 90 (I-90) was also assessed using Federal Highway Administration's Traffic Noise Model (TNM). This assessment evaluated the potential change in sound levels attributed to I-90 traffic noise reflecting off the proposed buildings back to the residential neighborhood located to the north of the Project.

Receptor Locations

The noise analysis included an evaluation of the study area to identify nearby sensitive receptor locations, which typically include areas of sleep and areas of outdoor activities. Per BPDA Scoping Determination, the noise analysis identified six nearby sensitive receptor locations near the Project. As shown on Figure 6.10, the receptor locations include the following:

- R1 – Residential neighborhood to the east on Blaine Street;
- R2 – Residential neighborhood to the south on Harvester Street;
- R3 – Residential neighborhood to the west on Hichborn Street, which includes the vicinity of the planned Residences at Boston Landing at 125 Guest Street on the corner of Arthur Street;
- R4 – Residential neighborhood to the southeast on Everett Street;
- R5 – Residential neighborhood to the south on North Beacon Street; and
- R6 – Residential neighborhood to the north on Lincoln Street and Antwerp Street.

These receptor locations, selected based on land use considerations, represent the most sensitive locations near the Project Site.

4 Section 51.103, The N*oise Guidebook,* U.S. Department of Housing and Urban Development, Office of Environment and Energy.

6.7.3 Noise Impact Criteria

The City of Boston and the HUD have developed noise impact criteria that establish noise thresholds deemed to result in adverse impacts. The noise analysis for the Project compared existing and future sound levels to these criteria and determined whether or not the Project will generate noise impact at sensitive receptor locations in the vicinity of the Project or will be impacted by the nearby transportation facilities (I-90 and MBTA commuter rail).

6.7.3.1 City of Boston Noise Impact Criteria

The City of Boston has developed noise standards that establish noise thresholds deemed to result in adverse impacts. The noise analysis for the Proposed Project used these standards to evaluate whether the Proposed Project will generate sound levels that result in potential adverse impacts.

Under Chapter 40 Section 21 of the General Laws of the Commonwealth of Massachusetts and Title 7 Section 50 of the City of Boston Code, the Air Pollution Control Commission of the City of Boston has adopted Regulations for the Control of Noise in the City of Boston. These regulations establish maximum allowable sound levels based upon the land use affected by the proposed development. Table 6-9 summarizes the allowable sound levels that should not be exceeded.

For a residential zoning district, the maximum noise level affecting residential uses shall not exceed the Residential Noise Standard. The residential land use noise standard is 60 dB(A) for daytime periods (7:00 AM to 6:00 PM) and 50 dB(A) for nighttime conditions (6:00 PM to 7:00 AM).

Table 6-9 City of Boston Noise Standards by Zoning District, dB(A)

Land Use Zone District	Daytime (7:00 AM – 6:00 PM)	All Other Times (6:00 PM – 7:00 AM)
Residential	60	50
Residential/Industrial	65	55
Business	65	65
Industrial	70	70

Source: Regulations for the Control of Noise in the City of Boston, Air Pollution Control Commission.

6.7.3.2 HUD Noise Impact Criteria

The HUD standard is intended to protect residential receptor locations from noise sources, such as highways, rail lines, and airports that may cause interference with normal activities, such as sleep and conversation. The HUD Guidebook states that a noise assessment is required if a proposed residential development is located within 15 miles of an airport, within 3,000 feet of a railway, or within 1,000 feet of a major roadway.

HUD uses a day-night average sound level (DNL or Ldn) as the value for establishing goals for determining acceptable sound levels. The DNL levels are based on a multitude of factors and provides a noise indicator of a 24-hour weighted average sound level. The

DNL is derived from hourly sound level values and includes a nighttime penalty that accounts for increased annoyance during these hours. Studies have shown that additional annoyance occurs during the nighttime since background sound levels are typically at their minimum and many people are noise sensitive while trying to sleep.

HUD considers a DNL of 65 decibels or lower as an acceptable exterior sound level and 45 decibels as an acceptable interior goal. Exterior sound levels above 65 decibels but not exceeding 75 decibels is normally unacceptable. However, a waiver may be granted if noise attenuation measures (such as noise barriers and/or special building construction material) are provided. HUD considers exterior sound levels above 75 decibels to be unacceptable. Residential buildings are constructed such that the walls are expected to reduce the outdoor sound levels by a minimum of 20 decibels. Therefore, indoor sound levels for residential buildings of 45 decibels or less are considered acceptable.

6.7.4 Existing Noise Conditions

A noise monitoring program was developed to establish existing ambient sound levels in vicinity of the Project Site. The existing sound levels were measured using Type 1 sound analyzers (Larson Davis 831 and SoundExpert LxT). Measurements were conducted between October 18, 2016 and October 19, 2016 to capture sound levels representative of typical existing ambient conditions. Short-term measurements (15 minutes) during the daytime period were conducted between 11:00 AM to 12:30 PM. The nighttime period measurements were conducted between 3:00 AM to 5:00 AM. Additional measurements were conducted on October 16, 2018 and October 17, 2018. The existing measured sound level data are summarized in Table 6-10.

Table 6-10 Existing Ambient Sound Levels, dB(A)

	City of Boston Residential District Noise Standard		Measured L90 Sound Levels[1]	
Monitoring Location	Daytime	Nighttime	Daytime	Nighttime
M1 – Everett Street	60	50	55.3	45.2
M2 – Harvester Street	60	50	50.7	46.2
M3 – Hichborn Street	60	50	52.9	47.8
M4 – Lincoln Street	60	50	71.6	61.7

Source: VHB
Note: Refer to Figure 6.10 for noise monitoring locations.
1 Measured sound levels represent average of hourly L90 levels during each period.

The measured L90 sound levels range from approximately 51 dB(A) to approximately 55 dB(A) during the daytime period in the neighborhood surrounding the Project site. The residential neighborhood located north of the site (Lincoln Street/Antwerp Street) experiences approximately 72 dB(A) during the daytime period. During the nighttime period, the neighborhood surrounding the Project site experience sound levels ranging from approximately 45 dB(A) to approximately 48 dB(A). The neighborhood across the highway experiences sound levels of approximately

62 dB(A). The result of the noise monitoring program indicates that the daytime and nighttime sound levels in the surrounding neighborhoods adjacent to the Project Site are currently below the City of Boston's standards for a Residential District. However, the Lincoln Street neighborhood experiences sound levels exceeding the City's noise standards during both daytime and nighttime periods. During the daytime period, the measured sound levels data were composed of noise from nearby construction activities and vehicles traveling on the surrounding roadways, such as the Turnpike, Everett Street and Hichborn Street. The nighttime period sound levels were generally associated with traffic on the Turnpike and noise from mechanical equipment from nearby buildings. Appendix E provides the noise monitoring data.

6.7.5 Future Noise Conditions

The noise analysis assessed the potential noise impacts associated with the Proposed Project's mechanical equipment and loading activities. The analysis evaluated the potential sound level impacts at the nearby sensitive receptor locations and the proposed residential uses.

Mechanical Equipment

Since the Proposed Project is in the early stages of the design process, the specific details related to the final selection of mechanical equipment are not confirmed at the time of this noise assessment. Based on preliminary design plans, the anticipated mechanical equipment associated with the Proposed Project are presented in Table 6-11.

Table 6-11 Anticipated Rooftop Mechanical Equipment

Equipment	Building A	Building B	Building C	Building D
Cooling Tower	Marley NC8403TLN2	Marley NC8405UAS2	Marley NC8405UAS2	Marley NC8403QAN2
Boiler	Crest FB 4000	Crest FB 4000	Crest FB 4000	Crest FB 4000
Stair Pressuration Fan	Greenheck USF-324-BI	Greenheck USF-333-BI	Greenheck USF-336-BI	Greenheck USF-333-BI
Energy Recovery Unit	AAON RN-030	AAON RN-030	AAON RN-030	AAON RN-030
Emergency Generator	Cummins 500DFEK	Cummins 750DQFAA	Cummins 750DQFAA	Cummins 750DQFAA

A quantitative analysis was conducted for the external rooftop equipment using the manufacturer's specifications provided by the mechanical engineer. The reference sound level data for the rooftop mechanical equipment were analyzed using the industry accepted noise modeling program CadnaA. The sound levels associated with the equipment were projected to the receptor locations using the properties of sound propagation following the ISO 9613 methodology[5]. These sound levels were adjusted to reflect the distances to the sensitive receptor locations, propagation path, and applicable blockages (such as building

5 ISO 9613-2:1996 "Acoustics-Attenuation of sound during propagation outdoors-Part: 2" *International Organization for Standardization*. Reviewed 2012.

structures). The calculated sound levels, presented in Table 6-12, represent the exterior sound levels at the nearby sensitive receptor locations.

Table 6-12 Future External Sound Levels, Db(A)

	Existing Sound Levels		Project Sound
Receptor Location	Daytime	Nighttime	Levels
R1: 20-26 Blaine St	55.3	45.2	43.9
R2: 1-3 Sinclair Rd	50.7	46.2	49.8
R3: 48-50 Hichborn St	52.9	47.8	47.3
R4: 33 Everett St	55.3	45.2	43.4
R5: 55 Saunders St	52.9	47.8	49.7
R6: 142-148 Lincoln St	71.6	61.7	42.2

Note: Refer to Figure 6.10 for receptor locations.

The Project-generated sound levels are expected to be the same during both daytime and nighttime periods, as all equipment are assumed to be operating at full load continuously during both daytime and nighttime periods. As shown in Table 6-8, the overall project-generated sound levels attributed to the rooftop equipment ranges from approximately 42.2 dB(A) to 49.8 dB(A) at the nearby sensitive receptor locations. These project-generated sound levels are below the City daytime and nighttime standards of 60 dB(A) and 50 dB(A), respectively for a residential zone.

Furthermore, the Project is expected to install emergency generators for life safety purposes, such as emergency exit lighting. The emergency generators do not operate continuously and were not included in this noise assessment. The Project will be required to adhere to the Massachusetts Department of Environmental Protection's (MassDEP's) regulations that require such equipment to be certified and registered when installed. As part of the air permitting process, the Project will be required to comply with additional noise requirements described in MassDEP regulations under the Codes of Massachusetts Regulations (310 CMR 7.00). At the proper time during the construction phase, the Proponent will submit a permit application to MassDEP, which would include noise mitigation measures (such as acoustic enclosures and exhaust silencers) that are necessary to meet MassDEP's noise criteria.

Service and Loading Activities

Due to the nature of the residential uses, daily loading/service activities associated with the proposed residential units are expected to be serviced by small delivery/service vehicles, such as FedEx/DHL vans. Deliveries associated with the proposed retail uses will consist of tractor-trailer trucks similar to ones used at the existing site. Loading activities are expected to occur in designated loading areas at each proposed building. The loading areas are expected to be located internally within the proposed buildings. The loading activities will be managed so that service and loading operations do not impact traffic on the adjacent roadways. Since

loading activities will be enclosed and will be managed, potential noise impacts to nearby sensitive receptor locations are expected to be negligible.

Building Design Noise Reflection

The proposed buildings associated with the Project are expected to have minimal impacts on the existing sound environment in the residential neighborhood located north of the Project site. Changes in sound levels associated with traffic traveling along the Massachusetts Turnpike (I-90) reflecting off the proposed building facades is expected to be minimal. FHWA[6] has indicated that field studies have shown that noise barriers, in this case the proposed buildings, would not increase sound levels at receptors on the opposite side of the highway.

Due to the properties of acoustical energy or sound, the potential increase that maybe experienced on the opposite side of barriers if all acoustical energy is reflected of the building would be approximately three decibels, which is considered not perceptible by the average human. However, not all the acoustical energy is reflected to the receptors on the opposite side. Some of the energy is diffracted over the barrier, reflected to points on the opposite side, and scattered by ground coverings (such as passing vehicles, jersey barrier in the median), Additionally, acoustic energy dissipates with distance and therefore, some of the reflected energy is lost due to the longer path that it must travel. FHWA has stated that measurements made to quantify this reflective increase have never shown an increase of greater than 1-2 dB, which is an increase that is not perceptible to the average human ear.

An analysis of potential reflection has been conducted to quantify the potential impacts associated with the proposed buildings. The analysis follows a methodology for evaluating reflections due to median barriers that is published in the National Cooperative Highway Research Program (NCHRP) Report 791. The methodology utilizes FHWA's TNM program for calculating sound levels associated with the I-90 traffic traveling pass the Project site. Traffic for I-90 were obtained from the MassDOT Transportation Data Management System. The modeling results indicate sound level increases of up to approximately two decibels, which confirms FHWA's statement.

6.7.6 Potential Noise Impacts on Proposed On-Site Residential Uses

HUD requires a noise assessment of noise sources that are located within certain distances of major transportation facilities, such as major roadways, rail lines, and airports. The Project is located approximately:

- 180 feet from I-90;
- 80 feet from MBTA Commuter Rail; and

6 Keeping the Noise Down: Highway Traffic Noise Barriers, Federal Highway Administration, Publication No. FHWA-EP-01-004, HEPN/ 2-01 (10M)E, February 2001.

› 5.5 miles from Logan International Airport.

Based on HUD procedures and guidelines, the Project is located within nearby major transportation facilities, therefore, the noise analysis evaluated noise associated with these facilities.

Traffic data associated with I-90 were obtained from MassDOT's Transportation Data Management System, train information from the MBTA schedules, and information associated with Logan Airport from Massport website. The analysis was conducted using the DNL Calculator for determining the sound levels at the Project site. The Project consists of multi-use development that includes residential units. The noise assessment focused on residential buildings located closest to I-90 and the rail line. Building facades located further away would experience lower sound levels as sound dissipates over distance and reductions due to impeding structures serving as barriers.

Buildings B, C and D have similar distances and are located approximately 180 feet from I-90 and approximately 80 feet from the commuter rail line. Table 6-13 summarizes the traffic data assumed for the analysis. Table 6-14 summarizes the train information used in the analysis.

Table 6-13 I-90 Traffic Data

Roadway Name		**Interstate 90**	
Vehicle Type	Cars	Medium Trucks	Heavy Trucks
Effective Distance	180 ft.	180 ft.	180 ft.
Average Travel Speed	67 mph	67 mph	67 mph
Average Daily Trips	111,791	18,788	2,943
Night Fraction of ADT	15%	15%	15%
Road Gradient	1%	1%	1%

Table 6-14 Commuter Rail Train Information

Train Type	Diesel
Effective Distance	80 ft
Average Train Speed	10 mph
Engines Per Train	1
Railway Cars Per Train	8
Average Train Operations (ATO)	55 trains per day
Night Fraction of ATO	27%
Railway Whistles or Horns?	No
Track Type	Bolted

Based on the noise contours developed for Logan Airport, the Project site is located beyond the 60 dB DNL contour. The results from the DNL Calculator indicate that all three buildings with residential units will experience an overall DNL of approximately 80 decibels.

With levels greater than HUD's threshold, the Project will require noise attenuation measures to minimize the impacts. The facades of the proposed buildings abutting I-90 and the commuter rail will be designed to incorporate building material with noise attenuation properties necessary to reduce interior sound levels below HUD's interior goal of 45 dB(A). The interior goal of 45 dB(A) is achievable with building material providing a minimum of approximately 35 dB(A) of reduction for Building B, Building C, and Building D. These reductions levels are considered achievable with the appropriate building construction techniques and materials. In addition, the setbacks of the upper floors of Buildings C and D will require less noise attenuation measures. All other building facades associated with the project would experience quieter sound levels because they are further from the two noise sources or sheltered by other buildings. The exterior sound levels and the necessary attenuation level for the north facades of the buildings are shown in Table 6-15.

Table 6-15 Proposed Residential Unit Sound Levels

Building	Overall Exterior DNL Sound Level (dB)[1]	Required Attenuation Level[2]
B, C, and D	80	35

1 Calculation conducted with online HUD DNL Calculator available at https://www.hudexchange.info
2 Sound level reduction necessary to meet HUD's interior goal of 45 dB(A).

6.7.7 Temporary Construction Noise

The construction activity associated with the Project may temporarily increase nearby sound levels due to the use of heavy machinery. Heavy machinery is expected to be used intermittently throughout the Project's construction phases, typically during daytime periods. The construction activities that will generate the highest sound levels may include demolition, site excavation and grading, and construction of the foundation for the proposed building. A construction management program will be developed with the local governing agency to ensure that the applicable noise regulation is met.

The Project will implement mitigation measures to reduce or minimize noise from construction activities. Construction vehicles and equipment would be required to maintain their original engine noise control equipment. Specific mitigation measures may include the following:

- Construction equipment would be required to have installed and properly operating appropriate noise muffler systems.
- Appropriate traffic management techniques would be implemented during the construction period would mitigate roadway traffic noise impact.

› Proper operation and maintenance, and prohibition of excessive idling of construction equipment engines, would be required.

Therefore, construction noise levels are proposed to be mitigated to the greatest extent possible.

6.7.8 Conclusion of Noise Impact Assessment

The noise analysis determined that the sensitive receptor locations near the Project Site currently experience sound levels below the City of Boston's noise criteria. Based on preliminary design, the proposed Project's operations will have no adverse noise impacts at nearby sensitive receptor locations. Additionally, during the design of the proposed residential units, selection of building materials and construction techniques will be considered to minimize noise impacts to the interior of the residential units on-site.

6.8 Solid and Hazardous Wastes

Management of soil and groundwater will be in accordance with applicable local, state, and federal laws and regulations, including the Massachusetts Contingency Plan. Like many properties in this part of Allston, the Project has undergone environmental investigations over the past decades. Release Tracking Number ("RTN") 3-2332 (incorporating RTN 3-14097) concerned CVOCs and petroleum, and was brought to regulatory closure in 2001 through the filing of a Class A-2 Response Action Outcome ("RAO"). RTN 12447 (linked to RTN 3-15227) concerned petroleum, and was similarly brought to regulatory closure through the filing of a Class A-2 RAO in 1999. More recently, as a result of site pre-characterization activities in anticipation of site redevelopment, RTN 3-33943 was issued in association with CVOCs and arsenic. It is anticipated that this RTN, which is in Phase II pursuant to the Massachusetts Contingency Plan ("MCP"), will provide the MCP framework under which to manage site soils and other media.

Overall, demolition debris waste will be separated and legally disposed of in regional landfills. Any material which cannot 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.

6.9 Construction

Impacts associated with the Proposed Project construction activities are temporary in nature and are typically related to truck traffic, air (dust), noise, stormwater runoff, solid waste, and vibration. For each phase of construction, the Proponent will

develop a detailed Construction Management Plan (CMP) for approval by BTD prior to construction. Each CMP will be developed to reflect the input of the regulatory authorities having jurisdiction over such plans, including the Boston Fire Department and BTD. The CMP will include detailed information on construction activities, specific construction mitigation measures, and vehicle routing and staging to minimize impact on the surrounding neighborhood and the Turnpike.

Construction methodologies that ensure public safety and protect nearby residents will be employed. Techniques such as barricades, walkways, and signage will be used. Construction management and scheduling will minimize impacts on the surrounding environment and will include plans for construction worker commuting and parking, routing plans for trucking and deliveries, and control of noise and dust. The following section generally describes the potential construction-period impacts and proposed CMP elements, which are subject to refinement and modification as the design of the Proposed Project progresses.

6.9.1 Draft Construction Management Plan

An important component of the transportation plan for the Project is an effective series of measures that are designed to minimize traffic flow and safety impacts during the Project's construction phase. Summarized below are several measures which are anticipated to be undertaken during the construction phase of the Project.

- The Proponent and the general contractor will coordinate with BTD regarding all transportation-related construction impacts of the Project.
- Designated truck routes will be established to govern how trucks access the Project site. The goal of this commitment is to have construction trucks avoid travelling through residential areas and pedestrian-oriented corridors to the extent practical.
- Secure fencing will be provided in areas affected by construction to protect nearby pedestrian and vehicular traffic. Gate entrances into the construction area will be established to minimize impacts on adjacent ways.
- During construction activities, a police detail will be employed as necessary to manage pedestrian and vehicle traffic at the construction access to the Project site.
- Secure on-site storage will be provided for tools and equipment in an effort to minimize construction-related vehicle trips to the site.
- Full or partial street closures will be avoided to the extent possible. Should a partial street closure be necessary in order to complete construction-related activities, the closure will be limited to off-peak periods as practical. Police details will be used as necessary to manage vehicle circulation. Prior to the implementation of any planned construction activities within the public right-of-way, the contractor will prepare a traffic and pedestrian management plan for public review.
- The General Contractor (GC) will work with the TMA to implement appropriate measures to encourage ridesharing and the use of public transportation services by employees and subcontractors working on the Project.

Implementation of the above measures will ensure that construction-related impacts associated with the Project will be appropriately managed, and safe and efficient access for vehicles, pedestrians and bicyclists will be maintained.

Refer to Appendix G for a detailed Draft Construction Management Plan.

6.9.2 Potential Construction Impacts

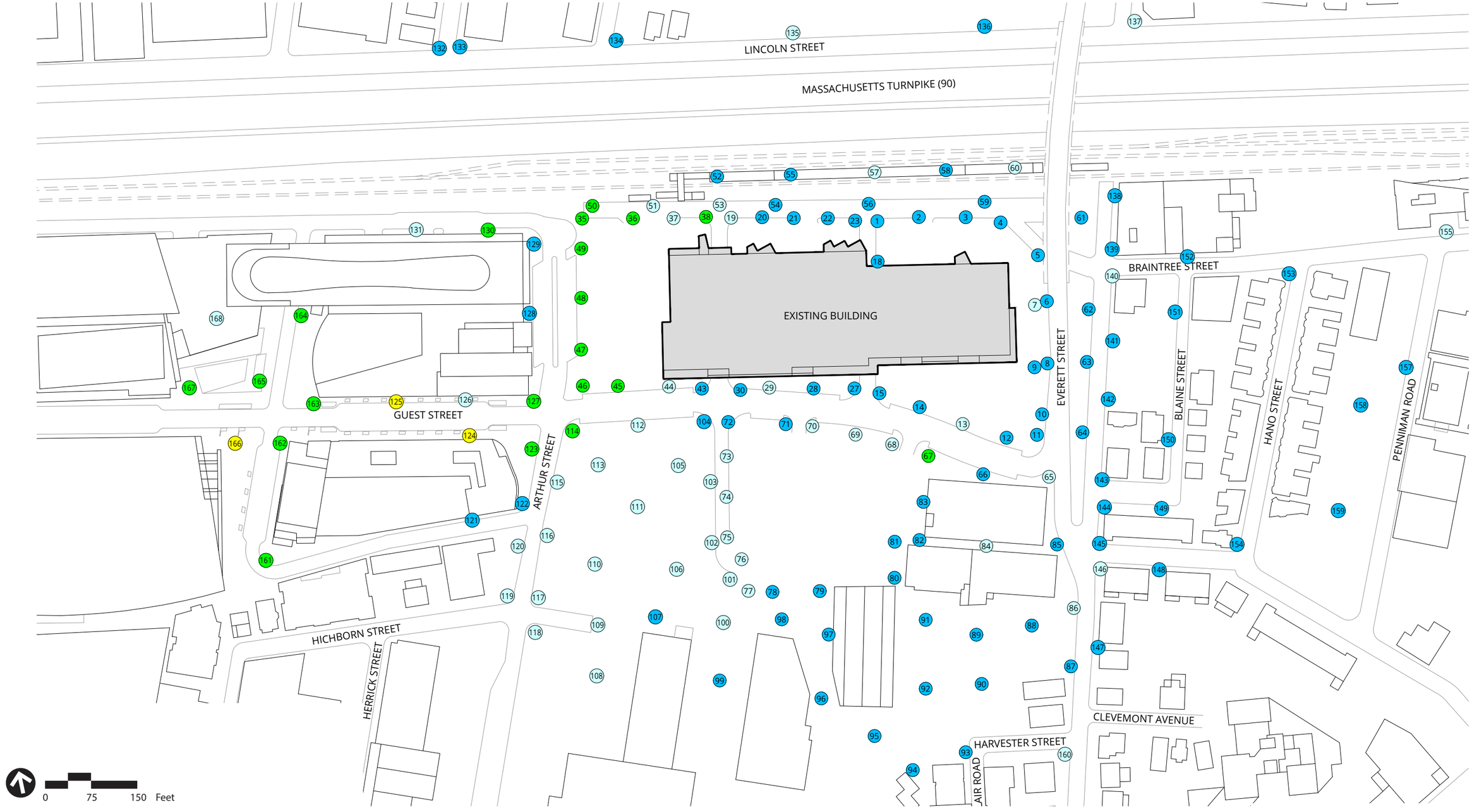
With the exception of utility connections, access improvements, and intersection upgrades, all work is on private property owned by the Proponent. Customer access and product delivery to ongoing retail will be maintained and controlled to minimize disruption. On-site parking will be available for customers at all times.

6.9.3 Rodent Control Post-Construction

Trash and solid waste removal will be handled by the Construction Manager (CM). The C will maintain a service contract with a professional pest control firm to address rodent/pest control during the operational phase of the Proposed Project, as needed. In addition, no open top dumpsters will be allowed as an additional precaution to deter infestation.

6.9.4 Anticipated Schedule

The anticipated construction start date for the initial phase of development (currently contemplated as Building A) is scheduled for Q1 2020. This phase is anticipated to be completed Q2 2022. The remaining phases are expected to be approximately seven years for Full Build.



LEGEND:

MEAN SPEED CATEGORIES:
- Sitting
- Standing
- Walking
- Uncomfortable
- Dangerous

SENSOR LOCATION:
- Grade Level

Prepared by: RWDI

Figure 6.1a

Pedestrian Wind No-Build Condition
Mean Speed

Allston Yards
Allston, Massachusetts

LEGEND:

EFFECTIVE GUST SPEED CATEGORIES:
- Acceptable
- Unacceptable

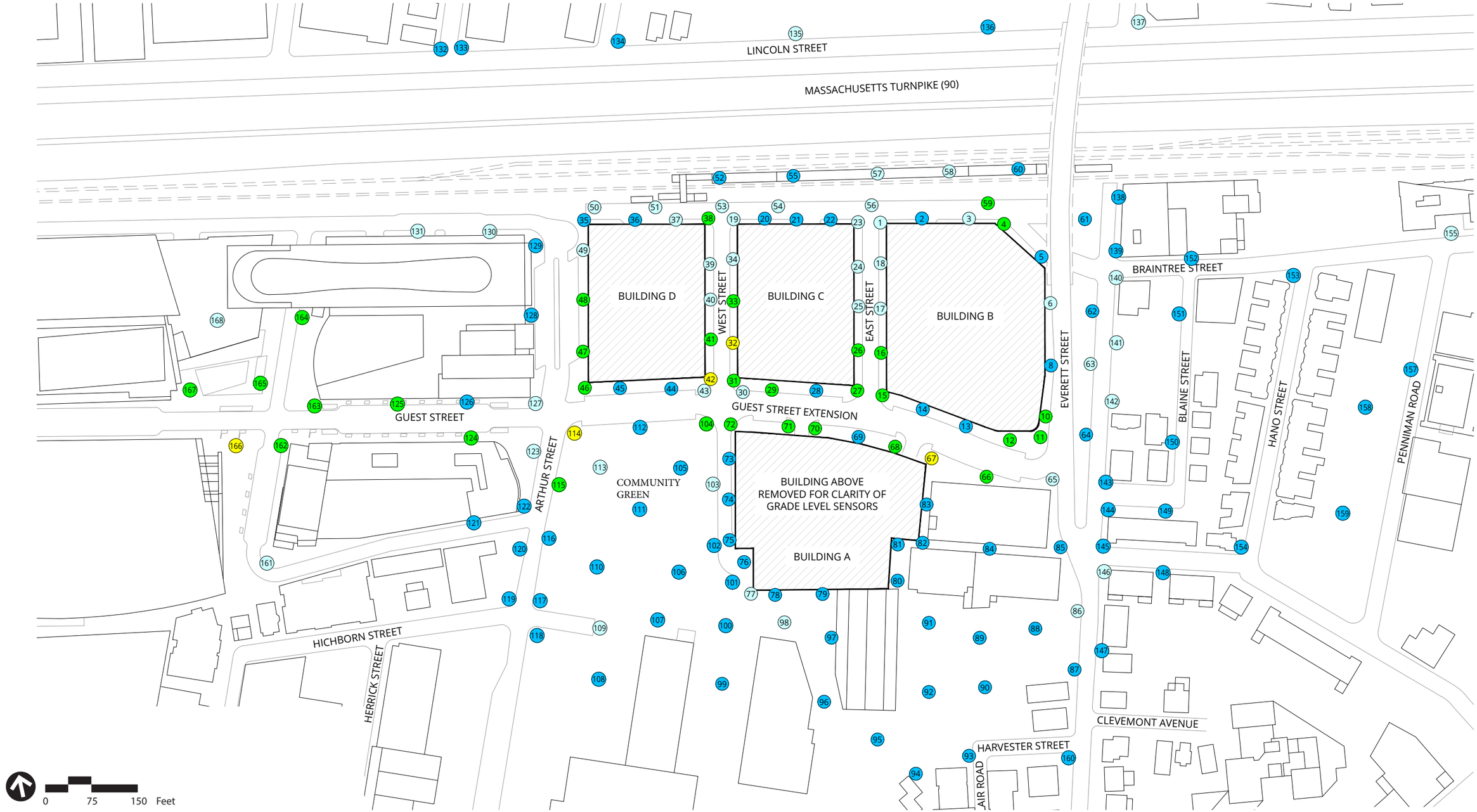
SENSOR LOCATION:
- Grade Level

Prepared by: RWDI

Figure 6.1b

Pedestrian Wind No-Build Condition
Effective Gust Speed

Allston Yards
Allston, Massachusetts



LEGEND:

MEAN SPEED CATEGORIES:
- Sitting
- Standing
- Walking
- Uncomfortable
- Dangerous

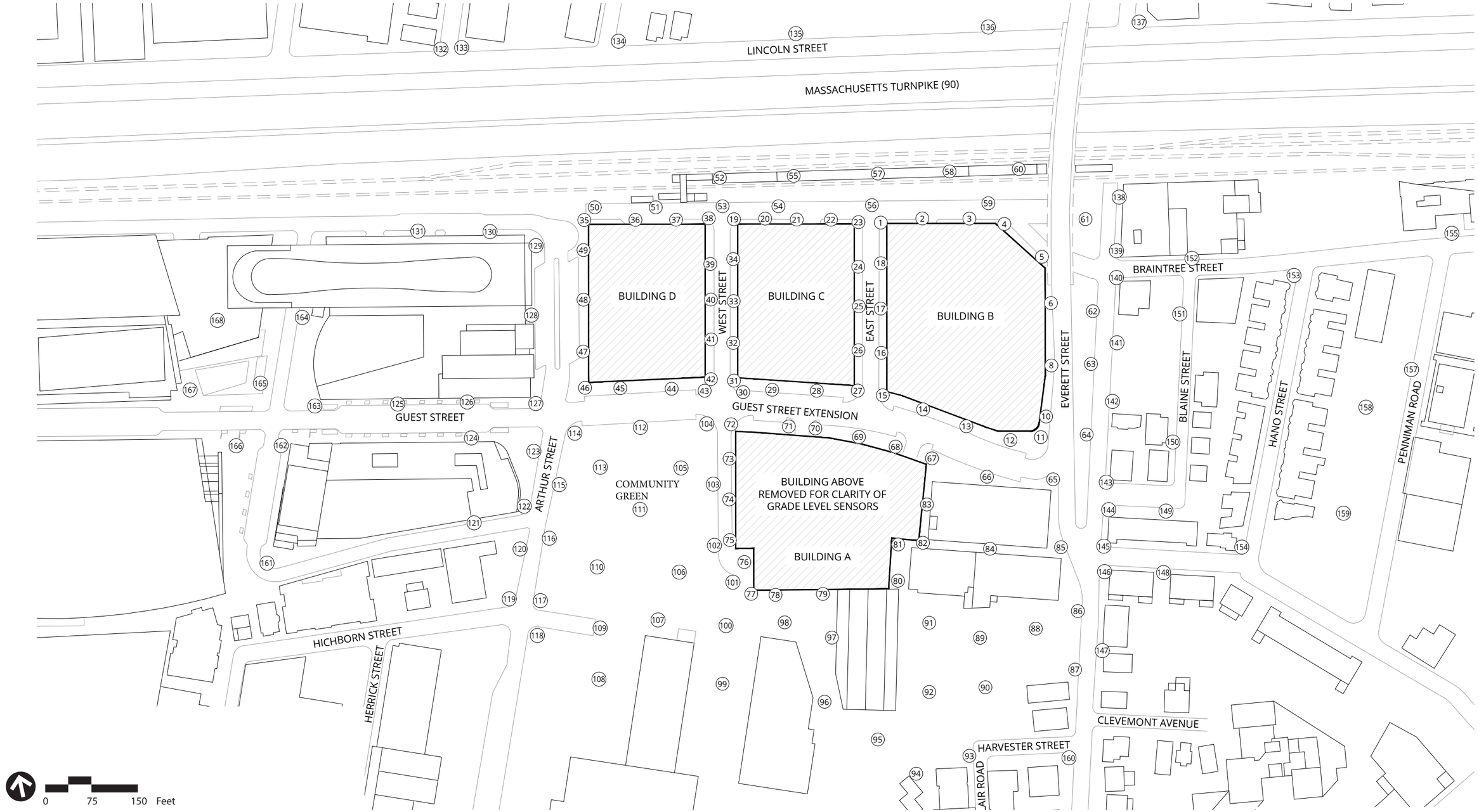
SENSOR LOCATION:
- Grade Level

Prepared by: RWDI

Figure 6.2a

Pedestrian Wind Full Build Condition
Mean Speed

Allston Yards
Allston, Massachusetts



LEGEND:

EFFECTIVE GUST SPEED CATEGORIES:
- Acceptable
- Unacceptable

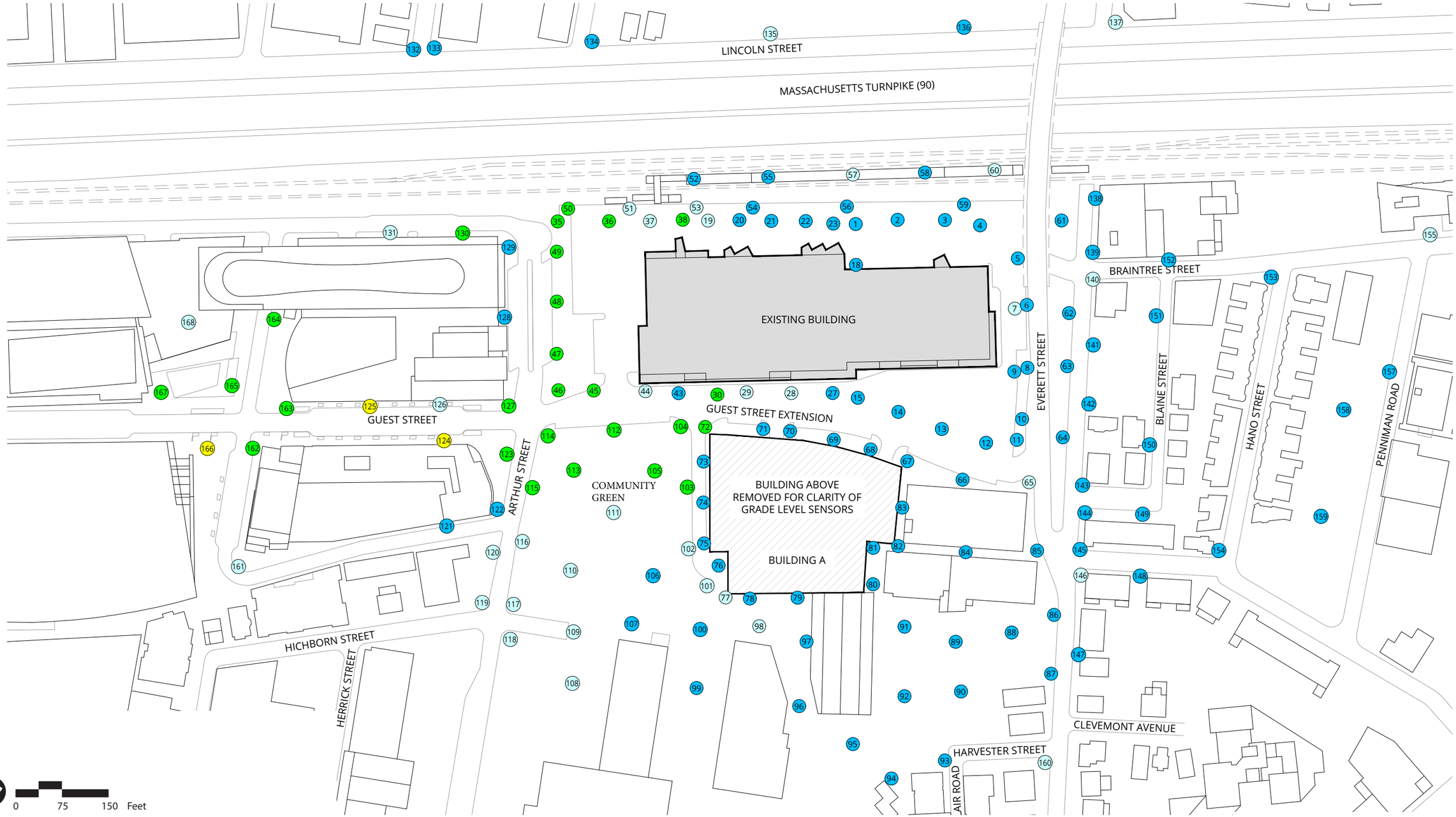
SENSOR LOCATION:
- Grade Level

Prepared by: RWDI

Figure 6.2b

Pedestrian Wind Full Build Condition
Effective Gust Speed

Allston Yards
Allston, Massachusetts



LEGEND:

MEAN SPEED CATEGORIES:
- Sitting
- Standing
- Walking
- Uncomfortable
- Dangerous

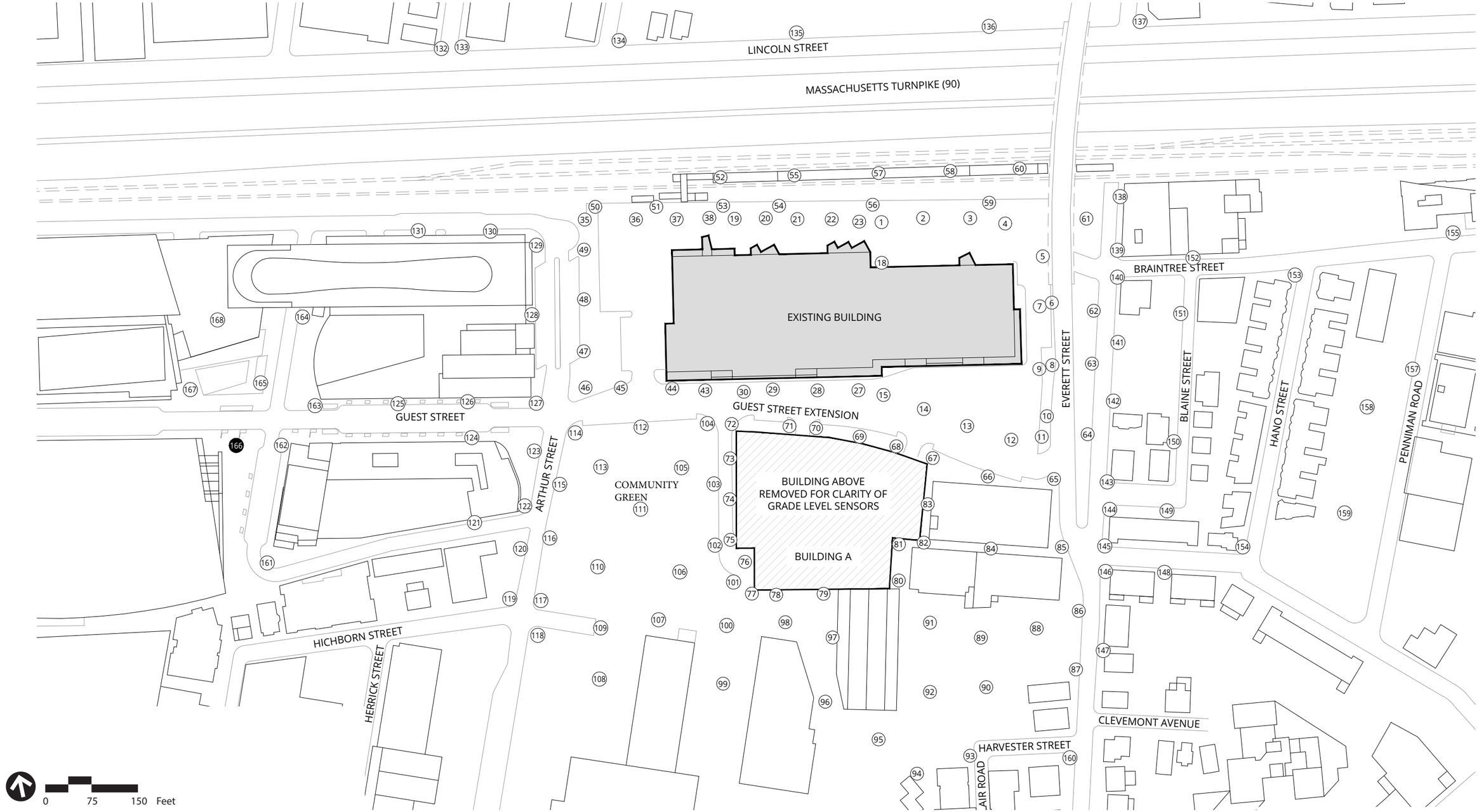
SENSOR LOCATION:
- Grade Level

Prepared by: RWDI

Figure 6.3a

Phase 1 (Building A) Wind Condition Mean Speed

Allston Yards
Allston, Massachusetts



LEGEND:

EFFECTIVE GUST SPEED CATEGORIES:
- Acceptable
- Unacceptable

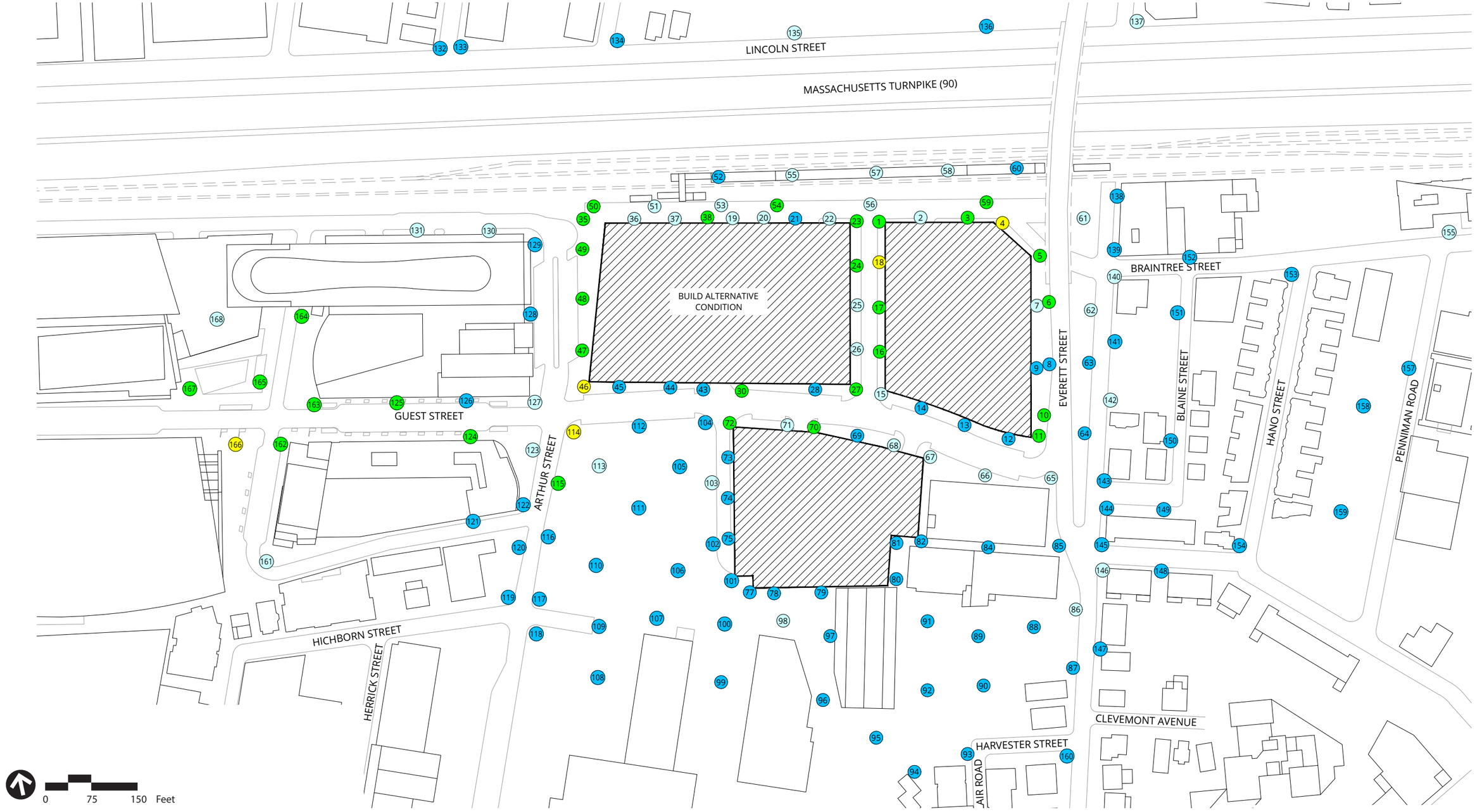
SENSOR LOCATION:
- Grade Level

Prepared by: RWDI

Figure 6.3b

Phase 1 (Building A) Wind Condition
Effective Gust Speed

Allston Yards
Allston, Massachusetts



LEGEND:

MEAN SPEED CATEGORIES:
- Sitting
- Standing
- Walking
- Uncomfortable
- Dangerous

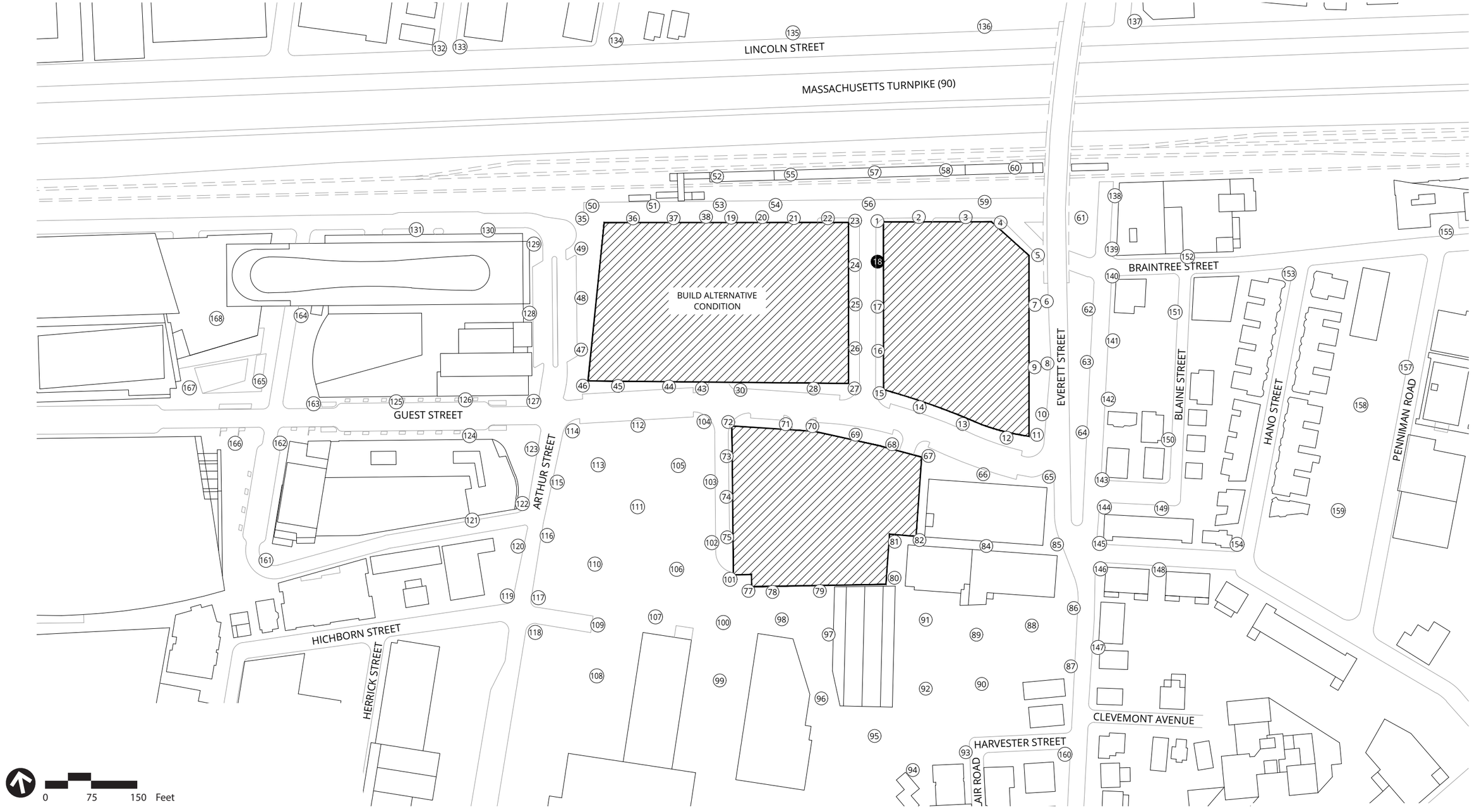
SENSOR LOCATION:
- Grade Level

Prepared by: RWDI

Figure 6.4a

Build Alternative Wind Condition
Mean Speed

Allston Yards
Allston, Massachusetts



LEGEND:

EFFECTIVE GUST SPEED CATEGORIES:
- Acceptable
- Unacceptable

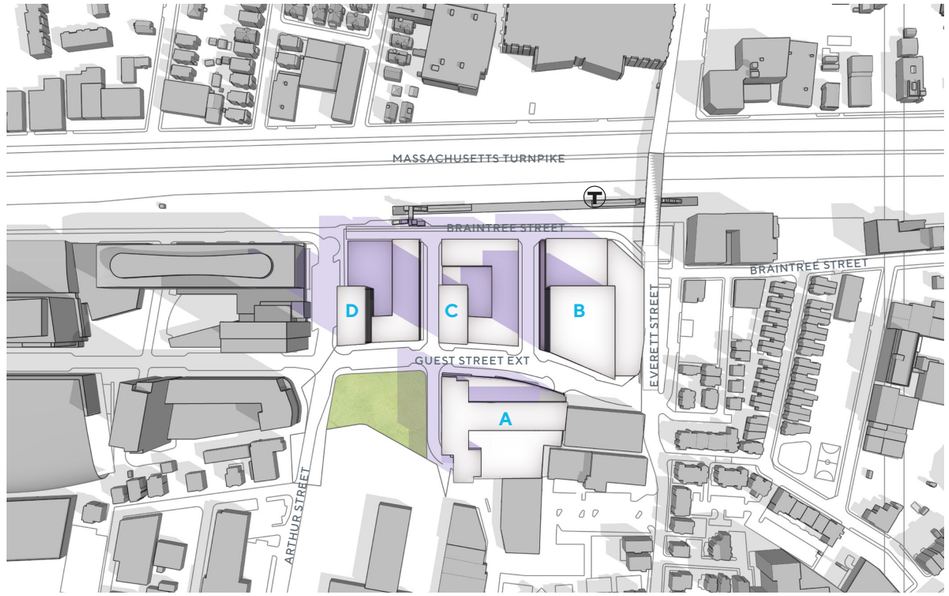
SENSOR LOCATION:
- Grade Level

Prepared by: RWDI

Figure 6.4b

Build Alternative Wind Condition
Effective Gust Speed

Allston Yards
Allston, Massachusetts



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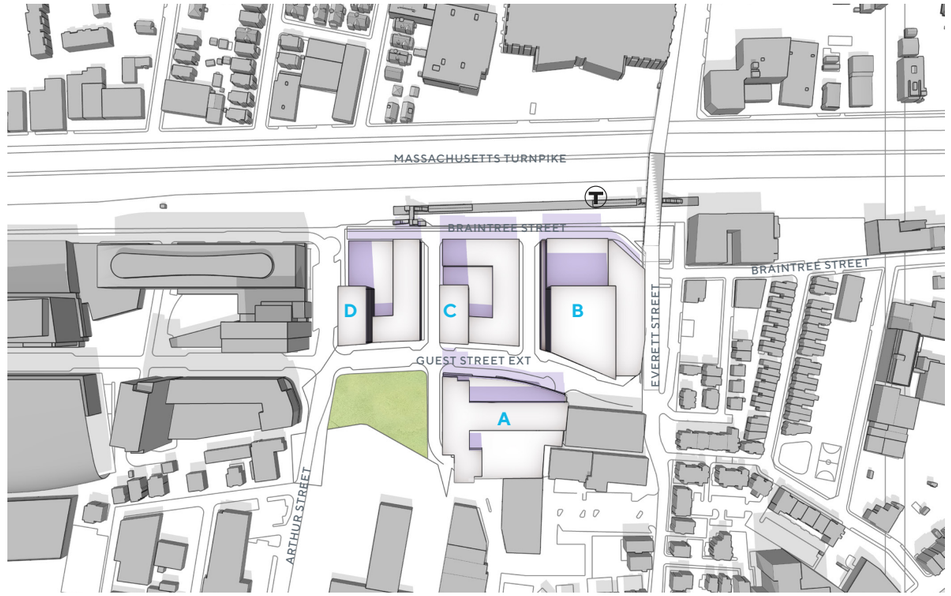

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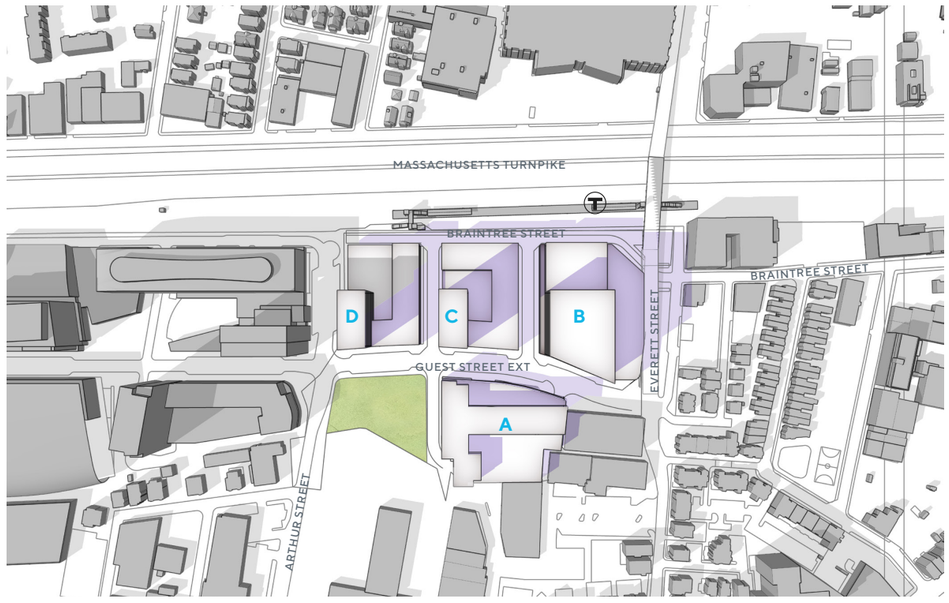


3PM

0 150 300 Feet

LEGEND:

EXISTING AND FUTURE NO-BUILD SHADOWS

NET NEW SHADOWS - ROOF

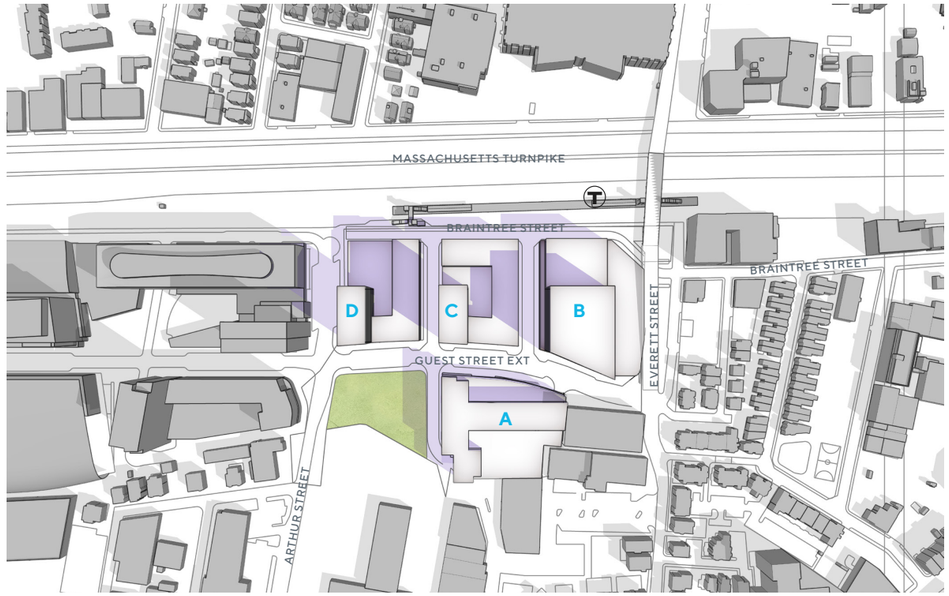
NET NEW SHADOWS - STREET

Prepared by: Elkus Manfredi Architects

Figure 6.5a

Full-Build Condition Shadows
March 21

Allston Yards
Allston, Massachusetts



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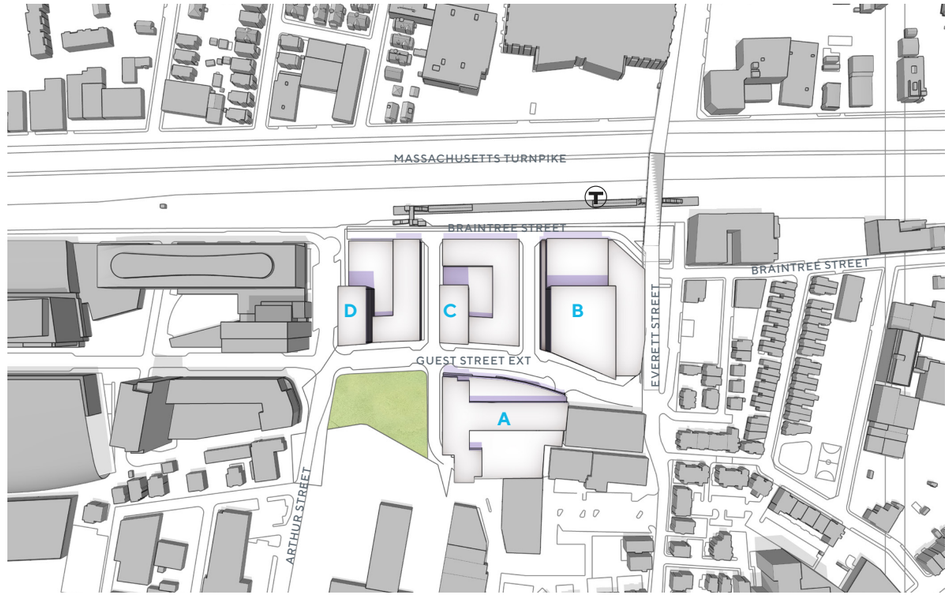

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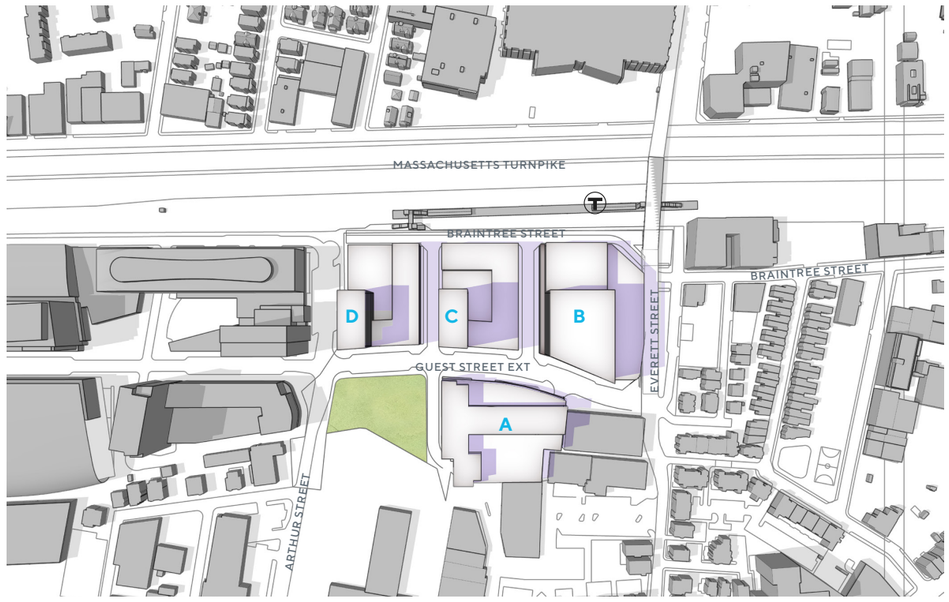

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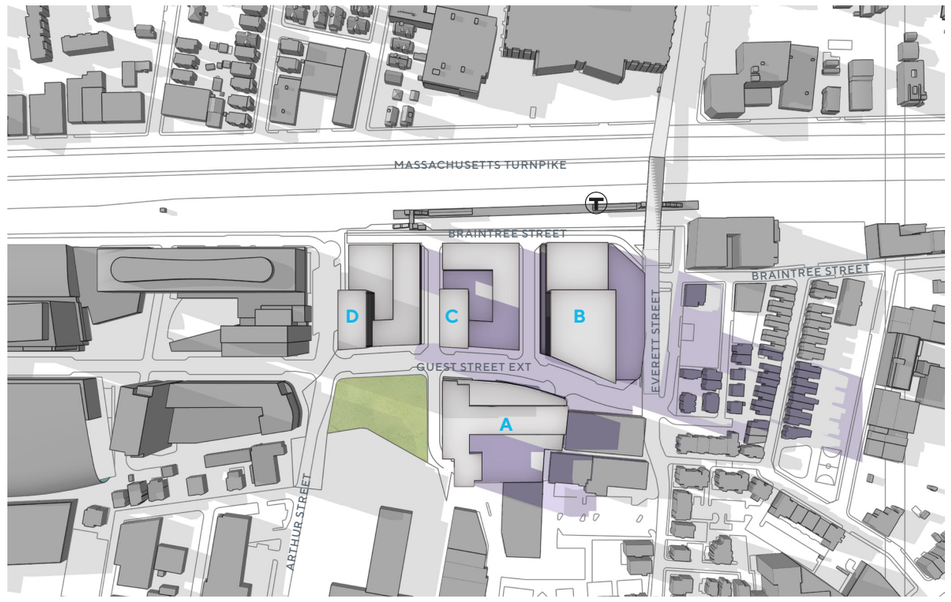


6PM

0 150 300 Feet

LEGEND:

EXISTING AND FUTURE NO-BUILD SHADOWS

NET NEW SHADOWS - ROOF

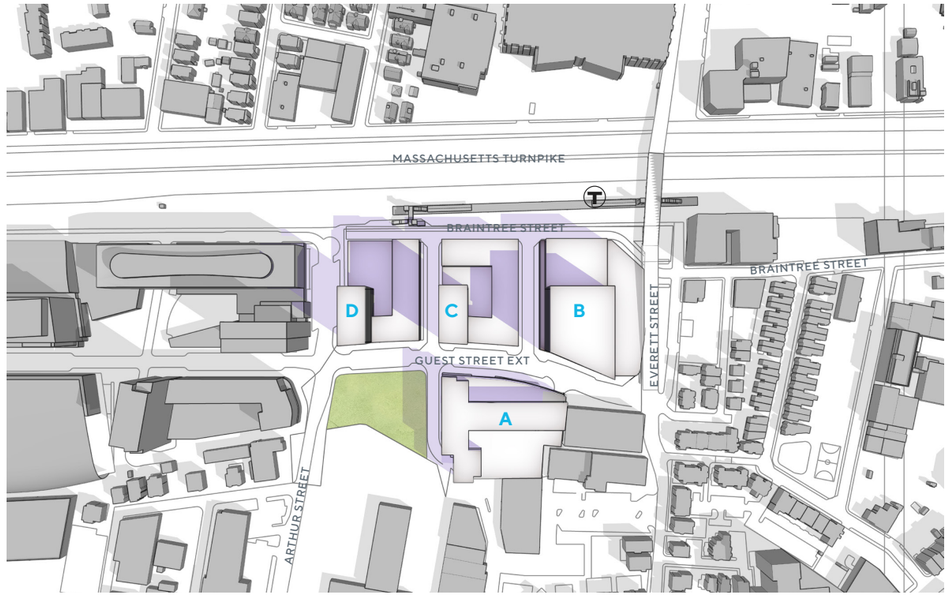
NET NEW SHADOWS - STREET

Prepared by: Elkus Manfredi Architects

Figure 6.5b

Full-Build Condition Shadows
June 21

Allston Yards
Allston, Massachusetts



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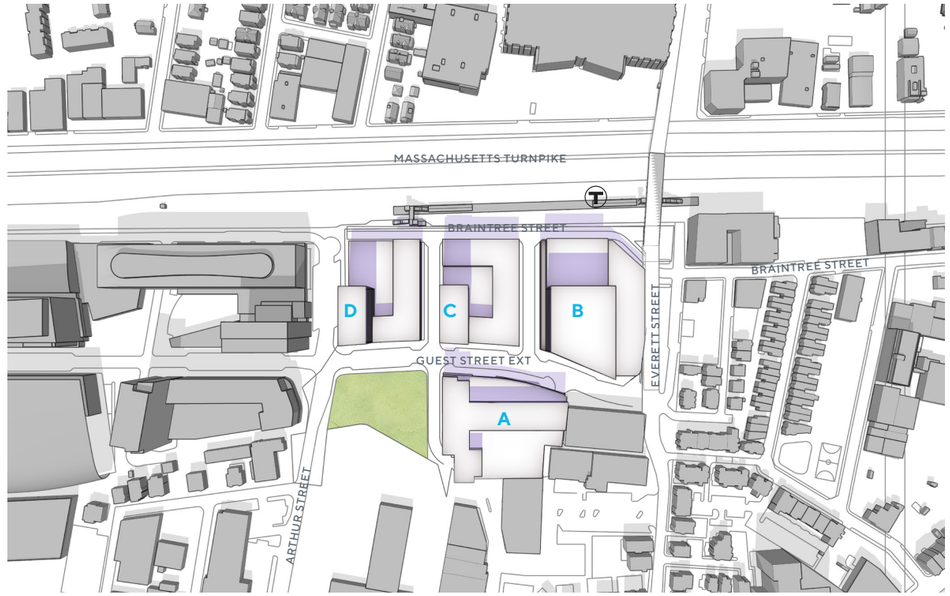

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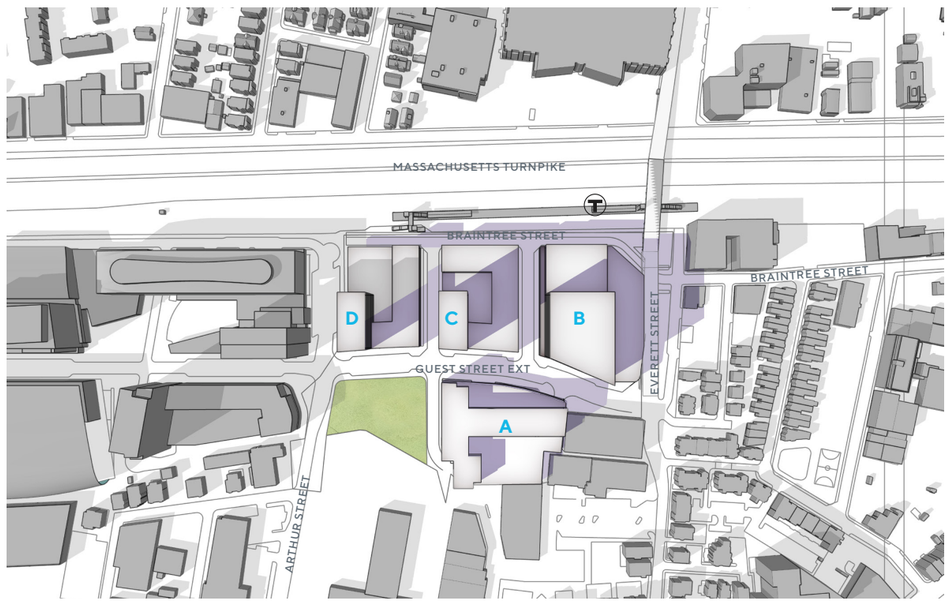

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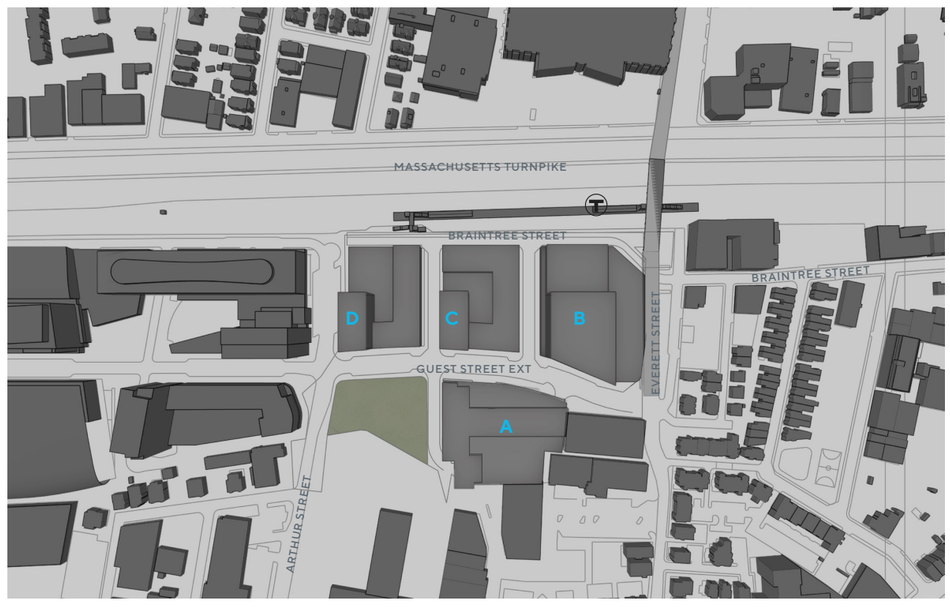


6PM

0 150 300 Feet

LEGEND:

EXISTING AND FUTURE NO-BUILD SHADOWS

NET NEW SHADOWS - ROOF

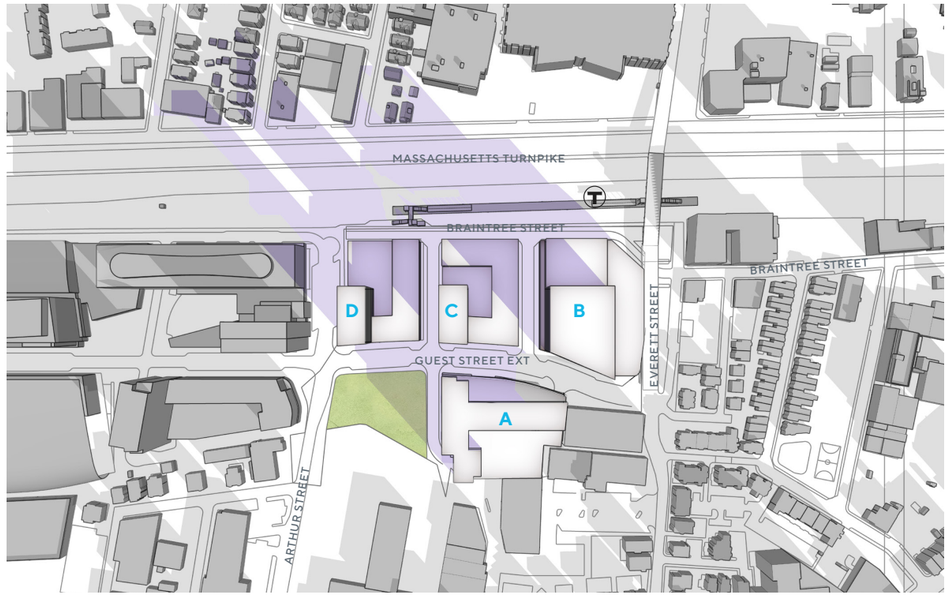
NET NEW SHADOWS - STREET

Prepared by: Elkus Manfredi Architects

Figure 6.5c

Full-Build Condition Shadows
September 21

Allston Yards
Allston, Massachusetts



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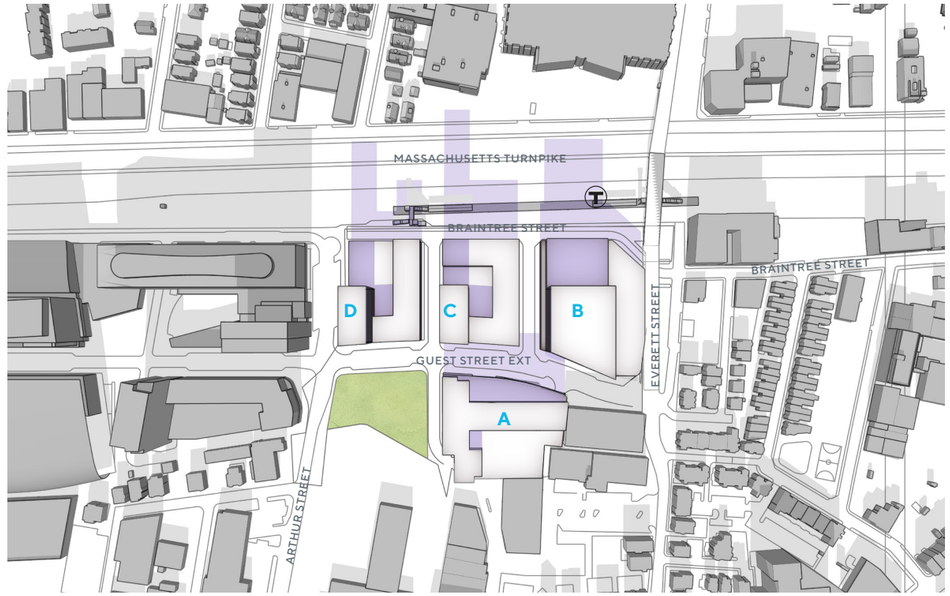

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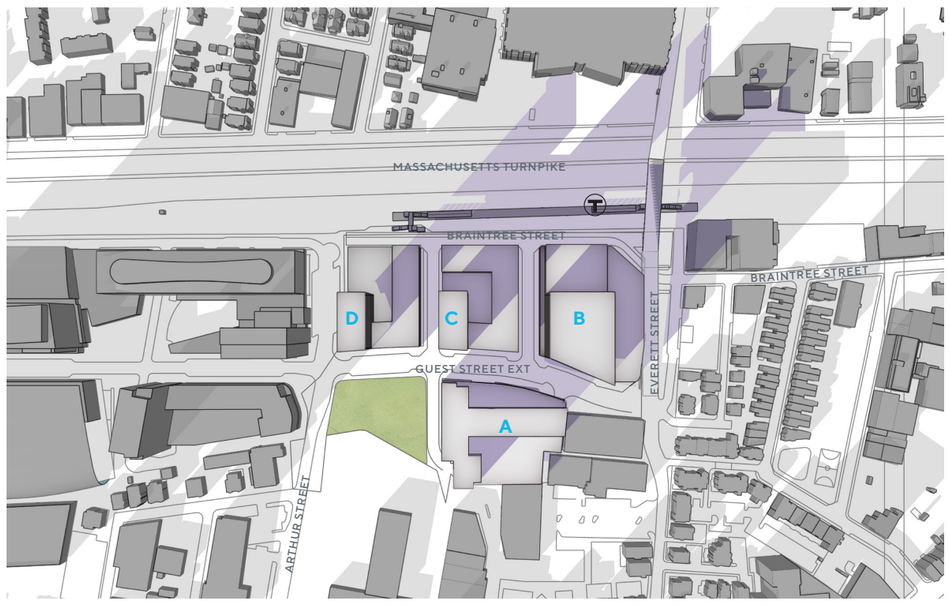

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0 150 300 Feet

LEGEND:

EXISTING AND FUTURE NO-BUILD SHADOWS

NET NEW SHADOWS - ROOF

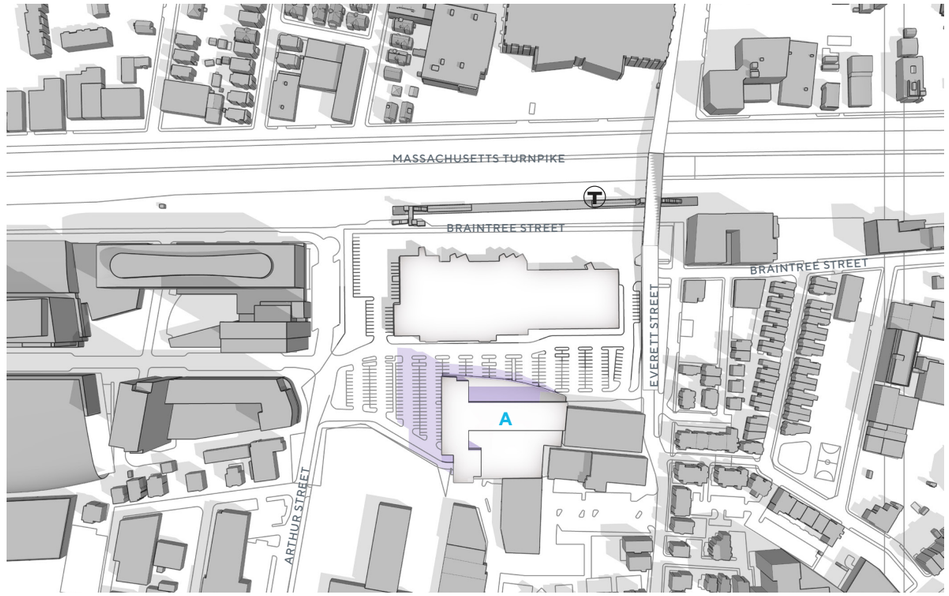
NET NEW SHADOWS - STREET

Prepared by: Elkus Manfredi Architects

Figure 6.5d

Full-Build Condition Shadows
December 21

Allston Yards
Allston, Massachusetts



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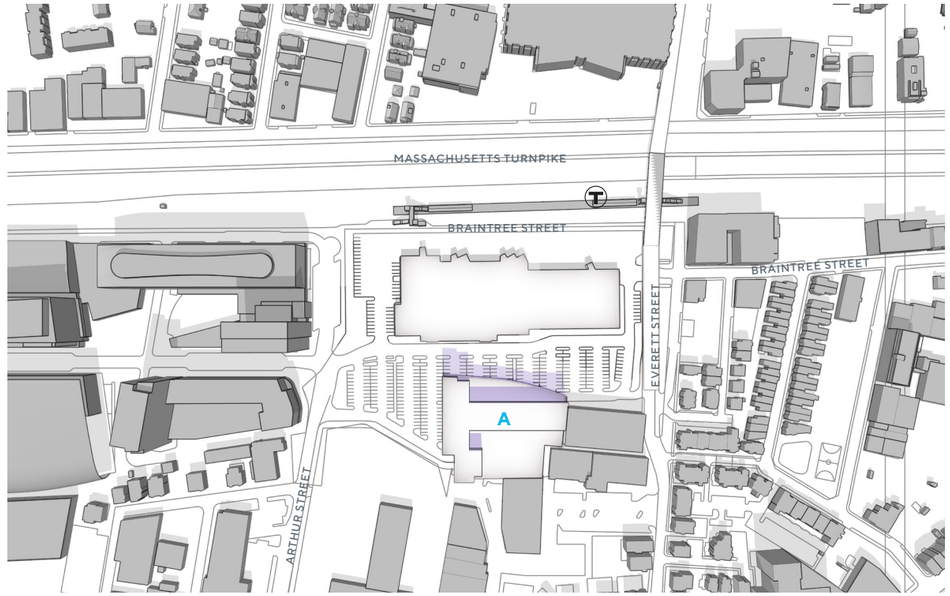

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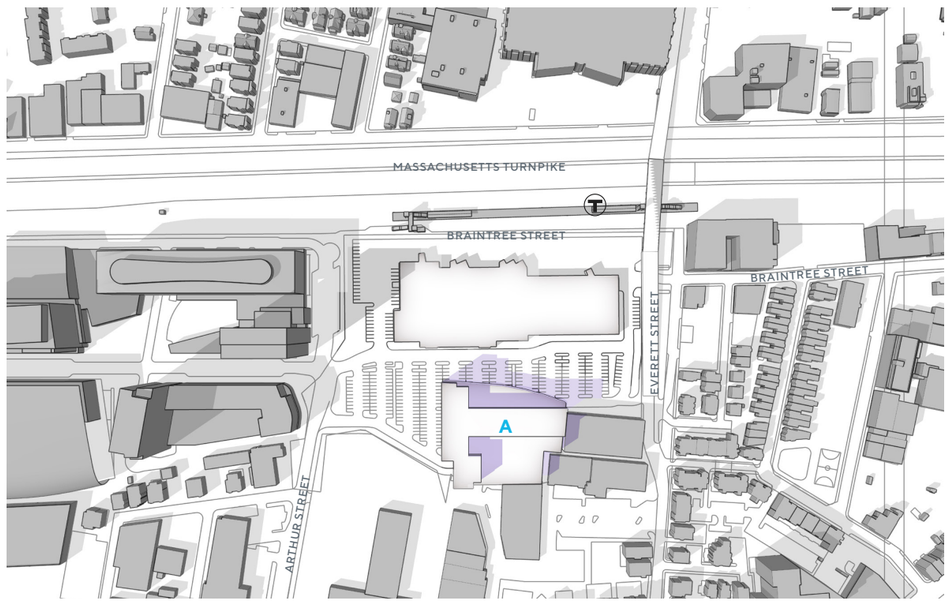


3PM

0 150 300 Feet

LEGEND:

EXISTING AND FUTURE NO-BUILD SHADOWS

NET NEW SHADOWS - ROOF

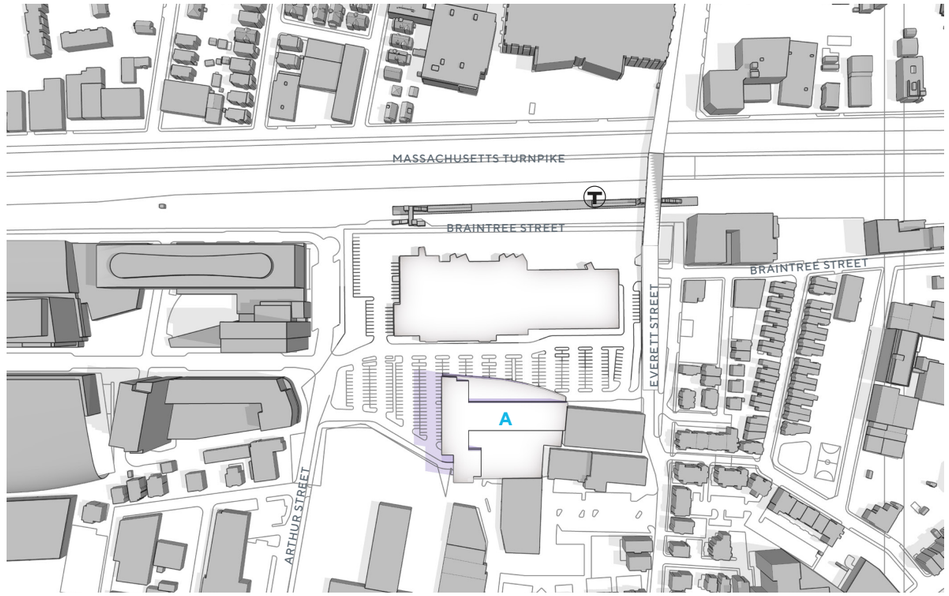
NET NEW SHADOWS - STREET

Prepared by: Elkus Manfredi Architects

Figure 6.6a

Phase 1 Build Condition Shadows
March 21

Allston Yards
Allston, Massachusetts



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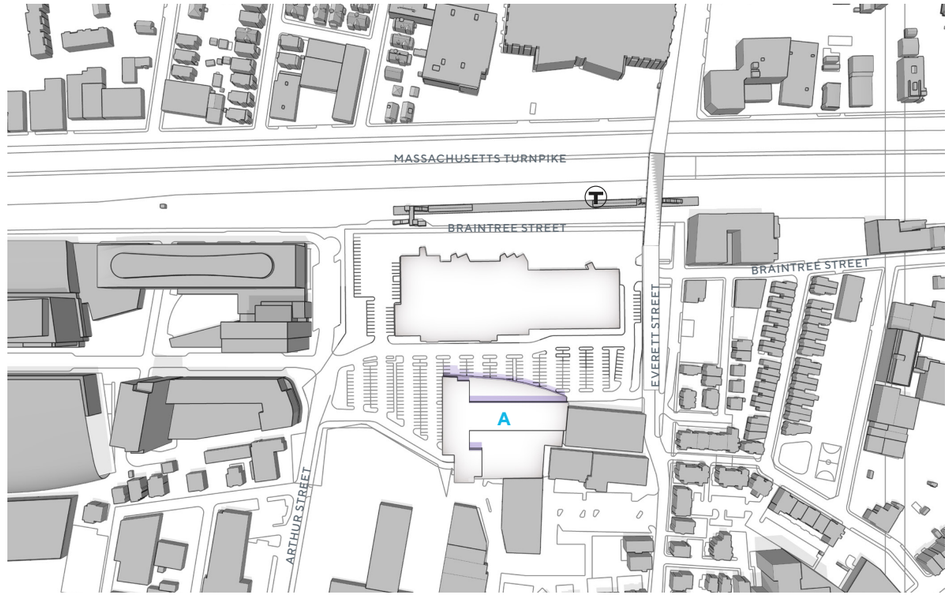

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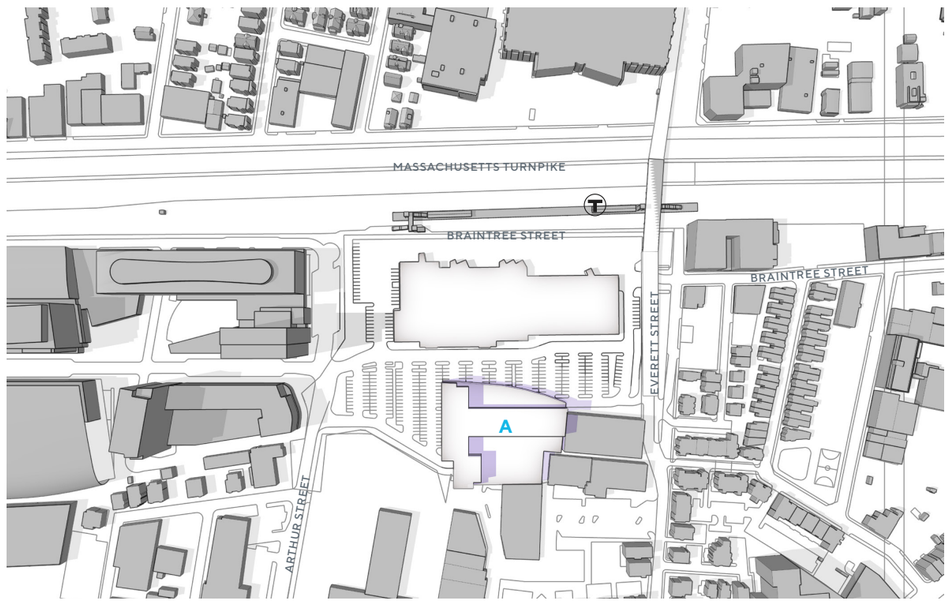

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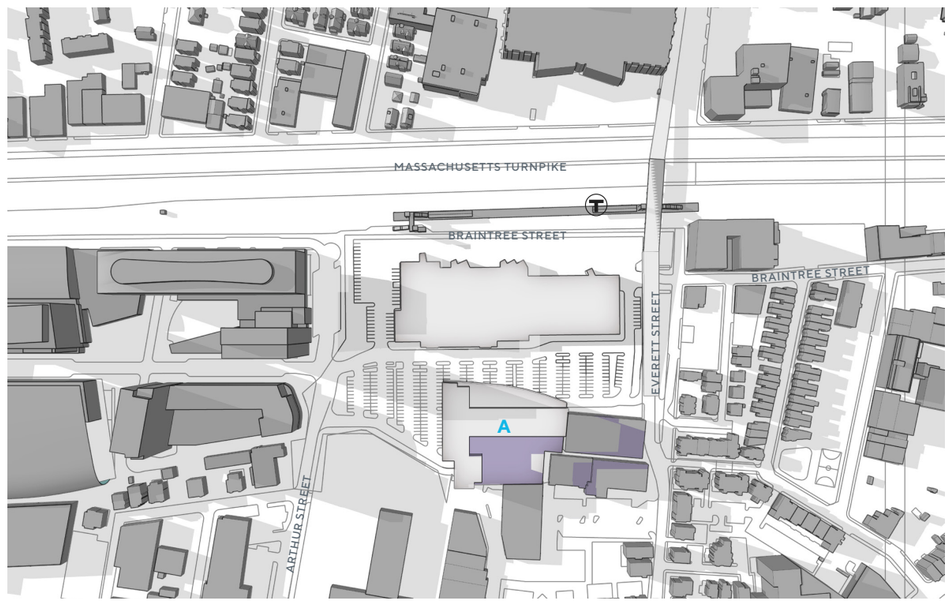


6PM

0 150 300 Feet

LEGEND:

EXISTING AND FUTURE NO-BUILD SHADOWS

NET NEW SHADOWS - ROOF

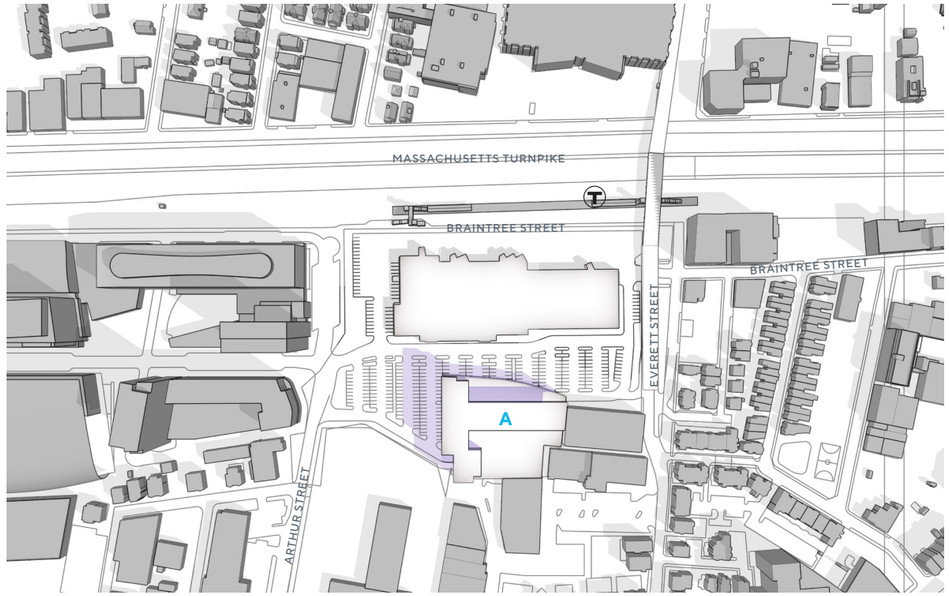
NET NEW SHADOWS - STREET

Prepared by: Elkus Manfredi Architects

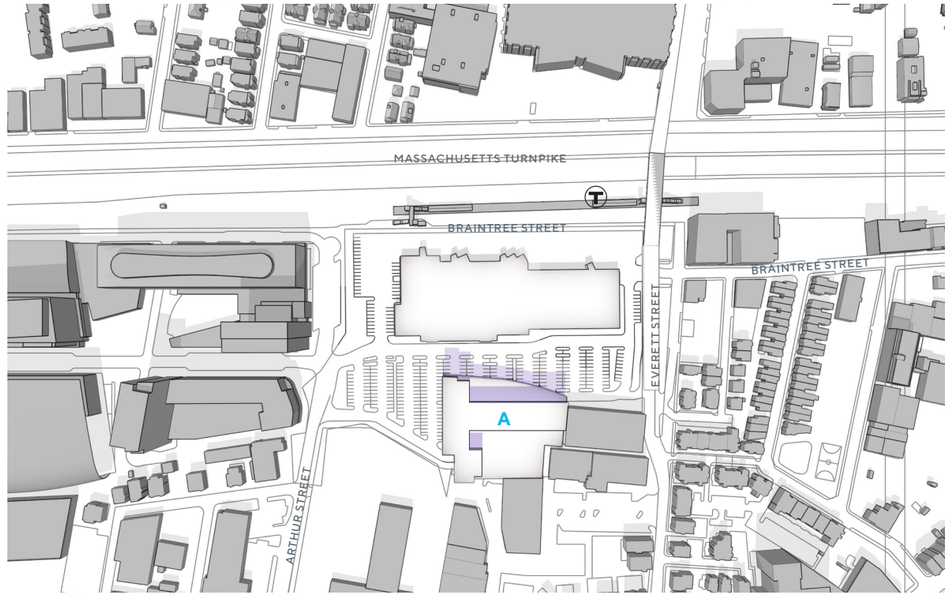
Figure 6.6b

Phase 1 Build Condition Shadows
June 21

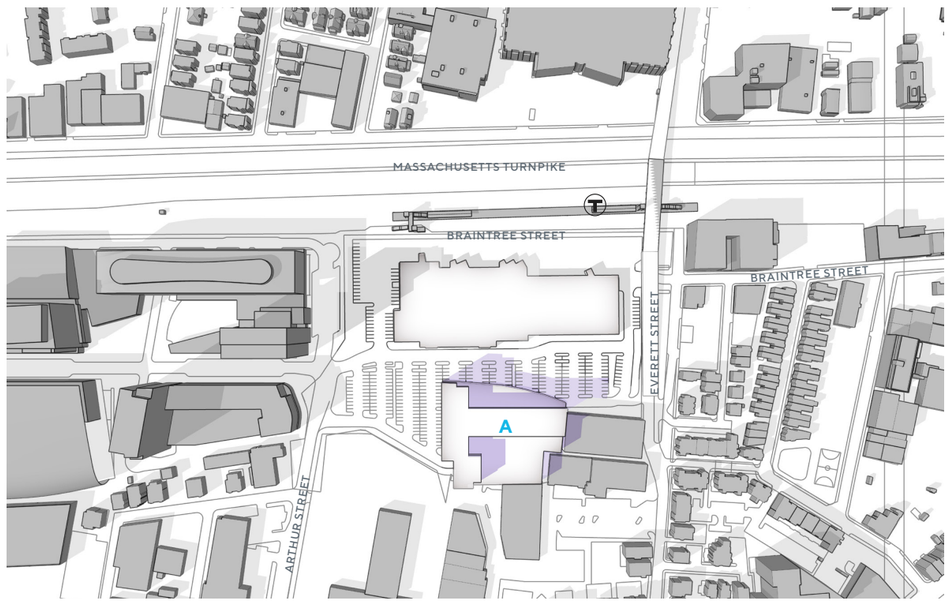
Allston Yards
Allston, Massachusetts



9AM



12PM



3PM

6PM

0 150 300 Feet

LEGEND:

EXISTING AND FUTURE NO-BUILD SHADOWS

NET NEW SHADOWS - ROOF

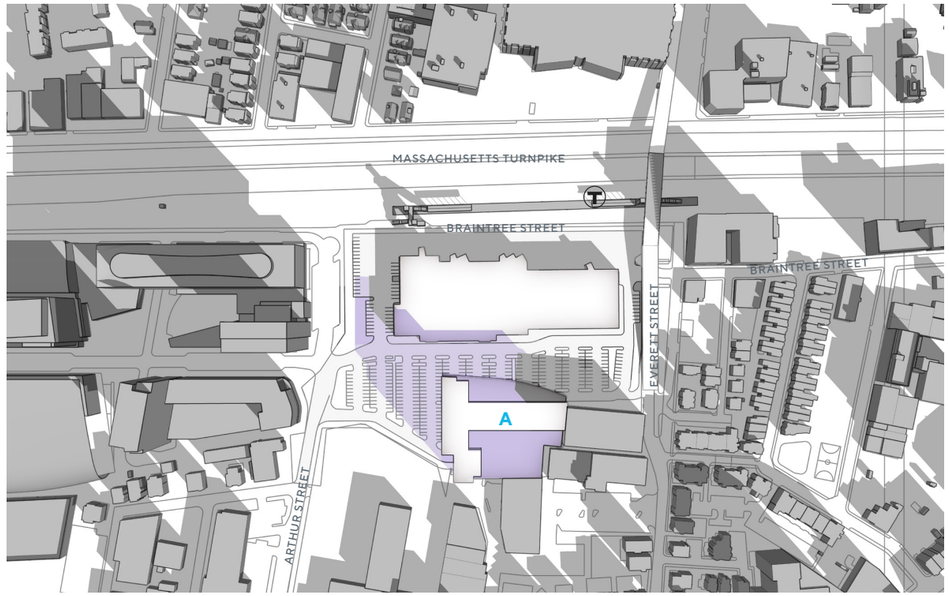
NET NEW SHADOWS - STREET

Prepared by: Elkus Manfredi Architects

Figure 6.6c

Phase 1 Build Condition Shadows
September 21

Allston Yards
Allston, Massachusetts



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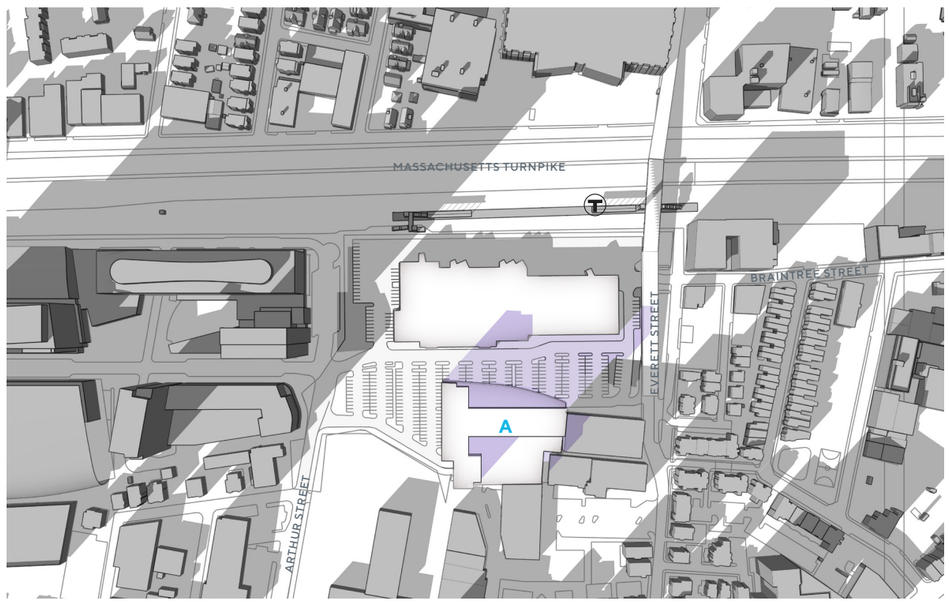
12PM



3PM

0 150 300 Feet

LEGEND:

EXISTING AND FUTURE NO-BUILD SHADOWS

NET NEW SHADOWS - ROOF

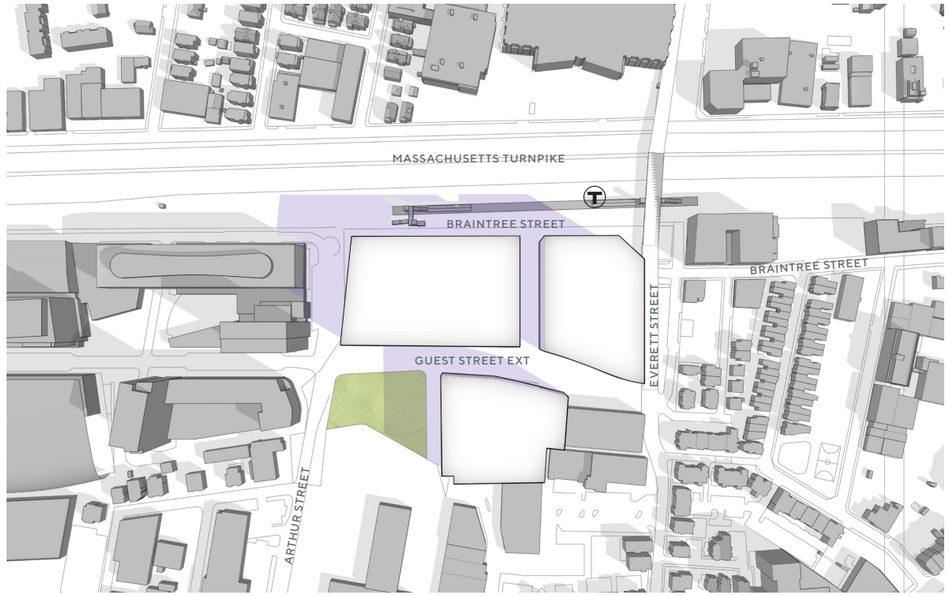
NET NEW SHADOWS - STREET

Prepared by: Elkus Manfredi Architects

Figure 6.6d

Phase 1 Build Condition Shadows
December 21

Allston Yards
Allston, Massachusetts



9AM

12PM

3PM

0 150 300 Feet

LEGEND:

EXISTING AND FUTURE NO-BUILD SHADOWS

NET NEW SHADOWS - ROOF

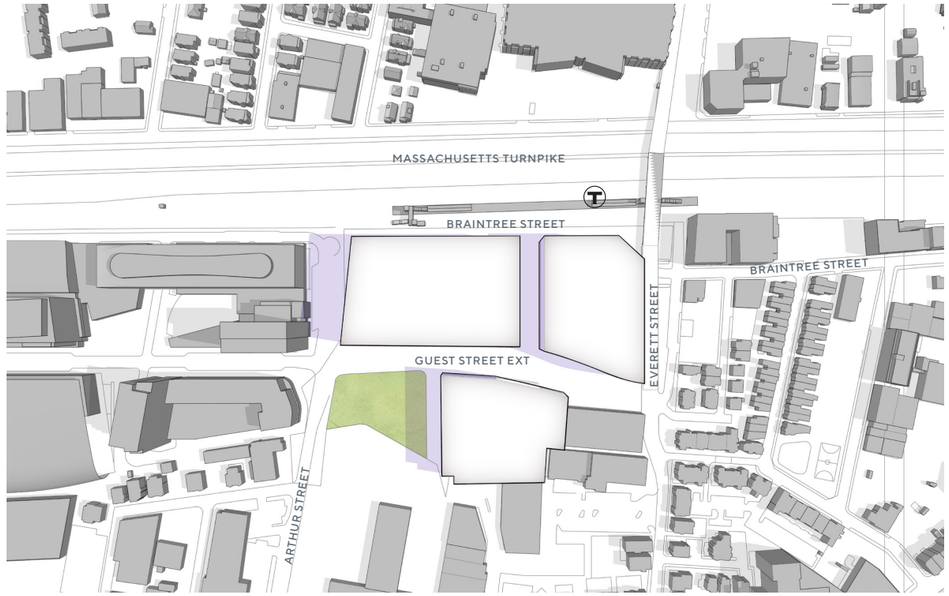
NET NEW SHADOWS - STREET

Prepared by: Elkus Manfredi Architects

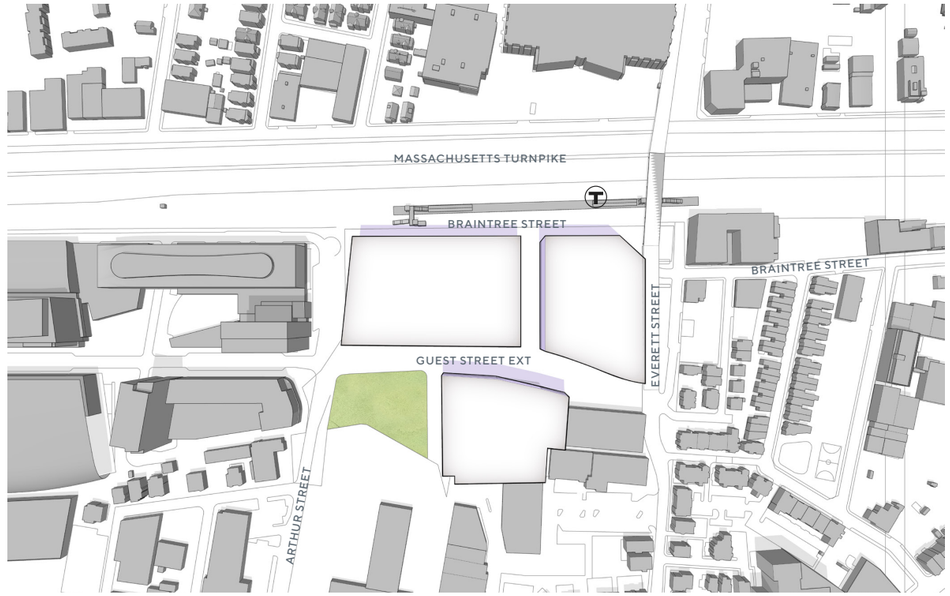
Figure 6.7a

Build Alternative Condition Shadows
March 21

Allston Yards
Allston, Massachusetts

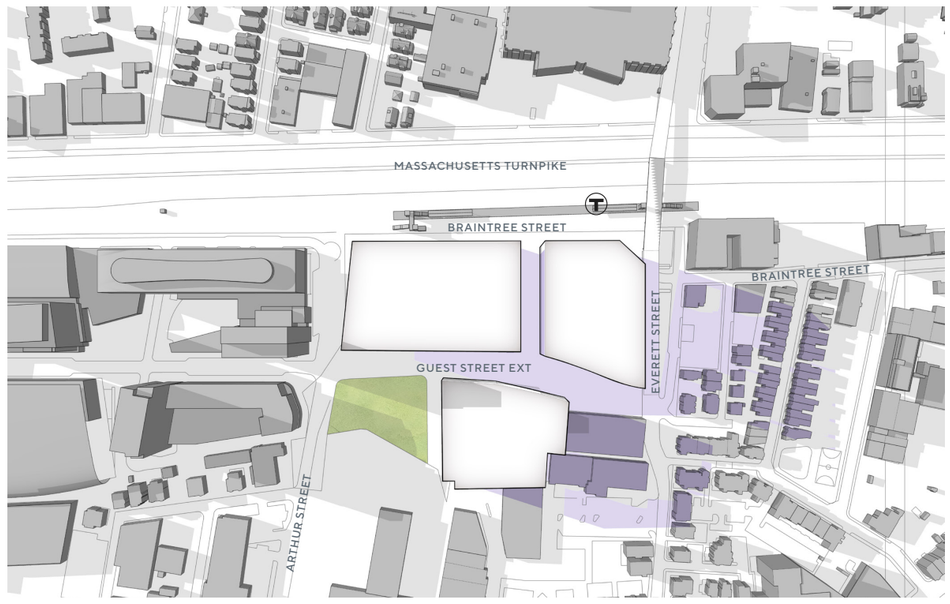


9AM



12PM

3PM



6PM

0 150 300 Feet

LEGEND:

EXISTING AND FUTURE NO-BUILD SHADOWS

NET NEW SHADOWS - ROOF

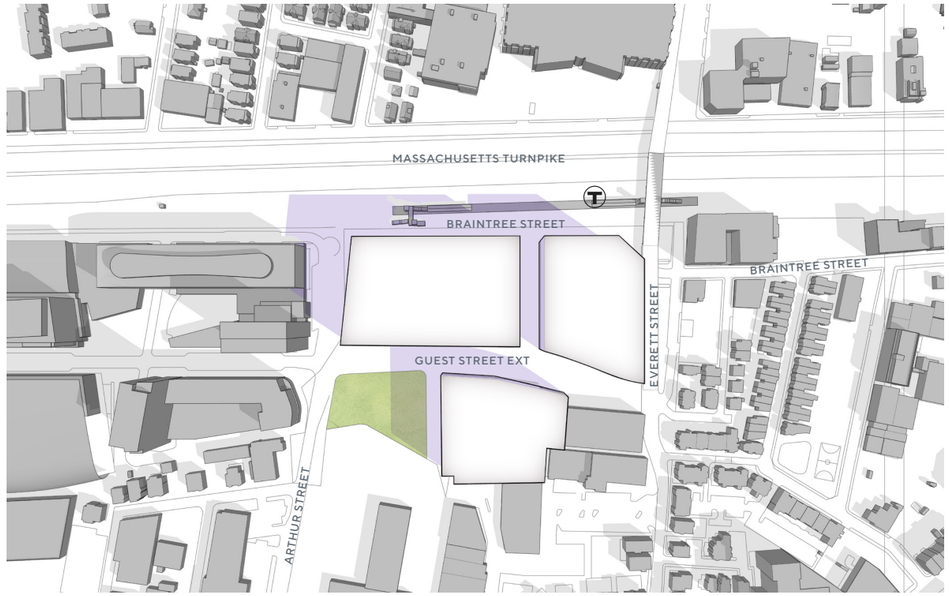
NET NEW SHADOWS - STREET

Prepared by: Elkus Manfredi Architects

Figure 6.7b

Build Alternative Condition Shadows
June 21

Allston Yards
Allston, Massachusetts



9AM

12PM

3PM

6PM

0 150 300 Feet

LEGEND:

EXISTING AND FUTURE NO-BUILD SHADOWS

NET NEW SHADOWS - ROOF

NET NEW SHADOWS - STREET

Prepared by: Elkus Manfredi Architects

Figure 6.7c

Build Alternative Condition Shadows
September 21

Allston Yards
Allston, Massachusetts

9AM

12PM

3PM

0 150 300 Feet

LEGEND:

EXISTING AND FUTURE NO-BUILD SHADOWS

NET NEW SHADOWS - ROOF

NET NEW SHADOWS - STREET

Prepared by: Elkus Manfredi Architects

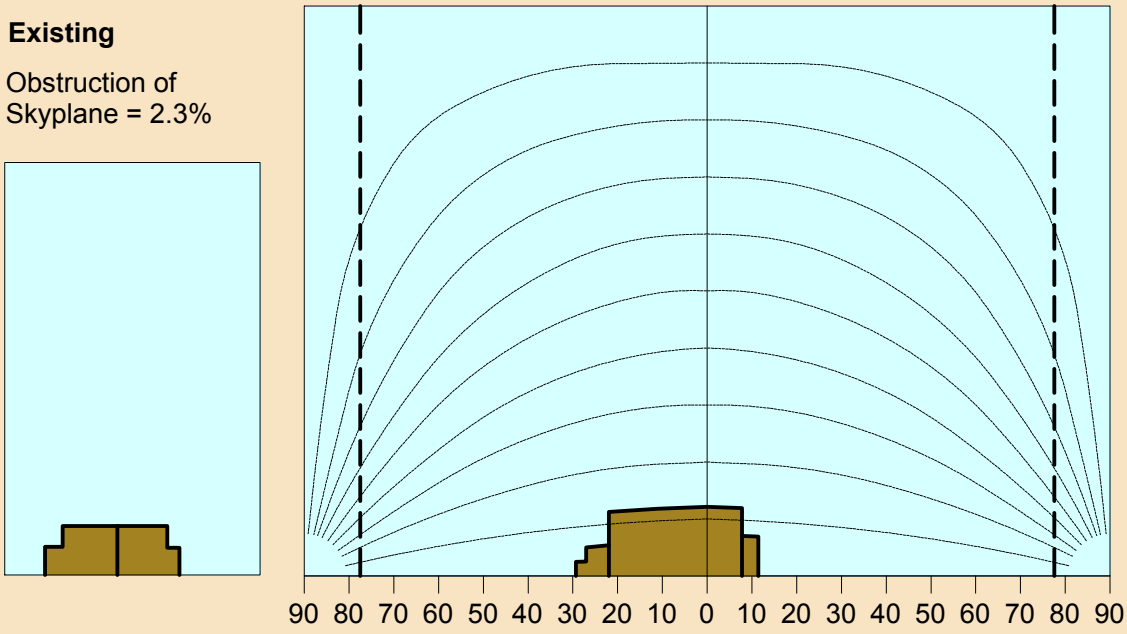
Figure 6.7d

Build Alternative Condition Shadows
December 21

Allston Yards
Allston, Massachusetts

Existing

Obstruction of
Skyplane = 2.3%



Proposed

Obstruction of
Skyplane = 52.8%

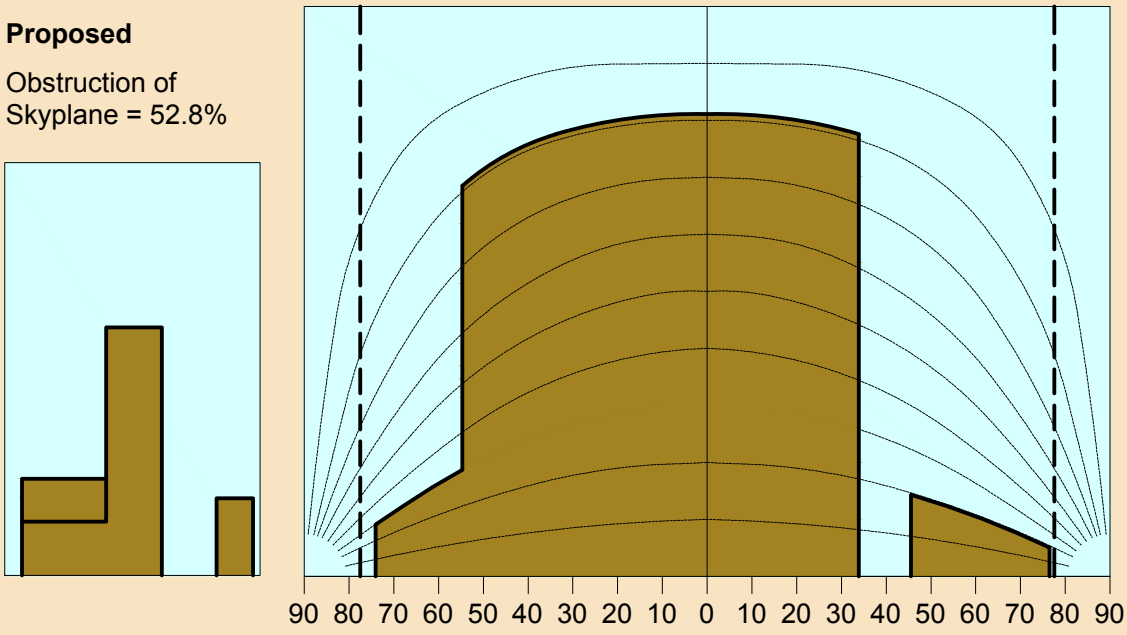


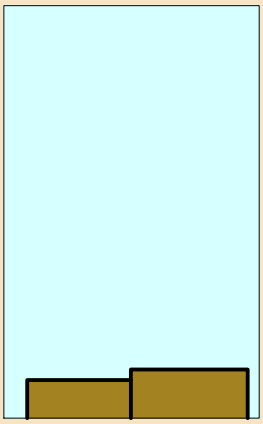
Figure 6.8a

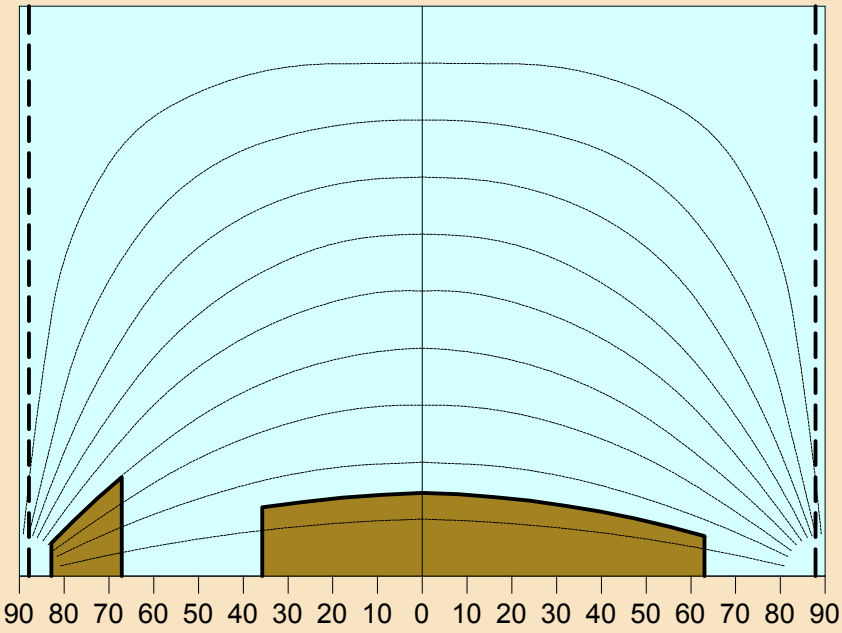
Daylight Analysis
Center of Arthur Street

Allston Yards
Allston, Massachusetts

Existing

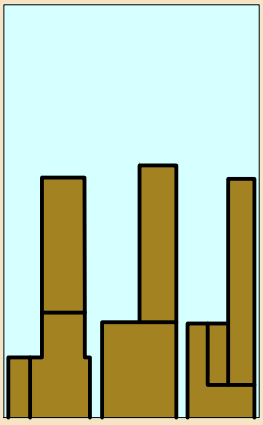
Obstruction of
Skyplane =12.2%





Proposed

Obstruction of
Skyplane = 94.6%



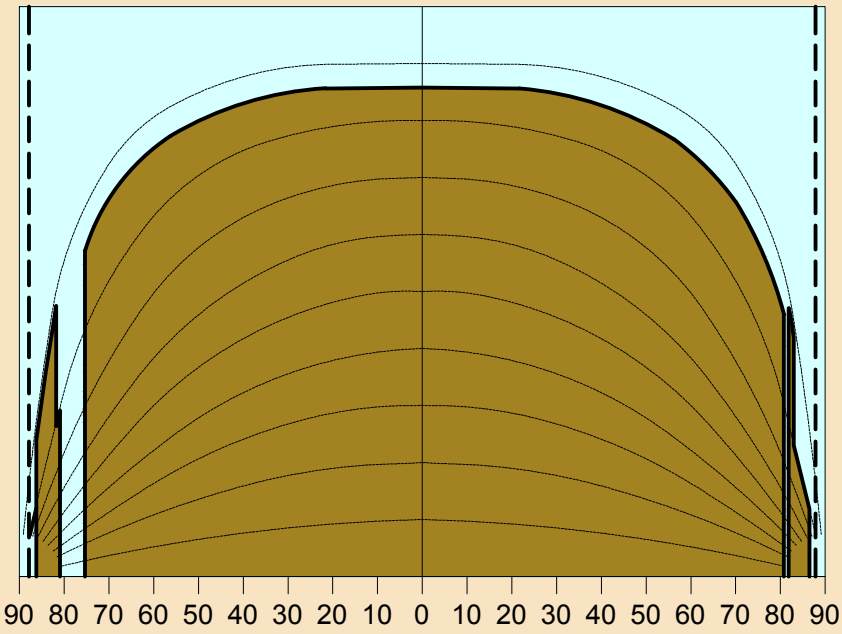


Figure 6.8b

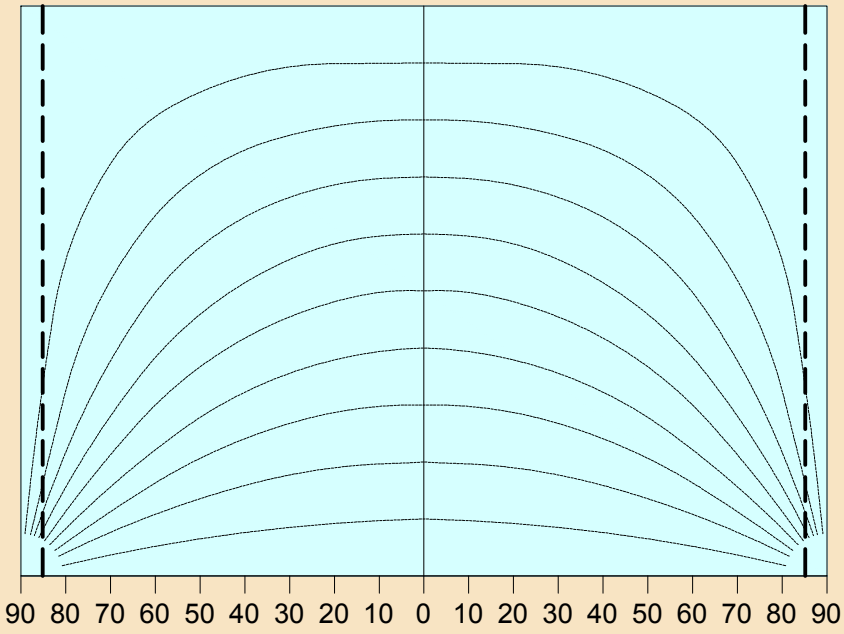
Daylight Analysis
Center of Braintree Street

Allston Yards
Allston, Massachusetts

Existing

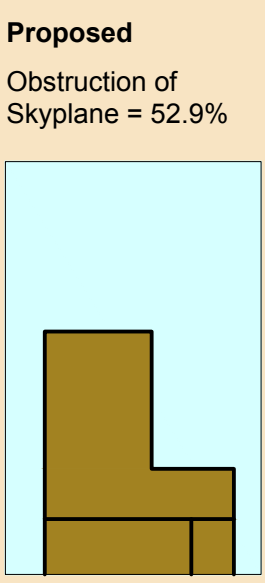
Obstruction of
Skyplane =0.0%

no impacts due to bridge elevation in relation to building



Proposed

Obstruction of
Skyplane = 52.9%



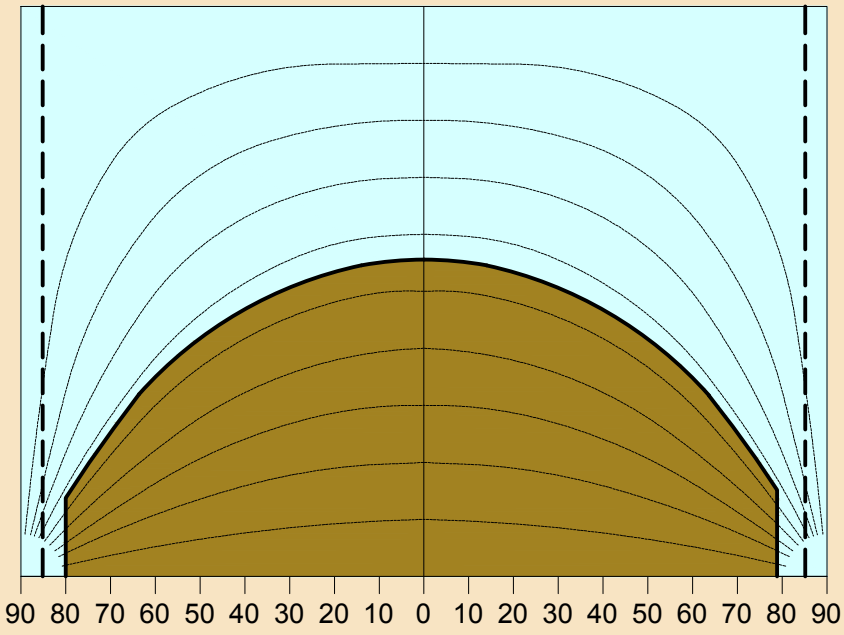


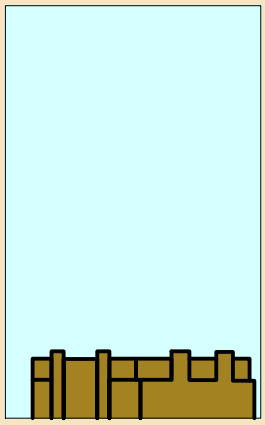
Figure 6.8c

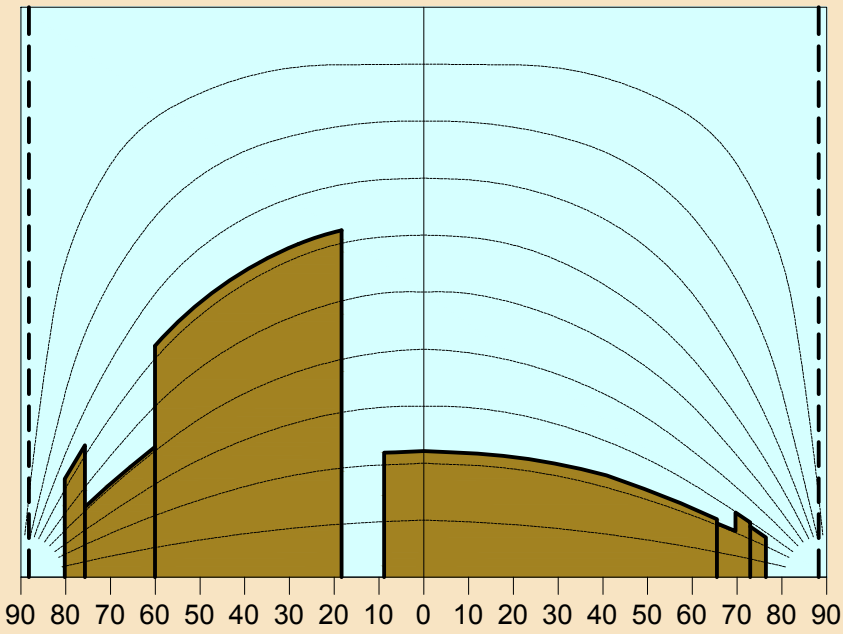
Daylight Analysis
Center of Everett Street

Allston Yards
Allston, Massachusetts

Existing

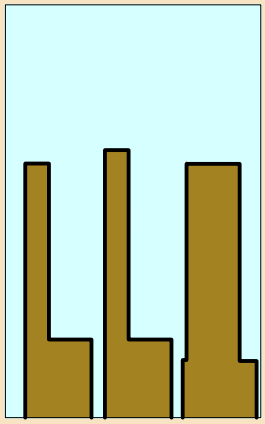
Obstruction of
Skyplane = 32.4%





Proposed

Obstruction of
Skyplane = 86.6%



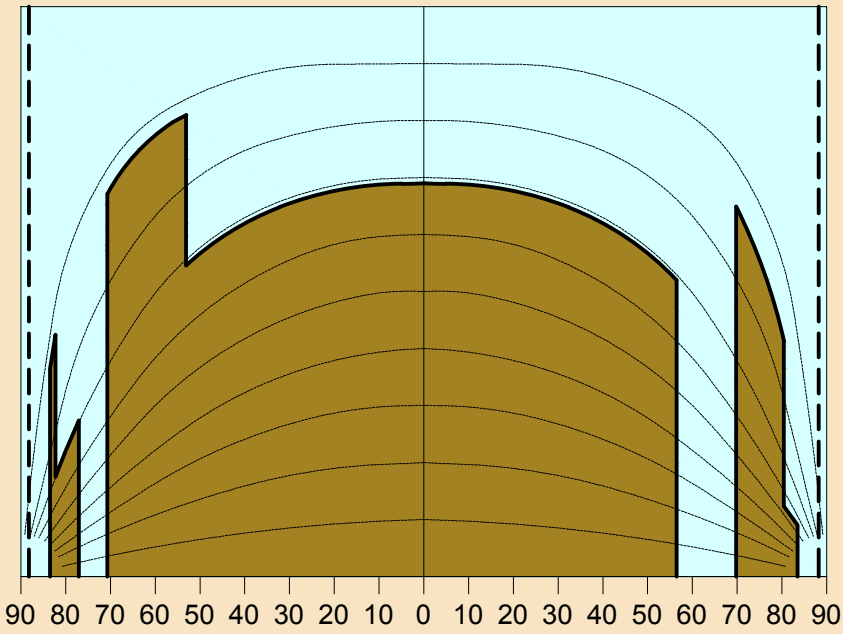


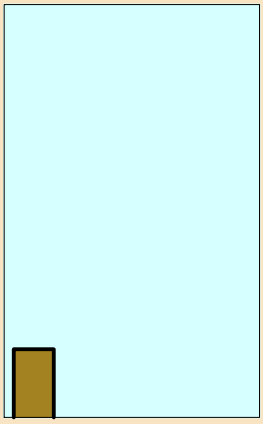
Figure 6.8d

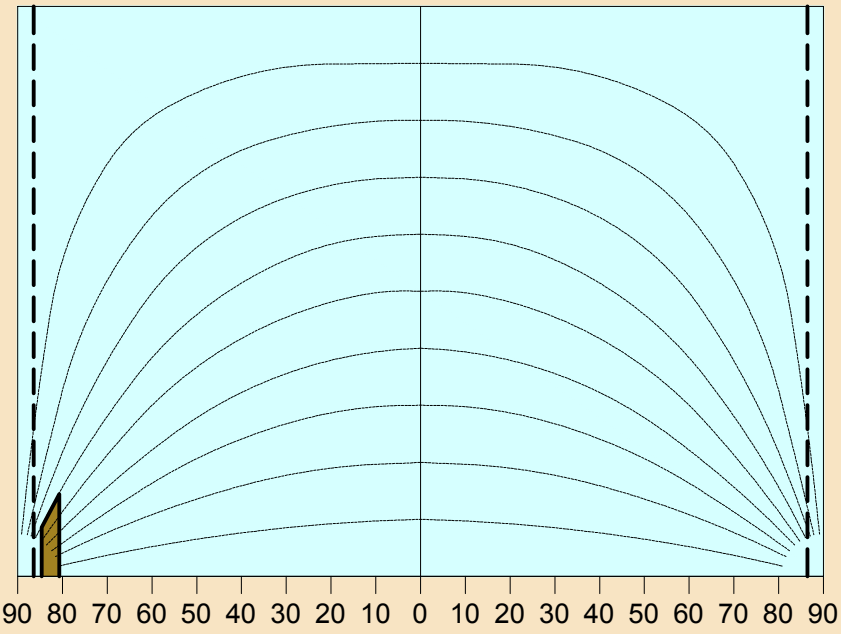
Daylight Analysis
Center of Guest Street looking North

Allston Yards
Allston, Massachusetts

Existing

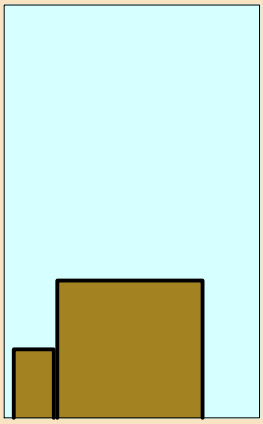
Obstruction of
Skyplane = 0.1%





Proposed

Obstruction of
Skyplane = 86.8%



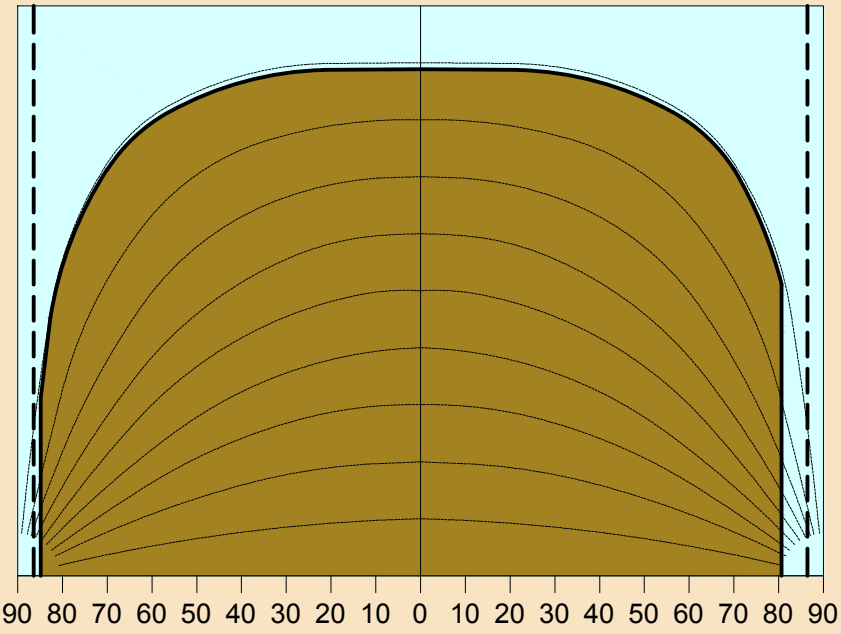
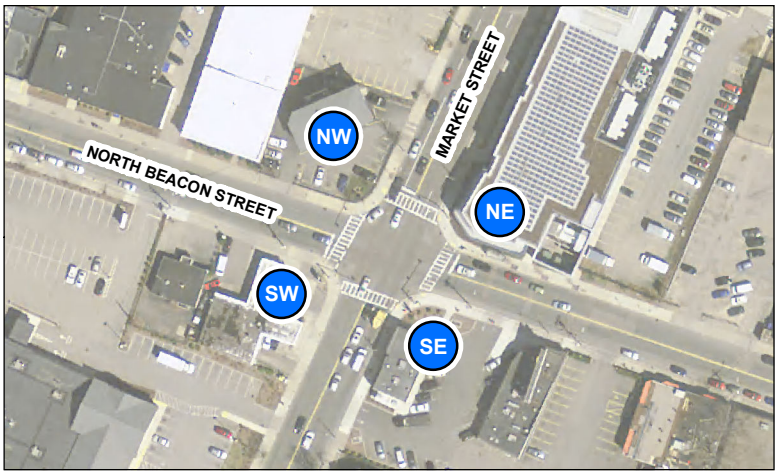


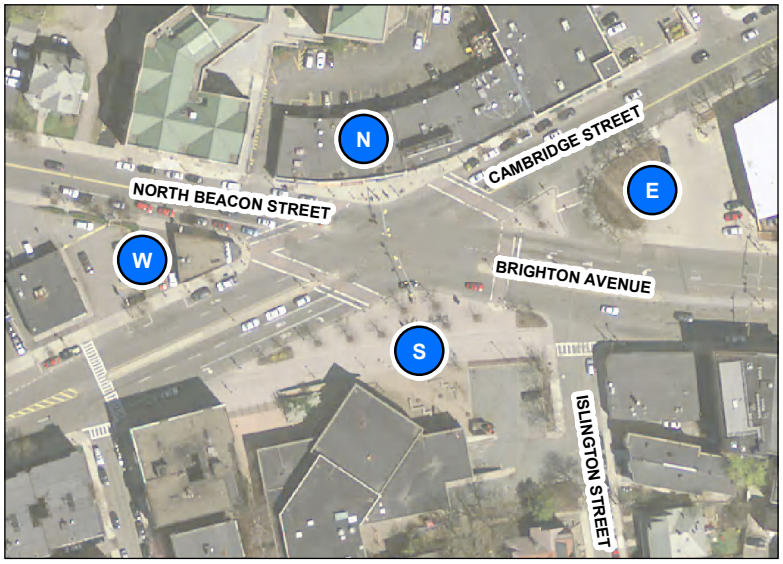
Figure 6.8e

Daylight Analysis
Center of Guest Street looking South

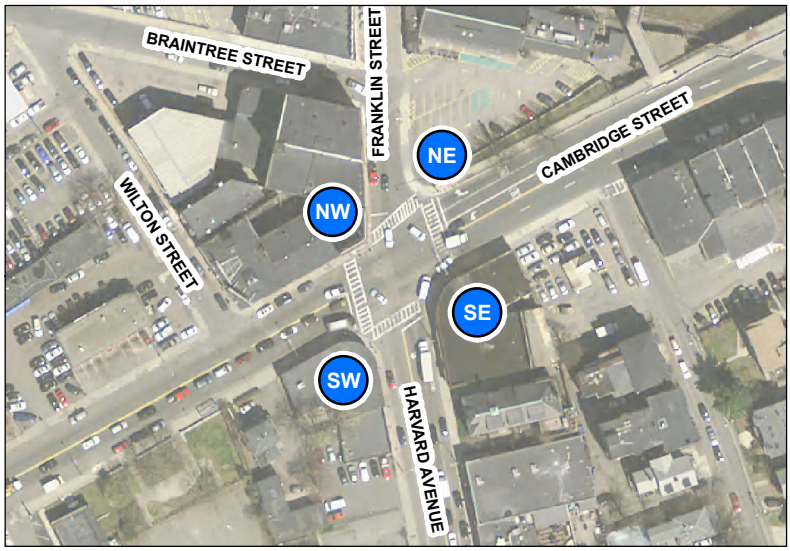
Allston Yards
Allston, Massachusetts



North Beacon Street at Market Street



North Beacon Street at Cambridge Street



Cambridge Street at Harvard Street

Figure 6.9 Microscale Receptors

Allston Yards
Allston, Massachusetts

Source: ArcGIS Bing Aerial

Prepared By: VHB

Project Site

M# Monitoring Locations

R# Receptor Locations

Figure 6.10

Noise Monitoring and Receptor Locations

Allston Yards
Allston, Massachusetts

7

Greenhouse Gas Emissions Assessment

This chapter provides an overview of the local and state regulatory context related to sustainable design and presents the results of the Greenhouse Gas ("GHG") emissions assessment, in accordance with the MEPA Greenhouse Gas Emissions Policy and Protocol (the "MEPA GHG Policy").[1] The Proponent is committed to incorporating key aspects of sustainability and high-performance building design, as it is the Proponent's intent to operate the Project in a sustainable manner. Through coordination with DOER and as a result of the pre-filing meeting, the Proponent will continue to evaluate additional energy conservation measures and scenarios subsequent to the filing of this EENF/DPIR for inclusion in the next MEPA filing, as discussed in Section 7.3.8.

7.1 Summary of Key Findings and Benefits

The key findings related to sustainable, high-performance design and GHG emissions include:

- Based on the preliminary design parameters assumed in the Design Case, the Project would achieve an estimated energy savings of 27.1 percent when compared to the Base Case (defined below). This would result in a 20.5 percent reduction in stationary source GHG emissions, or approximately 1,103 tons per year.
- The Design Case (defined below) Energy Use Intensity ("EUIs") of the Project components are generally less than the EUIs for the prototype buildings in the US Department of Energy ("DOE") study. This would indicate that the Project is expected to perform better than prototype buildings of similar use.
- A variety of clean and renewable energy sources were analyzed including solar panels, wind, and cogeneration in the form of combined heat and power ("CHP"). A potential solar PV system could reduce additional stationary source GHG emissions by 239 tons per year, while multiple CHPs could reduce site-wide emissions by 212 tons per year over the proposed design. The Proponent will continue to evaluate the feasibility of these systems as the design progresses.
- A variety of additional energy saving measures are proposed and being considered as part of the Project including: building commissioning, energy tracking and monitoring, plug load reductions, green tenant guidelines, and solid/construction & demolition ("C&D") waste reduction strategies.

1 MEPA Greenhouse Gas Policy and Protocol, Executive Office of Energy and Environmental Affairs, effective November 1, 2007 (revised version effective May 5, 2010).

› The Project-related mobile source CO_2 emissions are projected to be reduced by 1,003 tons per year with the implementation of the proposed TDM program and signal timing optimizations.

7.2 Regulatory Context

7.2.1 MEPA Greenhouse Gas Policy and Protocol

The MEPA GHG Policy requires project proponents to identify and describe the feasible measures to minimize both mobile and stationary source GHG emissions generated by their proposed projects. Mobile sources include vehicles traveling to and from a project, while stationary sources include on-site boilers, heaters, and/or internal combustion engines (direct sources), as well as the consumption of energy in the form of electricity (indirect sources). Greenhouse gases include several air pollutants, such as carbon dioxide ("CO_2"), methane, hydrofluorocarbons, and perfluorocarbons. The MEPA GHG Policy calls for the evaluation of CO_2 emissions for a land development project because CO_2 is the predominant man-made contributor to global warming. This evaluation makes use of the terms CO_2 and GHG interchangeably.

The MEPA GHG Policy states that all projects undergoing MEPA review requiring the submission of an EIR must quantify the project's GHG emissions, and identify measures to avoid, minimize, or mitigate such emissions. In addition to quantifying project-related GHG emissions, the MEPA GHG Policy requires proponents to quantify the effectiveness of proposed improvements in terms of energy savings, and, therefore, potential emissions reductions. The goal of the MEPA GHG Policy is to identify and implement measures to minimize or reduce the total GHG emissions anticipated to be generated by that respective project.

7.2.2 Stretch Energy Code

As part of the Green Communities Act of 2008, Massachusetts developed an optional building code, known as the "Stretch Energy Code," that gives cities and towns the ability to choose stronger energy performance in buildings than otherwise required under the state building code. Codified by the Board of Building Regulations and Standards as 780 CMR Appendix 115.AA of the 8th edition Massachusetts Building Code, the Stretch Energy Code is an appendix to the Massachusetts building code, based on further amendments to the International Energy Conservation Code ("IECC"). The Stretch Energy Code increases the energy efficiency code requirements for new construction and major residential renovations or additions in municipalities that adopt it. The Stretch Energy Code applies to both residential and commercial buildings and, specifically, to new commercial buildings over 5,000 square feet in size, including multi-family residential buildings over three stories. The City of Boston adopted the Stretch Energy Code, which became mandatory on July 1, 2011.

Effective January 1, 2017, the Stretch Energy Code requires a 10-percent greater energy efficiency compared to the state's energy code (the "Base Code"). This DEIR/DPIR assesses the energy performance of the Project using the Stretch Energy

Code requirements in effect as of January 1, 2017 in order to demonstrate the Project can meet such requirements.

7.3 Stationary Source Greenhouse Gas Emissions Assessment

In support of Boston's GHG reduction goals, the Proponent has evaluated and incorporated strategies to minimize energy consumption associated with the Project through building energy modeling based on conceptual design as well as considered clean, renewable energy sources. Also, the Proponent and Project Team have begun to engage utility providers to better understand available alternative, cleaner energy sources, as well as grants and/or rebates.

7.3.1 Methodology

To provide for energy efficiency and reduced stationary source GHG emissions, the Proponent has evaluated the following key planning and design criteria:

- Methods to reduce overall energy demand through appropriate design and sizing of systems; and
- Methods to improve building envelope materials.

Each Project component was modeled with the proposed building geometry, HVAC system type, occupancy schedule, and ventilation rates.

Direct stationary source CO_2 emissions include those emissions from the facility itself, such as boilers, heaters, and internal combustion engines. Indirect stationary source CO_2 emissions are derived from the consumption of electricity, heat, or cooling from off-site sources, such as electrical utility or district heating and cooling systems. The direct and indirect stationary source CO_2 emissions from the proposed building sources are calculated through an energy analysis procedure that combines eQuest[2] models based on assumptions for the Project's building elements, such as (but not limited to) the specific type of use(s) and users of the buildings, building configuration and architecture type, building envelope (walls/windows), interior fit-out (where known), and HVAC equipment efficiency ratings with Excel spreadsheets for post-processing of emission conversion factors.

The GHG mitigation and energy conservation measures can be divided into the buildings' construction materials, architecture, and the heating and cooling processes. The following presents the specific proposed building improvements (and their correlating energy modeling parameters for reference, where applicable) that are assumed to be included as part of the Project for the purpose of this analysis. The specific proposed improvements will likely be subject to design modifications as necessary to achieve the GHG emissions reduction based on the final building program and tenants and design.

2 "eQuest, the Quick Energy Simulation Tool" Copyright © 1998-2009 James J. Hirsch.

Energy Model and Analysis Conditions

The energy analysis is used to estimate the amount of annual energy consumption by simulating a year of building operations based on typical yearly weather and user inputs. The analysis modeled each of the four buildings (Building A, B, C and D) and the parking garages proposed by the Project as they are currently designed. The exact makeup and equipment of each building is subject to change as the Project's design progresses.

The model estimates each buildings' electricity and gas usage based on building design and system assumptions using Appendix G of ASHRAE 90.1-2013. The amount of consumed energy is then converted into the amount of CO_2 emitted using the standardized conversion factors.[3] CO_2 emissions were quantified for (1) the Base Case corresponding to the minimum requirements of ASHRAE 90.1-2013 and (2) the Design Case, which includes all energy saving measures that were deemed to be reasonable and feasible. The stationary source assessment calculated CO_2 emissions for the following build conditions:

- **Build Condition with MA Building Code (the "Base Case")** - The Project assuming typical construction materials and building equipment/systems that meet the minimum requirements of the base code. This baseline is established by the energy code as being defined by ASHRAE 90.1–2013.
- **Build Condition with Energy Conservation Measures (the "Design Case")** - The Project assuming building design and system improvements that meet the MEPA GHG Policy and Stretch Energy Code.

7.3.2 Future Stationary Source GHG Emissions

The Project includes the construction of four buildings with four use types. The uses included in the energy assessment for the EENF/DPIR include residential, retail, supermarket and office. The proposed structured parking spaces were also considered in the energy analysis. The approach to and results of the building energy model for the Project buildings is presented below. The noteworthy improvements for the base representative building are presented in the table and sections below. While specific improvements may be subject to design modification as design progresses, the Proponent is committed to achieving the stationary-source GHG emissions-reduction targets estimated herein for the final building program and design.

Building A

Building A is a 6-level mixed use building (with residential, retail, and supermarket on the lower floors) located on the southern portion of the Project Site. The proposed building consists of up to 176 residential units and approximately 93,200 square feet of retail space, including the proposed grocery store. The current building design includes multiple energy conservation measures (ECMs), including improved glazing and HVAC systems on both the air and water side and reduced lighting power densities in the grocery store. A summary of key energy modeling

3 Assumes conversion factors of 710 lbs/MWh for electricity and 117 lbs/MMBtu for natural gas based on the 2016 ISO New England Electric Generator Air Emissions Report, as required by the MEPA GHG Policy.

assumptions is provided in Table 7-1. As currently proposed, there are no trade-offs associated with the building envelope as the roof and wall assemblies are the same as the Base Case.

Table 7-1 Building A Key Model Assumptions

Building Component	Base Case[1]	Design Case
Square Footage/Usage		
Modeled Square Footage	248,400 sf	
Space Description	Residential with Supermarket/Retail	
Building Envelope		
Roof Assembly	Insulation Entirely above Deck U-Value: 0.032	Same as Base Case
Wall Assembly	Steel Framed Wall U-Value: 0.055	Same as Base Case
Wall-to-Wall Ratio	Residential: 40% Supermarket: 7%	Same as Base Case
Windows and Glazing	Vertical U-Value: 0.42	Vertical U-Value: 0.38
Solar Heat Gain Coefficient	0.4	0.4
Air-Side HVAC		
HVAC System	Residential- System #1 PTAC Residential Support- System #7 VAV Supermarket- System #3 PSZ-AC	Residential- Water Source Heat Pumps Residential Support- Packaged VAV Supermarket- System Packaged RTU w/ Furnace
Energy Recovery	50% effectiveness for systems required by code	70% effectiveness
Cooling Efficiency	PTAC- EER 10.1 PSZ- EER 11.7-12.1	Residential- EER 15 RTU- EER 14
Heating Efficiency	PSZ Furnace- 80%	WSHP- COP 4.5
Water-Side HVAC		
System Type	Two Natural Draft Boilers	Two Condensing Boilers
Efficiency	80%	95%
Lighting and Equipment		
Lighting Power Density (W/sf)	Residential: 0.51 W/sf Supermarket: 1.26 W/sf	Residential: 0.51 W/sf Supermarket: 1.13 W/sf
Equipment (W/sf)	Residential: 1.0 W/sf Supermarket: 0.5 W/sf Electric Stoves	Residential: 1.0 W/sf Supermarket: 0.5 W/sf Electric Stoves

1 Based case represents ASHRAE 90.1-2013 conditions.

The total estimated annual electricity and natural gas consumption, and associated emissions for Building A are presented in Table 7-2. Under the Base Case, the CO_2 emissions are estimated to be 1,127 tons per year ("tpy"). With the currently proposed building design and system improvements, the estimated energy use reduction for the building is 32.5 percent, which equates to a 23.9 percent reduction in stationary source CO_2 emissions when compared to the Base Case. The stationary source CO_2 emissions percent reduction for the building under the Design condition was quantified as follows: 270/1,127 = 0.239 x 100 = 23.9 percent.

Reduction % = Emissions Reductions Due to Project Improvements (End Use Savings) / Project-Generated Emissions (Base Case Emissions)

This methodology is applied consistently to the remaining buildings to determine the percent reduction of stationary source emissions.

Table 7-2 Building A Stationary Source CO_2 Emissions

	Energy Consumption			CO_2 Emissions		
	Electricity (MWh/yr)	**Natural Gas (MMBtu/yr)**	**Total (MMBtu/yr)**	**Electricity (tons/yr)[1]**	**Natural Gas (tons/yr)**	**Total (tons/yr)**
Base Case	2,121	6,391	13,630	753	374	1,127
Design Case	2,054	2,192	9,203	729	128	858
End-Use Savings	67	4,199	4,427	24	246	270
Percent Savings			**32.5%**			**23.9%**

1 tons/yr = short tons per year

Building B

Building B is a 15-story predominantly office building located in the northeastern corner of the Project Site (Figure 1.6). The proposed building is anticipated to include approximately 375,000 square feet of office space. Additionally, the building will include 15,200 square feet of residential and 10,500 square feet of retail space. The conceptual design of this building includes ECMs, including improved glazing and HVAC systems on both the air and water side and reduced lighting power densities in the office spaces. A summary of key energy modeling assumptions is provided in Table 7-3 below. As currently proposed, there are no trade-offs associated with the building envelope as the roof and wall assemblies are the same as the Base Case.

Table 7-3 Building B Key Model Assumptions

Building Component	**Base Case[1]**	**Design Case**
Square Footage/Usage		
Modeled Square Footage	400,700 sf	
Space Description	Core and Shell Office with Retail and Residential	
Building Envelope		
Roof Assembly	Insulation Entirely above Deck U-Value: 0.032	Same as Base Case
Wall Assembly	Steel Framed WallU-Value: 0.055	Same as Base Case
Wall-to-Wall Ratio	Office: 40%	Same as Base Case
Windows and Glazing	Vertical U-Value: 0.42	Vertical U-Value: 0.38
Solar Heat Gain Coefficient	0.4	0.4
Air-Side HVAC		
HVAC System	System #7 VAV with Reheat	VAV with centrifugal chillers and condensing boilers
Energy Recovery	50% effectiveness for systems required by code	70% effectiveness
Water-Side HVAC		
Boiler Type	Two Natural Draft Boilers	Two Condensing Boilers
Boiler Efficiency	80%	95%
Chiller Type	Two Centrifugal Chillers	Two Centrifugal Chillers
Chiller Efficiency	kW/ton – 0.560 FL	kW/ton – 0.560 FL

Building Component	Base Case[1]	Design Case
	kW/ton – 0.50 IPLV	kW/ton – 0.50 IPLV
Lighting and Equipment		
Lighting Power Density (W/sf)	Office: 0.82 W/sf	Office: 0.7 W/sf
Equipment (W/sf)	Office: 1.0 W/sf	Office: 1.0 W/sf

1 Based case represents ASHRAE 90.1-2013 conditions.

The total estimated annual electricity use and natural gas consumption, and associated emissions for Building B are presented in Table 7-4. Under the Base Case, the CO_2 emissions are estimated to be 1,273 tpy. With the currently proposed building design and system improvements, the estimated energy use reduction for the building is approximately 17.0 percent, which equates to an approximately 14.4 percent reduction (183 tpy) in stationary source CO_2 emissions when compared to the Base Case.

Table 7-4 Building B Stationary Source CO_2 Emissions

	Energy Consumption			CO_2 Emissions		
	Electricity (MWh/yr)	Natural Gas (MMBtu/yr)	Total (MMBtu/yr)	Electricity (tons/yr)[1]	Natural Gas (tons/yr)	Total (tons/yr)
Base Case	2,935	3,955	13,971	1,042	232	1,273
Design Case	2,652	2,548	11,598	941	149	1,090
End-Use Savings	283	1,407	2,374	101	82	183
Percent Savings			**17.0%**			**14.4%**

1 tons/yr = short tons per year

Building C

Building C is a 22-story residential building in the center of the northern portion of the Project Site (Figure 1.6). The building is anticipated to include approximately 396 residential units as the largest residential building of the Proposed Project. The conceptual building design includes ECMs, including improved glazing and HVAC systems on both the air and water side and reduced lighting power densities in the retail spaces. A summary of key energy modeling assumptions is provided in Table 7-5. As currently proposed, there are no trade-offs associated with the building envelope as the roof and wall assemblies are the same as the Base Case.

The total estimated annual electricity use and natural gas consumption, and associated emissions for Building C are presented in Table 7-6. Under the Base Case, the CO_2 emissions are estimated to be 1,363 tpy. With the currently proposed building design and system improvements, the estimated energy use reduction for the building is approximately 30.2 percent, which equates to a 21.7 percent reduction (295 tpy) in stationary source CO_2 emissions when compared to the Base Case.

Table 7-5 Building C Key Model Assumptions

Building Component	Base Case[1]	Design Case
Square Footage/Usage		
Modeled Square Footage	355,300 sf	
Space Description	Residential with First Floor Retail	
Building Envelope		
Roof Assembly	Insulation Entirely above Deck U-Value: 0.032	Same as Base Case
Wall Assembly	Steel Framed Wall U-Value: 0.055	Same as Base Case
Wall-to-Wall Ratio	Residential: 40% Retail: 7%	Same as Base Case
Windows and Glazing	Vertical U-Value: 0.42	Vertical U-Value: 0.38
Solar Heat Gain Coefficient	0.4	0.4
Air-Side HVAC		
HVAC System	Residential- System #1 PTAC Residential Support- System #7 VAV Retail- System #3 PSZ-AC	Residential- Water Source Heat Pumps Residential Support- Packaged VAV
Energy Recovery	50% effectiveness for systems required by code	70% effectiveness
Cooling Efficiency	PTAC- EER 10.1 PSZ- EER 11.7-12.1	Residential- EER 15 RTU- EER 14
Heating Efficiency	PSZ Furnace- 80%	WSHP- COP 4.5
Water-Side HVAC		
System Type	Two Natural Draft Boilers	Two Condensing Boilers
Efficiency	80%	95%
Lighting and Equipment		
Lighting Power Density (W/sf)	Residential: 0.51 W/sf Retail: 1.26 W/sf	Residential: 0.51 W/sf Retail: 1.13 W/sf
Equipment (W/sf)	Residential: 1.0 W/sf Retail: 0.5 W/sf Electric Stoves	Residential: 1.0 W/sf Retail: 0.5 W/sf Electric Stoves

1 Based case represents ASHRAE 90.1-2013 conditions.

Table 7-6 Building C Stationary Source CO_2 Emissions

	Energy Consumption			CO_2 Emissions		
	Electricity (MWh/yr)	**Natural Gas (MMBtu/yr)**	**Total (MMBtu/yr)**	**Electricity (tons/yr)[1]**	**Natural Gas (tons/yr)**	**Total (tons/yr)**
Base Case	2,516	8,027	16,612	893	470	1,363
Design Case	2,508	3,028	11,589	890	177	1,068
End-Use Savings	7	4,999	5,023	3	293	295
Percent Savings			**30.2%**			**21.7%**

1 tons/yr = short tons per year

Building D

Building D is an 18-story residential building proposed in the northwestern corner of the Project Site. The building consists of approximately 306 residential units and 6,300 square feet of ground-floor retail space. The conceptual building design includes ECMs, including improved glazing and HVAC systems on both the air and water side and reduced lighting power densities in the retail spaces. A summary of key energy modeling assumptions is provided in Table 7-7. As currently proposed, there are no trade-offs associated with the building envelope as the roof and wall assemblies are the same as the Base Case.

Table 7-7 Building D Key Model Assumptions

Building Component	Base Case[1]	Design Case
Square Footage/Usage		
Modeled Square Footage	275,300 sf	
Space Description	Residential with First Floor Retail	
Building Envelope		
Roof Assembly	Insulation Entirely above Deck U-Value: 0.032	Same as Base Case
Wall Assembly	Steel Framed Wall U-Value: 0.055	Same as Base Case
Wall-to-Wall Ratio	Residential: 40% Retail: 7%	Same as Base Case
Windows and Glazing	Vertical U-Value: 0.42	Vertical U-Value: 0.38
Solar Heat Gain Coefficient	0.4	0.4
Air-Side HVAC		
HVAC System	Residential- System #1 PTAC Residential Support- System #7 VAV Retail- System #3 PSZ-AC	Residential- Water Source Heat Pumps Residential Support- Packaged VAV
Energy Recovery	50% effectiveness for systems required by code	70% effectiveness
Cooling Efficiency	PTAC- EER 10.1 PSZ- EER 11.7-12.1	Residential- EER 15 RTU- EER 14
Heating Efficiency	PSZ Furnace- 80%	WSHP- COP 4.5
Water-Side HVAC		
System Type	Two Natural Draft Boilers	Two Condensing Boilers
Efficiency	80%	95%
Lighting and Equipment		
Lighting Power Density (W/sf)	Residential: 0.51 W/sf Retail: 1.26 W/sf	Residential: 0.51 W/sf Retail: 1.13 W/sf
Equipment (W/sf)	Residential: 1.0 W/sf Retail: 0.5 W/sf Electric Stoves	Residential: 1.0 W/sf Retail: 0.5 W/sf Electric Stoves

1 Based case represents ASHRAE 90.1-2013 conditions.

The total estimated annual electricity use and natural gas consumption, and associated emissions for Building D are presented in Table 7-8. Under the Base Case, the CO_2 emissions are estimated to be 1,063 tpy. With the currently proposed building design and system improvements, the estimated energy use reduction for the building is approximately 30.2 percent, which equates to a 21.7 percent reduction (230 tpy) in stationary source CO_2 emissions when compared to the Base Case.

Table 7-8 Building D Stationary Source CO_2 Emissions

	Energy Consumption			CO_2 Emissions		
	Electricity (MWh/yr)	**Natural Gas (MMBtu/yr)**	**Total (MMBtu/yr)**	**Electricity (tons/yr)[1]**	**Natural Gas (tons/yr)**	**Total (tons/yr)**
Base Case	1,962	6,261	12,958	697	367	1,063
Design Case	1,956	2,362	9,039	695	138	833
End-Use Savings	6	3,899	3,918	2	228	230
Percent Savings			**30.2%**			**21.7%**

1 tons/yr = short tons per year

Parking Garages

The Proposed Project will provide on-site parking garages that will use energy for lighting and ventilation. The garage spaces will use a reduced lighting power density and more efficient ventilation system to reduce energy consumption. A summary of key energy modeling assumptions is provided in Table 7-9.

Table 7-9 Parking Garages Key Model Assumptions

Building Component	**Base Case[1]**	**Design Case**
Square Footage/Usage		
Modeled Square Footage	604,550 sf	
Space Description	Ventilated Parking Garages	
Equipment		
Lighting Power Density (W/sf)	0.19 W/sf	0.17 W/sf
Ventilation	Ventilation fans turn down to 50% based on CO sensors	Ventilation fans turn down to 25% based on CO sensors

1 Based case represents ASHRAE 90.1-2013 conditions.

The total estimated annual electricity use and natural gas consumption, and associated emissions for the Parking Garages are presented in Table 7-10. Under the Base Case, the CO_2 emissions are estimated to be 548 tpy. With the currently proposed building design and system improvements, the estimated energy use reduction for the building is approximately 22.8 percent, which equates to a 22.8 percent reduction (125 tpy) in stationary source CO_2 emissions when compared to the Base Case.

Table 7-10 Parking Garages Stationary Source CO_2 Emissions

	Energy Consumption			CO_2 Emissions		
	Electricity (MWh/yr)	Natural Gas (MMBtu/yr)	Total (MMBtu/yr)	Electricity (tons/yr)[1]	Natural Gas (tons/yr)	Total (tons/yr)
Base Case	1,542	0	5,264	548	0	548
Design Case	1,191	0	4,066	423	0	423
End-Use Savings	351	0	1,198	125	0	125
Percent Savings			**22.8%**			**22.8%**

1 tons/yr = short tons per year

Overall Project Emissions (Full Build Out)

The total estimated annual electricity use, natural gas consumption, and associated emissions for the Project (all buildings combined, or full build out) are presented in Table 7-11. Under the Base Case, the CO_2 emissions for the Project are estimated to be 5,374 tpy. With the currently proposed building design and system improvements, the estimated CO_2 emissions are 4,272 tpy which is a savings of 1,103 tpy. The equivalent estimated energy use reduction for the Project is approximately 27.1 percent, which equates to an approximately 20.5 percent overall reduction in stationary source CO_2 emissions when compared to the Base Case. The reduction in stationary source energy is consistent with the energy conservation design goals of the Proponent.

Table 7-11 Stationary Source CO_2 Emissions for the Overall Project (Full Build)

	Energy Consumption (MMBtu/yr)			CO_2 Emissions (tons/yr)		
Building Name	Base Case	Design Case	Percent Savings	Base Case	Design Case	Percent Reduction
Building A	13,630	9,203	32.5%	1,127	858	23.9%
Building B	13,971	11,598	17.0%	1,273	1,090	14.4%
Building C	16,612	11,589	30.2%	1,363	1,068	21.7%
Building D	12,958	9,039	30.2%	1,063	833	21.7%
Parking Garages	5,264	4,066	22.8%	548	423	22.8%
Total	**62,436**	**45,495**	**27.1%**	**5,374**	**4,272**	**20.5%**

1 tons/yr = short tons per year

7.3.3 Energy Use Intensity

EUI is a tool used to provide a common basis of comparison for energy use for various building uses. It is the total amount of energy used at a project over a one-year period, divided by the square footage of that building and represents the energy consumed by a building relative to its size. Based on a recent DOE research report, the median EUIs for prototype buildings in Climate Zone 5A are 54.1 kBtu/sf-yr for high-rise apartment buildings, 46.3 kBtu/sf-yr for a retail store and 37.1 kBtu/sf-yr for a medium office under ASHRAE 90.1-2013.[4] The benchmark EUI for a supermarket is 196 kBtu/sf-yr [5]. Based on square footage, the residential buildings are most similar to the high-rise apartment prototype building. Table 7-12 provides the as-modeled EUI for each prototype building modeled for the Project under the Base and Design Cases.

Table 7-12 Energy Use Intensity (kBtu/sf-yr)

Project Component	Modeled Area (sf)	EUI (kBtu/sf-yr)		Percent Improvement	Prototype Benchmark EUIs[2,3,4]
		Base Case[1]	Design Case		
Building A	248,400	54.9	37.0	32.5%	83.9
Building B	400,700	34.9	28.9	17.0%	37.1
Building C	355,300	46.8	32.6	30.2%	53.3
Building D	275,300	47.1	32.8	30.2%	53.3

1 The Base Case represents current Base Energy Code ASHRAE 90.1-2013 standards.
2 "Cost-Effectiveness of the ASHRAE Standard 90.1-2013 for the State of Massachusetts". *US Department of Energy*. December 2015.
3 "US Energy Use Intensity by Property Type" Energy Star Portfolio Manager. Technical Reference. March 2016.
4 Benchmark EUIs represent a mixed EUI, calculated by multiplying the percent of area for each use in an individual building and the representative EUI for the use, stated in the text above.

The Base Case EUIs of the Project components generally fall around the benchmark values provided by the prototype buildings in the DOE study and Energy Star study. Building A's EUI is likely less than the benchmark as the benchmark EUI for the supermarket is older and based on already-constructed buildings that comply with older building codes. In general, the Prototype Benchmark EUIs are for theoretical buildings with designs that do not exactly reflect the Project they are being compared against. As such, differences between the modeled EUIs and the Benchmarks are expected. For all buildings, the Design Case EUIs represent significant improvement over the Base Case EUIs, which demonstrates the Proponent's commitment to constructing a green project.

4 "Cost-Effectiveness of the ASHRAE Standard 90.1-2013 for the State of Massachusetts." *US Department of Energy*. December 2015.

5 "US Energy Use Intensity by Property Type" Energy Star Portfolio Manager. Technical Reference. March 2016.

7.3.4 Other Beneficial Stationary Source GHG Emissions Measures

Other beneficial measures are intended to be incorporated into the Project's design which cannot be incorporated into the energy modeling due to modeling limitations. These measures are described below.

Building Commissioning

Building commissioning will be conducted prior to and during occupancy to ensure the building systems are operating efficiently and as designed. This quality-control process optimizes the energy performance of the building, reduces maintenance cost, and extends the lifespan of the building systems. Facilities staff will be trained to properly operate the building systems, with special consideration for new technologies. The period between audits will depend upon energy performance.

The Proponent will conduct an enhanced commissioning process during the construction process, including functional testing of all major lighting and HVAC systems. Once they are occupied, the performance of the buildings will be benchmarked against national/local averages after the buildings are placed in service and stabilized. If underperformance is identified, an audit will be conducted of major lighting and HVAC systems to address deficiencies.

Energy Tracking and Monitoring

The Proponent has an internal program for tracking building energy use over time, that will be implemented to confirm appropriate building performance. The Proponent will implement a Measurement and Verification ("M&V") plan that will utilize the base building energy management system to monitor operations of equipment or systems. The buildings will include a monitored electronic metering network in the base building design that is capable of being expanded to accommodate and document future tenant sub-metering. Additionally, the retail tenant shall be metered either via a check meter or utility meter, depending on the utility.

The Proponent supports the City's Climate Action Plan and will comply with the Building Energy Use Disclosure Ordinance and report whole-building energy use for the required components of the Project.

Plug Load Reduction

The Proponent commits to encouraging the use of ENERGY STAR™ appliances and equipment where available and reasonably practicable. The building energy model does not take credit for reduced plug loads as the eQUEST model conducted for the Design Case did not account for energy conservation measures related to plug-in equipment. The use of ENERGY STAR™ appliances and equipment has proven to result in a reduction in overall energy use and, therefore, a reduction in stationary

source CO_2 emissions for the Project.[6] A 10-percent reduction was applied to the total annual electrical output of the Miscellaneous[7] category derived from the eQUEST model. By applying the 10-percent reduction to account for ENERGY STAR™ appliances and equipment, the total annual Miscellaneous electricity would be reduced from 4,000 MWh to 3,600 MWh which is equivalent to a difference of 142 tons of CO_2 emissions. This results in an overall stationary source CO_2 emissions reduction of 23.2 percent for the Project and overall energy reduction of 29.3 percent compared to the baseline code.

Green Tenant Guidelines

The Proponent may consider developing Green Tenant Guidelines for residential tenants, which would provide information on utilizing the sustainable design features of the building and the individual units to their fullest potential. These could include information on how to use the heating and cooling systems, ways to conserve energy and water, plug load controls, waste reduction and recycling, green cleaning guidelines and products, non-automotive transportation and cycling options and identification of amenities within walking or biking distance. The intent of these guidelines is also to educate future office and retail tenants about the sustainable design and construction features and encourage them to adopt green building practices that support the overall sustainability goals of the Proposed Project.

These guidelines may include the following information:

- Description of sustainable design, construction, and operational features of the Project, including resource conservation goals and features (i.e., low-flow plumbing fixtures, lighting controls), as well as building certification checklists, such as LEED.
- Description of current regulatory requirements that pertain to leasable spaces (i.e., Stretch Energy Code, City of Boston energy reporting requirements).
- A list of approved categories of fit-out materials with performance standards, which may include health product declarations or similar transparency declarations, environmental product declarations, recycled content, regional availability, VOC content limits for adhesives, sealants, paints and coatings, NAUF composite wood materials, and CRI and/or FloorScore compliant flooring materials.
- Recommendations and guidance on providing good indoor air quality during construction and once occupied.
- Recommendations and guidance on ways to lower energy use for tenant space including HVAC systems, controls, and set points.
- Waste reduction goals and recycling and/or composting facilities/programs.

6 Compared to standard office equipment and home appliances (non-ENERGY STAR rated), ENERGY STAR-qualified products use 30 to 75 percent less electricity according to the ENERGY STAR website: <https://www.energystar.gov/index.cfm?c=ofc_equip.pr_office_equipment>

7 The Miscellaneous category is one of the categories eQUEST breaks electrical use into and the most applicable to plug-in loads.

- Information on Green Cleaning guidelines/policies.
- Information regarding Project-wide features that aim to encourage alternative transportation and TDM measures.
- Information on how to train/inform maintenance staff and employees on sustainable design/operation features.

Solid/C&D Waste Reduction and Potential GHG Reductions

Recycling and reuse programs will be developed and implemented by all construction contractors to reduce the amount of waste that is sent to landfills throughout construction. Prior to the start of construction, the construction management team will prepare and submit a Construction Waste Management Plan ("CWMP") which will be implemented on-site. The Proposed Project will target a minimum diversion rate of 75 percent of C&D waste.

Storage of collected recyclables will be accommodated in designated recycling areas of the Project. A contracted waste management company will collect the recyclables on a regular basis. The Proposed Project is targeting 100 percent of paper, corrugated cardboard, glass, plastic and metal to be recycled during operations. Information on recyclable materials and the recycling program will be distributed to residential tenants and will include strategies to reduce waste through recycling and reuse programs.

7.3.5 Evaluation of Alternative and Renewable Energy

A variety of clean and renewable energy sources were analyzed including solar panels, wind, and cogeneration in the form of CHP. While not included in the base design assumptions of the preliminary energy models, these systems will continue to be evaluated as the Project design advances. In other words, the base design is able to achieve the proposed energy savings and GHG reductions shown here without these systems included in the preliminary energy models.

Solar Photovoltaic Panels

Solar, or Photovoltaic (PV), panels are comprised of an array of small solar cells that convert sunlight to electricity. The constant and significant improvements in PV technologies are making PV systems lighter and more cost efficient. The Proposed Project has the potential for a variety of flat rooves and unshaded walls on the Project's buildings that may be appropriate for PV system installation.

For the rooftop and building-integrated solar feasibility study, each roof and southern-facing building facade was assessed for potential implementation of the technology. Since roof areas are also used to house mechanical equipment (such as cooling towers, stair pressurization fans, etc.), electrical equipment (generators) and rooftop amenity areas, and stair access, solar is usually only feasible on a subset of total roof area. Due to the variable roof elevations and lines of the proposed buildings, PV was not considered on the lower roofs due to shading from the towers and due to the aesthetic concern about tower occupants looking down onto PV on the lower roofs.

The analysis considered a 38,885-sf system with a capacity of 544 kW. The study indicated that approximately 671,971 kWh of energy per year could be generated site-wide. This is equivalent to approximately $105,499 per year in utility costs and reduces site-wide GHG emissions by 239 tons per year. Details of the solar analysis are presented in Appendix F.

With the phased nature of the project, it unlikely that the current incentives will still exist when all phases of the Project are built, however a payback period has been calculated that includes federal incentives[8]. The simple payback period for the PV solar systems is estimated to 16.2 years (inclusive of the federal tax credit) for all buildings but could potentially be reduced with SMART incentives. Of note, the roof-mounted arrays had a significantly lower payback (~13 years) compared to the building-integrated arrays (32 to 37 years). Without incentives, the simple payback of the systems increases to 17.9 years.

The Proponents will work with tenants to consider this renewable energy source, as well as relevant incentives, in more depth as design progresses for each individual building. At a minimum, building rooftops will be designed to be "solar-ready" with the appropriate structural capacity and electrical infrastructure to support a solar PV installation if deemed feasible at a future date.

Combined Heat and Power

CHP provides a unique opportunity to reduce electric demand and provide useful heating at the same time. Residential buildings are conducive to the domestic hot water and thermal patterns that are required to maximize return on investment for CHP. Based on the Project's network connection and constant base load, 75 kW sized units would be anticipated to serve each of the three residential buildings (Buildings A, C and D). These base loads include, but are not limited to, lighting in corridors and stairwells, supply and exhaust fans for ventilation, and compressors to temper make up air. Thermal energy produced by the system, that is lower temperature heat, would be utilized to offset the residential domestic hot water load. Office uses do not have consistent heat requirements and thus are not conducive to CHP systems. As such, Building B is not considered in this analysis.

The analysis of the CHP systems is presented in Appendix F, including the estimated GHG savings. The analysis assumed that the CHP systems would have a 33 percent electrical efficiency and a 58 percent thermal efficiency. In total, the three CHP systems would be expected to increase the project-wide energy savings to 31.1 percent from 27.1 percent in the Design Case. When netting the energy savings against the energy consumption of the CHPs, the total GHG reduction across the project would be 211 tons per year over the Proposed Design and 1,225 tons per year over the Base Case.

8 A payback analysis was included that accounts for a 10% federal tax credit as installation would likely occur after 2022. Currently, the federal tax credit is 30%, but will begin to reduce in 2020, and drops to 10% in 2022. Additionally, the SMART program is a 1,600 MW program with declining block values. So, depending on when the projects are built it is likely that the federal tax credit will at most be 10% and the SMART program will be in the late stage blocks or no longer be accepting participants.

Table 7-13 Residential Combined Heat and Power Analysis

Project Component	Base Case Energy Use (MMBtu)[1]	With CHP Energy Use (MMBtu)[2]	Energy Use Savings (MMBtu)[3]	Energy Use Savings (Percent)[3]	GHG Savings (tpy)[3]	GHG Savings (Percent)[3]
Building A	13,630	8,480	5,150	37.8%	326	33.1%
Building C	16,612	10,590	6,022	36.3%	379	31.7%
Building D	12,958	8,260	4,698	20.4%	296	31.7%

MMBtu one million British thermal units)
tpy tons per year
1 The Base Case represents current Base Energy Code ASHRAE 90.1-2013 standards.
2 Represents the Proposed Design (of Section 7.3.2) with a 75 kW CHP system.
3 Represents savings of Proposed Design with CHP system over Base Case.

Wind

Wind electricity generation has been considered at this Project location. Based on information noted on the U.S. Department of Energy "WINDExchange" website for Massachusetts,[9] this location is estimated to have an average wind speed of 5.5-6.0 meters/second at 80 meters in height. This average wind speed is on the lower end of the wind speed spectrum and below the minimal level for potential wind generation equipment.[10] For this reason, the Proponent is not committed to installing standalone wind turbines on-site or a roof-top wind harvesting system on the rooftop of the proposed buildings at this time.

District Energy Microgrid Feasibility Study

Through design revisions in response to agency, IAG, and community comments on the initial Article 80 filing, the Proposed Project's square footage has been reduced to fall below the 1.5 million square feet threshold for evaluating the feasibility of incorporating a District Energy Microgrid System. While the Proposed Project is no longer technically subject to the Pilot Policy, the Proponent has volunteered to participate on a consultative basis in recognition of the BPDA's and City's commitment to reducing GHG emissions. As mentioned in Section 4.4 in Chapter 4, *Sustainability and Climate Change Resiliency,* the Project Team is in the initial stages of data gathering (Part A) for the District Energy Microgrid Feasibility Study, as required by the BPDA's Smart Utilities Pilot Policy. As such, the Project Team filed Part A of the District Energy Microgrid Feasibility Study on January 7, 2019. The Project Team will continue to consult with the BPDA as it prepares and files Part B, which is anticipated to identify potential renewable and other energy system alternatives and study their feasibility.

9 https://windexchange.energy.gov/states/ma

10 The wind resource map shows the predicted mean annual wind speeds at an 80-m height, presented at a spatial resolution of about 2 kilometers that is interpolated to a finer scale for display. Areas with annual average wind speeds around 6.5 meters per second and greater at 80-m height are generally considered to have a resource suitable for wind development.

The study includes building energy modeling for load profiles, utility rate tariff analysis, and an assessment of the site and program to determine microgrid and district energy system options and their physical and regulatory constraints. System types to be evaluated further in the District Energy Microgrid Feasibility Study include photovoltaics, CHP, wind, and geothermal. Site-level planning for these resources will be considered alongside physical and regulatory constraints. Site electrical distribution and utility equipment locations will be provided when more detailed design is underway.

Fuel Cell Technology

Fuel cells are being considered for application in the grocery store component of Building A. This technology is being studied as part of the BPDA Smart Utilities Pilot Policy's District Energy Microgrid Feasibility Study (mentioned above). The Project Team will continue examining the backup power required to maintain operation of critical loads for that program.

7.3.6 Passive House Evaluation

Passive House is a rigorous, voluntary standard for energy efficiency in a building, reducing its ecological footprint. It results in ultra-low energy buildings that require little energy for space heating or cooling. Passive House is a design process that is integrated with architectural design that focuses on achieving very low energy use for heating and cooling buildings by implementing design solutions such as optimized orientation and shading, superinsulation, passive solar gains, air-tight envelope, elimination of thermal bridges and efficient HVAC. The program is relatively new in the United States but has been expanding across Europe.

There are no prescriptive insulation requirements for Passive House certification, however, in order to meet the strict energy use requirements, a highly insulated envelope is essential. The insulation has to be continuous and connection details free of thermal bridges. Achieving Passive House certification requires the design to meet stringent airtightness standards (n50: 0.6 ACH @ 50Pa). Performance must be verified through blower door testing of the entire building after construction.

The Proponent has studied the potential to make Building D a Passive House building by increasing envelope insulation and reducing HVAC capacities to meet the requirements of the design standard. Table 7-14 highlights the changes made to the energy model inputs to reflect a Passive House building. Increased envelope insulation and reduced lighting power densities are primary energy conversation measures employed to reduce energy load in Building D.

Table 7-14 Building D Passive House Key Model Assumptions

Building Component	Base Case[1]	Passive House Case
Square Footage/Usage		
Modeled Square Footage	275,300 sf	
Space Description	Residential with First Floor Retail	
Building Envelope		
Roof Assembly	Insulation Entirely above Deck U-Value: 0.032	R-60 ci above deck U-Value: 0.016
Wall Assembly	R-13 Batt + R-10 ci U-Value: 0.055 (R-18 effective)	Effective R-40 U-Value: 0.025
Wall-to-Wall Ratio	Residential: 40% Retail: 7%	Residential: 40% Retail: 7%
Windows and Glazing	Metal Framed Fixed: U-Value: 0.42 Metal Frame, Operable: U-Value: 0.5	Assembly U-Value: 0.14 (Triple Glazed, argon filled)
Solar Heat Gain Coefficient	0.4	0.28
Air-Side HVAC		
HVAC System	Residential- System #1 PTAC with natural draft boilers	Residential- Water Source Heat Pumps Corridors- Packaged VAV
Energy Recovery	50% effectiveness for systems required by code	70% Efficient
Cooling Efficiency	PTAC- EER 10.1 IPSZ- EER 11.7-12.1	Direct Expansion 15 EER RTU 14 EER
Heating Efficiency	Natural Draft Boilers 80%	WSHP COP – 4.5
Service Hot Water		
System Type	Gas Storage Water Heater	Gas Storage Water Heater
Efficiency	80%	95% Condensing Boiler
Flow Fixtures	Standard	35% reduction
Lighting and Equipment		
Lighting Power Density (W/sf)	Residential: 0.51 W/sf Retail: 1.26 W/sf	Residential: 0.38 W/sf Retail: 0.95 W/sf
Equipment (W/sf)	Residential: 1.0 W/sf	Residential: 0.75 W/sf

1 Based case represents ASHRAE 90.1-2013 conditions.

Energy modeling was conducted with the outlined inputs to estimate the annual energy consumption of the Proposed Project with a Passive House building (assumed to be Building D). The resulting energy consumption and GHG emissions of Building D is presented in Table 7-15. With the passive design features implemented, the building is estimated to reduce energy consumption by 49.2 percent compared to the base case. This corresponds to a 27.1 percent energy consumption reduction from the Design Case. GHG emissions would be reduced by 42.0 percent, saving 447 tons per year compared to the base case.

Table 7-15 Building D with Passive House Stationary Source CO_2 Emissions

	Energy Consumption			CO_2 Emissions		
	Electricity (MWh/yr)	**Natural Gas (MMBtu/yr)**	**Total (MMBtu/yr)**	**Electricity (tons/yr)[1]**	**Natural Gas (tons/yr)**	**Total (tons/yr)**
Base Case	1,963	6,266	12,967	697	367	1,064
Passive Case	1,492	1,494	6,585	530	87	617
End-Use Savings	472	4,772	6,382	167	279	447
Percent Savings			**49.2%**			**42.0%**

tons/yr = short tons per year

Given the potential energy consumption savings associated with the passive design of Building D, the additional energy conservation measures required to produce such results must be evaluated financially. Detailed information on the cost analysis of the passive design is presented in Appendix F. A summary of the results of the cost analysis are presented in Table 7-16. The inclusion of the Passive House energy conservation measures is estimated to result in an incremental cost of $8.9 per square foot or a net capital incremental increased cost of $2,198,800 (inclusive of potential MassSave incentives). The analysis confirms that the passive house principles have merit and can have a significant impact in energy performance of Building D. As project design progresses, the Proponent will continue to review the feasibly of implementing passive house principles into the design of Building D to maximize energy efficiency and reduce greenhouse gas emissions.

Table 7-16 Passive House Cost Summary

Parameter	**Value**
Multi-family Development Area	275,300 SF
Passive House Incremental Cost per SF	$8.9 /SF
Total Upfront Incremental Cost	$2,450,170
MassSave Incentives	-$251,370
Net Capital Cost for Passive House	**$2,198,800**
Additional Financing Cost	$143,035 / year
Annual Operating Cost Savings	-$81,826 /year

Through coordination with DOER and based on the results of the study of Passive House for Building D, the Proponent will continue to consider Passive House design strategies on the other residential buildings. Additionally, a Passive House feasibility assessment for the office building (Building B) will be provided in the subsequent MEPA filing to better understand the GHG emissions benefits for that typology.

7.3.7 Utility Incentives

The Proponent is exploring technical assistance programs and incentives such as MassSave, MA SMART Solar Program, and MA Alternative Energy Credits, as well as

potential partnerships with the utility service providers and the DOER for implementing energy efficiency measures. The Proponent has been in contact with Eversource and anticipates meeting with them in mid-February. By working with these utilities throughout the design process, the Proponent will evaluate additional energy conservation strategies and, therefore, additional energy savings and associated GHG emissions reductions may be achieved. A detailed incentives analysis for energy systems will be provided in the District Energy Microgrid Feasibility Study. Furthermore, the Proponent is committed to meeting the applicable requirements of the City of Boston Building Energy Reporting and Disclosure Ordinance, Section 7-2.2 of the Boston Ordinances, once the Proposed Project is in operation.

7.3.8 Future Stationary Source Assessments

Through coordination with DOER and as a result of the pre-filing meeting, the Proponent will continue to evaluate additional energy conservation measures and scenarios subsequent to the filing of this EENF/DPIR for inclusion in the subsequent MEPA filing. Future assessments will evaluate designing the office building (Building B) to Passive House standards and determine the envelope changes necessary to achieve the ultra-low energy efficiencies required by Passive House. This analysis will also expand the residential Passive House evaluation to include the other residential components in the Project (Building A and Building C).

The subsequent GHG assessment will also consider the application of alternative HVAC systems, including VRFs, air source water heating, etc. for all the buildings so that the Proposed Project would only use electricity as an energy source not requiring natural gas. Consequentially, the analysis will consider the cost trade-offs associated with the elimination of gas infrastructure and the additional cost associated with increased electrical infrastructure. Finally, the Proponent will review available Alternative Energy Credits as they apply to the above scenarios in the consideration of their feasibility.

7.4 Mobile Source GHG Emissions Assessment

Mobile source GHG emissions are based upon the traffic volumes, the distance vehicles travel and GHG emission rates. The mobile-source emissions are calculated by performing a mesoscale analysis to evaluate the changes in CO_2 emissions for the existing and future conditions within the traffic study area. The GHG mobile source analysis estimates the area-wide CO_2 emissions from vehicle traffic for a period of one year. Mobile-source emissions were calculated by performing an annual GHG emissions mesoscale analysis to evaluate the estimated change in CO_2 emissions for the existing and future conditions within the study area.

7.4.1 Analysis Conditions

Consistent with the traffic analysis, the following conditions were analyzed: the 2018 Existing Condition; and 2025 future No-Build, Build, and Build with Mitigation

Conditions. The analysis compares the future No-Build, Build, and Build with Mitigation Conditions in order to identify the anticipated changes in traffic conditions and mobile source GHG emissions as a result of the Proposed Project. Where applicable, the Existing Condition is considered for comparison purposes only.

7.4.2 Mobile Source Emission Rates and Inventories

EPA's Office of Transportation and Air Quality ("OTAQ") has developed the Motor Vehicle Emission Simulator ("MOVES").[11] MOVES2014b is EPA's latest motor vehicle emissions model for state and local agencies to estimate GHG and other emissions from cars, trucks, buses, and motorcycles.

All the vehicle emissions used in mobile source GHG analysis were obtained using EPA's MOVES2014b emissions model. MOVES2014b calculates emission factors from motor vehicles in a mass per distance format (often grams per mile) for existing and future conditions and applies these factors to Vehicle Miles Travelled ("VMT") data to obtain emissions inventories. The emissions calculated for this air quality assessment include Tier 3 emission standards, which is an EPA program that sets new vehicle emissions standards, including lowering the sulfur content of gasoline, heavy-duty engine and vehicle greenhouse gas regulations (2014-2018), and the second phase of light-duty vehicle GHG regulations (2017-2025). It also includes Massachusetts-specific conditions, such as the state vehicle registration age distribution and the statewide Inspection and Maintenance ("I/M") Program.[12] These stringent emissions regulation programs often result in smaller emissions inventories with the passage of time when comparing similar scenarios. Input data for the model was obtained from DEP and used Project-specific developed inputs where appropriate.

The MOVES2014b model was run at a project-level to obtain emission factors for each link of the mesoscale analysis. The model was set to calculate the emissions burden by choosing to model emissions processes that are specifically related to vehicles in the study area. Links were created that used the appropriate speeds and grades for each roadway segment.

7.4.3 Traffic Data

The air quality study used traffic data (volumes, delays, and speeds) developed for each analysis condition. The mesoscale analysis for CO_2 emissions considered a yearly traffic volume developed from weekday periods. The vehicle-miles-traveled ("VMT") data used in the air quality analysis were developed based on the traffic data analyzed in this report (see Chapter 5, *Transportation)*.

11 MOVES2014a (Motor Vehicles Emission Simulator), December 2015, US EPA, Office of Mobile Sources, Ann Arbor, MI.

12 The Stage II Vapor Recovery System is the process of collecting gasoline vapors form vehicles as they are refueled. This requires the use of a special gasoline nozzle at the fuel pump.

7.4.4 Existing Mobile Source CO_2 Emissions

Table 7-17 presents CO_2 emissions from mobile sources under all conditions. The calculation of Existing Conditions mobile source emissions provides a base for which future years are evaluated. The mobile source analysis calculated the existing CO_2 emissions from the major roadways in the study area. These CO_2 emissions, estimated to be 22,920 tpy, establish a baseline to which future emissions can be compared. Results are presented in short tons (2,000 lbs.) per year.

7.4.5 Future Mobile Source CO_2 Emissions

Future Proposed Project-related mobile source CO_2 emissions calculations are based upon changes in traffic and emission's factor data. The traffic data includes traffic volumes, vehicle miles traveled and roadway operations. The emission factor data includes emission reduction programs and years of analysis.

The 2025 CO_2 emission factors are lower than the 2018 emissions due to the implementation of emission control programs, such as the Federal Motor Vehicle Emission Control Program (Tier 3), the Stage II Vapor Recovery System, and the Massachusetts Vehicle inspection and Maintenance program.

The mobile source analysis estimated the future study area CO_2 emissions due to the changes in traffic and emission data. Under the No-Build Condition, CO_2 emissions were estimated to be 27,104 tpy. Under the Build Condition, the CO_2 emissions were estimated to be 29,394 tpy.

The total Proposed Project-related mobile source GHG emissions are 2,290 tpy, as presented in Table 7-17. The 2,290 tpy increase in CO_2 emission represents an 8 percent increase in CO_2 emissions for the mesoscale study area for future 2025 conditions.

Table 7-17 Mobile Source CO_2 Emissions Analysis Results (tpy)

Pollutant	2018 Existing Conditions	2025 No-Build Conditions	2025 Build Conditions	Project-related CO_2 Emissions[1]
Greenhouse Gas (CO_2)	22,920	27,104	29,394	2,290

1 Represents the difference in CO_2 emissions between the Build and No-Build Conditions.

7.4.6 Proposed Mitigation Measures

The proposed transportation improvement measures differ from a typical development in that the transportation infrastructure within the study area will be provided as part of the initial development phase to accommodate the future traffic associated with the full build-out, or Master Plan. The improvements to be implemented as part of the Proposed Project have been designed to accommodate traffic from the potential redevelopment of surrounding properties as well as the

traffic anticipated to be generated by the Proposed Project. Overall, the additional new traffic generated by the Proposed Project can be accommodated on the surrounding roadway network and, with the proposed transportation infrastructure improvements, minimal impacts are expected from the Proposed Project. The mobile source GHG emissions related to these transportation infrastructure improvements were assessed as part of the mobile source analysis.

The mobile source GHG assessment calculated the GHG emissions for Proposed Project-related mobile sources. A transportation mitigation program has been developed to reduce the impacts of Proposed Project-related traffic. Specifically, the traffic mitigation measures proposed by the Proponents to minimize the traffic impacts of the full build-out include multiple TDM measures and roadway improvements. Additionally, the Proposed Project is located directly adjacent to the MBTA Commuter Rail station and is services by MBTA bus lines in close proximity to the Project Site. These public transit options will also reduce Proposed Project-related traffic.

The Proponent is committed to implementing a TDM program. A full description of the TDM program is detailed in Section 5.11 of Chapter 5, *Transportation*. Implementation of the TDM program is expected to improve air quality in the study area by promoting the use of alternative forms of transportation over the use of single-occupancy vehicle ("SOV") trips to the Project Site. This modal shift results in lower Project-related VMT which consequentially reduces indirect emissions.

Although not easily modeled, previous estimates of similar TDM programs have ranged on the order of two percent reduction in vehicle miles travelled from the Proposed Project-generated trips. Assuming a similar relationship to GHG emissions, this would correlate to an approximately 46 tons of CO_2 per year reduction in mobile source GHG based on estimated Proposed Project emissions.

Additionally, the Proposed Project will include re-time signals at three intersections along Market Street (Guest Street, North Beacon Street, and Faneuil Street). These roadway improvements are expected to reduce GHG emissions by 957 tons per year by reducing vehicle delay at the mitigated intersections. This results in a reduced Proposed Project-related CO_2 emission of 1,287 tpy. These savings are shown in Table 7-18.

Table 7-18 Mobile Source CO_2 Emissions Mitigation Analysis Results (tpy)

Pollutant	Project-related CO_2 Emissions[1]	Estimated Reductions Due to TDM Measures[2]	Estimated Reductions Due to Roadway Improvements[3]	Resulting Project-related CO_2 Emissions
Greenhouse Gas (CO_2)	2,290	46	957	1,287

1 Represents the difference in CO_2 emissions between the Build and No-Build Conditions
2 Mitigation from TDM Measures estimated as 2 percent of unmitigated Project-related emissions.
3 Mitigation from roadway improvement measures, such as signal optimization.

8

Infrastructure

This chapter describes the infrastructure systems that will support the Proposed Project. The following utilities are evaluated: wastewater, water, stormwater management, natural gas, electricity, and telecommunications. The Proposed Project is located in an urban context with a comprehensive utility service network available at the Project Site boundaries.

The Proposed Project will connect to proposed utility systems within Guest Street Extension and Braintree Street Extension. These proposed systems ultimately connect to existing city and utility company systems in the adjacent public streets. Based on initial investigations and consultations with the appropriate agencies and utility companies, it is anticipated that the existing infrastructure systems will support the incremental increase in demand associated with the development and operation of the Proposed Project. As design progresses, all required engineering analyses will be conducted, and the final design will adhere to all applicable protocols and design standards ensuring that the Proposed Project is properly supported by and properly uses city infrastructure. Detailed design of the Proposed Project's utility systems will proceed in conjunction with the design of the buildings and interior mechanical systems.

The systems discussed herein include those owned or managed by the Boston Water and Sewer Commission ("BWSC"), private utility companies, and on-site infrastructure systems. There will be close coordination among these entities and with the project engineers and architects during the construction process for the Proposed Project. Figure 8.1 shows the existing infrastructure at the Project Site, and Figure 8.2 presents the proposed utilities and connections for the Proposed Project.

8.1 Summary of Key Findings and Benefits

The findings related to infrastructure systems include:

- Utility infrastructure systems are available at the Project Site boundaries and it is anticipated that they will support the demand associated with the development and operation of the Proposed Project. This will be confirmed as the design develops, service locations are established and the development team meets with the appropriate agencies and utility companies. The development team has met with BWSC who has confirmed adequate capacity for the Proposed Project.
- On-site drainage generally flows towards the Charles River via BWSC-owned and maintained drainage infrastructure in Everett Street (under the Pike) abutting the Project Site.

- The Project Site is currently serviced by BWSC for domestic and fire protection water and sanitary sewage conveyance.
- Based upon sewage generation rates outlined in the DEP Sewer Connection and Extension Regulations, 310 CMR 15.203.f, the Proposed Project is estimated to generate approximately 186,414 gallons per day of sanitary sewage (178,814 gallons per day of net new sanitary sewage) and will require approximately 205,055 gallons of water per day (196,695 net new gallons of water per day).

The key Proposed Project-related mitigation and beneficial measures associated with the infrastructure systems include:

- The Proposed Project will not introduce additional peak flows, pollutants, or sediments that would potentially impact the receiving waters of the local BWSC stormwater drainage system.
- The Proposed Project will improve the quality and quantity of site stormwater runoff compared to existing conditions by collecting and infiltrating 1.25 inches of rainfall over all impervious areas, including proposed internal streets and sidewalks to meet BWSC and BPDA Smart Utilities Policy standards.
- The proposed stormwater management systems will comply with the 2008 DEP Stormwater Management Policy and Standards.

Consistent with the sustainable design goals and Article 37 of the Code, the Proposed Project is expected to exceed a 20 percent annual potable water use reduction for interior water use and sewage conveyance through the use of low-flow/high-efficiency plumbing fixtures. Such achievement will be determined once plumbing fixtures are selected by the plumbing engineer.

8.2 Regulatory Context

All connections will be designed and constructed in accordance with applicable city, state and federal standards. The final design process for the Proposed Project will include required engineering analyses and will adhere to applicable protocols and design standards, ensuring that the Proposed Project is properly supported by, and in turn properly uses the utility infrastructure of the City and private utilities. Detailed design of the Proposed Project-related utility systems will proceed in conjunction with the final design of the buildings and its interior mechanical systems.

All improvements and connections to BWSC infrastructure will be reviewed by BWSC as part of the Site Plan Review process. This process includes a comprehensive design review of the proposed service connections, assessment of system demands and capacity and establishment of service accounts.

- BWSC has reviewing authority of the proposed site plan design, including stormwater management infrastructure, and water and sanitary sewer system connections/design.

- The Boston Fire Department (BFD) will review the Proposed Project with respect to fire protection measures such as access, hydrants, Siamese connections, and standpipes.
- Design of the Project Site access, hydrant locations, and energy systems (gas and electric) will also be coordinated with the respective system owners.
- Where new utility connections are needed and existing connections are to be capped, the excavation will be authorized by the Boston Public Works Department (BPWD) through the street opening permit process, as required.

Additional information on the regulatory framework for each utility system is included in subsequent sections of this chapter.

8.3 Description of Stormwater Management System

Since most of the Project Site is already impervious, the Proposed Project will not result in significant changes in the pattern of stormwater runoff. Stormwater management controls will be established in compliance with the BWSC standards. 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. The development team is also studying opportunities to incorporate green roof technologies into the building program

8.3.1 Existing Drainage Conditions

Record information shows on-site drainage generally flows towards the Charles River. Everett Street contains BWSC owned drainage infrastructure adjacent to the Project Site. Drainage infrastructure also runs through a utility easement on the northwest portion of the Project Site. Site run-off is collected through a series of catch basins throughout the existing parking lot and are directed through a vortechs water quality unit before discharging to the BWSC owned 66-inch by 87-inch drain in Everett Street. Roof drainage is collected within the existing plumbing system and directed through a vortechs water quality unit before discharging to the same BWSC owned drain in Everett Street. Run-off ultimately flows to the Charles River through outfall SD0037. Figure 8.1a shows the existing drainage facilities serving the Project Site

8.3.2 Proposed Drainage Conditions

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 stormwater standards and BWSC requirements. Additionally, to better warrant 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.

8.3.3 Compliance with DEP SMS

Standard #1: No new stormwater conveyances (e.g., outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.

› Compliance: The Project will comply with this Standard. Untreated stormwater will not be directly discharged to, nor will erosion be caused to, wetlands or waters of the Commonwealth as a result of the Project.

Standard #2: Stormwater management systems must be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.

› Compliance: The Project will comply with this Standard. The existing discharge rate will decrease as a result of the improvements associated with the Project. The project is increasing pervious area and collecting run-off through infiltration systems which will reduce the pre-development peak discharge rates.

Standard #3: Loss of annual recharge to groundwater should be minimized through the use of infiltration measures to the maximum extent practicable. The annual recharge from the post development Project Site should approximate the annual recharge from the pre-development or existing site conditions, based on soil types.

› Compliance: The Project will prevent the loss of annual recharge to groundwater by incorporating groundwater recharge techniques. The Proponents will install 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 conditions, which is a mostly impervious.

Standard #4: For new development, stormwater management systems must be designed to remove 80 percent of the average annual load (post-development conditions) of TSS. It is presumed that this standard is met when: Suitable nonstructural practices for source control and pollution prevention are implemented; Stormwater BMPs are sized to capture the prescribed runoff volume; and Stormwater management BMPs are maintained as designed.

› Compliance: The Project will remove 80 percent of the annual load of TSS by the implementation of BMPs. Stormwater overflow will be collected and treated by structural means, including subsurface drainage systems sized to capture the required volume. The Project will also include permeable pavers within the Guest Street Extension furnishing zone.

Standard #5: For land uses with higher potential pollutant loads, source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses to the maximum extent practicable. If, through source control and/or pollution prevention, all land uses with higher potential pollutant loads cannot be completely protected from exposure to rain, snow, snow melt, and stormwater runoff, the proponent shall use the specific structural stormwater BMPs determined by the Department to be suitable for such uses as provided in the Massachusetts Stormwater Handbook. Stormwater discharges from land uses with higher potential pollutant loads shall also comply with the requirements of the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26-53 and the regulations promulgated there under at 314 CMR 3.00, 314 CMR 4.00 and 314 CMR 5.00.

› Compliance: The Project Site will be occupied by buildings and open spaces not associated with land uses with higher potential pollutant loads. The proposed parking garage will drain via a gas/oil separator to the sanitary sewer system.

Standard #6: Stormwater discharge to critical areas must utilize certain stormwater management BMPs approved for critical areas. Critical areas are Outstanding Resource Waters ("ORWs"), shellfish beds, swimming beaches, cold-water fisheries and recharge areas for public water supplies.

› Compliance: The Project Site does not discharge within the Zone II or Interim Wellhead Protection Area of a public water supply or near any other critical area.

Standard #7: A redevelopment project is required to meet the following Stormwater Management Standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural stormwater best management practice requirements of Standards 4, 5, and 6. Existing stormwater discharges shall comply with Standard 1 only to the maximum extent practicable. A redevelopment project shall also comply with all other requirements of the Stormwater Management Standards and improve existing conditions.

› Compliance: The Project is considered a redevelopment project. The Project will comply with Stormwater Management Standards 1 through 6 to the maximum extent practicable and all other requirements of the Stormwater Management Standards and will thereby materially improve upon existing conditions.

Standard #8: Erosion and sediment controls must be implemented to prevent impacts during construction or land disturbance activities.

› Compliance: Sedimentation and erosion controls will be employed to prevent construction or land disturbance impacts to groundwater. Erosion and sediment control plans will be submitted to BWSC and the contractor will be required to implement the measures as part of the BWSC general services application process. The implementation of these measures is also a requirement of the NPDES permit that will be obtained for the Project.

Standard #9: A Long-Term Operation and Maintenance (O&M) Plan shall be developed and implemented to ensure that stormwater management systems function as designed.

› Compliance: An Operation and Maintenance ("O&M") Plan will be developed and implemented. The O&M Plan will be reviewed by the BWSC.

Standard #10: All illicit discharges to the stormwater management system are prohibited.

Compliance: There are no currently known illicit discharges. All proposed discharges will be reviewed by the BWSC to ensure consistency with this standard

8.3.4 Compliance with BWSC Standards

All improvements and connections to BWSC infrastructure will be reviewed by BWSC as part of the Site Plan Review process. This process includes a comprehensive design review of the proposed service connections, assessment of system demands and capacity, and establishment of service accounts for water, sewer, and stormwater systems.

8.4 Wastewater Generation

8.4.1 Existing Sewer System

BWSC owns and maintains the sanitary sewer lines near the Project Site. These include the 15-inch sewer which runs through an easement along the back side of the existing building in the Braintree Street Extension area and a 26-inch by 39-inch sewer in Everett Street. The Project Site currently generates approximately 7,600 gallons per day of wastewater based on DEP 310 CMR 15.203 flow factors for the existing supermarket/retail uses.

8.4.2 Proposed Sewer System

Generation rates from the Massachusetts State Environmental Code (Title 5) were used to estimate the Proposed Project's sewage generation rates. Table 8-1 below presents the estimated sanitary sewage flow for the Proposed Project.

The Proposed Project will generate an estimated 186,414 gallons per day of sewage (178,814 net new gallons per day). The Project plans to maintain a majority of the existing 15-inch sewer within Braintree Street Extension and connect all building sewer services to it. All connections will be coordinated with BWSC.

Table 8-1 Estimated Sanitary Sewage Flow (Full-Build)

Use	Sewage Generation Rate[1]	Proposed Size/Quantity	Estimated Sewage Generation (GPD)
Residential	110 GPD/Bedroom	1,294 Beds[2]	142,340
Office	75 GPD/1000 SF	375,000 SF	28,125
Retail	50 GPD/1000 SF	49,000 SF	2,450
Grocery	97 GPD/1000 SF	67,000 SF	6,499
Restaurant	35 GPD/seat	200 seats	7,000
	Total Proposed		186,414
	Total Existing		7,600
	Net New Total		**178,814**

GPD Gallons per day
SF Square Feet
1 Based on DEP 310 CMR 15.203 flow calculation factors.
2 Assumes the following bedroom breakdown for the up to 895 units: 5.9% Studio, 52.9% 1-Bedroom, 37.9% 2-Bedrooms and 3.3% 3-Bedrooms. This bedroom mix is subject to change.

8.4.3 I/I Mitigation

BWSC requires that new developments generating greater than 15,000 gallons per day of net new wastewater flow provide Infiltration/Inflow (I/I) mitigation at a ratio of 4:1 relative to the net new wastewater generated. Infiltration/Inflow is the component of flows in sanitary sewer systems that do not come from wastewater generated by a building, such as groundwater infiltration from leaking/broken sewer infrastructure, as well as stormwater connections from roof leaders and drainage infrastructure.

As currently proposed, Phase 1 is projected to generate approximately 28,209 gallons per day of net new sewage based on the following program:

- 176 residential units;
- 67,000 square feet of grocery;
- 25,200 square feet of retail;

As design is advanced and approval is sought, BWSC will review and confirm the appropriate mitigation volume and value of compensation to be paid to the I/I mitigation fund, or provided through alternative mitigation mechanisms, such as individual improvement projects.

8.5 Water Demand

8.5.1 Existing Water Supply System

BWSC owns and maintains the water mains near the Project Site. BWSC record drawings show the streets surrounding the Project Site are serviced by southern low service mains. The existing Project Site has an 8-inch private loop that is metered at the corner of Everett Street and Braintree Street Extension. The mains range in size

from a 12-inch main in Guest Street and Everett Street, to a 6-inch main in Hichborn Street. The installation dates and materials of these pipes also vary, from pit-cast iron ("PCI") pipe installed in 1876 and 1884 to cast iron cement lined ("CICL") pipe installed and lined in 1950. The existing water infrastructure provides a high level of service and diversity to the Allston neighborhood. Additionally, currently two public fire hydrants are near the Project Site in addition to 4 private hydrants on-site.

8.5.2 Proposed Water Supply System

Domestic water demand is based on estimated sewage generation with an added factor of 10 percent for consumption, system losses, and other use. Based upon sewage generation rates outlined in the DEP Sewer Connection and Extension Regulations, 310 CMR 15.203.f, the Proposed Project will require approximately 205,055 gallons of water per day (196,695 net new gallons per day). However, appropriate low-flow and low-consumption plumbing fixtures will be installed in all residential units to achieve a reduction in water usage at a minimum of 20 percent over the baseline to comply with Article 37 of the Boston Zoning Code, as discussed in Chapter 4, *Sustainability/Climate Resiliency*. The Proposed Project is expected to exceed a 20 percent annual potable water use reduction for interior water use and sewage conveyance through the use of low-flow/high-efficiency plumbing fixtures. Such achievement will be determined once plumbing fixtures are selected by the plumbing engineer.

New water connections will be designed in accordance with BWSC design standards and requirements. Water services to new buildings will be metered in accordance with BWSC's Site Plan Requirements and Site Review Process. The review includes, but is not limited to, sizing of domestic water and fire protection services, calculation of meter sizing, sizing and location of booster pumps (if required, by MEP Engineer), backflow prevention design, and location of hydrants and Siamese connections conform to BWSC and BFD requirements. The Proponent will provide for the meter connection to the BWSC's automatic meter reading system. Fire protection connections on the Project Site will also need approval of the BFD.

8.6 Other Utilities

8.6.1 Natural Gas Service

National Grid Energy owns and operates the natural gas mains and services near the Project Site. The site survey indicates a 4-inch gas main in Guest Street and an 8-inch main in Everett Street. The Proposed Project plans to extend the natural gas main along Guest Street Extension to Everett Street to service the proposed buildings.

The Proposed Project's estimated natural gas load for the Phase 1 (Building A) is 12,000 MBH. The estimated natural gas load for the remaining proposed buildings will be determined based on final design and uses. The Proponent will work with National Grid to confirm adequate system capacity as the design for the buildings is advanced.

8.6.2 Electrical Service

Eversource owns and operates the electric facilities near the Project Site. The site survey indicates underground power facilities in Everett Street and Guest Street along the frontage of the Project Site. The Proposed Project plans to extend the underground power facilities along Guest Street Extension to Everett Street to service the proposed buildings. As the design of the Proposed Project progresses, the Proponent's electrical engineer and civil engineer will coordinate with Eversource on future configurations of the power system and connections.

The estimated electrical demand load for the Phase 1 (Building A) is one 13.8kV-480/277V, 6000 Amp service (house) and one 13.8kV-208/120V, 4000 Amp service (residential). The electrical demand load for the remaining buildings will determined based on final design and uses. Energy conservation measures will be an integral part of the Proposed Project-related infrastructure design. As described in Chapter 4, *Sustainability and Climate Resiliency*, all buildings will be designed to include energy-efficient and water-conservation features for mechanical, electrical, architectural, and structural systems, assemblies, and materials, where feasible and reasonable.

8.6.3 Telephone and Telecommunications

Verizon owns and operates the telephone facilities and services near the Project Site. The site survey indicates that there is an active conduit and manhole located in Everett Street where the existing building is currently being serviced. Given the existing infrastructure, telephone for the Project Site could be provided from Everett Street or Guest Street as the Proposed Project plans to extend telephone systems to service on-site the proposed buildings. The configuration of the proposed service will be developed with Verizon as the design progresses.

Comcast owns and operates the telecommunications facilities and services near the Project Site. The site survey indicates that there is active conduit and manholes in Everett Street. Telecommunications for the Project Site could be provided from Everett or Guest Street as the Proposed Project plans to extend the telecommunications line to service on-site to the proposed buildings. The configuration of the proposed service will be developed with Comcast as the design progresses.

8.6.4 HVAC System

The proposed HVAC system for the residential portion of the Proposed Project includes an energy efficient 2-pipe vertical water source heat pump system. The heat pumps serving the residential units will be vertically stacked at the exterior wall and will be capable of both heating and cooling year-round. Common areas of the building will be served by multiple concealed horizontal ducted heat pumps located above the ceilings. Each heat pump will be provided with a local stand-a-lone thermostat.

There will be a condenser water central plant located on the roof that will consist of cooling towers, plate and frame heat exchangers, gas fired condensing heating hot

water boilers and condenser water pumps. Condenser water will be distributed vertically to serve each of the heat pumps.

Heating hot water system will serve the condenser water system as an auxiliary heat source and provide heat in the mechanical penthouse only.

Residential unit bathrooms will be exhausted continuously. Each kitchenette shall also be exhausted. The two exhausts systems shall be combined and run will be extended directly to a common vertical exhaust riser. Ductwork to collect at upper levels then routed back to an energy recovery unit on the roof.

Ventilation supply air will be distributed at upper levels in the building. Main supply air risers will run vertically with horizontal distribution at each floor. Horizontal ductwork will be extended down the corridors and tap off into each residential unit.

The Project Team intends to continue evaluating the feasibility of cogeneration systems, as the design advances. Potential benefit includes generating electricity on-site to reduce transmission loss and for heating domestic hot water for the residential buildings.

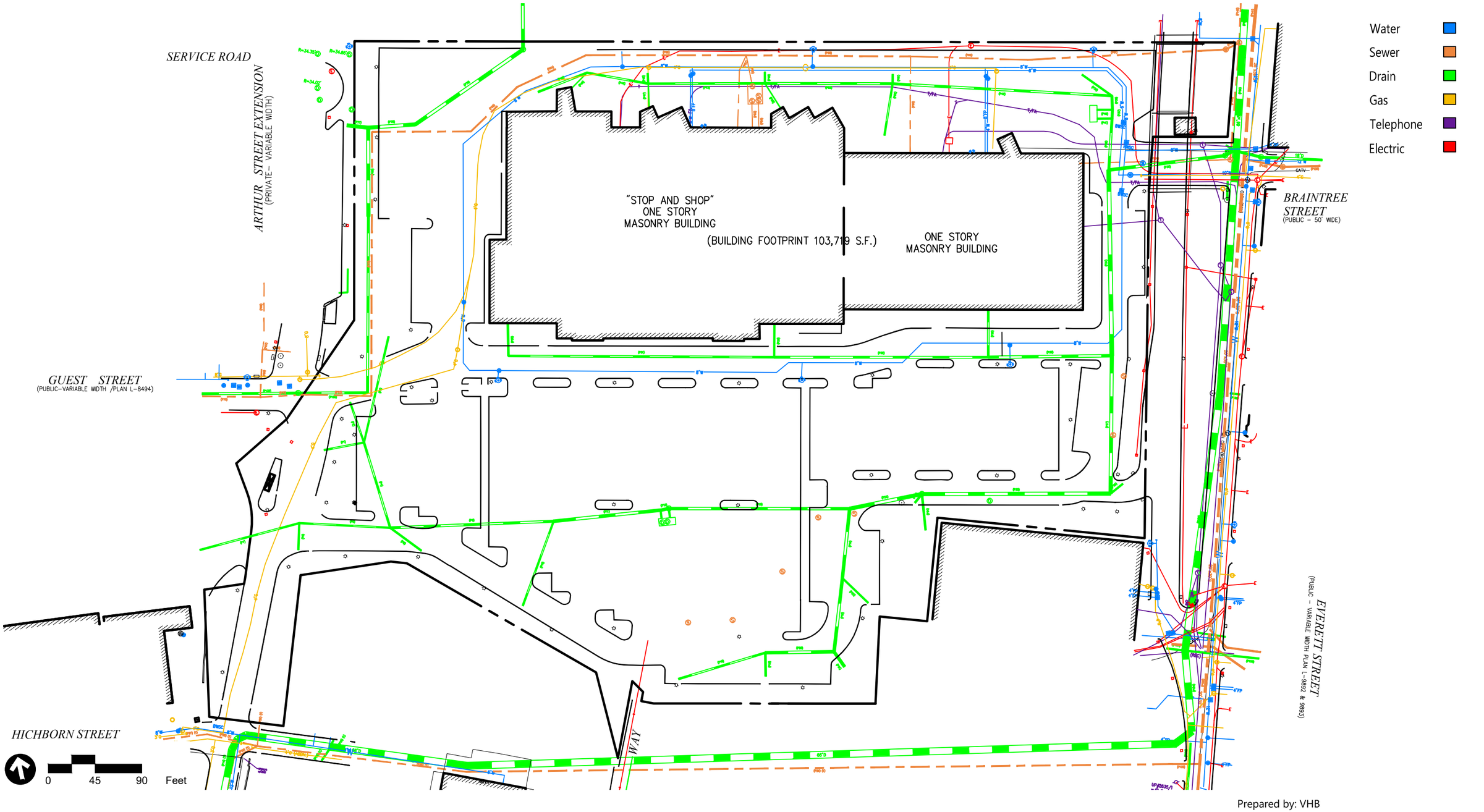
8.6.5 Compliance with BPDA Smart Utilities Pilot Policy

Due to the size of the Proposed Project, it is subject to some elements of the BPDA's Smart Utilities Pilot Policy. The Proposed Project will comply with the Policy to the maximum extent practicable. The Proposed Project will capture 1.25-inches of stormwater over all impervious areas for infiltration, and install additional conduit adjacent to the street lighting for future telecommunication uses will be provided. The Proposed Project will coordinate the design of underground utilities, including electrical and telecom, with BWSC with such design being coordinated by the Policy. As part of the proposed traffic improvements (described in detail in Section 5.6.2 of Chapter 5, *Transportation*), Adaptive Signal Technology will be installed at the new intersections at Arthur Street/Guest Street, and Everett Street/Guest Street Extension, as well as part of the proposed North Beacon Street/Everett Street intersection improvements.

8.6.6 Phase 1 (Building A) Utilities

All proposed utilities under Guest Street Extension, including Building A utility services, will be constructed during the Phase 1 and stubs for East and West Streets will be put in place to allow for continuation in future phases. The main sewer and drain on the west end of the Project Site will be relocated to West and East Streets once Stop and Shop is demolished.

Utilities in West and East Streets, and Braintree Street Extension will be installed after Building A is open, after the Stop and Shop, and retail buildings are demolished and during the construction of each roadway. Utility stubs will be installed in Braintree Street Extension to service future Buildings B, C, and D.



Prepared by: VHB

Figure 8.1
Existing Utilities

Allston Yards
Allston, Massachusetts

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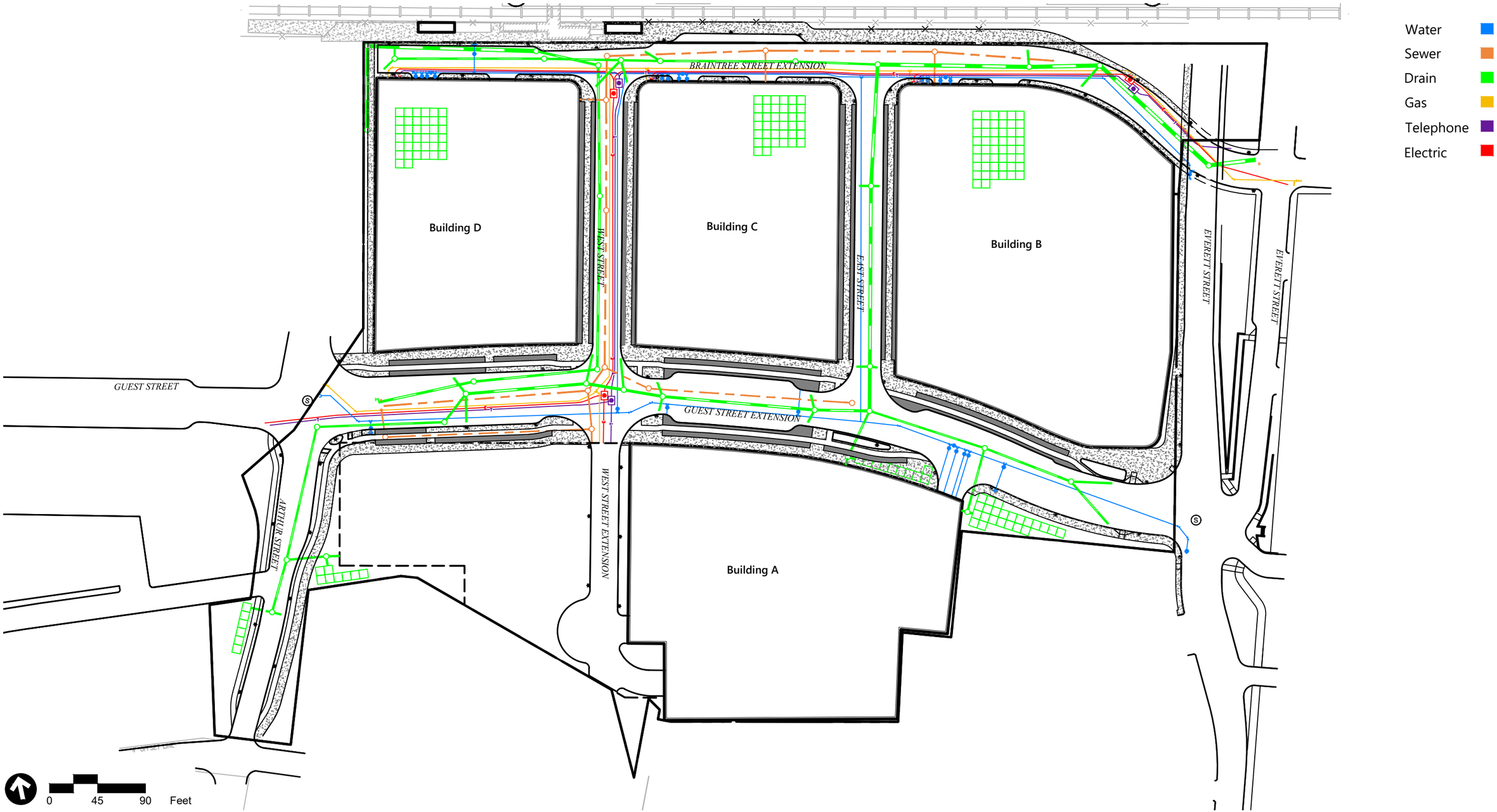

Prepared by: VHB

Figure 8.2

Proposed Utilities

Allston Yards
Allston, Massachusetts

9

Historic Resources

This chapter identifies the historic and archaeological resources within a ¼-mile radius of the Project Site, and describes the potential Proposed Project-related impacts on these resources. A review of the State and National Registers of Historic Places, Inventory of Historic and Archaeological Assets of the Commonwealth (the "Inventory") maintained by the Massachusetts Historical Commission ("MHC"), and the and Massachusetts Cultural Resource Information System ("MACRIS"), was undertaken to identify historic resources.

9.1 Summary of Key Findings and Benefits

The key findings related to historic resources include:

- There are no historic resources within the Project Site;
- There are no buildings on the Project Site that are over 50 or more years old;
- There are 12 historic resources located within a 0.25-mile radius of the Project Site. This includes two properties that have been determined eligible for listing in the National Register and 10 inventoried properties;
- There are no previously identified archaeological resources located within the Project Site or within a 0.25-mile radius of the Project Site.
- Urban Design Effects – The Project has been designed to be sensitive to the height, scale, massing, and materials of the surrounding residential neighborhood including nearby historic resources and will complete two city blocks, strengthening the neighborhood scale and continuity of the street wall façade;
- Shadow Effects – net new shadow is mostly limited to within the Project Site and are anticipated to be very minimal at the location of adjacent historic resources; and
- Wind Effects – The Project is not anticipated to generate any unsafe wind conditions around historic resources.

9.2 Historic Resources in the Project Vicinity

A survey was undertaken to identify historic resources within and in the vicinity of the Project Site. There are no historic resources within the Project Site. Just south of the Project Site are The International Harvester New England Branch Headquarters and the Englewood Diner, which have been determined eligible for listing in the National Register of Historic Places. The Saint Anthony's Area, 1–75 Aldie Street Area, and 1-87 Adamson Street Area, all inventoried Areas, are northeast of the Project Site on the opposite side of I-90. Within a 0.25-mile radius of the Project Site are several additional resources that are included in the Inventory. The names and addresses of the historic resources are listed in Table 9-1 and depicted in Figure 9.1. A description of the historic resources follows.

Table 9-1 Historic Resources within One-Quarter Mile of the Project Site

Map No.	Resource Name	Location	MHC Inventory No.	Designation
Properties determined eligible for the State and National Registers of Historic Places				
1	Englewood Diner	69 North Beacon Street	BOS.5952	NR DOE
A	International Harvester New England Branch Headquarters	61, 67–69 North Beacon Street	BOS.ADJ	NR DOE
Properties included in the Inventory of Historic and Archaeological Assets of the Commonwealth				
B	Saint Anthony's Area	Multiple	BOS.JM	INV
C	1–75 Aldie Street Area	1–75 Aldie Street	BOS.KQ	INV
D	1–87 Adamson Street Area	1–87 Adamson Street	BOS.KP	INV
E	Hano Street Area	Hano St, Braintree Street	BOS.KM	INV
F	Allston Heights Area	Multiple	BOS.KI	INV
G	2–15 Guilford Street Area	2–15 Guilford Street	BOS.LD	INV
H	Mount Saint Joseph Academy Area	Multiple	BOS.KH	INV
2	Single-Family Dwelling	19 Everett Street	BOS.8143	INV
3	Thomas Sinclair House	1 Sinclair Road	BOS.8310	INV
4	Jedidiah Tracy House	2 Sinclair Road	BOS.8311	INV

NR National Register of Historic Places
NR DOE Determined Eligible by SHPO for listing in the National Register
LL Boston Local Landmark (State Register of Historic Places)
LHD Local Historic District
INV Listed in the Inventory of Historic and Archaeological Assets of the Commonwealth, no current designation

9.2.1 Historic Resources On-Site

There are no historic resources within the Project Site.

9.2.2 Historic Resources Within ¼ Mile of the Project Site

Figure 9.1 provides a location map of historic resources within a one-quarter mile radius of the Project Site.

Properties Determined Eligible for the State and National Registers of Historic Places

Englewood Diner (BOS.5952)

The Englewood Diner (aka the Red Line Diner), 69 North Beacon St, is a classic one-story dining car constructed sometime after 1933. The car has colored enamel siding and a Pullman roof topped with a mounted wooden sign. In 2012, the car was relocated from its original location to its present location within the International Harvester New England Branch Headquarters Area.

International Harvester New England Branch Headquarters (BOS.ADJ)

The International Harvester New England Branch Headquarters, 61 and 67–69 North Beacon Street, comprises a service station (1924), a branch headquarters building (1925–1926), and a truck storage building (1926–1931). International Harvester was established in the first decade of the twentieth century and originally manufactured tractors and motor trucks, soon becoming the leading tractor producer in the country. The present arrangement of buildings was constructed at a time when the company had outgrown its headquarters on Commonwealth Avenue in Brookline. The Area has significance in the Areas of Architecture, Commerce, Industry, and Transportation.

Properties included in the Inventory of Historic and Archaeological Assets of the Commonwealth

Saint Anthony's Area (BOS.JM)

Saint Anthony's Area is a large, irregularly-shaped, inventoried Area located on the north side of I-90 and south of Western Avenue. The Area includes residential buildings constructed between ca. 1840–1930, many in the Greek Revival and Italianate styles, and represents one of the largest concentrations of wood-frame single- and two-family dwellings designed in the Allston-Brighton neighborhoods of Boston. St. Anthony's Roman Catholic Church is a major institutional complex within the Area and, in addition to the church building, includes a rectory, school, and convent. The Area has significance in the Areas of Architecture, Community Planning and Development, and Religion.

1–75 Aldie Street Area (BOS.KQ)

The 1–75 Aldie Street Area is a residential street that stretches between Everett Street on the west and Franklin Street on the east. The buildings were constructed between 1885 and 1917, with the majority being built in the last decade of the nineteenth century. Houses represent popular architectural styles of the day, such as Queen Anne, Shingle Style, and Colonial Revival.

1–87 Adamson Street Area (BOS.KP)

The 1–87 Adamson Street Area is a residential street that stretches between Everett Street on the west and Franklin Street on the east. The buildings were constructed beginning in 1846 and represent a variety of architectural styles including vernacular Greek Revival, Italianate, Second Empire, and Colonial Revival.

Hano Street Area (BOS.KM)

The Hano Street Area is a residential street that stretches between Braintree Street to the north and the major curve in Hano Street to the south. The area is one block south of the former Boston and Albany Railroad tracks and were originally constructed in the middle of a busy industrial, warehouse district. The modest, two-family dwellings were constructed in the 1890s by Samuel Hano, a book manufacturer. Houses were originally designed in the Queen Anne style, but have since been drastically altered.

Allston Heights Area (BOS.KI)

The Allston Heights Area is an irregularly-shaped Area that extends south from North Beacon Street, across Cambridge Street, and southeast to Allston Street, encompassing High Rock Way, Imrie Road, Cambridge Terrace, and portions of other adjacent streets. Buildings within the Area were constructed between 1840 and 1930 and is a fine collection of ornamented dwellings near Union Square in the Allston-Brighton neighborhood. There are examples of Queen Anne and Shingle Style residences. The Area has significance in the Areas of Architecture and Community Planning and Development.

2–15 Guilford Street Area (BOS.LD)

The 2–15 Guilford Street Area is a small residential Area that encompasses approximately nine buildings on the north and south sides of Guilford Street. The buildings were constructed between 1885 and 1899 and include examples of Queen Anne- and Colonial Revival-style dwellings. The Area has significance in the Areas of Architecture and Community Planning and Development.

Mount Saint Joseph Academy Area (BOS.KH)

The Mount Saint Joseph Academy Area extends south from North Beacon Street to Cambridge Street and is bounded by Dustin Street on the west and Saunders Street on the east. The park-like setting features nine structures, including a stable and incinerator facility (ca. 1900), a Renaissance Revival-style classroom building (ca. 1910), and chapel, dormitory, and classroom additions constructed after 1960. The school was established in 1885 as the St. Joseph's Academy for Girls. It is historically associated with the expansion of Roman Catholic educational offerings within the Diocese. The Area has significance in the Areas of Architecture, Community Planning and Development, Education, and Religion.

Single-Family Dwelling, 19 Everett Street (BOS.8143)

This two-story, five-bay-by-two-bay, wood-frame, rectangular-shaped house was constructed ca. 1840 in the Greek Revival style. The rear addition exhibits Italianate-style characteristics.

Thomas Sinclair House, 1 Sinclair Road (BOS.8310)

The Thomas Sinclair House is a two-story, five-bay-by-two-bay, wood-frame, Greek Revival-style house constructed ca. 1835. The house was built for Thomas Sinclair and his wife, Catherine, a daughter of Jedidiah Tracey, their next-door neighbor. It was originally located on North Beacon Street.

Jedidiah Tracy House, 2 Sinclair Road (BOS.8311)

The Jedidiah Tracy House is a two-story, five-bay-by-two-bay, wood-frame, Greek Revival-style house constructed ca. 1833. The house was built when Jedidiah Tracey relocated to Brighton with his family. It was originally located where 45–47 North Beacon Street is presently.

9.2.3 Archaeological Resources

The Project Site consists of a previously developed urban parcel. No previously identified archaeological resources are located within the Project Site. Due to previous development activities and disturbances, including site grading activities, it is not anticipated that the Project Site contains significant archaeological resources and, therefore, no impacts to archaeological resources are anticipated as a result of the Proposed Project.

9.3 Potential Impacts to Historic Resources

9.3.1 Building Design/Public Realm

As described in Chapter 1, *Project Description and Alternatives*, the Proposed Project will redevelop the existing underutilized suburban-style retail Project Site into a mixed-use development in the spirit of the Guest Street Planning Study and consistent with the height, massing, and uses of the adjacent Boston Landing development. In response to community concerns over building height and massing, the Proposed Project includes reduced building density, specifically to Building D, to provide more sky exposure for the Community Green, and reduced building height, including the shift in height on Building B away from Everett Street and reducing the height of Building A to relate to the smaller scale neighborhoods to the south and east. The Proposed Project also consists of greater variety in height to create a more interesting and lively skyline.

The primary urban design goal of the Proposed Project is to enhance the public realm around and inside the Project Site and create a vibrant and interactive destination near the proposed Guest Street Extension. As described in Section 3.4.1 of Chapter 3, *Urban Design,* the Proposed Project has been revised to reduced building height (specifically, Building A) at the community edge of the Project Site. In keeping with the Guest Street Planning Study, the bulk of building massing is located along Guest Street Extension away from North Beacon Street. Additionally, the proposed building heights are consistent with the Boston Landing buildings recently constructed or being planned immediately west of the Project Site. The Proponent intends to further relate the buildings to adjacent development through the use of masonry and perforated metal and glass materials and a simple building form reminiscent of industrial buildings.

9.3.2 Shadow

A shadow impact analysis was undertaken to show the anticipated impacts to historic resources from the Proposed Project in comparison to the existing condition. The analysis identifies net new shadow for March 21, June 21, September 21, and December 21 at 9AM, 12PM, and 3PM, as well as 6PM on June 21 and September 21, in accordance with the BPDA Article 80 review guidelines.

As presented in Section 6.3 of Chapter 6, *Environmental Protection*, net new shadows for both the Phase 1 (Building A) and Full Build Conditions are mostly limited to

within the Project Site. Net new shadow that would extend over historic resources is limited to the Hano Street Area on June 21 at 6PM and to the 1-87 Adamson Street Area on December 21 at 3PM under the Full Build Condition. The Proposed Project would not result in net new shadow on historic resources under any of the other conditions.

9.3.3 Wind

As demonstrated by the pedestrian wind study presented in Section 6.2 of Chapter 6, *Environmental Protection*, the Proposed Project (Full Build) would not result in a perceptible change in wind conditions for any of the twelve nearby historic resources.

Full Build Condition

Compared to the No Build Condition with the full build out of the Proposed Project, predicted mean wind speeds would decrease slightly at the intersection of Harvester Street and Everett Street (the location of 1 Sinclair Road and 19 Everett Street). Mean wind speeds would increase slightly along Everett Street, in the direction of Hano Street; however, conditions in the immediate vicinity of the Hano Street Area would equal the No Build Condition. Refer to Figures 6.1a and 6.2a for the pedestrian wind conditions of the No Build and Build Conditions, respectively.

The wind study projected no increase in wind gust speeds in the vicinity of any historic resources under the Full Build Condition (Figure 6.2b).

Phase 1 Condition (Building A)

With the completion of Building A, predicted pedestrian wind conditions around the aforementioned resources would remain unaltered from the No Build Condition. Refer to Figures 6.3a and 6.3b for the predicted wind conditions for Phase 1.

9.4 Status of Project Reviews with Historical Agencies

9.4.1 Boston Landmarks Commission Article 80 Review

The submission of the PNF initiated review of the Proposed Project by the Boston Landmarks Commission ("BLC") under the City of Boston's Article 80 review process.

9.4.2 Boston Landmarks Commission Article 85 Review

The building on the Project Site is not over 50 years of age; therefore, is not subject to the City of Boston's Demolition Delay Ordinance (Article 85 of the Boston Zoning Code).

9.4.3 Massachusetts Historical Commission State Register Review

The Massachusetts Historic Commission ("MHC") has review authority over projects requiring state funding, licensing, permitting, and/or approvals that may have direct or indirect impacts to properties listed in the State Register of Historic Places (M.G. L. Chapter 9, Sections 27-27c, as amended). The filing of this EENF for MEPA review initiates the MHC State Register Review process.

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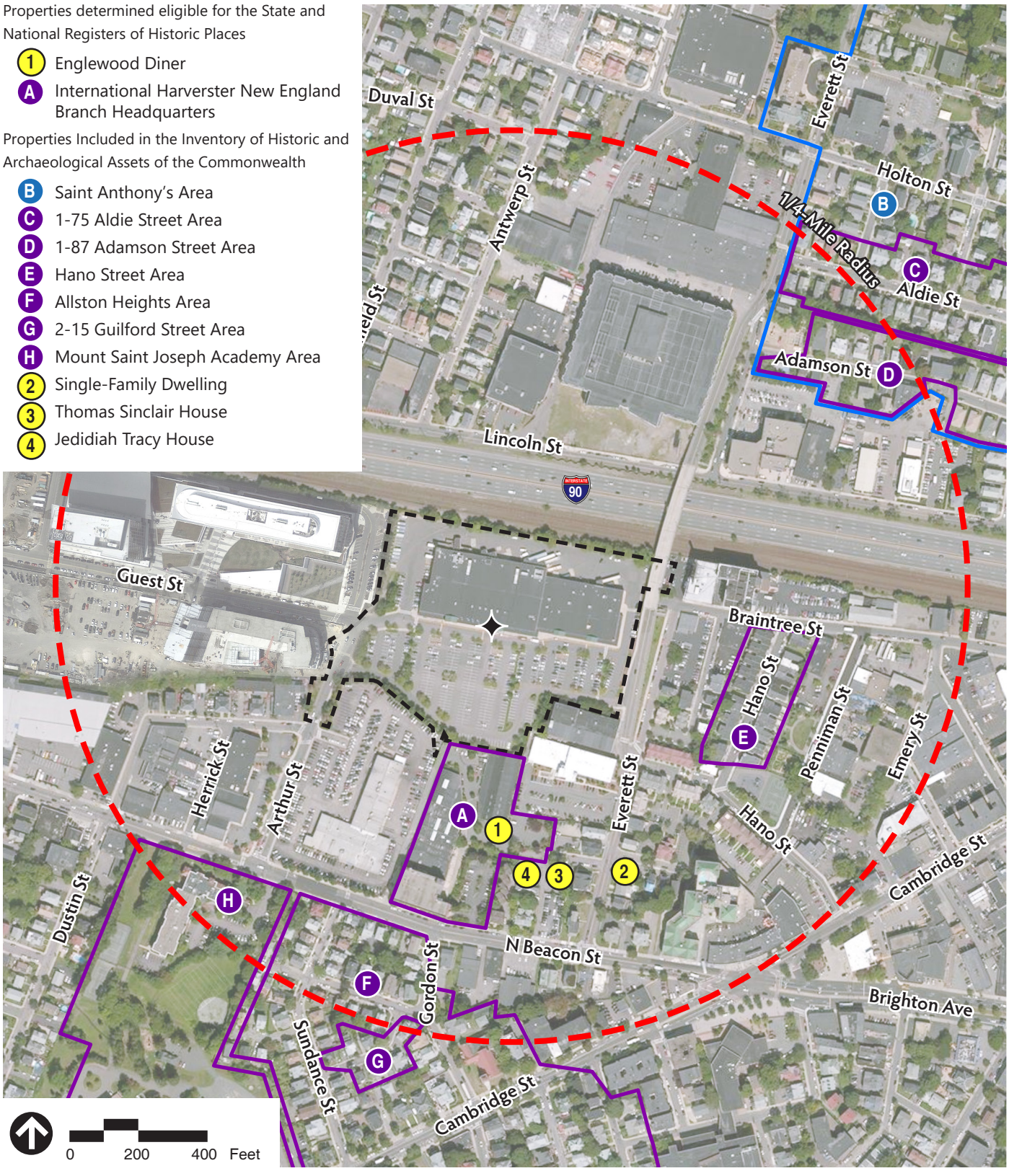


Source: ArcGIS Bing Aerial

Prepared By: VHB

Project Site

Figure 9.1

Historic Resources within ¼-mile of the Project Site

Allston Yards
Allston, Massachusetts

10

Summary of Mitigation Measures/ Draft Section 61 Findings

In accordance with 301 CMR 11.07(6)(k), this chapter provides a summary of proposed mitigation measures and draft Section 61 Findings for each agency action to be taken on the Proposed Project.

10.1 Summary of Proposed Mitigation Measures

The Proponent, where practicable, will mitigate or compensate for unavoidable impacts. This section provides a summary of impacts from and mitigation required for implementation of the Project. Table 10-1 summarizes the proposed mitigation measures and implementation schedule to avoid, minimize, or mitigate environmental impacts associated with the Proposed Project. The Proponent is responsible for funding and implementing these proposed mitigation measures unless specified otherwise.

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

Table 10-1 Summary of Proposed Mitigation and Other Beneficial Measures

Impact Category	Mitigation Measure	Timing/Phase
Transportation		
Traffic/ Roadway	New Guest Street Extension to Everett Street, with new signalized intersections at Arthur Street and Everett Street	Phase 1
	New Braintree Street Extension, East Street, West Street and West Street Extension.	Phase 1
	Expanded Arthur Boulevard and enhanced 24-foot Arthur Boulevard Plaza	Phase 1
	Design for adaptive control signal system at Guest Street/Arthur Street and Guest Street/Everett Street	Phase 1
	Implement signal timing improvements at three key study area intersections	Phase 1
	Guest Street Extension & Everett Street Intersection improvements, including: › Enhanced intersection accommodations for pedestrians, bicycles, and automobile traffic; › New traffic signal; and New ADA-compliant pedestrian signal control	Phase 1

Table 10-1 Summary of Proposed Mitigation and Other Beneficial Measures (Continued)

Impact Category	Mitigation Measure	Timing/Phase
Transportation (cont'd.)		
Traffic/ Roadway (cont'd.)	Guest Street & Arthur Street Intersection improvements, including: › Enhanced intersection for pedestrians, bicycles, and vehicles; › New traffic signal; and New ADA-compliant pedestrian signal control.	Phase 1
	Braintree Street Extension & Everett Street Intersection improvements, including: › Intersection accommodations for pedestrians, bicycles, and vehicles; and › New 4-way stop control.	Phase 1
	At least 6 Uber/Lyft spaces on Guest Street Extension for pick-up/drop-off with the opportunity for expansion as needed.	Phase 1
Transit	Enhanced connections to MBTA Boston Landing Station, including: › New Braintree Street Extension Kiss & Ride and Shuttle Area; › Enhanced Braintree Street Extension pedestrian area; › Relocation of MBTA Route 64 bus route along Guest Street Extension with new bus stops (subject to necessary permits and approvals); and › Additional bike racks and provide space on-site for a new BlueBikes public bike-share station.	Phase 1
	Install transit signal priority (TSP) equipment at Guest Street Extension's newly proposed signals at Arthur Street/Arthur Street Extension, Everett Street/old Everett Street, and at North Beacon Street/Everett Street	Phase 1
Bicycle/Pedestrian Accommodations	Enhance intersections for pedestrians, bicycles, and vehicular traffic at the corners of: › Guest and Everett Streets; › Guest and Arthur Streets; and › Braintree and Everett Streets.	Phase 1
	Provide a new separated bike lane on Guest Street Extension and Arthur Street within the Project Site, as well as secure interior bicycle storage and at-grade bicycle racks.	Phase 1
TDM Measures	Implement a robust TDM program.	During construction of Phase 1 and future phases of the Proposed Project

Table 10-1 Summary of Proposed Mitigation and Other Beneficial Measures (Continued)

Impact Category	Mitigation Measure	Timing/Phase
Air Quality/Greenhouse Gas Emissions		
	Implement a TDM program and signal timing improvements to lower Project-related vehicle miles traveled and reduce vehicle delay, thereby, reducing associated air emissions.	During construction of Phase 1 and future phases of the Proposed Project
	Based on the preliminary design parameters assumed in the Design Case, the Proposed Project would achieve an estimated energy savings of 27.1 percent when compared to the Base Case (defined below). This would result in a 20.5 percent reduction in stationary source GHG emissions, or approximately 1,103 tons per year.	During design of the Proposed Project
	Evaluate CHP and rooftop solar PV systems as Project design advances.	During design of the Proposed Project
	Design building rooftops to be "solar-ready" with the appropriate structural capacity and electrical infrastructure to support a solar PV system if deemed feasible at a future date.	During design of the Proposed Project
	Examine fuel cell technology for the grocery store component of Building A.	During design of Phase 1
	Utilize potential energy conservation incentives offered by utility companies.	During design of the Proposed Project
	Conduct 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.	During design of the Proposed Project
	Explore the feasibility of implementing Passive House principles into the design of Building D to maximize energy efficiency and reduce GHG emissions. 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 on the other residential buildings and the office building (Buildings A-C).	During design of the Proposed Project
	Provide EV charging stations as well as EV-ready spaces within structured parking across Project Site, in compliance with BTD requirements.	During design of the Proposed Project
	Consider developing Green Tenant Guidelines for residential tenants, which would provide information on utilizing the sustainable design features of the building and the individual units to their fullest potential.	During operation of the Proposed Project
Climate Change Adaptation & Resiliency		
	Reduce heat island effect with 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.	During design of the Proposed Project
	Coordinate the design of underground utilities, including electrical and telecom, with BWSC.	During construction of Phase 1 and future phases of the Proposed Project

Table 10-1 Summary of Proposed Mitigation and Other Beneficial Measures (Continued)

Impact Category	Mitigation Measure	Timing/Phase
	Consider employing reflective roof materials and/or vegetated roofs to help mitigate for rising temperature impacts.	During design of the Proposed Project
	Designing the residential units for natural ventilation (i.e., operable windows), which help reduce the reliance on mechanical ventilation systems.	During design of the Proposed Project
Stormwater Management/Water Quality		
	New/upgraded stormwater management system.	Phase 1
	Improve the quality and quantity of site stormwater runoff by collecting and infiltrating 1.25 inches of rainfall over all impervious areas, including proposed internal streets and sidewalks, in compliance with BWSC and BPDA Smart Utilities Policy standards.	During design of the Proposed Project
Water/Wastewater		
	Construct new water and sewer lines.	Phase 1
	Provide Infiltration/Inflow (I/I) mitigation at a ratio of 4:1 relative to the net new wastewater generated.	All Phases
	Exceed a 20 percent annual potable water use reduction for interior water use and sewage conveyance through the use of low-flow/high-efficiency plumbing fixtures.	During design of the Proposed Project
Solid/Hazardous Waste		
	Continue management of soil and groundwater in accordance with applicable local, state, and federal regulations.	During construction of Phase 1 and future phases of the Proposed Project
	Promote and ensure special handling, dust control, and management and disposal of any contaminated environmental media to prevent construction delays and to provide adequate protection to workers.	During construction of Phase 1 and future phases of the Proposed Project
Construction		
	Minimize the noise impact of construction activities through the use of mufflers, prohibition of excessive idling of construction equipment, as well as appropriate traffic management techniques to mitigate roadway traffic noise during construction period.	During construction of Phase 1 and future phases of the Proposed Project
	Divert at least 75 percent of construction debris from landfills.	During construction of Phase 1 and future phases of the Proposed Project
	Develop a Construction Management Plan with detailed information on construction activities, specific construction mitigation measures, and vehicle routing and staging to minimize impact on the surrounding neighborhood and the Turnpike.	Prior to construction of Phase 1 and future phases of the Proposed Project

10.2 Draft Section 61 Findings

10.2.1 Massachusetts Department of Transportation (MassDOT) Draft Section 61 Findings

D R A F T O N L Y

January 31, 2019

J. Lionel Lucien, P.E.
Manager - Public/Private Development Unit
Massachusetts Department of Transportation, Highway Division - Boston
10 Park Plaza, Room 4150
Boston, MA 02116

Re: EEA No. xxxxx – Allston Yards, Boston, Massachusetts

These findings for the Allston Yards development (the "Project"), (EEA No. xxxxx), have been prepared in accordance with the provisions of M.G.L. c. 30, Section 61 and 301 CMR 11.00. On *XXX*, the Secretary of Energy and Environmental Affairs issued a decision stating that the Project's Environmental Impact Report ("EIR"), dated *XXX,* adequately and properly complied with the Massachusetts Environmental Policy Act ("MEPA") and its implementing regulations.

Project Description

The approximately 10.6-acre project site ("the Site") is located south of and adjacent to the Framingham/Worcester commuter rail line owned and operated by the Massachusetts Bay Transportation Authority (MBTA). The property is abutted to the east by Everett Street, to the south by commercial properties, and to the west by the Boston Landing development. The Site is currently occupied by approximately 100,000 square feet (sf) of retail space including a 65,000 sf Stop & Shop grocery store with an approximately 450-space surface parking lot.

The proposed development will consist of approximately 895 new residential units, 375,000 sf of office space, 50,000 sf of supporting retail/restaurant space, and a new 67,000 sf Stop & Shop grocery store (the "Project"). The parking needs for the Project will be accommodated by up to 1,400 structured parking spaces, which will readily satisfy the anticipated demand for this use. As the Project continues to be refined in response to BPDA, agency and community comments, and market conditions, the mix of uses, intensity of uses and number of parking spaces are subject to change. However, they are expected to generally remain consistent with the foregoing.

Full access driveways for the Site currently are provided on Arthur Street, which connects to North Beacon Street at a signalized intersection to the south, and on Guest Street, which connects to Market Street at a signalized intersection roughly 0.35 miles to the west. There is an enter-only driveway on Braintree Street at the

northeasterly corner of the Site, and a right-turn enter-only driveway also is provided on Everett Street. As part of the Project, the Guest Street/Arthur Street intersection will be reconstructed and signalized to accommodate traffic generated by the Project and other surrounding developments. The Project also will construct a new Guest Street Extension connecting Arthur Street to Everett Street at the easterly end of the Site. The newly created full-access intersection of Guest Street Extension and Everett Street will be signalized and will help address existing operational deficiencies in this area. Likewise, the existing one-way, enter-only Braintree Street driveway will be converted to two-way use, with a new Braintree Street extension being constructed along the northerly edge of the Site. The Project also will feature new "East Street" and "West Street" roadways connecting Guest Street Extension and Braintree Street Extension. With these changes traffic circulation both within and around the Site will be significantly improved, as currently there is no egress to the east, and access from the east is limited to only one-way entering traffic via Braintree Street and a right-turn, enter-only driveway on Everett Street. All the roadways and intersections serving the Project Site as noted above are under City of Boston jurisdiction. The adjacent Everett Street bridge over Route I-90 is owned and maintained by MassDOT, but direct access is not proposed on that segment of Everett Street. Likewise, I-90 is under MassDOT jurisdiction; however, the Site does not directly abut that highway.

Overall, the Project will create a pedestrian-friendly environment by way of dedicated separated bicycle lanes and sidewalks along the new Guest Street Extension to be constructed as part of the Project, and other new pedestrian and bicycle improvements within the Site. Through the proposed site layout, the Project will reinforce pedestrian connectivity between Market Street, Everett Street, and North Beacon Street. The Proponent also is in active ongoing discussions with the MBTA about removing existing fencing along the northerly Site property line so that a direct pedestrian connection between the Site and Boston Landing MBTA commuter rail station will be provided. This work will include a new sidewalk and landscape improvements to be constructed by the Proponent on MBTA land abutting the Site through coordination with the MBTA.

Project Impacts

The Project is anticipated to generate approximately 8,360 (4,180 entering and 4,180 exiting) unadjusted daily vehicle trips compared to existing Site conditions. During the weekday morning peak hour, the Project is anticipated to generate approximately 385 (255 entering and 130 exiting), 370 (135 entering and 235 exiting), and 295 (165 entering and 130 exiting) peak hour vehicle trips during the respective weekday morning, weekday evening, and Saturday midday peak hours following appropriate adjustments for mode splits.

Physical and Operational Transportation Improvements

The Proponent is proposing to implement the following traffic mitigation measures to help minimize any Project impacts while also helping to address existing deficiencies in the area.

Guest Street Extension

Guest Street Extension will be constructed as part of this initial Site construction and will provide a new connection between existing Guest Street and Everett Street. The road is being designed to provide a full multi-modal "Complete Streets" environment. Guest Street Extension will be almost 800 feet in length between Arthur Street and Everett Street. The general roadway cross-section will consist of single 11-foot wide through-lanes in each direction, along with an 11-foot wide center width to be used for left-turn lanes at key intersections. Eight-foot wide parallel parking spaces also will be provided along both sides of the road for most of its length, except for in the immediate vicinity of intersections or bus stops. Five-foot wide separated bicycle lanes will be provided along both sides of the length of the newly constructed roadway. The bike lanes will be designed to follow current City- and industry standards and will involve a 3-foot physical separation being provided between the bike lane and adjacent parking lane. Ample sidewalk space will be provided along both sides of the roadway between the new bike lane and the new buildings.

Everett Street/Old Everett Street/Guest Street Extension Intersection

Proposed improvements at this location will involve realigning Old Everett Street to intersect Everett Street, opposite Guest Street Extension. An approximately 100-foot section of the existing median separating Everett Street from Old Everett Street will be removed to allow this change, and for the grade of Old Everett Street to be modified to meet the existing Everett Street grade without impacting the residential properties to the east of Old Everett Street.

At this newly reconstructed intersection, Guest Street Extension will feature an exclusive left-turn lane with a shared through-/right-turn lane. The eastbound separated bike lane also will be transitioned from the west to a standard bike lane to be located between these two lanes to allow bicyclists to pass through the intersection. A single entering lane will be provided from Everett Street heading westbound into the Project Site. The northbound Everett Street approach will consist of a single shared through-/right-turn lane, and an exclusive left-turn lane. The southbound approach will be comprised of a shared left-/through-lane and a short exclusive right-turn lane. The realigned Old Everett Street to the east still will provide single travel lanes in each direction. However, the new intersection will provide improved delineation compared to the poorly defined, wide-open configuration of the existing intersection with Everett Street.

Traffic at the newly-created, full-access intersection will be under traffic signal control. New crosswalks with concurrent pedestrian signal phasing will be provided as discussed later in this section. This signal will be interconnected with the new Guest Street Extension/Guest Street/Arthur Street intersection located approximately

800 feet to the west. It also can be incorporated into BTD's central signal control system if desired. The signal also will be designed to be adaptive-ready, so that BTD eventually can remove it from the system and allow it to operate under fully-adaptive control as part of any wider system that may be provided in the future. In addition to these provisions, additional Transit Signal Priority ("TSP") features will be implemented.

Arthur Street/Guest Street/Guest Street Extension

The existing four-way intersection of Arthur Street with Guest Street and the Stop & Shop driveway will be reconstructed as part of the initial Project Site development. This work will entail reconstructing the intersection to include the new easterly leg of the intersection (Guest Street Extension) which will be constructed from this location heading easterly to Everett Street. The reconstruction of this intersection also will involve the installation of a traffic signal. To help minimize delays for the MBTA Route 64 bus passing through this intersection TSP features will be implemented.

The westbound Guest Street Extension approach will feature an exclusive left-turn lane with a shared through-/right-turn lane. The opposing eastbound Guest Street approach will initially feature a single shared lane. The northbound Arthur Street approach will feature a shared left-/through-lane with an adjacent exclusive right-turn lane, while the opposing southbound approach will feature a single shared lane.

Traffic Signal Timing Adjustments

The Proponent will work with the Boston Transportation Department to implement updated signal timing program at Market Street's intersections with the following locations:

- Market Street at Faneuil Street
- Market Street at Faneuil Street
- Market Street at Faneuil Street

Transportation Demand Management (TDM)

Transportation Demand Management (TDM) measures are most often directed at commuter travel and implemented at office sites. However, due to the mixed-use and transit-orientated nature of the Proposed Project, there are opportunities to bring TDM programs to the Proposed Project's other land uses, including the grocery store, retail stores, and residential housing.

General TDM measures to be implemented as part of this Project will involve promoting transit use and facilitating bicycle and pedestrian travel both through Site amenities and ongoing practices and programs. The Proponent is committed to joining "A Better City", which is the existing Transportation Management Association (TMA) serving this part of the City. Through involvement with this organization and programs within the Site, a variety of programs will be implemented aiming at reducing single-occupant automobile traffic visiting the Site. The Proponent will appoint and overall on-site TDM coordinator who will oversee all TDM programs for

each building of the Proposed Project, and coordinate with the TMA. The final job description for this role will be determined by the TMA, but it is expected that duties of the on-site TDM coordinator may include, but not be limited to, acting as a liaison with Site employers and MassRIDES, assisting site employees and residents with ride matching and transportation planning, and other activities.

Monitoring Program

As requested by MassDOT, the Proponent will undertake a comprehensive traffic-monitoring program for five years following the initial occupancy of the warehouse component of the Project. This post-opening data collection will consist of automatic traffic recorder counts to be conducted for a continuous 24-hour period on typical a weekday and Saturday. These counts will be conducted on Guest Street Extension east of Arthur Street, Guest Street Extension west of Everett Street, and Braintree Street Extension west of the Braintree Street/Everett Street intersection. Weekday morning, weekday evening, and Saturday midday peak-period turning movements counts (TMCs) also will be conducted at Guest Street Extension's newly signalized intersections with Everett Street/Old Everett Street and Arthur Street/Guest Street. TMCs also will be conducted during these same time periods at the North Beacon Street/Everett Street intersection. This monitoring will be conducted in five annual intervals following the full build-out of the Project, with summary reports being provided to MassDOT to document the Site trip generation.

The Proponent also will conduct annual travel surveys of Project Site employees to determine the number of Site employees utilizing public transportation, those traveling to the Site by private automobile, and those using car-sharing services or other means to travel to and from work. Employees also will be surveyed to identify those that bike or walk to and from work.

Construction Management Plan

The Proponent will prepare a detailed construction management plan ("CMP") that will address the temporary transportation impacts of the project. Typically included in a CMP is a clear explanation of the phasing and timing of construction. Included are:

- Estimates of the number of workers on the site by phase;
- The associated expected amount of construction traffic;
- Construction vehicle routing and staging;
- Site entrance and egress points; and
- An explanation of how roadway operations, bicycle and pedestrian activities will be maintained throughout the construction period.

The Proponent is committed to developing the CMP in concert with the City of Boston and MassDOT (if the construction of the Project Site or off-site improvements affect locations under state jurisdiction), as required.

Construction Vehicle Traffic

Construction vehicles will be necessary to move construction materials to and from the Project Site. Every effort will be made to reduce noise, control fugitive dust, and minimize other disturbances associated with construction traffic. Truck staging and laydown areas for the Project will be carefully planned.

Pedestrian Access during Construction

The Project is committed to ensuring that pedestrian and bicycle accommodations of equivalent width, quality, and accessibility be provided and protected throughout construction. All temporary sidewalk and/or bike lane accommodations will be treated as a normal sidewalk and bike lane with regards to winter weather operations (clearing of snow and ice) and extreme rain events (prevent/resolve large puddles), to the extent feasible. During construction, the Project will aim to not close any sidewalks, but will relocate and/or protect such facilities as needed. As the Project advances in design and moves into construction, the General Contractor will identify changes required in any bicycle and/or pedestrian routes as part of the CMP.

Findings

MassDOT finds that the environmental impacts resulting from construction of the Project are those impacts described in the Single Environmental Impact Report, which will be updated as necessary in permit applications submitted for compliance with federal and state environmental laws.

Further, MassDOT finds that, with implementation of the mitigation measures described herein, all feasible means and measures will have been taken to avoid or minimize adverse impacts to the environment relating to construction and operation of the Project. Appropriate conditions will be included in permits issued for the Project to ensure implementation of the mitigation measures.

_____ _____

By Date

10.2.2 MassDOT Access Permit

The Proposed Project does not abut any roads with a MassDOT state highway layout. However, the Project Site does abut the Everett Street overpass adjacent to the easterly end of the Project Site and the land occupied by the Boston Landing MBTA commuter rail station to the north also is under MassDOT ownership. If the proposed Everett Street roadway and/or sidewalks improvements or the construction of Braintree Street Extension require the issuance of an Access Permit , an application will be submitted and approved by MassDOT prior to construction of these improvements. Similarly, the planned MBTA access improvements may require

the issuance of a license and/or easement. An access permit application also can be submitted if needed to memorialize that work within state-owned land.

10.2.3 MBTA License/Easement

As the Proposed Project will involve construction within the MBTA's Zone of Influence ("ZOI"), the MBTA will review and approve any such work falling within the ZOI prior to construction. The Proponent will work with the MBTA to determine the appropriate real estate entitlement process required to allow for the proposed access improvements to the Boston Landing MBTA commuter rail station, which may involve a license agreement and/or easement.

10.2.4 MEPA GHG Self-Certification Letter

In accordance with the MEPA GHG Policy, the Proponent will provide a self-certification to the MEPA Office signed by an appropriate professional following completion of construction to demonstrate that the stationary source GHG emissions have been mitigated. A draft commitment letter for this self-certification submission is provided below.

DRAFT ONLY

Secretary Matthew A. Beaton
Executive Office of Energy & Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

ATTN: Deirdre Buckley, Director, MEPA Office

Re: Letter of Commitment for Stationary Source Greenhouse Gas Emissions Self-Certification
EA No. XXXXX – Allston Yards Project, Boston, MA

Dear Secretary Beaton and Director Buckley:

On behalf of the Stop & Shop Supermarket Company LLC (Stop & Shop) with New England Development, VHB has prepared a summary of the estimated reduction in overall energy use and stationary source Greenhouse Gas ("GHG") emissions for the Allston Yards Project in the Allston neighborhood of Boston (the "Project").

In accordance with the current MEPA Greenhouse Gas Emissions Policy and Protocol (the "GHG Policy") dated May 2010, the stationary source GHG assessment was provided to the MEPA Office as part of the Expanded Environmental Notification Form (the "EENF") filed on February 15, 2019. The design case assumed building design and system improvements that would result in energy reductions, in accordance with the GHG Policy.

Building energy modeling based on early stages of design estimate that the assumed energy conservation measures across the full build-out of the Project could

reduce overall energy usage by 27.1 percent resulting in a 20.5 percent reduction in stationary source CO_2 emissions when compared to the baseline case. The following table presents the estimated energy savings and CO_2 emissions reductions by building.

Stationary Source CO_2 Emissions for the Overall Project (Full Build)

	Energy Consumption (MMBtu/yr)			CO_2 Emissions (tons/yr)[1]		
Building Name	**Base Case**	**Design Case**	**Percent Savings**	**Base Case**	**Design Case**	**Percent Reduction**
Building A	13,630	9,203	32.5%	1,127	858	23.9%
Building B	13,971	11,598	17.0%	1,273	1,090	14.4%
Building C	16,612	11,589	30.2%	1,363	1,068	21.7%
Building D	12,958	9,039	30.2%	1,063	833	21.7%
Parking Garages	5,264	4,066	22.8%	548	423	22.8%
Total	**62,436**	**45,495**	**27.1%**	**5,374**	**4,272**	**20.5%**

1 tons/yr = short tons per year

The building energy model results, and estimated energy usage savings and stationary source GHG emissions reductions are preliminary. Following completion of construction of each element, the Proponent will submit a self-certification to the MEPA Office, signed by an appropriate professional, which identifies the as-built energy conservation measures and documents the stationary source GHG emissions reductions from the baseline case.

If you have any questions, please contact me at (617) 607-0091 or via e mail at ldevoe@vhb.com.

Very truly yours,

VANASSE HANGEN BRUSTLIN, INC.

Lauren DeVoe, AICP, LEED AP BD+C
Senior Environmental Planner

cc: Michael Barelli, New England Development

11

Response to PNF Comments

This chapter presents direct responses to the BPDA Scoping Determination on the PNF, as well as agency and public comments submitted to the BPDA. Copies of the BPDA Scoping Determination (Section 11.1) and each comment letter submitted by city reviewers, the IAG, and elected officials during the public review period of the PNF (Sections 11.2 and 11.3, respectively) are included within the chapter. Each letter is assigned a number, as listed in Table 11-1 below. Each individual comment is delineated with a code that corresponds to the response code. The responses provided aim to refer to specific sections of the EENF/DPIR for further information.

Numerous comments were also submitted from members of the public via the BPDA website, which are provided in Appendix H for reference. Responses to these comments are provided by topic in Section 11.4 below, as many of the letters had duplicative comments and/or expressed a similar array of concerns.

Table 11-1 List of Comment Letters Received on the PNF

Letter No.	Commenter	Affiliation	Date Received
SD	Scoping Determination	Boston Planning and Development Agency (BPDA)	August 3, 2018
1	Urban Design/Planning Staff	BPDA Urban Design & Planning Departments	July 18, 2018
2	Katie Pedersen	BPDA Climate Change & Environmental Planning Department	July 31, 2018
3	Tad Read, Manuel Esquivel	BPDA Transportation & Infrastructure Planning Department	July 11, 2018
4	Tim Davis	BPDA Compliance Department	July 18, 2018
5	John Dalzell	Interagency Green Building Committee (IGBC)	June 21, 2018
6	Kara Elliott-Ortega	Mayor's Office of Arts and Culture	June 26, 2018
7	Carrie Marsh	Boston Parks and Recreation Commission	May 7, 2018
8	John P. Sullivan	Boston Water and Sewer Commission (BWSC)	February 20, 2017
9	Anabela Gomes, Colin Akerly, John Bligh, John Cusack, Dan Daly, Rosie	Impact Advisory Group (IAG)	June 25, 2018

Letter No.	Commenter	Affiliation	Date Received
	Hanlon, Bernadette Lally, Andrea Howard		
EO	Mark Ciommo, Kevin Honan, Michael Moran	Boston City Council/Massachusetts General Court	July 30, 2018
10-29	Public Commenters[1]	Various	Various

1 Refer to Appendix H for copies of the comments received by the public.

11.1 BPDA Scoping Determination

Comment SD.1

The Draft Project Impact Report ("DPIR") should include complete responses to all comments included in Appendices A, B and C within the framework of the criteria outlined in the Scoping Determination.

Response:

All comments received for the PNF have been delineated and responded to herein.

Comment SD.2

Throughout the initial phase of review, the Proponent has taken steps to meet with local residents, elected officials, abutters, and City and State agencies. These conversations must continue, ensuring that the project that is presented in the DPIR is beneficial to the adjacent neighborhoods and the City of Boston as a whole.

Response:

The Proponent has met with the IAG to review the updates to the project, and has remained in touch with key community stakeholders and local elected officials. Additionally, the Proponent will continue to meet with local community groups, organizations and abutters to ensure that information about the project is available and explained, and to ensure that ideas and concerns are considered and addressed as best possible. Refer to Section 1.9 in Chapter 1, *Project Description and Alternatives*, for additional information.

Comment SD.3

In order to minimize and mitigate the Proposed Project's impacts, the BPDA encourages the Proponent to continue to work with those parties, including the lAG and community, who have expressed concern.

Response:

The Proponent will continue meeting with local community groups, organizations and abutters to ensure that information about the project is available and explained, and to ensure that ideas and concerns are considered and addressed as best possible. Refer to Section 1.9 in Chapter 1, *Project Description and Alternatives*, for additional information.

Comment SD.4

The DPIR shall include a Brighton/Guest Street Area Planning Study compliant project as an alternative.

Response:

Refer to Section 1.8 of Chapter 1, *Project Description and Alternatives*, and Figure 1.7b for more details. Also, wind and shadow studies for this Build Alternative Condition are also provided in Sections 6.2.5 and 6.3.4 of Chapter 6, *Environmental Protection,* respectively.

Comment SD.5

The DPIR shall include a more definitive explanation of the Proposed Project's overall phasing strategy. Provide diagrams to show when the different elements of the project will be delivered and how the parcels will be programmed/managed before they are developed.

Response:

Refer to Section 1.6 in Chapter 1, *Project Description and Alternatives*, for a project phasing description, and Figure 1.6 for a diagram showing how the parcels will be programmed/managed before they are developed.

Comment SD.6

Due to the importance of transportation for this project, transportation elements will need to be addressed early in the project phasing to account for a cumulative impact with other developments.

Response:

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), will be constructed upfront as part of the initial phase. Refer to Section 1.6 in Chapter 1, *Project Description and Alternatives*, for a project phasing description.

Comment SD.7

Therefore, the Allston Yards project must facilitate improved connections to the Boston Landing MBTA Commuter Rail Station for pedestrians, bicycles, vehicles, and buses.

Response:

Refer to Section 5.6.2 of Chapter 5, *Transportation*, for a description of the proposed pedestrian, bicycle, and vehicular connections to the Boston Landing MBTA commuter rail station adjacent to the Project Site.

Comment SD.8

A detailed approach to the construction management must be included in the DPIR.

Response:

Refer to Section 6.9.1 of Chapter 6, *Environmental Protection*, for a description of the conceptual Construction Management Plan (CMP). Appendix G provides the conceptual CMP for the Proposed Project.

Comment SD.9

Special attention must be given to the comment letters. The letters represent the opinions of the active residents, business leaders and elected officials of the community in which the Proponent intends to develop the Proposed Project.

Response:

All comments received for the PNF have been delineated and responded to herein. Specifically, Section 11.2 provides a response to each comment from any City Agency and the IAG, Section 11.3 provides a response to each comment from an elected official, and Section 11.4 responds to public comments, organized by topic.

Comment SD.10

Applicant/Proponent Information:

a. Development Team

(1) Names: (a) Proponent (including description of development entity and type of corporation, and the principals thereof); (b) Attorney; (c) Project consultants and architects;

(2) Business address, telephone number, FAX number and email, where available for each

(3) Designated contact for each

Response:

Refer to Section 2.4.1 in Chapter 2, *Regulatory Context and General Information*, for a full list of development team members.

Comment SD.11

b. Legal Information

(1) Legal judgments or actions pending concerning the Proposed Project

(2) History of tax arrears on property owned in Boston by Applicant

(3) Evidence of site control over Project Site, including current ownership and purchase options, if any, for all parcels in the Proposed Project, all restrictive covenants and contractual restrictions affecting the Proponent's right or ability to accomplish the Proposed Project, and the nature of the agreements for securing parcels not owned by the Applicant.

(4) Nature and extent of any and all public easements into, through, or surrounding the site.

Response:

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.

Comment SD.12

2. Project Site

a. An area map identifying the location of the Proposed Project

b. Description of metes and bounds of Project Site or certified survey of the Project Site.

c. Current zoning

Response:

Refer to Figures 1.1 and 1.2 for a site location map and site context map, respectively. Appendix B includes a description of the metes and bounds and survey of the Project Site. Refer to Section 2.1 of Chapter 2, *Regulatory Context and General Information*, for a description of the current zoning.

Comment SD.13

3. Project Description and Alternatives

a. The DPIR shall contain a full description of the Proposed Project and its components, including, its size, physical characteristics, development schedule, costs, and proposed

uses. This section of the DPIR shall also present analysis of the development context of the Proposed Project. Appropriate site and building plans to illustrate clearly the Proposed Project shall be required.

b. A description of alternatives to the Proposed Project that were considered shall be presented and primary differences among the alternatives, particularly as they may affect environmental and traffic/transportation conditions, shall be discussed.

Response:

Refer to Section 1.3 and Section 1.8 of Chapter 1, *Project Description and Alternatives*, for a description of the Proposed Project and its components and the project alternatives, respectively.

Comment SD.14

4. Public Benefits

a. Anticipated employment levels including the following:

(1) Estimated number of construction jobs

(2) Estimated number of permanent jobs

b. Current and/or future activities and program which benefit adjacent neighborhoods of Boston and the city at large, such as, child care programs, scholarships, internships, elderly services, education and job training programs, etc.

c. Other public benefits, if any, to be provided.

Response:

Refer to Section 1.7 of Chapter 1, *Project Description and Alternatives*, for a summary of public benefits of the Proposed Project.

Comment SD.15

5. Community Process

a. A list of meetings held and proposed with interested parties, including public agencies, abutters, and business and community groups.

b. Names and addresses of project area owners, abutters, and any community or business groups which, in the opinion of the applicant, may be substantially interested in or affected by the Proposed Project.

Response:

Refer to Section 1.9 in Chapter 1, *Project Description and Alternatives*, for more details.

Comment SD.16

An updated listing of all anticipated permits or approvals required from other municipal, state or federal agencies, including a proposed application schedule shall be included in the DPIR.

Response:

Refer to Table 2-1 of Chapter 2, *Regulatory Context and General Information*.

Comment SD.17

A statement on the applicability of the Massachusetts Environmental Policy Act ("MEPA") should be provided.

Response:

Refer to Section 2.2.2 in Chapter 2, *Regulatory Context and General Information*, for more details.

Comment SD.18

In addition to the information required to meet the specifications of Section 80B-3 and Section 80B-4 of the Code the analysis included in the DPIR must utilize as its framework the scope as outlined in the comments of the BPDA Urban Design and Planning Department letter, dated July 18, 2018 and included in Appendix S.

Response:

Analyses included in the DPIR have incorporated the framework and scope outlined in the BPDA Urban Design and Planning Department's comment letter.

Comment SD.19

In addition to the intersections previously counted for this project, several other intersections will provide critical data for the BPDA/BTD review of this project. The additional traffic counts should include:

- *Cambridge Street at Gordon Street*
- *Cambridge Street at Eleanor Street*
- *Cambridge Street at Dustin Street*

Response:

Refer to Section 5.3.1 of Chapter 5, *Transportation*, for a complete list of intersections studied, including the three intersections added at the request of BPDA/BTD.

Comment SD.20

In addition to the diverse elements suggested by the proponent, the proponent should also consider the following options:

- *The creation of Mobility MicroHUBs (Go Boston 2030)*
- *Designated Bus / Shuttle/ Ride-share pick-up/drop-off areas*
- *Real-time transit and mobility information within all buildings*
- *Transit pass subsidies for employees and residents*

• Contracted or site managed car share services and accommodations

• Electric Vehicle (EV) charging per BTD guidelines

• Joining the Allston/Brighton TMA

• Providing a subsidy for the emerging Allston/Brighton Shuttle program and/or MBTA bus service per an agreement with the MBTA.

Response:

Refer to Section 5.11.1 of Chapter 5, *Transportation*, for more details on the consideration of these elements.

Comment SD.21

The proponent will need to continue to work with the City and the New Balance Development Team on designing a connection to the proposed Braintree Street Extension and the existing Arthur Street extension that works for all parties.

Response:

Since filing the PNF, the Proponent has met with BPDA staff to review concepts for a potential connection between the proposed Braintree Street Extension and the existing Arthur Street extension. The proposed design of the Braintree Street Extension provides for a connection to Arthur Street, should all stakeholders agree to allow such a connection to be made in the future. Refer to Section 5.6.2 of Chapter 5, *Transportation*, for more details on the proposed Braintree Street Extension.

Comment SD.22

The other proposed on-site street network and its integration with the surrounding off site/public street network is generally well designed. A long-term goal of the City is the continuation of West Street out to North Beacon Street. All discussions with the proponent about allowing for the future extension of this street through abutting properties has been acknowledged and agreed to, however, the proponent should provide further advanced design of this extension between the proposed "Building 2" and "Community Green" to ensure its ease of feasibility and limit impacts on the existing site design and open space.

Response:

Since filing the PNF, the Proponent has advanced design of West Street Extension in response to BPDA and BCDC feedback. The current design introduces vehicle and pedestrian traffic on West Street, between the Community Green and Building A. The current design allows for a future connection to North Beacon Street, should other parties desire to extend West Street to North Beacon Street. As noted in Section 1.4.3, this new West Street Extension has been laid out, dimensioned, and

designed like a street, and program previously proposed there has been shifted into the body of the Community Green.

Comment SD.23

The approach to the MBTA station headhouse on Everett Street is a key pedestrian connection for the project and existing community. Therefore, design of this street should include robust sidewalks to provide for both pedestrian access to the station and sufficient space for a street furnishing zone.

Response:

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. The segment of Everett Street to the north of Braintree Street Extension is a bridge structure which extends over the commuter rail line and I-90. The sidewalks on the bridge overhang the exterior beam by 2'3," which is just below the 3-foot overhang typically allowed by MassDOT on bridges. Accordingly, widening the sidewalks on the bridge structure would require the construction of a new narrow adjoining bridge structure to support an expanded sidewalk. This would involve substantial infrastructure changes including additional bridge girders and modifications to the existing bridge piers, while only providing a slightly wider sidewalk. Instead, the Proponent is focusing its efforts on the ground-level access improvements adjacent to the Boston Landing Station. As noted earlier, that work will eliminate the need for pedestrians from the east to travel on Everett Street to access the station. Furthermore, with the revised configuration of Building B, the sidewalk at the northwesterly corner of the Everett Street/Old Everett Street/ Guest Street Extension will be wider than with the prior plan, allowing for a most prominent and pedestrian-friendly access connection to the Project Site.

Comment SD.24

The City recommends that Everett Street between Guest Street and the MBTA station entrance should be built to include a 8-foot sidewalks plus a 3-foot furnishing zone for a total of 11-feet from the curb to fence/wall. This should be done in a way that does not impact the existing roadway width.

Response:

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. Furthermore, with the revised configuration of Building B, the sidewalk at the northwesterly corner of the Everett Street/Old Everett Street/Guest Street Extension will be wider than with the prior plan, allowing for a most prominent and pedestrian-friendly access connection to the Project Site.

Comment SD.25

The proponent should use a more aggressive parking ratio than stated for the office space usage for this project. Currently, it is listed as 2.0 spaces per 1,000 square feet, while the district-based goal for Allston/Brighton is 0.5 spaces per 1,000 square feet.

Response:

Refer to Section 5.7 of Chapter 5, *Transportation*, for a discussion on parking needs for the Project.

Comment SD.26

MBTA Bus Stations - Where existing, the proponent should analyze upgrading bus stops to bi-directional enhanced bus stations with real time countdown clocks, covered waiting areas, public art, and sufficient space to allow for multiple buses to pick up passengers. They should be designed to serve both MBTA and shuttle buses. Where not existing, such stations should be constructed in identified locations.

o Existing stops at Arthur Street and Guest Street intersection should be upgraded to better serve users.

o New stops should be considered throughout the site along the Guest Street Extension. The Proponent mentions conversations with the MBTA about extending service through this area and possibly shifting routes to better serve those getting to the project site; this conversation should be continued going forward.

Response:

As noted in Section 2.3 of Chapter 2, *Regulatory Context and General Information*, since filing the PNF, the Proponent has met with MBTA staff on three occasions to discuss bus-related infrastructure, including bus stops for Route 64. New bus stops are proposed on Guest Street, in both directions, between Arthur Street and West Street. The existing stops at Arthur and Guest Street will be discontinued and shifted to these new locations to better serve the demand of the supermarket and additional residences and offices. The Proponent will continue this coordination to ensure that the requirements of the MBTA are met.

Comment SD.27

The Proponent should consider the following in reference to bus services improvements:

- *The 64 bus runs adjacent to the site at Guest Street and Arthur Street.*

The proponent should, in partnership with the MBTA, evaluate the feasibility and effectiveness of shifting bus service to be on all of Guest Street, possibly extending from Market Street on the West to Everett Street on the East.

- *The proponent should, in partnership with the MBTA, evaluate restructuring of service schedules primarily for the 64 bus and trains that serve the Boston Landing MBTA stop to better accommodate transfer connections and new residents/employees of the development site. This rescheduling should place emphasis on service during evenings and weekends in order to improve upon the existing headways for MBTA service in the area.*

Response:

As noted in Section 2.3 of Chapter 2, *Regulatory Context and General Information*, since filing the PNF, the Proponent has met with MBTA staff on three occasions to discuss service improvements to the Route 64 bus. The Proponent will continue this coordination as elements of the Proposed Project come on line. The Proponent proposes adding new MBTA bus stops on Guest Street to improve circulation in the area and are working with the MBTA to modify Route 64 bus to better serve this new neighborhood.

Comment SD.28

MBTA Bus Equipment - The proponent should work with the MBTA on the potential to provide funds for additional bus equipment for the MBTA to service the Allston Yards development site, primarily for the #64 route.

Response:

As noted in Section 2.3 of Chapter 2, *Regulatory Context and General Information*, since filing the PNF, the Proponent has met with MBTA staff on numerous occasions to discuss the Route 64 bus. The Proponent will continue this coordination as elements of the Proposed Project come on line.

Comment SD.29

Working with the City and the Allston Brighton TMA, the proponent should evaluate and consider joint shuttle services with nearby property owners and development teams. This should include considerations for expanding upon the new shuttle service to be operated by the Cabot, Cabot and Forbes team that will service their St Gabriel's development. Other potential partners include proponents of proposed development in the Everett Street corridor and north of I-90.

Response:

As noted in Section 5.8.1 of Chapter 5, *Transportation*, the Proposed Project is anticipated to include a generous "Kiss & Ride" area on Braintree Street Extension, adjacent to the Boston Landing MBTA commuter rail station. This area is intended to serve shuttle buses (including those contemplated for the St. Gabriel's development), as well as pick-up and drop-off activity. Since the Proposed Project is located within easy walking distance of the Boston Landing MBTA commuter rail station, the Proponent does not anticipate operating any shuttle services of its own.

Comment SD.30

The proponent should prepare a plan for providing a connection through a larger area than just the project site for bicycle access, on par with suggestions in the Brighton/Guest Street Planning Study. This development should continue regional bike connectivity.

Response:

Chapter 5, *Transportation*, provides a detailed discussion of access for auto, pedestrian, and bicycle traffic. Both Guest Street Extension and Arthur Street within the Site will feature separated bike lanes. Braintree Street Extension also will feature standard bike lanes on both sides of the roadway connecting the Boston Landing MBTA commuter rail station to the neighborhoods to the east. The bicycle facilities have been designed to connect seamlessly with the surrounding roadway network in the event that other roadways beyond the Project Site are modified in the future to feature the same level of accommodations as those provided within the Project Site.

Comment SD.31

The proponent should investigate a wayfinding solution for both bicyclists and pedestrians through and around the project area. This can be done in conjunction with an improved TDM plan. The scope of this wayfinding initiative should be considered along Guest Street from Market Street to Everett Street.

Response:

All of the Project roadways will feature standard traffic signage, which can be supplemented with additional wayfinding signage at key locations. It is expected that these signs primarily would direct bicyclists and pedestrian the Boston Landing MBTA commuter rail station, Boston Landing, and other notable uses in the area. Signage will be designed to be clear and effective, but unobtrusive so as not to create visual clutter from excessive signage. See Section 3.4.3 of Chapter 3, *Urban Design,* for further discussion of wayfinding signage.

Comment SD.32

Expansion of the BLUEbikes network into Allston Brighton to supplement the existing public transit network is a priority of Boston Bikes. The proponent should work with that team to locate stations or provide other support for the network in this area. Connecting the Boston Landing station to BLUEbikes will be a key to continuing improvement of transit in this area.

Response:

Refer to Section 5.8.5 of Chapter 5, *Transportation*, for more details on bicycle accommodations, including bike-sharing. The nearest Bluebike public bike share station is located at 20 Guest Street approximately ¼-mile to the west. The

Proponent is committed to installing a new Bluebikes station at the Proposed Project if desired by the City, or as demand warrants.

Comment SD.33

Compliance with BTD bicycle parking guidelines to serve both the general public and specific site uses, as well as facilities for future employees to accommodate cycling.

Response:

Refer to Section 5.8.5 of Chapter 5, *Transportation*, for more details.

Comment SD.34

Provide phasing diagrams to show when the different elements of the project will be delivered and how the parcels will be programmed/managed before they are developed.

Response:

Refer to Section 1.4.6 in Chapter 1, *Project Description and Alternatives*, for a project phasing description, and Figure 1.6 for a diagram for a project phasing diagram showing how the parcels will be programmed/managed before they are developed.

Comment SD.35

More documentation on the specifics of Phase 1 will also be needed if approval of that phase is anticipated with approval of the PDA. This should include the standard Article 80 large project review documentation like wind and shadow studies and more detailed information on architecture.

Response:

A higher level of detail is provided for Building A as the initial development phase (in addition to the street and utility infrastructure for the full build-out) in Section 1.6 of Chapter 1, *Project Description and Alternatives,* and Section 3.4.4 of Chapter 3, *Urban 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.

Phase 1 condition wind and shadow studies are provided in Sections 6.2.4 and 6.3.3 of Chapter 6, *Environmental Protection*, respectively.

Comment SD.36

An initial plan for utilities, including transformers, gas trains, and gas meters should be developed. All of these items should be interior to the buildings.

Response:

Refer to Figure 8.2 for the proposed utilities plan. The Project Team will evaluate the locations of the infrastructure and locate them inside the building where feasible.

Comment SD.37

The DPIR should include thoughtful alternatives to the proposed project. At a minimum there should be a Guest Street Area Planning Study compliant project.

Response:

Refer to Section 1.8 of Chapter 1, *Project Description and Alternatives*, for an analysis of project alternatives, particularly for a description of the Guest Street Area Planning Study Build Alternative.

Comment SD.38

The height on Building 1 should move away from Everett Street (as has been shown in subsequent presentations). Building 2 should be stepping down in height towards the smaller scale neighborhoods to the south and east.

Response:

Building heights have been reduced on three out of the 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 shifting building height of Building B (formally Building 2) away from Everett Street and stepping down the height of Building A (formerly Building 1) significantly (from 200 feet to 85 feet). Refer to Section 3.4.1 of Chapter 3, *Urban Design,* for more details on proposed height and massing.

Comment SD.39

...more variety in height should be explored. The adjacent PDA 87 area has a variety in height and massing, which creates an interesting and lively skyline from the neighborhood and turnpike. This idea of variety of height and massing should be extended into the Allston Yards area.

Response:

The design of the Proposed Project has evolved with an intent of introducing diversity in height and massing. Building heights have been reduced on three out of the 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 shifting building height of Building B (formally Building 2) away from Everett Street and stepping down the height of Building A significantly (from 200 feet to 85 feet).

Refer to Section 3.4.1 of Chapter 3, *Urban Design*, for more details on proposed height and massing.

Comment SD.40

Braintree Street needs to be designed with full, comfortable sidewalks and a separated bike path at the north side at a minimum. People coming from the east will likely use Braintree Street as access to the commuter rail.

Response:

The Project Team is working with the MBTA to provide a robust sidewalk and striped 5-foot bike lanes in each direction on Braintree Street Extension between Everett Street overpass and the Boston Landing MBTA commuter rail station. Refer to Section 5.6.2 of Chapter 5, *Transportation*, for more details related to pedestrian and bicycle enhancements on Braintree Street Extension.

Comment SD.41

Additionally, explore the possibility of connecting the Arthur Street Extension to Braintree Street Extension. This would improve connectivity and simplify the route of shuttle buses and delivery trucks.

Response:

Since filing the PNF, the Proponent has met with BPDA staff to review concepts for a potential connection between the proposed Braintree Street Extension and the existing Arthur Street extension. The proposed design of the Braintree Street Extension provides for a connection to Arthur Street, should all stakeholders agree to allow such a connection to be made in the future. Refer to Section 5.6.2 of Chapter 5, *Transportation*, for more details on the proposed Braintree Street Extension.

Comment SD.42

The massing of Building 2 should be adjusted (pull the south corner in) to allow a clearer potential connection to North Beacon Street along the side of 61 North Beacon Street. Options for this future connection should be explored in the DPIR.

Response:

Since filing the PNF, the Proponent has advanced design of West Street Extension in response to BPDA and BCDC feedback. The current design introduces vehicle and pedestrian traffic on West Street, between the Community Green and Building A. The current design allows for a future connection to North Beacon Street, should other parties desire to extend West Street to North Beacon Street. As noted in Section 1.4.3 of Chapter 1, *Project Description and Alternatives*, this new West Street

Extension has been laid out, dimensioned, and designed like a street, and program previously proposed there has been shifted into the body of the Community Green.

Comment SD.43

The intersection of Arthur and the Guest Street Extension should be more fully considered, including the area to the west of the intersection where the 64 bus stop is.

Response:

A full signalized design of the entire Guest Street/Arthur Street intersection is proposed as part of the Proposed Project. Refer to Section 5.6.2 of Chapter 5, *Transportation*, for further details.

Comment SD.44

Opportunities to add street trees to Arthur Street should be advanced. While the earlier idea of a boulevard may not be right for this street, providing it with a generous tree canopy will make it a much more pleasant and functional approach to Boston Landing and Allston Yards for all modes of transportation, and adding tree canopy, wherever possible, works toward dissipating heat island effect.

Response:

Refer to Section 3.6.2 of Chapter 3, *Urban Design*, and Figure 3.25 for more details of the proposed Arthur Street streetscape design.

Comment SD.45

The last block of the south side of the Guest Street Extension where it meets Everett Street appears narrow and less conforming with Complete Streets. Is there a way to set this up so that there is space for a sidewalk similar to the ones in the other blocks.

Response:

The connection of Guest Street to Everett Street has been shifted further to the north to provide space for a much wider sidewalk.

Comment SD.46

Evaluate the sidewalks from the Guest Street extension to the Everett Street Bridge. This should meet Complete Streets Guidelines in the reconstructed portions, particularly on the west side of the street.

Response:

Due to varied grade conditions along Everett Street, there will be no Frontage Zone related to retail. The pedestrian walk and Greenscape/Furnishing Zone varies in width from 10′-6″ to 20′-4″. The combination of Greenscape/Furnishing Zone and

Pedestrian Zone along the west side of Everett Street will maintained at a minimum of 11'. Where there is additional room, a planted buffer will be provided between the building wall and the Furnishing and Pedestrian Zone.

Comment SD.47

The new crosswalk at the north side of the Guest Street Extension and Everett Street appears to have accessibility issues created by grade issues. Provide larger scale drawings of the proposal at this intersection including grading information.

Response:

Refer to Figure 5.45 in Chapter 5, *Transportation*, for grading information at this intersection.

Comment SD.48

The proposed restaurant at the corner of Arthur Street and the Guest Street extension should be eliminated to allow that corner to fully function as open space and extend the streetscape along the eastern edge of Arthur Street. Consider the relationship of this space with the smaller area across Arthur Street.

Response:

The previously proposed standalone restaurant within the Community Green has been removed in lieu of an expanded green space in response to community comments.

Comment SD.49

The open space at the corner of Arthur and Guest Streets should be designed to anticipate the possible future West Street extension. So rather than using that area as a focus of landscape design (as has been shown in recent meetings), it should laid out and paved like a Street and program currently proposed there should be moved into the body of the park, so that the future street extension is not perceived as a loss of open space.

Similarly, the southern edge of the park should be designed so that the park could be readily expanded into the adjacent Volvo Village site.

Response:

Since filing the PNF, the Proponent has advanced design of West Street Extension in response to BPDA and BCDC feedback. The current design introduces vehicle and pedestrian traffic on West Street, between the Community Green and Building A. The current design allows for a future connection to North Beacon Street, should other parties desire to extend West Street to North Beacon Street. As noted in Section 1.4.3, of Chapter 1, *Project Description and Alternatives*, this new West Street

Extension has been laid out, dimensioned, and designed like a street, and program previously proposed there has been shifted into the body of the Community Green.

The southern edge of the Community Green is designed as a "soft" [planted] edge to allow the most flexibility for future southward expansion, should that be desired by the relevant parties.

Comment SD.50

Include street cross sections showing the detail of the sidewalks and planted edge.

Response:

Refer to Figures 3.25a and 3.25b for street cross sections.

Comment SD.51

Consider infilling between Building 1 and Everett Street to better allow a complete street sidewalk and a row of trees between the sidewalk and the building.

Response:

The area located between Building B (formerly Building 1) and Everett Street will be infilled to create an on-grade condition adjacent to Everett Street in order to accommodate trees, vegetation, and a wider sidewalk at the northwest corner of the Everett Street/Guest Street Extension intersection.

Comment SD.52

The connection across the turnpike on Everett is going to be increasingly important to the development of the larger area and it needs to work for pedestrians and bicycles as well as cars and trucks.

Response:

Refer to 5.8.4 of Chapter 5, *Transportation*, for a description of the extensive improvements proposed at the site entrance off Everett Street. In addition, as noted in the response to Comment SD.51 above, the area located between Building B (formerly Building 1) and Everett Street will be infilled to accommodate trees, and vegetation, and a wider sidewalk.

Comment SD.53

The north-south orientation of the tower portions of the buildings is not ideal for energy use, so perhaps that leads to some design solutions that help manage energy while giving some form/detail to the towers. Smaller, punched openings and creative use of facade material shapes and forms could be explored.

Response:

As discussed in Chapter 1, *Project Description and Alternatives*, the Proponent has modified the proposed development program and building height/massing. These modifications enabled the Project Team to further consider the building massing and orientation in relation to the neighboring development and planned street layout. The re-orientation of some of the tower portions of the buildings to place the larger elevations be in a more East-West configuration in combination with a thoughtful building envelope design may result in increased energy efficiency. The building envelope design has been advanced for Building A only. Thus, the design of the tower elements of Buildings B, C, and D are conceptual and do not include proposed façade materials or openings. These design details of Buildings B, C, and D will be reviewed and modeled for energy efficiency as part of future design review once they are advanced.

Comment SD.54

Signage will be reviewed and approved with each individual building. An area signage master plan is encouraged in addition to building specific signage plans. Note that retail and residential signage is generally located at entrances to those establishments.

Response:

Refer to Section 3.4.3 of Chapter 3, *Urban Design*, for more details related to signage.

Comment SD.55

As the redesign of the Everett Street abutment advances to accommodate the relocated intersection at the Guest Street Extension and the steeper grades that will be required to meet the existing bridge, efforts should be made to reuse the granite that currently comprises the abutment walls, particularly where they land in areas that are visible from or immediately adjacent to public realm. Alternatively, the granite should be salvaged and incorporated into the public realm.

Response:

The Everett Street granite abutment wall will be reconfigured at the corner of Everett and Braintree Street at the north-east corner of Building B to accommodate the change in grade from Braintree up to Everett Street to maintain the grades of the street along the building. The granite walls along Everett will be rebuilt to match the existing conditions while accommodating the new grades. Excess stone will be stockpiled for use in the landscape at the new Community Green to the extent feasible depending on stakeholder input on the Community Green design.

Comment SD.56

Written description of program elements and space allocation (in square feet) for each element, as well as Project totals.

Response:

Refer to Table 1-2 of Chapter 1, *Project Description and Alternatives*.

Comment SD.57

Neighborhood plan, elevations and sections (in multiple directions) at an appropriate scale (1=1 00' or larger as determined by the BPDA) showing relationships of the proposed project to the neighborhood context:

a. Massing

b. Building height

c. Scaling elements

d. Open space

e. Major topographic features

f. Pedestrian and vehicular circulation

g. Land use

Response:

The supporting figures of Chapter 3, *Urban Design*, includes the requested plans.

Comment SD.58

Color, or black and white 8"x10" photographs of the site and neighborhood.

Response:

Refer to Figure 1.4 at the end of Chapter 1, *Project Description and Alternatives*.

Comment SD.59

Sketches and diagrams to clarify design issues and massing options.

Response:

Refer to Figure 3.4 for massing diagram for the Proposed Project.

Comment SD.60

Eye-level perspective (reproducible line or other approved drawings) showing the proposal (including main entries and public areas) in the context of the surrounding area. Views should display a particular emphasis on important viewing areas such as key intersections, pathways, or public parks/attractions. A few of such viewpoints have already been used in presentations to the public. Long ranged (distanced) views of the proposed project must also be studied to assess the impact on the skyline or other view lines. All perspectives should show (in separate comparative sketches) at least both the build and no-build conditions; any alternatives proposed should be compared as well. The BPDA should approve the view locations before analysis is begun. We suggest at least the following viewpoints: up and down Everett, Arthur, and Guest Streets including from outside of the project site by several blocks; from across the turnpike and the crest of the Everett Street overpass; the crest of the Cambridge Street overpass; any visibility from the southern crests of Dustin or Cambridge Streets. View studies should be cognizant of light and shadow, massing and bulk.

Response:

Refer to Figure 3.8 and Figures 3.9a through 3.9p for various view perspectives of the Proposed Project. The viewpoint locations were reviewed in advance by BPDA staff.

Comment SD.61

Additional aerial or skyline views of the project, if and as requested.

Response:

Refer to Figures 3.10 for aerial view of the Proposed Project.

Comment SD.62

Site sections at 1" = 20' or larger (or other scale approved by the BPDA) showing relationships to adjacent buildings and spaces. Multiple sections through the site and the surrounding context (two to three blocks on all sides) should be provided.

Response:

Refer to Figures 3.5 through 3.7 for details on building and neighborhood sections, respectively.

Comment SD.63

Site plan(s) at an appropriate scale (1" = 20' or larger, or as approved by the BPDA) showing:

a. General relationships of proposed and existing adjacent buildings and open spaces

b. Open spaces defined by buildings on adjacent parcels and across streets

c. General location of pedestrian ways, driveways, parking, service areas, streets, and major landscape features

d. Pedestrian, handicapped, vehicular and service access and flow through the parcel and to adjacent areas

e. Survey information, such as existing elevations, benchmarks, and utilities

f. Phasing possibilities

g. Construction limits

Response:

Refer to Figures 1.5 for proposed site condition, Figure 1.6 for phasing diagram, Figure 3.21 for circulation diagram, and Figure 3.24 for conceptual landscape plan.

Comment SD.64

Massing model (ultimately in basswood) at 1":40'0" for use in the Agency's Downtown Model.

Response:

A physical massing model will be provided as requested.

Comment SD.65

Study model(s) at 1" = 16' or 1" = 20' showing preliminary concept of setbacks, cornice lines, fenestration, facade composition, etc. are recommended.

Response:

A physical study model will be provided as requested.

Comment SD.66

Drawings at an appropriate scale (e.g., 1":16'0", or as determined by BPDA) describing architectural massing, facade design and proposed materials including:

a. Building and site improvement plans. Include any exterior utilities like transformers.

b. Neighborhood elevations, sections, and/or plans showing the

c. Development in the context of the surrounding area

d. Sections showing organization of functions and spaces, and relationships to adjacent spaces and structures

e. Preliminary building plans showing ground floor and typical upper floor(s).

f. Phasing, if any, of the Proposed Project

Response:

Refer to Figures 3.1a-b for existing and proposed neighborhood context plans, Figures 3.3a-h for proposed floor plans, Figures 3.6 for details of neighborhood sections, and Figures 3.11 through 3.20 for Phase 1 conditions (Building A). Refer to Section 1.6 in Chapter 1, *Project Description and Alternatives*, for a project phasing description.

Comment SD.67

A written and/or graphic description of the building materials and its texture, color, and general fenestration patterns is required for the proposed development.

Response:

Refer to Section 3.4 of Chapter 3, *Urban Design*.

Comment SD.68

Electronic files describing the site and Proposed Project.

Response:

An electronic version of this EENF/DPIR filing has been uploaded to the BPDA website.

Comment SD.69

Full responses, which may be in the formats listed above (and more), to any urban design-related issues raised in preliminary reviews or specifically included in the BPDA scoping determination, preliminary adequacy determination, or other document requesting additional information leading up to BPDA Board action, inclusive of material required for Boston Civic Design Commission review.

Response:

Direct responses are provided herein.

Comment SD.70

Proposed schedule for submission of all design or development-related materials.

Response:

The timing of this filing was discussed with the BPDA at a pre-filing meeting.

Comment SD.71

Diagrammatic sections through the neighborhood (to the extent not covered in item #2 above) cutting north-south and east-west at the scale and distance indicated above.

Response:

Refer to Figure 3.6 for a neighborhood section of the Proposed Project.

Comment SD.72

True-scale three-dimensional graphic representations of the area indicated above either as aerial perspective or isometric views showing all buildings, streets, parks, and natural features.

Response:

Refer to Figure 3.10 for 3D view of the Proposed Project.

Comment SD.73

A daylight analysis for both build and no-build conditions shall be conducted by measuring the percentage of skydome that is obstructed by the Proposed Project building(s) and evaluating the net change in obstruction. If alternative massing studies are requested (which see above) or result as part of the Article 80 development review process, daylight analysis of such alternatives shall also be conducted for comparison. The study should treat three elements as controls for data comparisons: existing conditions, the 'as-of-right' massing, and context examples. The BRADA program must be used for this analysis.

Response:

Refer to Section 6.4 of Chapter 6, *Environmental Protection*, for detailed daylight analysis.

Comment SD.74

Estimated water consumption and sewage generation from the Proposed Project and the basis for each estimate. Include separate calculations for air conditioning system make-up water.

Response:

Refer to Sections 8.4, 8.5, and 8.6.4 in Chapter 8, *Infrastructure*, for estimates for wastewater generation, water demand, and HVAC system respectively.

Comment SD.75

Description of the capacity and adequacy of water and sewer systems and an evaluation of the impacts of the Proposed Project on those systems; sewer and storm drain systems should include a tributary flow analysis as part of this description.

Response:

Refer to Sections 8.3 and 8.4 in Chapter 8, *Infrastructure*.

Comment SD.76

Identification of measures to conserve resources, including any provisions for recycling or 'green' strategies, including green roofs.

Response:

Refer to Section 4.3.2 for compliance with Article 37 and Chapter 4, *Sustainability and Climate Change Resiliency*, for recycling strategies, life-cycle assessment (LCA), and discussion of "green" strategies.

Comment SD.77

Description of the Proposed Project's impacts on the water quality of Boston Harbor or other water bodies that could be affected by the Project, if applicable.

Response:

Refer to Section 8.3 in Chapter 8, *Infrastructure*.

Comment SD.78

Description of mitigation measures to reduce or eliminate impacts on water quality.

Response:

Refer to Section 8.3 in Chapter 8, *Infrastructure*.

Comment SD.79

Description of impact of on-site storm drainage on water quality.

Response:

Refer to Section 8.3 in Chapter 8, *Infrastructure*.

Comment SD.80

Information on how the Proposed Project will conform to requirements of the Ground Water Trust under Article 32, if applicable, by providing additional recharge opportunities.

Response:

The Project is not within the Ground Overlay District; however, it will comply with BWSC standards and BPDA Smart Utilities Pilot Policy by collecting and infiltrating 1.25 inches of rainwater over all impervious areas.

Comment SD.81

Detail methods of protection proposed for infrastructure conduits and other artifacts, including the MBTA tunnels and station structures, and BSWC sewer lines and water mains, during construction.

Response:

The Proposed Project will coordinate all methods of infrastructure protection with both the MBTA and BWSC. Sewer inspection and vibration monitoring will be put in place as necessary and as required by each agency.

Comment SD.82

Detail the energy source of the interior space heating; how obtained, and, if applicable, plans for reuse of condensate.

Response:

Refer to Section 7.3 of Chapter 7, *Greenhouse Gas Emissions Assessment*, for the proposed energy conservation measures assumed in the energy model for each building, which includes high efficiency boilers.

Comment SD.83

a. Description of energy requirements of the project and evaluation of project impacts on resources and supply

Response:

The Project requires supply of electrical power and natural gas. Project impact on these resources will be determined as design progresses and microgrid feasibility assessment is completed.

Comment SD.84

b. Description of measures to conserve energy usage and consideration of the feasibility of including solar energy provisions or other on-site energy provisions, including wind, geothermal, and cogeneration... Any other system (emergency systems, gas, steam, optic fiber, cable, etc.) impacted by this development should also be described in brief. The location of transformer and other vaults required for electrical distribution or ventilation must be chosen to minimize disruption to pedestrian paths and public improvements both when operating normally and when being serviced, and must be described... The Proponent should investigate energy strategies that take advantage of this scale of construction, including those that incorporate green roof strategies as well as solar orientation and materials/systems that maximize efficiencies, daylighting strategies, wind, solar, and geothermal systems, and cogeneration.

Response:

Refer to Section 7.3.5 of Chapter 7, *Greenhouse Gas Emissions Assessment*, for an evaluation of energy conservation measures, including on-site renewable energy opportunities.

Comment SD.85

Based on the square footage and uses outlined in the Project Notification Form, the Proposed Project will be subject to and be required to enter into a Development Impact Project ("DIP or Linkage") agreement. A full analysis of square footage and uses should be submitted in the DPIR.

Response:

Refer to Section 2.1.2 of Chapter 2, *Regulatory Context and General Information*.

Comment SD.86

As part of the DPIR, the Proponent must include an up to date and completed Article 80 Accessibility Checklist for the Proposed Project. An Accessibility Checklist is attached to Appendix E.

Response:

Refer to Appendix C for the updated Accessibility Checklist.

boston planning & development agency

August 3, 2018

Guy Stutz
The Stop & Shop Supermarket Company, LLC
1385 Hancock Street
Quincy, MA 02467

Re: Scoping Determination for proposed Allston Yards project

Dear Mr. Stutz:

Please find enclosed the Scoping Determination for the proposed Allston Yards project located at 60 Everett Street in the Allston neighborhood of Boston. The Scoping Determination describes information required by the Boston Redevelopment Authority d/b/a the Boston Planning & Development Agency in response to the Project Notification Form, which was submitted under Article 80B of the Boston Zoning Code on January 22, 2018. Additional information may be required during the course of review of the proposal.

If you have any questions regarding the Scoping Determination or the review process, please contact me at (617) 918.4244 or Casey.A.Hines@Boston.gov

Sincerely,

Casey A. Hines

Casey A. Hines
Senior Project Manager

CC: Brian Golden, BPDA
Sara Myerson, BPDA
Jonathan Greeley, BPDA
Jerome Smith, ONS
Linda Costanzo, Stop & Shop Supermarket Company, LLC
John Twohig, New England Development
Christian Regnier, Goulston & Storrs

BOSTON REDEVELOPMENT AUTHORITY
D/B/A BOSTON PLANNING & DEVELOPMENT AGENCY

SCOPING DETERMINATION
ALLSTON YARDS

SUBMISSION REQUIREMENTS
FOR DRAFT PROJECT IMPACT REPORT (DPIR)

PROPOSED PROJECT:	ALLSTON YARDS
PROJECT SITE:	60 EVERETT STREET, ALLSTON
PROPONENT:	THE STOP & SHOP SUPERMARKET COMPANY, LLC 1385 HANCOCK STREET QUINCY, MASSACHUSETTS 02467
MASTER DEVELOPER:	NEW ENGLAND DEVELOPMENT 75 PARK PLAZA BOSTON, MASSACHUSETTS 02116
DATE:	AUGUST 3, 2018

The Boston Redevelopment Authority ("BRA") d/b/a the Boston Planning & Development Agency ("BPDA") is issuing this Scoping Determination pursuant to Section 80B-5.3 of the Boston Zoning Code (the "Code") in response to and based on the review of the Project Notification Form ("PNF") for the Allston Yards project (the "Proposed Project"), which The Stop & Shop Supermarket Company, LLC ("Proponent"), together with New England Development ("Master Developer"), submitted to the BPDA on January 22, 2018. Notice of the receipt by the BPDA of the PNF was published in the *Boston Herald* on January 22, 2018, which initiated a public comment period with a closing date of February 21, 2018; the public comment period was subsequently extended until June 15, 2018. The Scoping Determination requires the Proponent to respond to comments received from City and State agencies, elected officials, the Mayorally appointed Impact Advisory

Group (the "IAG"), and the public.

On February 10, 2017, the Proponent filed a Letter of Intent ("LOI") in accordance with the Executive Order regarding Provision of Mitigation by Development Projects in Boston. As proposed in the LOI the Proposed Project, initially, will include a new Stop & Shop grocery store and approximately 360 residential units, 5,000 square feet of retail space, parking, 25,000 square foot publicly accessible open space, and related infrastructure. The first phase infrastructure will support the overall project. The remaining build-out of the Proposed Project is planned to include additional retail and restaurant uses, up to 650 residential units, and Class A office space.

On February 24, 2017, letters soliciting nominations to the IAG for the Proposed Project were delivered to State Senator Sal D. Domenico, State Representative Michael Moran, and City Councilor Mark Ciommo. Additional letters seeking recommendations were delivered to the Mayor's Office of Neighborhood Services and the At-Large City Councilors. Nominations were also sought from the BPDA Planning Department.

Thirteen (13) individuals were appointed to the IAG and have been invited to participate in advising BPDA staff on the determination and consideration of the impacts and appropriate mitigation regarding the Proposed Project. The following list includes the names of the IAG members:

1. Akerly, Colin
2. Bligh, John
3. Cusack, John
4. Daly, Dan
5. D'Isidoro, Anthony
6. Gomes, Anabela
7. Hanlon, Rosie
8. Howard, Andrea
9. Lally, Bernadette
10. Leis, Peter
11. Powers, Jean
12. Rodriguez-Hernandez, Monica
13. Walters, Emma

The BPDA appreciates the efforts of the IAG and the members should be applauded for their commitment to the review of the Proposed Project.

The notice of receipt by the BPDA of the PNF and the PNF were sent to the City's public agencies pursuant to Section 80A-2 of the Code, as well as to the IAG members. Pursuant to Section 80B-5.3 of the Code, a Scoping Session was held on February 26, 2018 with the City of Boston's public agencies at which time the Proposed Project was reviewed and discussed. Members of the IAG were also invited to attend the scoping session.

The BPDA sponsored a Public Meeting to discuss the PNF on April 23, 2018 at the Jackson Mann Community Center (500 Cambridge Street, Allston MA 02134). The Public Meeting was duly advertised in the *Allston-Brighton TAB* and *Boston Bulletin* newspapers. Additionally, the public meeting was posted to the BPDA calendar, a notification was sent to all subscribers of the BPDA'S Allston/Brighton neighborhood updates, and local City and State elected officials and their staff members have received notification via email. In addition, four (4) IAG working sessions were held on March 12, April 30, May 9, and May 29, 2018.

Written comments in response to the PNF received by the BPDA from City of Boston agencies and elected officials are included in **Appendix A** and must be answered in their entirety. Written comments in response to the PNF received by the BPDA from the public are included in **Appendix B** and must be answered in their entirety. Written comments in response to the PNF received by the BPDA from the IAG are included in **Appendix C** and must be answered in their entirety. The Draft Project Impact Report ("DPIR") should include complete responses to all comments included in **Appendices A, B and C** within the framework of the criteria outlined in the Scoping Determination. SD.1

Comments received by the BPDA from agencies and departments of the City of Boston are included in **Appendix A** and must be answered in their entirety.

Specifically, they are from:

- BPDA Urban Design/Planning Staff
- Kathleen Pedersen, Sr. Land Use Planner, Sustainability Specialist &

Environmental Review, BPDA
- John (Tad) Read, Senior Deputy Director for Transportation & Infrastructure Planning and Manuel Esquivel, Senior Infrastructure & Energy Planning Fellow, BPDA
- Tim Davis, Housing Policy Manager, BPDA
- John Dalzell, Interagency Green Building Committee
- Kara Elliot-Ortega, Directo of Planning and Policy, Mayor's Office of Arts and Culture
- Carrie Marsh, Executive Secretary, Boston Parks and Recreation Commission
- John P. Sullivan, P.E., Chief Engineer and Operations Officer, Boston Water and Sewer Commission

Public comments received by the BPDA during the comment period are included in **Appendix B** and must be answered in their entirety.

Comments from IAG members that were received by the BPDA during the comment period are included in **Appendix C** and must be answered in their entirety.

The Scoping Determination requests information that the BPDA requires for its review of the Proposed Project in connection with Article 80 of the Code, Development Review and Approval and other applicable sections of the Code.

In addition to the specific submission requirements outlined in the sections below, the following points are highlighted for additional emphasis and consideration:

- Throughout the initial phase of review, the Proponent has taken steps to meet with local residents, elected officials, abutters, and City and State agencies. These conversations must continue, ensuring that the project that is presented in the DPIR is beneficial to the adjacent neighborhoods and the City of Boston as a whole. SD.2

- It is clear in reading through the comment letters that the Proposed Project has simultaneously generated excitement and concern. While many of the letters show that there is desire to see the redevelopment of the Allston Yards/60 Everett Street site, numerous individuals request that additional studies occur in order to evaluate the potential impacts of a project of this

magnitude, as well as the potential benefits. In order to minimize and mitigate the Proposed Project's impacts, the BPDA encourages the Proponent to continue to work with those parties, including the IAG and community, who have expressed concern. SD.3

- The large parcel that the Proposed Project is on is central to the Allston neighborhood and was of critical interest during the 2012 Brighton/Guest Street Area Planning Study. This study has been instrumental in guiding the development in the area, and is the result of a significant community planning process. The DPIR shall include a Brighton/Guest Street Area Planning Study compliant project as an alternative. SD.4

- The DPIR shall include a more definitive explanation of the Proposed Project's overall phasing strategy. Provide diagrams to show when the different elements of the project will be delivered and how the parcels will be programmed/managed before they are developed. SD.5

- Allston Yards is a significant project with substantial implications for the district transportation network. The Proposed Project's scale and scope require the inclusion of network improvements like the Braintree Street Extension, Guest Street Extension, Guest Street/Arthur Street intersection improvements, the proposed geometric design of the Guest Street/Everett Street intersection, and improvements to bike and transit access. Due to the importance of transportation for this project, transportation elements will need to be addressed early in the project phasing to account for a cumulative impact with other developments. SD.6

- Transit will be a key element for the success of the Allston Yards site. Adequate transit upgrades and proper infrastructure have the potential to provide substantial benefits to not only the residents, employees, and visitors of Allston Yards but to the larger Allston/Brighton community. Therefore, the Allston Yards project must facilitate improved connections to the Boston Landing MBTA Commuter Rail Station for pedestrians, bicycles, vehicles, and buses. SD.7

- All development projects have construction impacts. As with any urban development, there needs to be a balance of construction related

inconveniences with the daily activities that will continue to occur adjacent to the project site. A detailed approach to the construction management must be included in the DPIR. SD.8

- Special attention should be given to the comment letters. The letters represent the opinions of the active residents, business leaders and elected officials of the community in which the Proponent intends to develop the Proposed Project. SD.9

These are just a few of the questions and areas that the Proponent must fully explore in the DPIR.

I. PROJECT SITE AND DESCRIPTION

Project Site
The Allston Yards development site is located at 60 Everett Street in the Allston neighborhood of Boston and 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 (the "Project Site").

Project Description
The Stop & Shop Supermarket Company, LLC, together with New England Development, proposes to transform an underutilized urban site currently consisting of big box retail with a vast surface parking lot into a vibrant mixed-use neighborhood focused on healthy living and eating. The uses considered in the PNF include: Residential, Office, Grocery, Retail, Restaurant, Fitness, Open space and programmed open space, Community gathering space, and Parking.

The Proponent and Master Developer envision Buildings 1-4 will be developed through a long-term multiphased approach over several years. A phased demolition and construction plan allows the existing Stop & Shop to remain open and continuously serve its neighbors and customers during construction of the initial development of Building 1. The full build development program for the Proposed Project includes: (1) up to 1,050 residential units; (2) 300,000 GSF of Office use; (3) 67,000 GSF of Grocery use; (4) 50,000 GSF of Retail/Restaurant use; (5) 0.5 acres Community Green; and (6) up to 1,300 parking spaces.

II. PREAMBLE

The Proposed Project is being reviewed pursuant to Article 80, Development Review and Approval, which sets forth a comprehensive procedure for project review of the following components: transportation, environmental protection, urban design, historic resources, infrastructure systems, site plan, tidelands, and Development Impact Project, if any. The Proponent is required to prepare and submit to the BPDA, a DPIR that meets the requirements of the Scoping Determination by detailing the Proposed Project's impacts and proposed measures to mitigate, limit or minimize such impacts. The DPIR shall contain the information necessary to meet the specifications of Section 80B-3 (Scope of Large Project Review; Content of Reports) and Section 80B-4 (Standards for Large Project Review Approval), as required by the Scoping Determination. After submitting the DPIR, the Proponent shall publish notice of such submittal as required by Section 80A-2. Pursuant to Section 80B-5.4(c) (i) (3), the BPDA shall issue a written Preliminary Adequacy Determination ("PAD") within ninety (90) days. Public comments, including the comments of public agencies, shall be transmitted in writing to the BPDA no later than fifteen (15) days prior to the date by which the BPDA must issue its PAD. The PAD shall indicate the additional steps, if any, necessary for the Proponent to satisfy the requirements of the Scoping Determination. If the BPDA determines that the DPIR adequately describes the Proposed Project's impacts and, if appropriate, proposed measures to mitigate, limit or minimize such impacts, the PAD will announce such a determination and that the requirements of further review are waived pursuant to Section 80B-5.4(c) (iv). Section 80B-6 requires the Director of the BPDA to issue a Certification of Compliance indicating the successful completion of the Article 80 development review requirements before the Commissioner of Inspectional Services can issue any building permit for the Proposed Project.

III. REVIEW/SUBMISSION REQUIREMENTS

In addition to full-size scale drawings, 15 copies of a bound booklet and an electronic copy (PDF format) containing all submission materials reduced to size 8-1/2" x 11", except where otherwise specified are required. The electronic copy should be submitted to the BPDA via the following website: https://attachments.bostonredevelopmentauthority.org/. The booklet should be

printed on both sides of the page. In addition, an adequate number of copies must be available for community review. A copy of this Scoping Determination should be included in the booklet for reference.

A. GENERAL INFORMATION

1. Applicant/Proponent Information

a. Development Team

(1) Names

(a) Proponent (including description of development entity and type of corporation, and the principals thereof) SD.10

(b) Attorney

(c) Project consultants and architects

(2) Business address, telephone number, FAX number and email, where available for each

(3) Designated contact for each

b. Legal Information

(1) Legal judgments or actions pending concerning the Proposed Project

(2) History of tax arrears on property owned in Boston by Applicant

(3) Evidence of site control over Project Site, including current ownership and purchase options, if any, for all parcels in the Proposed Project, all restrictive covenants and contractual restrictions affecting the Proponent's right or ability to accomplish the Proposed Project, and the nature of the agreements for securing parcels not owned by the SD.11

Applicant.

(4) Nature and extent of any and all public easements into, through, or surrounding the site. SD.11 (cont.)

2. Project Site

a. An area map identifying the location of the Proposed Project
b. Description of metes and bounds of Project Site or certified survey of the Project Site. SD.12
c. Current zoning

3. Project Description and Alternatives

a. The DPIR shall contain a full description of the Proposed Project and its components, including, its size, physical characteristics, development schedule, costs, and proposed uses. This section of the DPIR shall also present analysis of the development context of the Proposed Project. Appropriate site and building plans to illustrate clearly the Proposed Project shall be required. SD.13
b. A description of alternatives to the Proposed Project that were considered shall be presented and primary differences among the alternatives, particularly as they may affect environmental and traffic/transportation conditions, shall be discussed.

4. Public Benefits

a. Anticipated employment levels including the following:
   (1) Estimated number of construction jobs
   (2) Estimated number of permanent jobs SD.14
b. Current and/or future activities and program which benefit adjacent neighborhoods of Boston and the city at large, such as, child care programs, scholarships, internships, elderly services, education and job training programs, etc.
c. Other public benefits, if any, to be provided.

5. Community Process

a. A list of meetings held and proposed with interested parties, including public agencies, abutters, and business and community groups. SD.15

b. Names and addresses of project area owners, abutters, and any community or business groups which, in the opinion of the applicant, may be substantially interested in or affected by the Proposed Project.

B. REGULATORY CONTROLS AND PERMITS

An updated listing of all anticipated permits or approvals required from other municipal, state or federal agencies, including a proposed application schedule shall be included in the DPIR. SD.16

A statement on the applicability of the Massachusetts Environmental Policy Act ("MEPA") should be provided. If the Proposed Project is subject to MEPA, all required documentation should be provided to the BPDA, including, but not limited to, a copy of the Environmental Notification Form, decisions of the secretary of Environmental Affairs, and the proposed schedule for coordination with BPDA procedures. SD.17

C. TRANSPORTATION COMPONENT

In addition to the information required to meet the specifications of Section 80B-3 and Section 80B-4 of the Code the analysis included in the DPIR must utilize as its framework the scope as outlined in the comments of the BPDA Urban Design and Planning Department letter, dated July 18, 2018 and included in ***Appendix A.*** *These comments are incorporated herein by reference and made a part hereof and must be addressed in their entirety in the DPIR.* SD.18

Allston Yards is a significant project with substantial implications for the district transportation network. The project's scale and scope require the extension of an existing street (Guest Street), creation of new streets and intersections, and

improvements to bike and transit access. Due to the importance of transportation for this project, transportation elements will need to be addressed early in the project phasing to account for a cumulative impact with other developments.

The project must also be viewed in the context of the 2012 Brighton/Guest Street Planning Study, which anticipated substantially less development on this site than the proponent is advocating. This study suggested that the amount of long-term development the area would be able to handle without significant changes to transportation infrastructure would be 1.35-1.75 M square feet. Before this project and after the study there has been almost 3.8 M square feet of development approved in the study area, meaning this development will add on to the transportation challenges shared by others that need to be resolved. While the study was completed prior to the opening of the Boston Landing MBTA Commuter Rail Station, this level of development will present significant challenges to the surrounding site; therefore, the Allston Yards development in a position to contribute a great deal to transportation improvements for the area.

The City's comments are a detailed analysis of technical issues, incorporate comments from community feedback, and provide context for the next round of public review. The sections are divided between Transportation/Site Access and Urban Design/Architecture; however, there are points of overlap between the two sections.

Transportation & Site Access

Transportation and site access will be critical factors for determining the future success of the Allston Yards project. Existing transportation networks in the Allston neighborhood are burdened and site access is constrained by existing congested roadways. However, the site also represents the potential to improve neighborhood connectivity to the rest of the Allston/Brighton neighborhood.

The Transportation and Site Access chapter includes sections on modeling methodology, Transportation Demand Management (TDM), Site Access and Internal Circulation, Parking and Loading, Transit Network and Accommodations, and Bike Network and Accommodations. Additional transportation related elements related to the City's Complete Streets design guidelines including pedestrian network design, public realm design, and building design features are included in the Urban

Design and Architecture chapter.

Modeling Methodology

The Proponent uses BTD standards in their trip generation methodology. They Proponent's analysis claims an overestimation of traffic generation and impacts which could be beneficial for accommodating actual future impacts. This will be important given the surrounding developments and further-reaching connections that may be made through this area.

In addition to the intersections previously counted for this project, several other intersections will provide critical data for the BPDA/BTD review of this project. The additional traffic counts should include:

SD.19

- Cambridge Street at Gordon Street
- Cambridge Street at Eleanor Street
- Cambridge Street at Dustin Street

Transportation Demand Management Overview

The proponent has outlined a comprehensive plan for implementing a TDM program which includes traditional commuter and residential-oriented measures and also measures for the grocery and retail use of the development. In addition to the diverse elements suggested by the proponent, the proponent should also consider the following options:

SD.20

- The creation of Mobility MicroHUBs (Go Boston 2030)
- Designated Bus / Shuttle / Ride-share pick-up/drop-off areas
- Real-time transit and mobility information within all buildings
- Transit pass subsidies for employees and residents
- Contracted or site managed car share services and accommodations
- Electric Vehicle (EV) charging per BTD guidelines
- Joining the Allston/Brighton TMA
- Providing a subsidy for the emerging Allston/Brighton Shuttle program and/or MBTA bus service per an agreement with the MBTA.

These elements will ensure the Allston Yards community has a comprehensive set

of transportation options and will help to ease the burden on the Allston neighborhood and broader Allston-Brighton area.

Site Access, Internal Circulation & Off-site Network Impacts

The proponent outlines a comprehensive system of internal streets and improvements to surrounding streets which include new and improved intersections and signals as well as pedestrian/bicycle accommodations. The inclusion of network improvements like the Braintree Street Extension, Guest Street Extension, Guest Street/Arthur Street intersection improvements, and the proposed geometric design of the Guest Street Extension/Everett Street intersection are important elements for the early stages of this project.

Key considerations as the project is refined include:

- The proponent should be commended for their upfront on a well-designed roadway network, in particular their solution for the Guest Street Extension/Everett Street intersection. The proponent will need to continue to work with the City and the New Balance Development Team on designing a connection to the proposed Braintree Street Extension and the existing Arthur Street extension that works for all parties. SD.21

- The other proposed on-site street network and its integration with the surrounding off site/public street network is generally well designed. A long term goal of the City is the continuation of West Street out to North Beacon Street. All discussions with the proponent about allowing for the future extension of this street through abutting properties has been acknowledged and agreed to, however, the proponent should provide further advanced design of this extension between the proposed "Building 2" and "Community Green" to ensure its ease of feasibility and limit impacts on the existing site design and open space. SD.22

- The approach to the MBTA station headhouse on Everett Street is a key pedestrian connection for the project and existing community. Therefore, design of this street should include robust sidewalks to provide for both pedestrian access to the station and sufficient space for a street furnishing zone. The City recommends that Everett Street between Guest Street and the SD.23 SD.24

MBTA station entrance should be built to include a 8-foot sidewalks plus a 3-food furnishing zone for a total of 11-feet from the curb to fence/wall. This should be done in a way that does not impact the existing roadway width. SD.24 (cont.)

Working with the City, a package of off-site operational improvements to heavily impacted and poorly performing intersections will be determined as part of the project's transportation mitigation package. This may include signal timing and phasing improvements, pavement markings, signage and signal equipment upgrades and interconnect.

Parking & Loading

Parking and loading are key considerations for internal circulation, access to city streets, and pedestrian/bike networks. The proponent has outlined a plan for keeping loading on the north end of the Site via the Braintree Street Extension. The City recognizes this as a key component that needs to be confirmed. Aside from the work put forth by the proponent thus far, key consideration should be given to the following items:

- The proponent should use a more aggressive parking ratio than stated for the office space usage for this project. Currently, it is listed as 2.0 spaces per 1,000 square feet, while the district-based goal for Allston/Brighton is 0.5 spaces per 1,000 square feet. SD.25

Transit Network & Accommodations

Transit will be a key element for the success of the Allston Yards site. Additionally, adequate transit upgrades have the potential to provide substantial benefits to the project and surrounding neighborhood. The transit section describes primarily key bus improvements to the Site. The Proponent mentions that "a substantial portion of the Proposed Project-generated trips is expected to use the MBTA transit system…" This highlights the significance that bus service will have in the area, especially with the 64 bus running adjacent to the site.

The transit improvements that should be included in the Allston Yards program include:

- MBTA Bus Stations - Where existing, the proponent should analyze upgrading bus stops to bi-directional enhanced bus stations with real time countdown clocks, covered waiting areas, public art, and sufficient space to allow for multiple buses to pick up passengers. They should be designed to serve both MBTA and shuttle buses. Where not existing, such stations should be constructed in identified locations. SD.26
    - Existing stops at Arthur Street and Guest Street intersection should be upgraded to better serve users.
    - New stops should be considered throughout the site along the Guest Street Extension. The Proponent mentions conversations with the MBTA about extending service through this area and possibly shifting routes to better serve those getting to the project site; this conversation should be continued going forward.

- MBTA Bus Services - Efficient and frequent bus services to the site will enable residents, employees, and visitors to quickly access the development site. Additionally, expanded bus services will potentially allow additional transportation mobility options for Allston residents. The Proponent should consider the following in reference to bus services improvements:
    - The 64 bus runs adjacent to the site at Guest Street and Arthur Street. The proponent should, in partnership with the MBTA, evaluate the feasibility and effectiveness of shifting bus service to be on all of Guest Street, possibly extending from Market Street on the West to Everett Street on the East. SD.27
    - The proponent should, in partnership with the MBTA, evaluate restructuring of service schedules primarily for the 64 bus and trains that serve the Boston Landing MBTA stop to better accommodate transfer connections and new residents/employees of the development site. This rescheduling should place emphasis on service during evenings and weekends in order to improve upon the existing headways for MBTA service in the area.

- MBTA Bus Equipment - The proponent should work with the MBTA on the potential to provide funds for additional bus equipment for the MBTA to SD.28

service the Allston Yards development site, primarily for the #64 route. SD.28 (cont.)

- Working with the City and the Allston Brighton TMA, the proponent should evaluate and consider joint shuttle services with nearby property owners and development teams. This should include considerations for expanding upon the new shuttle service to be operated by the Cabot, Cabot and Forbes team that will service their St Gabriel's development. Other potential partners include proponents of proposed development in the Everett Street corridor and north of I-90. SD.29

Bicycle Network & Accommodations

Proper bike infrastructure will enable residents, employees, and visitors to access the site by bicycle. This will enable users to have access to an active transportation mode that is safe, reliable, and convenient. The proponent has outlined measures to improve the bicycle network in the area that are consistent with current BTD guidelines. Key elements for further consideration include:

- The proponent should prepare a plan for providing a connection through a larger area than just the project site for bicycle access, on par with suggestions in the Brighton/Guest Street Planning Study. This development should continue regional bike connectivity. SD.30

- The proponent should investigate a wayfinding solution for both bicyclists and pedestrians through and around the project area. This can be done in conjunction with an improved TDM plan. The scope of this wayfinding initiative should be considered along Guest Street from Market Street to Everett Street. SD.31

- Expansion of the BLUEbikes network into Allston Brighton to supplement the existing public transit network is a priority of Boston Bikes. The proponent should work with that team to locate stations or provide other support for the network in this area. Connecting the Boston Landing station to BLUEbikes will be a key to continuing improvement of transit in this area. SD.32

- Compliance with BTD bicycle parking guidelines to serve both the general public and specific site uses, as well as facilities for future employees to SD.33

accommodate cycling.

D. ENVIRONMENTAL PROTECTION COMPONENT

The DPIR must address the comments of the Kathleen Pedersen, Sustainability Specialist & Environmental Review, BPDA, dated July 31, 2018 and the Interagency Green Building Committee, dated June 21, 2018 and included in ***Appendix A.***

E. OPEN SPACE

The DPIR must address the comments of the Boston Parks and Recreation Department, dated May 7, 2018 and included in ***Appendix A.***

F. URBAN DESIGN/PLANNING COMPONENT

In addition to the information required to meet the specifications of Section 80B-3 and Section 80B-4 of the Code, the Proponent must address the comments outlined by the BPDA's Urban Design and Planning Departments, included in ***Appendix A****. These comments are incorporated herein by reference and made a part hereof and must be addressed in their entirety in the DPIR.*

Urban Design and Architecture

The site of the proposed Allston Yards project is currently occupied by a 100,000 square foot retail shopping center anchored by a Stop & Shop supermarket and a large surface parking lot. It is appreciated that this is not the best use of space within the city, particularly as Boston confronts the need for additional housing. The site is also adjacent to the 15 acre Boston Landing development and the anticipated development at the five acre Boston Volvo Village. It is also near the burgeoning developments in the area between North Beacon, Cambridge, and Braintree Streets. Close to three million square feet of new construction are anticipated in the immediate neighborhood. The design, density, and connectivity of this site are reviewed in the context of the rapid expansion of the area along with significant improvements in transit through the Boston Landing commuter rail stop.

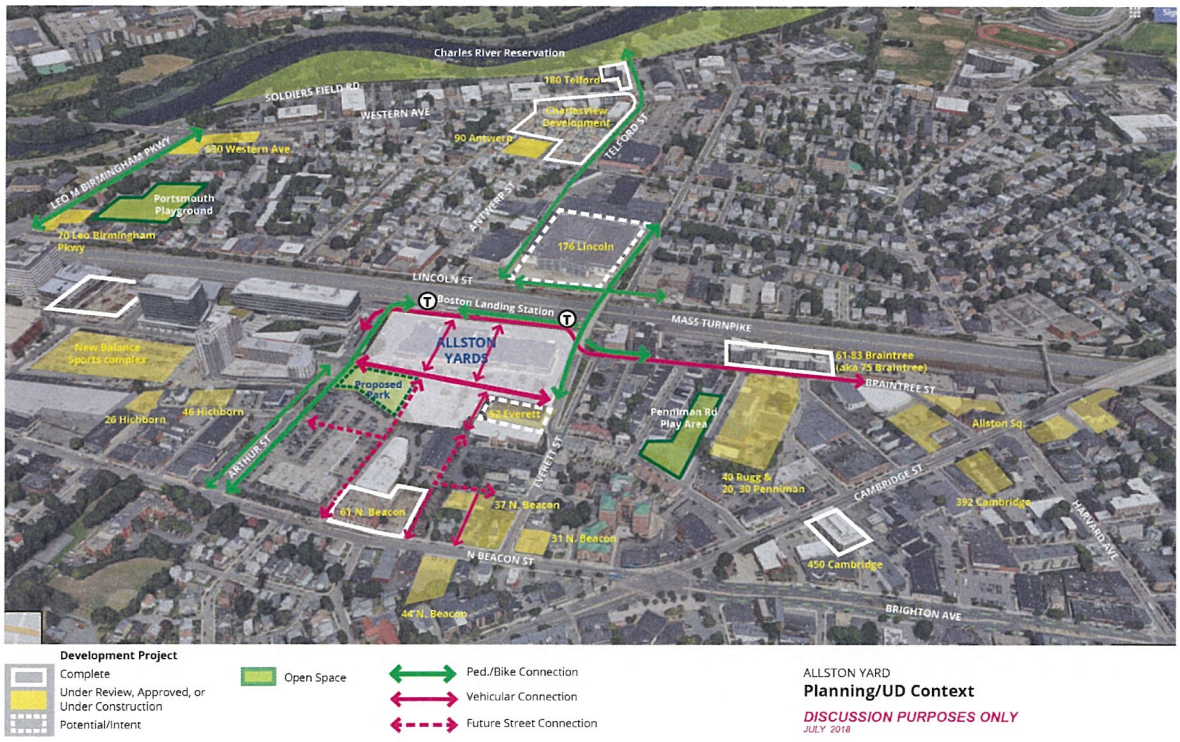
Part of understanding how this project will interact with other developments in the area requires more in depth understanding of the phasing of the project. Provide

phasing diagrams to show when the different elements of the project will be delivered and how the parcels will be programmed/managed before they are developed. Surface parking is discouraged as an interim use, excepting construction parking. SD.34

More documentation on the specifics of Phase 1 will also be needed if approval of that phase is anticipated with approval of the PDA. This should include the standard Article 80 large project review documentation like wind and shadow studies and more detailed information on architecture. SD.35

An initial plan for utilities, including transformers, gas trains, and gas meters should be developed. All of these items should be interior to the buildings. SD.36

See the following Planning/UD Context showing nearby projects and transit connections:



We reserve the right to add additional comments and concerns during the course of the process of combined BPDA and BCDC review, which may affect the responses detailed in the DPIR.

Zoning

The proposed project is located near the center of the 2012 Guest Street Area Planning Study. This study has been instrumental in guiding the development in the area, and is the result of a significant community planning process.

Basing this large proposed development in a significant transportation improvement, the extension of Guest Street and reconfiguration of the Guest/Everett intersection, is a good place to start. See the transportation section for more comments, but note that a clear understanding of how the proposed additional people in this area will impact the commuter rail, bus network, bicycle and pedestrian movement, automobile traffic and appropriate mitigation will be key to the success of the project.

Alternatives

The DPIR should include thoughtful alternatives to the proposed project. At a minimum there should be a Guest Street Area Planning Study compliant project. SD.37

Neighborhood Context and Scale

As has been noted in preliminary meetings, the proposal for four buildings over 200' is challenging in this area. In the Guest Street Area Planning Study a height of 150' was contemplated along the the turnpike stepping down to the neighborhood. The height on Building 1 should move away from Everett Street (as has been shown in subsequent presentations). Building 2 should be stepping down in height towards the smaller scale neighborhoods to the south and east. SD.38

Additionally, more variety in height should be explored. The adjacent PDA 87 area has a variety in height and massing, which creates an interesting and lively skyline from the neighborhood and turnpike. This idea of variety of height and massing should be extended into the Allston Yards area. SD.39

Site Access and Circulation

Braintree Street needs to be designed with full, comfortable sidewalks and a separated bike path at the north side at a minimum. People coming from the east will likely use Braintree Street as access to the commuter rail. SD.40 Additionally, explore the possibility of connecting the Arthur Street Extension to Braintree Street SD.41

Extension. This would improve connectivity and simplify the route of shuttle buses and delivery trucks. SD.41 (cont.)

The massing of Building 2 should be adjusted (pull the south corner in) to allow a clearer potential connection to North Beacon Street along the side of 61 North Beacon Street. Options for this future connection should be explored in the DPIR. SD.42

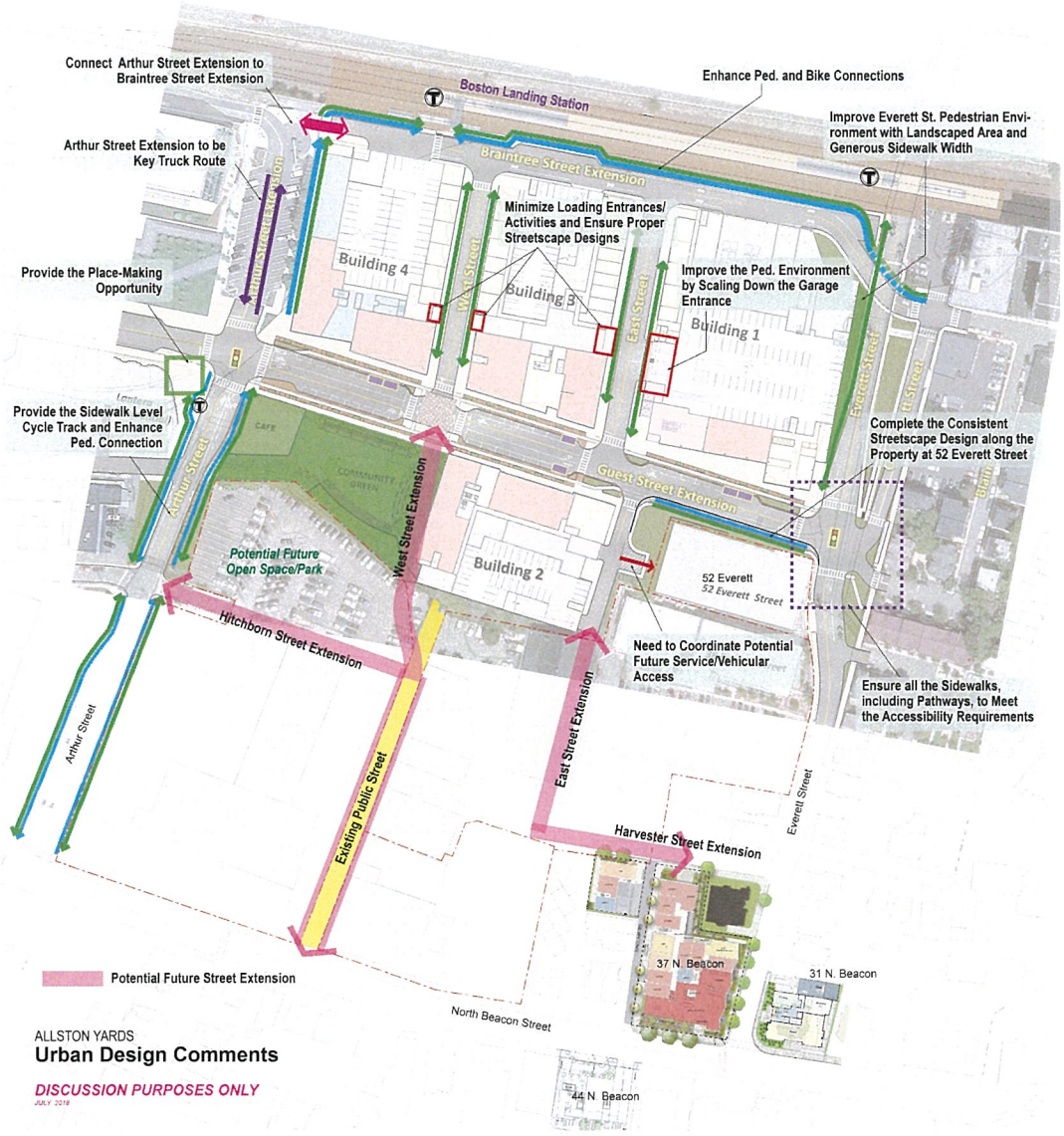
The intersection of Arthur and the Guest Street Extension should be more fully considered, including the area to the west of the intersection where the 64 bus stop is. SD.43 Opportunities to add street trees to Arthur Street should be advanced. While the earlier idea of a boulevard may not be right for this street, providing it with a generous tree canopy will make it a much more pleasant and functional approach to Boston Landing and Allston Yards for all modes of transportation, and adding tree canopy, wherever possible, works toward dissipating heat island effect. SD.44

The last block of the south side of the Guest Street Extension where it meets Everett Street appears narrow and less conforming with Complete Streets. Is there a way to set this up so that there is space for a sidewalk similar to the ones in the other blocks. SD.45 For example, understanding that the slope issues in the adjacent intersection are complicated, could that block swing north slightly to reduce the unused sidewalk in front of Building 1 and increase the needed sidewalk on the south side of the street.

Evaluate the sidewalks from the Guest Street extension to the Everett Street Bridge. SD.46 This should meet Complete Streets Guidelines in the reconstructed portions, particularly on the west side of the street. See comments in the Architecture section on the relationship of Building 1 to Everett Street for more information.

The new crosswalk at the north side of the Guest Street Extension and Everett Street appears to have accessibility issues created by grade issues. Provide larger scale drawings of the proposal at this intersection including grading information. SD.47

See UD Comments diagram below:



Open Space

The proposed restaurant at the corner of Arthur Street and the Guest Street extension should be eliminated to allow that corner to fully function as open space and extend the streetscape along the eastern edge of Arthur Street. Consider the relationship of this space with the smaller area across Arthur Street. SD.48

The open space at the corner of Arthur and Guest Streets should be designed to SD.49

anticipate the possible future West Street extension. So rather than using that area as a focus of landscape design (as has been shown in recent meetings), it should laid out and paved like a street and program currently proposed there should be moved into the body of the park, so that the future street extension is not perceived as a loss of open space. SD.49 cont.

Similarly, the southern edge of the park should be designed so that the park could be readily expanded into the adjacent Volvo Village site.

Include street cross sections showing the detail of the sidewalks and planted edge. SD.50
Consider infilling between Building 1 and Everett Street to better allow a complete street sidewalk and a row of trees between the sidewalk and the building. SD.51
The connection across the turnpike on Everett is going to be increasingly important to the development of the larger area and it needs to work for pedestrians and bicycles as well as cars and trucks. SD.52

Architecture

Note that if Building 1 is anticipated to be reviewed and approved concurrently with the PDA, the typical Article 80 large project review documentation for that project. Of particular importance in this review is the relationship to Everett Street.

While a particular style of building is not needed for a development, it is encouraged that this architecture have variety in color and form across the buildings. The Boston Landing PDA Master Plan has a fairly cohesive design language. This area should not be an extension of that, rather there should be variety in the materials and details of the buildings. The north-south orientation of the tower portions of the buildings is not ideal for energy use, so perhaps that leads to some design solutions that help manage energy while giving some form/detail to the towers. Smaller, punched openings and creative use of facade material shapes and forms could be explored. SD.53

Signage will be reviewed and approved with each individual building. An area signage master plan is encourage in addition to building specific signage plans. Note that retail and residential signage is generally located at entrances to those establishments. SD.54

As the redesign of the Everett Street abutment advances to accommodate the relocated intersection at the Guest Street Extension and the steeper grades that will be required to meet the existing bridge, efforts should be made to reuse the granite that currently comprises the abutment walls, particularly where they land in areas that are visible from or immediately adjacent to public realm. Alternatively, the granite should be salvaged and incorporated into the public realm. SD.55

We reserve the right to add additional concerns during the course of the process of combined BPDA Staff, IAG, and BCDC review, which may affect the responses detailed in the DPIR. The following urban design materials for the Proposed Project's schematic design must be submitted for the DPIR:

1. Written description of program elements and space allocation (in square feet) for each element, as well as Project totals. SD.56
2. Neighborhood plan, elevations and sections (in multiple directions) at an appropriate scale (1"=100' or larger as determined by the BPDA) showing relationships of the proposed project to the neighborhood context:
   a. Massing
   b. Building height
   c. Scaling elements SD.57
   d. Open space
   e. Major topographic features
   f. Pedestrian and vehicular circulation
   g. Land use
3. Color, or black and white 8"x10" photographs of the site and neighborhood. SD.58
4. Sketches and diagrams to clarify design issues and massing options. SD.59
5. Eye-level perspective (reproducible line or other approved drawings) showing the proposal (including main entries and public areas) in the context of the surrounding area. Views should display a particular emphasis on important viewing areas such as key intersections, pathways, or public parks/attractions. A few of such viewpoints have already been used in presentations to the public. Long-ranged (distanced) views of the proposed project must also be studied to assess the impact on the skyline or other view lines. At least one bird's-eye perspective should also be included. All perspectives should show (in separate comparative sketches) at least both the build and no-build conditions; any alternatives proposed should be compared as well. The BPDA should approve the view locations before analysis is begun. We suggest at least the following viewpoints: up and down SD.60

Everett, Arthur, and Guest Streets including from outside of the project site by several blocks; from across the turnpike and the crest of the Everett Street overpass; the crest of the Cambridge Street overpass; any visibility from the southern crests of Dustin or Cambridge Streets. View studies should be cognizant of light and shadow, massing and bulk. SD.60 (cont.)

6. Additional aerial or skyline views of the project, if and as requested. SD.61

7. Site sections at 1"=20' or larger (or other scale approved by the BPDA) showing relationships to adjacent buildings and spaces. Multiple sections through the site and the surrounding context (two to three blocks on all sides) should be provided. SD.62

8. Site plan(s) at an appropriate scale (1"=20' or larger, or as approved by the BPDA) showing:

a. General relationships of proposed and existing adjacent buildings and open spaces

b. Open spaces defined by buildings on adjacent parcels and across streets

c. General location of pedestrian ways, driveways, parking, service areas, streets, and major landscape features SD.63

d. Pedestrian, handicapped, vehicular and service access and flow through the parcel and to adjacent areas

e. Survey information, such as existing elevations, benchmarks, and utilities

f. Phasing possibilities

g. Construction limits

9. Massing model (ultimately in basswood) at 1":40'0" for use in the Agency's Downtown Model. SD.64

10. Study model(s) at 1" = 16' or 1" = 20' showing preliminary concept of setbacks, cornice lines, fenestration, facade composition, etc. are recommended. SD.65

11. Drawings at an appropriate scale (e.g., 1":16'0", or as determined by BPDA) describing architectural massing, facade design and proposed materials including:

a. Building and site improvement plans. Include any exterior utilities like transformers.

b. Neighborhood elevations, sections, and/or plans showing the SD.66

c. Development in the context of the surrounding area

d. Sections showing organization of functions and spaces, and relationships to adjacent spaces and structures

e. Preliminary building plans showing ground floor and typical upper floor(s).

f. Phasing, if any, of the Proposed Project

12. A written and/or graphic description of the building materials and its texture, color, and general fenestration patterns is required for the proposed development. SD.67

13. Electronic files describing the site and Proposed Project. SD.68
14. Full responses, which may be in the formats listed above (and more), to any urban design-related issues raised in preliminary reviews or specifically included in the BPDA scoping determination, preliminary adequacy determination, or other document requesting additional information leading up to BPDA Board action, inclusive of material required for Boston Civic Design Commission review. SD.69
15. Proposed schedule for submission of all design or development-related materials. SD.70
16. Diagrammatic sections through the neighborhood (to the extent not covered in item #2 above) cutting north-south and east-west at the scale and distance indicated above. SD.71
17. True-scale three-dimensional graphic representations of the area indicated above either as aerial perspective or isometric views showing all buildings, streets, parks, and natural features. SD.72

Daylight Component

A daylight analysis for both build and no-build conditions shall be conducted by measuring the percentage of skydome that is obstructed by the Proposed Project building(s) and evaluating the net change in obstruction. If alternative massing studies are requested (which see above) or result as part of the Article 80 development review process, daylight analysis of such alternatives shall also be conducted for comparison. The study should treat three elements as controls for data comparisons: existing conditions, the 'as-of-right' massing, and context examples. SD.73 The areas of interest include Federal and Devonshire Streets, and Winthrop Square itself. Daylight analyses should be taken for each major building facade fronting these public ways / spaces. The midpoint of each public roadway, and a reasonably centered point in the Winthrop Square space, should be taken as the study points. The BRADA program must be used for this analysis.

If a Proponent wishes to substitute a more contemporary computer program for the 1985 BRADA program, its equivalency must first be demonstrated to the satisfaction of BPDA staff before it is utilized for inclusion in the DPIR, and it must be commonly available to Boston development team users.

Infrastructure Systems Component

An infrastructure impact analysis must be performed.

The discussion of Proposed Project impacts on infrastructure systems should be organized system-by-system as suggested below. The applicant's submission must include an evaluation of the Proposed Project's impact on the capacity and adequacy of existing water, sewerage, energy (including gas and steam), and electrical communications (including telephone, fire alarm, computer, cable, etc.) utility systems, and the need reasonably attributable to the proposed project for additional systems facilities.

Any system upgrading or connection requiring a significant public or utility investment, creating a significant disruption in vehicular or pedestrian circulation, or affecting any public or neighborhood park or streetscape improvements, comprises an impact which must be mitigated. The DPIR must describe anticipated impacts in this regard, including specific mitigation measures, and must include nearby Proposed Project build-out figures in the analysis. The standard scope for infrastructure analysis is given below:

1. Utility Systems and Water Quality

a. Estimated water consumption and sewage generation from the Proposed Project and the basis for each estimate. Include separate calculations for air conditioning system make-up water SD.74

b. Description of the capacity and adequacy of water and sewer systems and an evaluation of the impacts of the Proposed Project on those systems; sewer and storm drain systems should include a tributary flow analysis as part of this description SD.75

c. Identification of measures to conserve resources, including any provisions for recycling or 'green' strategies, including green roofs SD.76

d. Description of the Proposed Project's impacts on the water quality of Boston Harbor or other water bodies that could be affected by the Project, if applicable SD.77

e. Description of mitigation measures to reduce or eliminate impacts on water quality SD.78

f. Description of impact of on-site storm drainage on water quality SD.79

g. Information on how the Proposed Project will conform to requirements of the Ground Water Trust under Article 32, if applicable, by providing additional recharge opportunities SD.80

h. Detail methods of protection proposed for infrastructure conduits and other artifacts, including the MBTA tunnels and station structures, and BSWC sewer lines and water mains, during construction SD.81

i. Detail the energy source of the interior space heating; how obtained, and, if applicable, plans for reuse of condensate. SD.82

Thorough consultation with the planners and engineers of the utilities will be required, and should be referenced in the Infrastructure Component section.

2. Energy Systems

a. Description of energy requirements of the project and evaluation of project impacts on resources and supply SD.83

b. Description of measures to conserve energy usage and consideration of the feasibility of including solar energy provisions or other on-site energy provisions, including wind, geothermal, and cogeneration.

Additional constraints or information required are described below. Any other system (emergency systems, gas, steam, optic fiber, cable, etc.) impacted by this development should also be described in brief.

SD.84

The location of transformer and other vaults required for electrical distribution or ventilation must be chosen to minimize disruption to pedestrian paths and public improvements both when operating normally and when being serviced, and must be described. If necessary, storm drain and sewage systems should be separated or separations provided for in the design of connections.

The Proponent should investigate energy strategies that take advantage of this

scale of construction, including those that incorporate green roof strategies as well as solar orientation and materials/systems that maximize efficiencies, daylighting strategies, wind, solar, and geothermal systems, and cogeneration. SD.84 (cont.)

G. INFRASTRUCTURE SYSTEMS COMPONENT

*The DPIR must address the comments of the Boston Water and Sewer Commission, dated February 20, 2017 and included in **Appendix A**.*

H. DEVELOPMENT IMPACT PROJECT COMPONENT

Based on the square footage and uses outlined in the Project Notification Form, the Proposed Project will be subject to and be required to enter into a Development Impact Project ("DIP or Linkage") agreement. A full analysis of square footage and uses should be submitted in the DPIR. SD.85

I. PUBLIC NOTICE

The Proponent will be responsible for preparing and publishing in one newspaper of general circulation in the City a Public Notice of the submission of the DPIR to the BPDA as required by Section 80A-2. This Public Notice shall be published within five (5) days after the receipt of the DPIR by the BPDA. Therefore, public comments shall be transmitted to the BPDA within seventy five (75) days of the publication of this Public Notice. A sample form of the Public Notice are attached as **Appendix D**.

Following publication of the Public Notice, the Proponent shall submit to the BPDA a copy of the published Public Notice together with the date of publication.

J. INCLUSIONARY DEVELOPMENT POLICY/ AFFORDABLE HOUSING COMPONENT

*The DPIR must address the comments of the Tim Davis, BPDA Housing Policy Manager, dated July 18, 2018 and included in **Appendix A**.*

K. ACCESSIBILITY CHECKLIST

As part of the DPIR, the Proponent must include an up to date and completed SD.86

Article 80 Accessibility Checklist for the Proposed Project. An Accessibility Checklist is attached to **Appendix E**. SD.86 (cont.)

11.2 Responses to City Agencies and IAG

Letter 1: BPDA Urban Design & Planning Department

Comment 1.1

Due to the importance of transportation for this project, transportation elements will need to be addressed early in the project phasing to account for a cumulative impact with other developments.

Response:

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), will be constructed upfront as part of the initial phase (except for West Street). Refer to Section 1.6 in Chapter 1, *Project Description and Alternatives*, for a project phasing description.

Comment 1.2

The project must also be viewed in the context of the 2012 Brighton/Guest Street Planning Study, which anticipated substantially less development on this site than the proponent is advocating.

Response:

As discussed in this EENF/DPIR, the Proposed Project is substantially consistent with the Guest Street Planning Study, as informed by the scale and massing of the adjacent Boston Landing Project. Refer to Section 1.8 of Chapter 1, *Project Description and Alternatives*, and Figure 1.7b for more details. Also, wind and shadow studies for this Build Alternative Condition are also provided in Sections 6.2.5 and 6.3.4 of Chapter 6, Environmental Protection, respectively.

Comment 1.3

While the study was completed prior to the opening of the Boston Landing MBTA Commuter Rail Station, this level of development will present significant challenges to the surrounding site; therefore, the Allston Yards development in a position to contribute a great deal to transportation improvements for the area.

Response:

Refer to Section 5.6.2 of Chapter 5, *Transportation,* for a description of the proposed pedestrian, bicycle, and vehicular connections to the Boston Landing MBTA commuter rail station adjacent to the Project Site.

Comment 1.4

In addition to the intersections previously counted for this project, several other intersections will provide critical data for the BPDA/BTD review of this project. The additional traffic counts should include:

- *Cambridge Street at Gordon Street*
- *Cambridge Street at Eleanor Street*
- *Cambridge Street at Dustin Street*

Response:

Refer to Section 5.3.1 of Chapter 5, *Transportation,* for a complete list of intersections studied, including the three intersections added at the request of BPDA/BTD.

Comment 1.5

In addition to the diverse elements suggested by the proponent, the proponent should also consider the following options:

- *The creation of Mobility MicroHUBs (Go Boston 2030)*
- *Designated Bus/Shuttle/Ride-share pick-up/drop-off areas*
- *Real-time transit and mobility information within all buildings*
- *Transit pass subsidies for employees and residents*
- *Contracted or site managed car share services and accommodations*
- *Electric Vehicle (EV) charging per BTD guidelines*
- *Joining the Allston/Brighton TMA*
- *Providing a subsidy for the emerging Allston/Brighton Shuttle program*

and/or MBTA bus service per an agreement with the MBTA.

Response:

Refer to Section 5.11.1 of Chapter 5, *Transportation*, for more details on the consideration of these elements.

Comment 1.6

The proponent should be commended for their upfront on a well designed roadway network, in particular their solution for the Guest Street Extension/Everett Street intersection. The proponent will need to continue to work with the City and the New Balance Development Team on designing a connection to the proposed Braintree Street Extension and the existing Arthur Street extension that works for all parties.

Response:

Since filing the PNF, the Proponent has met with BPDA staff to review concepts for a potential connection between the proposed Braintree Street Extension and the existing Arthur Street extension. The proposed design of the Braintree Street Extension provides for a connection to Arthur Street, should all stakeholders agree to allow such a connection to be made in the future. Refer to Section 5.6.2 of Chapter 5, *Transportation*, for more details on the proposed Braintree Street Extension.

Comment 1.7

The other proposed on-site street network and its integration with the surrounding off site/public street network is generally well designed. A long term goal of the City is the continuation of West Street out to North Beacon Street. All discussions with the proponent about allowing for the future extension of this street through abutting properties has been acknowledged and agreed to, however, the proponent should provide further advanced design of this extension between the proposed "Building 2" and "Community Green" to ensure its ease of feasibility and limit impacts on the existing site design and open space.

Response:

Since filing the PNF, the Proponent has advanced design of West Street Extension in response to BPDA and BCDC feedback. The current design introduces vehicle and pedestrian traffic on West Street, between the Community Green and Building A. The current design allows for a future connection to North Beacon Street, should other parties desire to extend West Street to North Beacon Street. As noted in Section 1.4.3 of Chapter 1, *Project Description and Alternatives*, this new West Street Extension has been laid out, dimensioned, and designed like a street, and program previously proposed there has been shifted into the body of the Community Green.

Comment 1.8

The approach to the MBTA station headhouse on Everett Street is a key pedestrian connection for the project and existing community. Therefore, design of this street should include robust sidewalks to provide for both pedestrian access to the station and sufficient space for a street furnishing zone.

Response:

Refer to 5.8.4 of Chapter 5, *Transportation*, for a description of the extensive improvements proposed at the site entrance off Everett Street and the associated sidewalk improvements. The width of the sidewalk along the western edge of Everett Street will be maintained at 8′ width, where the street is affected by the Project construction limits between the new Guest Street Extension and the Everett Street bridge's southern abutment. The Everett Street sidewalk will remain at the existing dimensions beyond the construction limit line. As discussed in 5.8.4 of Chapter 5,

Transportation, any additional widening of the Everett Street sidewalk within the bridge section over I-90 is not practicable. However, the Project will be making significant at-grade access enhancements to Boston Landing Station north of and adjacent to the Project Site. With those improvements and the construction of new sidewalks and bike lanes connecting the station to the Braintree Street neighborhood to the east access to Boston Landing Station will be improved considerably compared to existing conditions.

Comment 1.9

The City recommends that Everett Street between Guest Street and the MBTA station entrance should be built to include a 8-foot sidewalks plus a 3-foot furnishing zone for a total of 11-feet from the curb to fence/wall. This should be done in a way that does not impact the existing roadway width.

Response:

The pedestrian walk and Greenscape/Furnishing Zone varies in width from 11'-0" to 20'-4". The width of the sidewalk along the western edge of Everett Street will be maintained at 8' width where the street is affected due to the project construction. The Everett Street sidewalk will remain at the existing dimensions beyond the construction limit line. As discussed in 5.8.4 of Chapter 5, *Transportation,* any additional widening is not feasible due to physical constraints. However, with the improvements noted above and the planned at-grade enhancements to Boston Landing Station, access to this station will be notably improved for pedestrians in this area.

Comment 1.10

Working with the City, a package of off-site operational improvements to heavily impacted and poorly performing intersections will be determined as part of the project's transportation mitigation package. This may include signal timing and phasing improvements, pavement markings, signage and signal equipment upgrades and interconnect.

Response

Refer to Table10-1 of Chapter 10, *Summary of Mitigation Measures/ Draft Section 61 Findings*, for an overview of transportation mitigation and Chapter 5, *Transportation*, for a more detailed discussion.

Comment 1.11

The proponent should use a more aggressive parking ratio than stated for the office space usage for this project. Currently, it is listed as 2.0 spaces per 1,000 square feet, while the district-based goal for Allston/Brighton is 0.5 spaces per 1,000 square feet.

Response:

Refer to Section 5.7 of Chapter 5, *Transportation*, for a discussion on parking needs for the Project.

Comment 1.12

MBTA Bus Stations - Where existing, the proponent should analyze upgrading bus stops to bi-directional enhanced bus stations with real time countdown clocks, covered waiting areas, public art, and sufficient space to allow for multiple buses to pick up passengers. They should be designed to serve both MBTA and shuttle buses. Where not existing, such stations should be constructed in identified locations.

- *Existing stops at Arthur Street and Guest Street intersection should be upgraded to better serve users.*
- *New stops should be considered throughout the site along the Guest Street Extension. The Proponent mentions conversations with the MBTA about extending service through this area and possibly shifting routes to better serve those getting to the project site; this conversation should be continued going forward.*

Response:

As noted in Section 2.3 of Chapter 2, *Regulatory Context and General Information*, since filing the PNF, the Proponent has met with MBTA staff on numerous occasions to discuss bus-related infrastructure, including bus stops for Route 64. New bus stops are proposed on Guest Street, in both directions, between Arthur Street and West Street. The existing stops at Arthur and Guest Street will be discontinued and shifted to these new locations to better serve the demand of the supermarket and additional residences and offices. The Proponent will continue this coordination to ensure that the requirements of the MBTA are met.

Comment 1.13

MBTA Bus Services - Efficient and frequent bus services to the site will enable residents, employees, and visitors to quickly access the development site. Additionally, expanded bus services will potentially allow additional transportation mobility options for Allston residents. The Proponent should consider the following in reference to bus services improvements:

- *The 64 bus runs adjacent to the site at Guest Street and Arthur Street. The proponent should, in partnership with the MBTA, evaluate the feasibility and effectiveness of shifting bus service to be on all of Guest Street, possibly extending from Market Street on the West to Everett Street on the East.*
- *The proponent should, in partnership with the MBTA, evaluate restructuring of service schedules primarily for the 64 bus and trains that serve the Boston Landing MBTA stop to better accommodate transfer connections and new*

residents/employees of the development site. This rescheduling should place emphasis on service during evenings and weekends in order to improve upon the existing headways for MBTA service in the area.

Response:

As noted in Section 2.3 of Chapter 2, *Regulatory Context and General Information*, since filing the PNF, the Proponent has met with MBTA staff on numerous occasions to discuss service improvements to the Route 64 bus. The Proponent will continue this coordination as elements of the Proposed Project come on line. We are proposing on adding new MBTA bus stops on Guest Street to improve circulation in the area and are working with the MBTA to modify Route 64 bus to better serve this new neighborhood.

Comment 1.14

MBTA Bus Equipment - The proponent should work with the MBTA on the potential to provide funds for additional bus equipment for the MBTA to service the Allston Yards development site, primarily for the #64 route.

Response:

As noted in Section 2.3 of Chapter 2, *Regulatory Context and General Information*, since filing the PNF, the Proponent has met with MBTA staff on numerous occasions to discuss the Route 64 bus. The Proponent will continue this coordination as elements of the Proposed Project come on line.

Comment 1.15

Working with the City and the Allston Brighton TMA, the proponent should evaluate and consider joint shuttle services with nearby property owners and development teams. This should include considerations for expanding upon the new shuttle service to be operated by the Cabot, Cabot and Forbes team that will service their St Gabriel's development. Other potential partners include proponents of proposed development in the Everett Street corridor and north of I-90.

Response:

As noted in Section 5.8.1 of Chapter 5, *Transportation*, the Proposed Project is anticipated to include a generous "Kiss & Ride" area on Braintree Street Extension, adjacent to the Boston Landing MBTA commuter rail station. This area is intended to serve shuttle buses (including those contemplated for the St. Gabriel's development) as well as pick-up and drop-off activity. Since the Proposed Project is located within easy walking distance of the Boston Landing MBTA commuter rail station, the Proponent does not anticipate operating any shuttle services of its own.

Comment 1.16

The proponent should prepare a plan for providing a connection through a larger area than just the project site for bicycle access, on par with suggestions in the Brighton/Guest Street Planning Study. This development should continue regional bike connectivity.

Response:

Chapter 5, *Transportation*, provides a detailed discussion of access for auto, pedestrian, and bicycle traffic. Both Guest Street Extension and Arthur Street within the Site will feature separated bike lanes. Braintree Street Extension also will feature standard bike lanes on both sides of the roadway connecting the Boston Landing MBTA commuter rail station to the neighborhoods to the east. The bicycle facilities have been designed to connect seamlessly with the surrounding roadway network in the event that other roadways beyond that Site are modified in the future to feature the same level of accommodations as those provided within the Site.

Comment 1.17

The proponent should investigate a wayfinding solution for both bicyclists and pedestrians through and around the project area. This can be done in conjunction with an improved TDM plan. The scope of this wayfinding initiative should be considered along Guest Street from Market Street to Everett Street.

Response:

All of the Project roadways will feature standard traffic signage, which can be supplemented with additional wayfinding signage at key locations. It is expected that these signs primarily would direct bicyclists and pedestrian the Boston Landing Station MBTA commuter rail station, Boston Landing, and other notable uses in the area. Signage will be designed to be clear and effective, but unobtrusive so as not to create visual clutter from excessive signage. See Section 3.4.3 of Chapter 3, *Urban Design,* for further discussion of wayfinding signage.

Comment 1.18

Expansion of the BLUEbikes network into Allston Brighton to supplement the existing public transit network is a priority of Boston Bikes. The proponent should work with that team to locate stations or provide other support for the network in this area. Connecting the Boston Landing station to BLUEbikes will be a key to continuing improvement of transit in this area.

Response:

Refer to Section 5.8.5 of Chapter 5, *Transportation*, for more details on bicycle accommodations, including bike-sharing. The nearest Bluebike public bike share station is located at 20 Guest Street approximately ¼-mile to the west. The

Proponent is committed to installing a new Bluebike station at the Proposed Project if desired by the City, or as demand warrants.

Comment 1.19

Compliance with BTD bicycle parking
guidelines to serve both the general public and specific site uses, as well as facilities for future employees to accommodate cycling.

Response:

Refer to Section 5.8.5 of Chapter 5, *Transportation*, for more details.

Comment 1.20

Provide phasing diagrams to show
when the different elements of the project will be delivered and how the parcels will be programmed/managed before they are developed.

Response:

Refer to Section 1.4 6 in Chapter 1, *Project Description and Alternatives*, for a project phasing description, and Figure 1.6 for a diagram for a project phasing diagram showing how the parcels will be programmed/managed before they are developed.

Comment 1.21

More documentation on the specifics of Phase 1 will also be needed if approval of that phase is anticipated with approval of the PDA. This should include the standard Article 80 large project review documentation like wind and shadow studies and more detailed information on architecture.

Response:

A higher level of detail is provided for Building A as the initial development phase (in addition to the street and utility infrastructure for the full build-out) in Section 1.6 and Section 3.4.4. 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 Phase 1 wind and shadow conditions are provided n Sections 6.2.4 and 6.3.3 of Chapter 6, *Environmental Protection*, respectively.

Comment 1.22

An initial plan for utilities, including transformers, gas trains, and gas meters should be developed. All of these items should be interior to the buildings.

Response:

Refer to Figure 8.2 for the proposed utilities plan. The Project Team will evaluate the locations of the infrastructure and locate them inside the building where feasible.

Comment 1.23

The DPIR should include thoughtful alternatives to the proposed project. At a minimum there should be a Guest Street Area Planning Study compliant project.

Response:

Refer to Section 1.8 of Chapter 1, *Project Description and Alternatives*, for an analysis of project alternatives, particularly for a description of the Guest Street Area Planning Study Build Alternative.

Comment 1.24

The height on Building 1 should move away from Everett Street (as has been shown in subsequent presentations). Building 2 should be stepping down in height towards the smaller scale neighborhoods to the south and east.

Response:

Building heights have been reduced on three out of the 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 shifting building height of Building B (formally Building 2) away from Everett Street and stepping down the height of Building A (formerly Building 1) significantly (from 200 feet to 85 feet). Refer to Section 3.4.1 of Chapter 3, *Urban Design*, for more details on proposed height and massing.

Comment 1.25

...more variety in height should be explored. The adjacent PDA 87 area has a variety in height and massing, which creates an interesting and lively skyline from the neighborhood and turnpike. This idea of variety of height and massing should be extended into the Allston Yards area.

Response:

The design of the Proposed Project has evolved with an intent of introducing diversity in height and massing. Building heights have been reduced on three out of the 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 shifting building height of Building B (formally Building 2) away from Everett Street and stepping down the height of Building A significantly (from 200 feet to 85 feet).

Refer to Section 3.4.1 of Chapter 3, *Urban Design*, for more details on proposed height and massing.

Comment 1.26

Braintree Street needs to be designed with full, comfortable sidewalks and a separated bike path at the north side at a minimum. People coming from the east will likely use Braintree Street as access to the commuter rail.

Response:

The Project Team is working with the MBTA to provide a robust sidewalk and striped 5-foot bike lanes in each direction on Braintree Street Extension between Everett Street overpass and the Boston Landing MBTA commuter rail station. Refer to Section 5.6.2 of Chapter 5, *Transportation*, for more details related to pedestrian and bicycle enhancements on Braintree Street Extension.

Comment 1.27

Additionally, explore the possibility of connecting the Arthur Street Extension to Braintree Street Extension. This would improve connectivity and simplify the route of shuttle buses and delivery trucks.

Response:

Since filing the PNF, the Proponent has met with BPDA staff to review concepts for a potential connection between the proposed Braintree Street Extension and the existing Arthur Street extension. The proposed design of the Braintree Street Extension provides for a connection to Arthur Street, should all stakeholders agree to allow such a connection to be made in the future. Refer to Section 5.6.2 of Chapter 5, *Transportation*, for more details on the proposed Braintree Street Extension.

Comment 1.28

The massing of Building 2 should be adjusted (pull the south corner in) to allow a clearer potential connection to North Beacon Street along the side of 61 North Beacon Street. Options for this future connection should be explored in the DPIR.

Response:

Since filing the PNF, the Proponent has advanced design of West Street Extension in response to BPDA and BCDC feedback. The current design introduces vehicle and pedestrian traffic on West Street, between the Community Green and Building A. The current design allows for a future connection to North Beacon Street, should other parties desire to extend West Street to North Beacon Street. As noted in Section 1.4.3 of Chapter 1, *Project Description and Alternatives*, this new West Street

Extension has been laid out, dimensioned, and designed like a street, and program previously proposed there has been shifted into the body of the Community Green.

Comment 1.29

Opportunities to add street trees to Arthur Street should be advanced. While the earlier idea of a boulevard may not be right for this street, providing it with a generous tree canopy will make it a much more pleasant and functional approach to Boston Landing and Allston Yards for all modes of transportation, and adding tree canopy, wherever possible, works toward dissipating heat island effect.

Response:

Refer to Section 3.6.2 of Chapter 3, *Urban Design*, and Figures 3.25a-b for more details of the proposed Arthur Street streetscape design.

Comment 1.30

The intersection of Arthur and the Guest Street Extension should be more fully considered, including the area to the west of the intersection where the 64 bus stop is.

Response:

A full signalized design of the entire Guest Street/Arthur Street intersection is proposed as part of the Proposed Project. Refer to Section 5.6.2 of Chapter 5, Transportation, for further details.

Comment 1.31

The last block of the south side of the Guest Street Extension where it meets Everett Street appears narrow and less conforming with Complete Streets. Is there a way to set this up so that there is space for a sidewalk similar to the ones in the other blocks.

Response:

The connection of Guest Street to Everett Street has been shifted further to the north to provide space for a much wider sidewalk.

Comment 1.32

Evaluate the sidewalks from the Guest Street extension to the Everett Street Bridge. This should meet Complete Streets Guidelines in the reconstructed portions, particularly on the west side of the street. See comments in the Architecture section on the relationship of Building 1 to Everett Street for more information.

Response:

Due to varied grade conditions along Everett Street, there will be no Frontage Zone related to retail. The pedestrian walk and Greenscape/Furnishing Zone varies in

width from 10′-6″ to 20′-4″. The combination of Greenscape/Furnishing Zone and Pedestrian Zone along the west side of Everett Street will maintained at a minimum of 11′. Where there is additional room, a planted buffer will be provided between the building wall and the Furnishing and Pedestrian Zone.

Comment 1.33

The new crosswalk at the north side of the Guest Street Extension and Everett Street appears to have accessibility issues created by grade issues. Provide larger scale drawings of the proposal at this intersection including grading information.

Response:

Refer to Figure 5.45 in Chapter 5, *Transportation*, for grading information at this intersection.

Comment 1.34

The proposed restaurant at the corner of Arthur Street and the Guest Street extension should be eliminated to allow that corner to fully function as open space and extend the streetscape along the eastern edge of Arthur Street. Consider the relationship of this space with the smaller area across Arthur Street.

Response:

The previously proposed standalone restaurant within the Community Green has been removed in lieu of an expanded green space in response to community comments.

Comment 1.35

The open space at the corner of Arthur and Guest Streets should be designed to anticipate the possible future West Street extension. So rather than using that area as a focus of landscape design (as has been shown in recent meetings), it should laid out and paved like a Street and program currently proposed there should be moved into the body of the park, so that the future street extension is not perceived as a loss of open space. Similarly, the southern edge of the park should be designed so that the park could be readily expanded into the adjacent Volvo Village site.

Response:

Since filing the PNF, the Proponent has advanced design of West Street Extension in response to BPDA and BCDC feedback. The current design introduces vehicle and pedestrian traffic on West Street, between the Community Green and Building A. The current design allows for a future connection to North Beacon Street, should other parties desire to extend West Street to North Beacon Street. As noted in Section 1.4.3 of Chapter 1, *Project Description and Alternatives*, this new West Street

Extension has been laid out, dimensioned, and designed like a street, and program previously proposed there has been shifted into the body of the Community Green.

The southern edge of the Community Green is designed as a "soft" [planted] edge to allow the most flexibility for future southward expansion, should that be desired by the relevant parties.

Comment 1.36

Include street cross sections showing the detail of the sidewalks and planted edge.

Response:

Refer to Figures 3.25a and 3.25b for streetscape cross-sections.

Comment 1.37

Consider infilling between Building 1 and Everett Street to better allow a complete street sidewalk and a row of trees between the sidewalk and the building.

Response:

The area located between Building B (formerly Building 1) and Everett Street will be infilled to create an on-grade condition adjacent to Everett Street in order to accommodate trees, vegetation, and a wider sidewalk.

Comment 1.38

The connection across the turnpike on Everett is going to be increasingly important to the development of the larger area and it needs to work for pedestrians and bicycles as well as cars and trucks.

Response:

Refer to 5.6.2 of Chapter 5, *Transportation,* for a description of the extensive improvements proposed at the site entrance off Everett Street. In addition, as noted in the response to Comment SD.51 above, the area located between Building B (formerly Building 1) and Everett Street will be infilled to accommodate trees, and vegetation, and a wider sidewalk.

Comment 1.39

The north-south orientation of the tower portions of the buildings is not ideal for energy use, so perhaps that leads to some design solutions that help manage energy while giving some form/detail to the towers. Smaller, punched openings and creative use of facade material shapes and forms could be explored.

Response:

As discussed in Chapter 1, *Project Description and Alternatives*, the Proponent has modified the proposed development program and building height/massing. These modifications enabled the Project Team to further consider the building massing and orientation in relation to the neighboring development and planned street layout. The re-orientation of some of the tower portions of the buildings to place the larger elevations be in a more East-West configuration in combination with a thoughtful building envelope design may result in increased energy efficiency. The building envelope design has been advanced for Building A only. Thus, the design of the tower elements of Buildings B, C, and D is conceptual and do not include proposed façade materials or openings. These design details of Buildings B, C, and D will be reviewed and modeled for energy efficiency as part of future design review once they are advanced.

Comment 1.40

Signage will be reviewed and approved with each individual building. An area signage master plan is encouraged in addition to building specific signage plans. Note that retail and residential signage is generally located at entrances to those establishments.

Response:

Refer to Section 3.4.3 of Chapter 3, *Urban Design*, for more details related to signage.

Comment 1.41

As the redesign of the Everett Street abutment advances to accommodate the relocated intersection at the Guest Street Extension and the steeper grades that will be required to meet the existing bridge, efforts should be made to reuse the granite that currently comprises the abutment walls, particularly where they land in areas that are visible from or immediately adjacent to public realm. Alternatively, the granite should be salvaged and incorporated into the public realm.

Response:

The Everett Street granite abutment wall will be reconfigured at the corner of Everett and Braintree Street at the north-east corner of Building B to accommodate the change in grade from Braintree up to Everett Street to maintain the grades of the street along the building. The granite walls along Everett will be rebuilt to match the existing conditions while accommodating the new grades. Excess stone will be stockpiled for use in the landscape at the new Community Green to the extent feasible depending on stakeholder input on the Community Green design.

Comment 1.42

Written description of program elements and space allocation (in square feet) for each element, as well as Project totals.

Response:

Refer to Table 1-2 of Chapter 1, *Project Description and Alternatives.*

Comment 1.43

Neighborhood plan, elevations and sections (in multiple directions) at an appropriate scale (1 '=100' or larger as determined by the BPDA) showing relationships of the proposed project to the neighborhood context:

a. Massing

b. Building height

c. Scaling elements

d. Open space

e. Major topographic features

f. Pedestrian and vehicular circulation

g. Land use

Response:

The supporting figures of Chapter 3, *Urban Design*, includes the requested plans.

Comment 1.44

Color, or black and white 8"x10" photographs of the site and neighborhood.

Response:

Refer to Figure 1.4 at the end of Chapter 1, *Project Description and Alternatives*.

Comment 1.45

Sketches and diagrams to clarify design issues and massing options.

Response:

Refer to Figures 3.4 for massing concept diagram.

Comment 1.46

Eye-level perspective (reproducible line or other approved drawings) showing the proposal (including main entries and public areas) in the context of the surrounding area. Views should display a particular emphasis on important viewing areas such as key intersections, pathways, or public parks/attractions... Long ranged (distanced) views of the proposed project must also be studied to assess the impact on the skyline or other view lines... All perspectives should show (in separate comparative sketches) at least both the build and no-build conditions; any alternatives proposed should be compared as well. The BPDA should approve the view locations before analysis is begun. We suggest at least the following viewpoints: up and down Everett, Arthur, and Guest Streets including from outside of the project site by several blocks; from across the turnpike and the crest of the Everett Street overpass; the crest of the Cambridge Street overpass; any visibility from the southern crests of Dustin or Cambridge Streets. View studies should be cognizant of light and shadow, massing and bulk.

Response:

Refer to Figure 3.8 and Figures 3.9a through 3.9p for various view perspectives, which have been reviewed in advance by BPDA staff.

Comment 1.47

Additional aerial or skyline views of the project, if and as requested.

Response:

Refer to Figure 3.10 for aerial view of the Project.

Comment 1.48

Site sections at 1 "=20' or larger (or other scale approved by the BPDA) showing relationships to adjacent buildings and spaces. Multiple sections through the site and the surrounding context (two to three blocks on all sides) should be provided.

Response:

Refer to Figures 3.5a-b and 3.6 for details on building and neighborhood sections, respectively.

Comment 1.49

Site plan(s) at an appropriate scale (1 "=20' or larger, or as approved by the BPDA) showing:

a. General relationships of proposed and existing adjacent buildings and open spaces

b. Open spaces defined by buildings on adjacent parcels and across streets

c. General location of pedestrian ways, driveways, parking, service areas, streets, and major landscape features

d. Pedestrian, handicapped, vehicular and service access and flow through the parcel and to adjacent areas

e. Survey information, such as existing elevations, benchmarks, and utilities

f. Phasing possibilities

g. Construction limits

Response:

Refer to Figures 1.5 for proposed site condition, Figure 1.6 for phasing diagram, Figure 3.21 for circulation diagram, and Figure 3.24 for conceptual landscape plan.

Comment 1.50

Massing model (ultimately in basswood) at 1":40'0" for use in the Agency's Downtown Model.

Response:

A physical massing model will be provided as requested.

Comment 1.51

Study model(s) at 1" = 16' or 1" = 20' showing preliminary concept of setbacks, cornice lines, fenestration, facade composition, etc. are recommended.

Response:

A physical study model will be provided as requested.

Comment 1.52

Drawings at an appropriate scale (e.g., 1":16'0", or as determined by BPDA) describing architectural massing, facade design and proposed materials including:

a. Building and site improvement plans. Include any exterior utilities like transformers.

b. Neighborhood elevations, sections, and/or plans showing the

c. Development in the context of the surrounding area

d. Sections showing organization of functions and spaces, and relationships to adjacent spaces and structures

e. Preliminary building plans showing ground floor and typical upper floor(s).

f. Phasing, if any, of the Proposed Project

Response:

Refer to Figures 3.1a-b for existing and proposed neighborhood context plans, Figures 3.3a-h for proposed floor plans, Figure 3.6 for details of neighborhood sections, and Figures 3.11 through 3.20 for Phase 1 conditions (Building A). Refer to Section 1.6 in Chapter 1, *Project Description and Alternatives*, for a project phasing description.

Comment 1.53

A written and/or graphic description of the building materials and its texture, color, and general fenestration patterns is required for the proposed development.

Response:

Refer to Section 3.4.2 of Chapter 3, *Urban Design*.

Comment 1.54

Electronic files describing the site and Proposed Project.

Response:

An electronic version of this EENF/DPIR filing has been uploaded to the BPDA website.

Comment 1.55

Full responses, which may be in the formats listed above (and more), to any urban design-related issues raised in preliminary reviews or specifically included in the BPDA scoping determination, preliminary adequacy determination, or other document requesting additional information leading up to BPDA Board action, inclusive of material required for Boston Civic Design Commission review.

Response:

Direct responses are provided herein.

Comment 1.56

Proposed schedule for submission of all design or development-related materials.

Response:

The timing of this filing was discussed with the BPDA at multiple pre-filing meetings.

Comment 1.57

Diagrammatic sections through the neighborhood (to the extent not covered in item #2 above) cutting north-south and east-west at the scale and distance indicated above.

Response:

Refer to Figure 3.6 for more details.

Comment 1.58

True-scale three-dimensional graphic representations of the area indicated above either as aerial perspective or isometric views showing all buildings, streets, parks, and natural features.

Response:

Refer to Figure 3.10 for 3D view.

Comment 1.59

A daylight analysis for both build and no-build conditions shall be conducted by measuring the percentage of skydome that is obstructed by the Proposed Project building(s) and evaluating the net change in obstruction. If alternative massing studies are requested (which see above) or result as part of the Article 80 development review process, daylight analysis of such alternatives shall also be conducted for comparison. The study should treat three elements as controls for data comparisons: existing conditions, the 'as-of-right' massing, and context examples... The BRADA program must be used for this analysis.

Response:

Refer to Section 6.4 of Chapter 6, *Environmental Protection*, for details on the daylight analysis.

Comment 1.60

The DPIR must describe anticipated impacts with respect to significant public or utility investment creating a significant disruption in vehicular or pedestrian circulation or affecting any public or neighborhood park or streetscape, including specific mitigation measures, and must include nearby Proposed Project build-out figures in the analysis.

Response:

Refer to Chapter 10, *Mitigation*, for a summary of proposed mitigation measures for the Project.

Comment 1.61

Estimated water consumption and sewage generation from the Proposed Project and the basis for each estimate. Include separate calculations for air conditioning system make-up water.

Response:

Refer to Sections 8.4, 8.5, and 8.6.4 in Chapter 8, *Infrastructure*, for estimates for wastewater generation, water demand, and HVAC system respectively.

Comment 1.62

Description of the capacity and adequacy of water and sewer systems and an evaluation of the impacts of the Proposed Project on those systems; sewer and storm drain systems should include a tributary flow analysis as part of this description.

Response:

Refer to Sections 8.3 and 8.4 in Chapter 8, *Infrastructure*.

Comment 1.63

Identification of measures to conserve resources, including any provisions for recycling or 'green' strategies, including green roofs.

Response:

Refer to Section 4.3.2 for compliance with Article 37 and Chapter 4, *Sustainability and Climate Change Resiliency*, for recycling strategies, life-cycle assessment (LCA), and discussion of "green" strategies.

Comment 1.64

Description of the Proposed Project's impacts on the water quality of Boston Harbor or other water bodies that could be affected by the Project, if applicable.

Response:

Refer to Section 8.3 in Chapter 8, *Infrastructure*.

Comment 1.65

Description of mitigation measures to reduce or eliminate impacts on water quality.

Response:

Refer to Section 8.3 in Chapter 8, *Infrastructure*.

Comment 1.66

Description of impact of on-site storm drainage on water quality.

Response:

Refer to Section 8.3 in Chapter 8, *Infrastructure*.

Comment 1.67

Information on how the Proposed Project will conform to requirements of the Ground Water Trust under Article 32, if applicable, by providing additional recharge opportunities.

Response:

The Project is not within the Ground Overlay District but will comply with BWSC standards by collecting and infiltrating 1.25-inches of rainwater over all impervious areas.

Comment 1.68

Detail methods of protection proposed for infrastructure conduits and other artifacts, including the MBTA tunnels and station structures, and BSWC sewer lines and water mains, during construction.

Response:

The Proposed Project will coordinate all methods of infrastructure protection with both the MBTA and BWSC. Sewer inspection and vibration monitoring will be put in place as necessary and as required by each agency.

Comment 1.69

Detail the energy source of the interior space heating; how obtained, and, if applicable, plans for reuse of condensate.

Response:

Refer to Section 7.3 of Chapter 7, *Greenhouse Gas Emissions Assessment*, for the proposed energy conservation measures assumed in the energy model for each building, which includes high efficiency boilers.

Comment 1.70

Description of energy requirements of the project and evaluation of project impacts on resources and supply.

Response:

Refer to Section 7.3 of Chapter 7, *Greenhouse Gas Emissions Assessment*, for more details.

Comment 1.71

Description of measures to conserve energy usage and consideration of the feasibility of including solar energy provisions or other on-site energy provisions, including wind, geothermal, and cogeneration… Any other system (emergency systems, gas, steam, optic fiber, cable, etc.) impacted by this development should also be described in brief… The location of transformer and other vaults required for electrical distribution or ventilation must be chosen to minimize disruption to pedestrian paths and public improvements both when operating normally and when being serviced, and must be described… The Proponent should investigate energy strategies that take advantage of this scale of construction, including those that incorporate green roof strategies as well as solar orientation and materials/systems that maximize efficiencies, daylighting strategies, wind, solar, and geothermal systems, and cogeneration.

Response:

Refer to Section 7.3.5 in Chapter 7, *Greenhouse Gas Emissions Assessment*, for more details regarding systems to be considered as part of the District Energy/Microgrid Feasibility Study.

MEMORANDUM

TO: Casey Hines, Project Manager

FROM: UD/Planning Staff

DATE: July 18th, 2018

SUBJECT: Allston Yards Redevelopment

Allston Yards

Project Notification Form

Scoping Comments

BACKGROUND

This project site is proposed to be developed by the Stop & Shop Supermarket Company LLC ("Stop & Shop") with New England Development as the Master Developer. This project is intended to replace the existing retail center at 60 Everett Street in the Allston neighborhood of Boston. The existing retail center contains a Stop & Shop location that will be expanded upon and the new development will be mixed-use and transit oriented. This 1.9 M square foot development is expected to be phased in over the next several years. The Proposed Project will include residential, office, grocery, restaurant, fitness and retail uses, as well as new activated open space for community use.

The large parcel that this Proposed Project is on is central to the Allston neighborhood and was of critical concern during the Brighton/Guest Street

Planning Study. The PNF outlines an emphasis on mobility and connections while referencing the Brighton/Guest Street Planning Study. It will be important to continue to build upon these past studies and planning initiatives in order to properly address the needs of this crucial area.

Note that these scoping comments directly address the filed Project Notification Form. Some of the issues included in these comments have been addressed in the continuing development of the project since the filing, particularly through meetings with the community and BPDA staff.

TRANSPORTATION

Allston Yards is a significant project with substantial implications for the district transportation network. The project's scale and scope require the extension of an existing street (Guest Street), creation of new streets and intersections, and improvements to bike and transit access. Due to the importance of transportation for this project, transportation elements will need to be addressed early in the project phasing to account for a cumulative impact with other developments. 1.1

The project must also be viewed in the context of the 2012 Brighton/Guest Street Planning Study, which anticipated substantially less development on this site than the proponent is advocating. 1.2 This study suggested that the amount of long-term development the area would be able to handle without significant changes to transportation infrastructure would be 1.35-1.75 M square feet. Before this project and after the study there has been almost 3.8 M square feet of development

approved in the study area, meaning this development will add on to the transportation challenges shared by others that need to be resolved. While the study was completed prior to the opening of the Boston Landing MBTA Commuter Rail Station, this level of development will present significant challenges to the surrounding site; therefore, the Allston Yards development in a position to contribute a great deal to transportation improvements for the area. 1.3

The City's comments are a detailed analysis of technical issues, incorporate comments from community feedback, and provide context for the next round of public review. The sections are divided between Transportation/Site Access and Urban Design/Architecture; however, there are points of overlap between the two sections.

Transportation & Site Access

Transportation and site access will be critical factors for determining the future success of the Allston Yards project. Existing transportation networks in the Allston neighborhood are burdened and site access is constrained by existing congested roadways. However, the site also represents the potential to improve neighborhood connectivity to the rest of the Allston/Brighton neighborhood.

The Transportation and Site Access chapter includes sections on modeling methodology, Transportation Demand Management (TDM), Site Access and Internal Circulation, Parking and Loading, Transit Network and Accommodations, and Bike Network and Accommodations. Additional transportation related elements related to the City's Complete Streets design guidelines including pedestrian network

design, public realm design, and building design features are included in the Urban Design and Architecture chapter.

Modeling Methodology

The Proponent uses BTD standards in their trip generation methodology. They Proponent's analysis claims an overestimation of traffic generation and impacts which could be beneficial for accommodating actual future impacts. This will be important given the surrounding developments and further-reaching connections that may be made through this area.

In addition to the intersections previously counted for this project, several other intersections will provide critical data for the BPDA/BTD review of this project. The additional traffic counts should include: 1.4

- Cambridge Street at Gordon Street
- Cambridge Street at Eleanor Street
- Cambridge Street at Dustin Street

Transportation Demand Management Overview

The proponent has outlined a comprehensive plan for implementing a TDM program which includes traditional commuter and residential-oriented measures and also measures for the grocery and retail use of the development. In addition to the diverse elements suggested by the proponent, the proponent should also consider the following options:

- The creation of Mobility MicroHUBs (Go Boston 2030) 1.5
- Designated Bus / Shuttle / Ride-share pick-up/drop-off areas
- Real-time transit and mobility information within all buildings
- Transit pass subsidies for employees and residents

- Contracted or site managed car share services and accommodations
- Electric Vehicle (EV) charging per BTD guidelines
- Joining the Allston/Brighton TMA
- Providing a subsidy for the emerging Allston/Brighton Shuttle program and/or MBTA bus service per an agreement with the MBTA.

1.5 (cont.)

These elements will ensure the Allston Yards community has a comprehensive set of transportation options and will help to ease the burden on the Allston neighborhood and broader Allston-Brighton area.

Site Access, Internal Circulation & Off-site Network Impacts

The proponent outlines a comprehensive system of internal streets and improvements to surrounding streets which include new and improved intersections and signals as well as pedestrian/bicycle accommodations. The inclusion of network improvements like the Braintree Street Extension, Guest Street Extension, Guest Street/Arthur Street intersection improvements, and the proposed geometric design of the Guest Street Extension/Everett Street intersection are important elements for the early stages of this project.

Key considerations as the project is refined include:

- The proponent should be commended for their upfront on a well designed roadway network, in particular their solution for the Guest Street Extension/Everett Street intersection. The proponent will need to continue to work with the City and the New Balance Development Team on designing a

1.6

connection to the proposed Braintree Street Extension and the existing Arthur Street extension that works for all parties. 1.6 (cont.)

- The other proposed on-site street network and its integration with the surrounding off site/public street network is generally well designed. A long term goal of the City is the continuation of West Street out to North Beacon Street. All discussions with the proponent about allowing for the future extension of this street through abutting properties has been acknowledged and agreed to, however, the proponent should provide further advanced design of this extension between the proposed "Building 2" and "Community Green" to ensure its ease of feasibility and limit impacts on the existing site design and open space. 1.7

- The approach to the MBTA station headhouse on Everett Street is a key pedestrian connection for the project and existing community. Therefore, design of this street should include robust sidewalks to provide for both pedestrian access to the station and sufficient space for a street furnishing zone. The City recommends that Everett Street between Guest Street and the MBTA station entrance should be built to include a 8-foot sidewalks plus a 3-food furnishing zone for a total of 11-feet from the curb to fence/wall. This should be done in a way that does not impact the existing roadway width. 1.8 1.9

Working with the City, a package of off-site operational improvements to heavily impacted and poorly performing intersections will be determined as part of the project's transportation mitigation package. This may include signal timing and 1.10

phasing improvements, pavement markings, signage and signal equipment upgrades and interconnect. 1.10 (cont.)

Parking & Loading

Parking and loading are key considerations for internal circulation, access to city streets, and pedestrian/bike networks. The proponent has outlined a plan for keeping loading on the north end of the Site via the Braintree Street Extension. The City recognizes this as a key component that needs to be confirmed. Aside from the work put forth by the proponent thus far, key consideration should be given to the following items:

- The proponent should use a more aggressive parking ratio than stated for the office space usage for this project. Currently, it is listed as 2.0 spaces per 1,000 square feet, while the district-based goal for Allston/Brighton is 0.5 spaces per 1,000 square feet. 1.11

Transit Network & Accommodations

Transit will be a key element for the success of the Allston Yards site. Additionally, adequate transit upgrades have the potential to provide substantial benefits to the project and surrounding neighborhood. The transit section describes primarily key bus improvements to the Site. The Proponent mentions that "a substantial portion of the Proposed Project-generated trips is expected to use the MBTA transit system..." This highlights the significance that bus service will have in the area, especially with the 64 bus running adjacent to the site.

The transit improvements that should be included in the Allston Yards program include:

- MBTA Bus Stations - Where existing, the proponent should analyze upgrading bus stops to bi-directional enhanced bus stations with real time countdown clocks, covered waiting areas, public art, and sufficient space to allow for multiple buses to pick up passengers. They should be designed to serve both MBTA and shuttle buses. Where not existing, such stations should be constructed in identified locations. 1.12
    - Existing stops at Arthur Street and Guest Street intersection should be upgraded to better serve users.
    - New stops should be considered throughout the site along the Guest Street Extension. The Proponent mentions conversations with the MBTA about extending service through this area and possibly shifting routes to better serve those getting to the project site; this conversation should be continued going forward.

- MBTA Bus Services - Efficient and frequent bus services to the site will enable residents, employees, and visitors to quickly access the development site. Additionally, expanded bus services will potentially allow additional transportation mobility options for Allston residents. The Proponent should consider the following in reference to bus services improvements: 1.13
    - The 64 bus runs adjacent to the site at Guest Street and Arthur Street. The proponent should, in partnership with the MBTA, evaluate the feasibility and effectiveness of shifting bus service to be on all of Guest

Street, possibly extending from Market Street on the West to Everett Street on the East.

- The proponent should, in partnership with the MBTA, evaluate restructuring of service schedules primarily for the 64 bus and trains that serve the Boston Landing MBTA stop to better accommodate transfer connections and new residents/employees of the development site. This rescheduling should place emphasis on service during evenings and weekends in order to improve upon the existing headways for MBTA service in the area. 1.13 (cont.)

- MBTA Bus Equipment - The proponent should work with the MBTA on the potential to provide funds for additional bus equipment for the MBTA to service the Allston Yards development site, primarily for the #64 route. 1.14

- Working with the City and the Allston Brighton TMA, the proponent should evaluate and consider joint shuttle services with nearby property owners and development teams. This should include considerations for expanding upon the new shuttle service to be operated by the Cabot, Cabot and Forbes team that will service their St Gabriel's development. Other potential partners include proponents of proposed development in the Everett Street corridor and north of I-90. 1.15

Bicycle Network & Accommodations

Proper bike infrastructure will enable residents, employees, and visitors to access the site by bicycle. This will enable users to have access to an active transportation

mode that is safe, reliable, and convenient. The proponent has outlined measures to improve the bicycle network in the area that are consistent with current BTD guidelines. Key elements for further consideration include:

- The proponent should prepare a plan for providing a connection through a larger area than just the project site for bicycle access, on par with suggestions in the Brighton/Guest Street Planning Study. This development should continue regional bike connectivity. 1.16

- The proponent should investigate a wayfinding solution for both bicyclists and pedestrians through and around the project area. This can be done in conjunction with an improved TDM plan. The scope of this wayfinding initiative should be considered along Guest Street from Market Street to Everett Street. 1.17

- Expansion of the BLUEbikes network into Allston Brighton to supplement the existing public transit network is a priority of Boston Bikes. The proponent should work with that team to locate stations or provide other support for the network in this area. Connecting the Boston Landing station to BLUEbikes will be a key to continuing improvement of transit in this area. 1.18
- Compliance with BTD bicycle parking guidelines to serve both the general public and specific site uses, as well as facilities for future employees to accommodate cycling. 1.19

URBAN DESIGN AND ARCHITECTURE

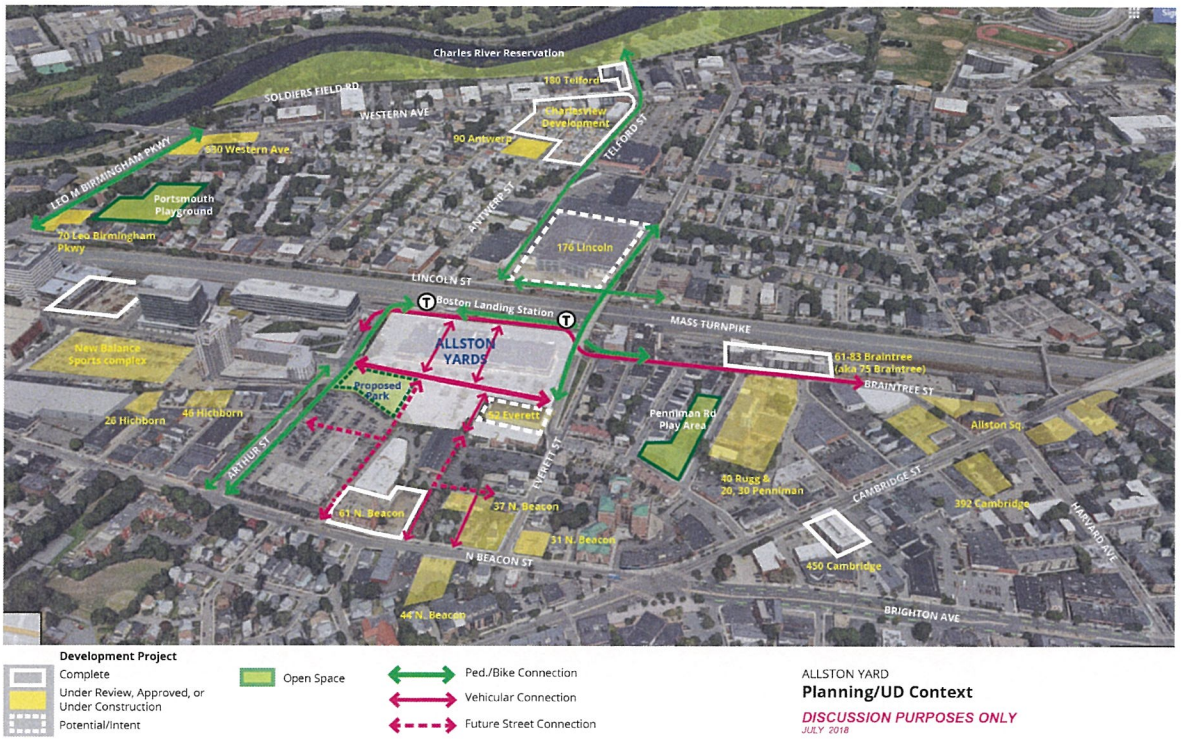
The site of the proposed Allston Yards project is currently occupied by a 100,000 square foot retail shopping center anchored by a Stop & Shop supermarket and a large surface parking lot. It is appreciated that this is not the best use of space within the city, particularly as Boston confronts the need for additional housing. The site is also adjacent to the 15 acre Boston Landing development and the anticipated development at the five acre Boston Volvo Village. It is also near the burgeoning developments in the area between North Beacon, Cambridge, and Braintree Streets. Close to three million square feet of new construction are anticipated in the immediate neighborhood. The design, density, and connectivity of this site are reviewed in the context of the rapid expansion of the area along with significant improvements in transit through the Boston Landing commuter rail stop.

Part of understanding how this project will interact with other developments in the area requires more in depth understanding of the phasing of the project. Provide phasing diagrams to show when the different elements of the project will be delivered and how the parcels will be programmed/managed before they are developed. Surface parking is discouraged as an interim use, excepting construction parking. 1.20

More documentation on the specifics of Phase 1 will also be needed if approval of that phase is anticipated with approval of the PDA. This should include the standard Article 80 large project review documentation like wind and shadow studies and more detailed information on architecture. 1.21

An initial plan for utilities, including transformers, gas trains, and gas meters should be developed. All of these items should be interior to the buildings. 1.22

See the following Planning/UD Context showing nearby projects and transit connections:



We reserve the right to add additional comments and concerns during the course of the process of combined BPDA and BCDC review, which may affect the responses detailed in the DPIR.

Zoning

The proposed project is located near the center of the 2012 Guest Street Area Planning Study. This study has been instrumental in guiding the development in the area, and is the result of a significant community planning process.

Basing this large proposed development in a significant transportation improvement, the extension of Guest Street and reconfiguration of the

Guest/Everett intersection, is a good place to start. See the transportation section for more comments, but note that a clear understanding of how the proposed additional people in this area will impact the commuter rail, bus network, bicycle and pedestrian movement, automobile traffic and appropriate mitigation will be key to the success of the project.

Alternatives

The DPIR should include thoughtful alternatives to the proposed project. At a minimum there should be a Guest Street Area Planning Study compliant project. 1.23

Neighborhood Context and Scale

As has been noted in preliminary meetings, the proposal for four buildings over 200' is challenging in this area. In the Guest Street Area Planning Study a height of 150' was contemplated along the the turnpike stepping down to the neighborhood. The height on Building 1 should move away from Everett Street (as has been shown in subsequent presentations). Building 2 should be stepping down in height towards the smaller scale neighborhoods to the south and east. 1.24

Additionally, more variety in height should be explored. The adjacent PDA 87 area has a variety in height and massing, which creates an interesting and lively skyline from the neighborhood and turnpike. This idea of variety of height and massing should be extended into the Allston Yards area. 1.25

Site Access and Circulation

Braintree Street needs to be designed with full, comfortable sidewalks and a separated bike path at the north side at a minimum. People coming from the east 1.26

will likely use Braintree Street as access to the commuter rail. Additionally, explore the possibility of connecting the Arthur Street Extension to Braintree Street Extension. This would improve connectivity and simplify the route of shuttle buses and delivery trucks. 1.27

The massing of Building 2 should be adjusted (pull the south corner in) to allow a clearer potential connection to North Beacon Street along the side of 61 North Beacon Street. Options for this future connection should be explored in the DPIR. 1.28

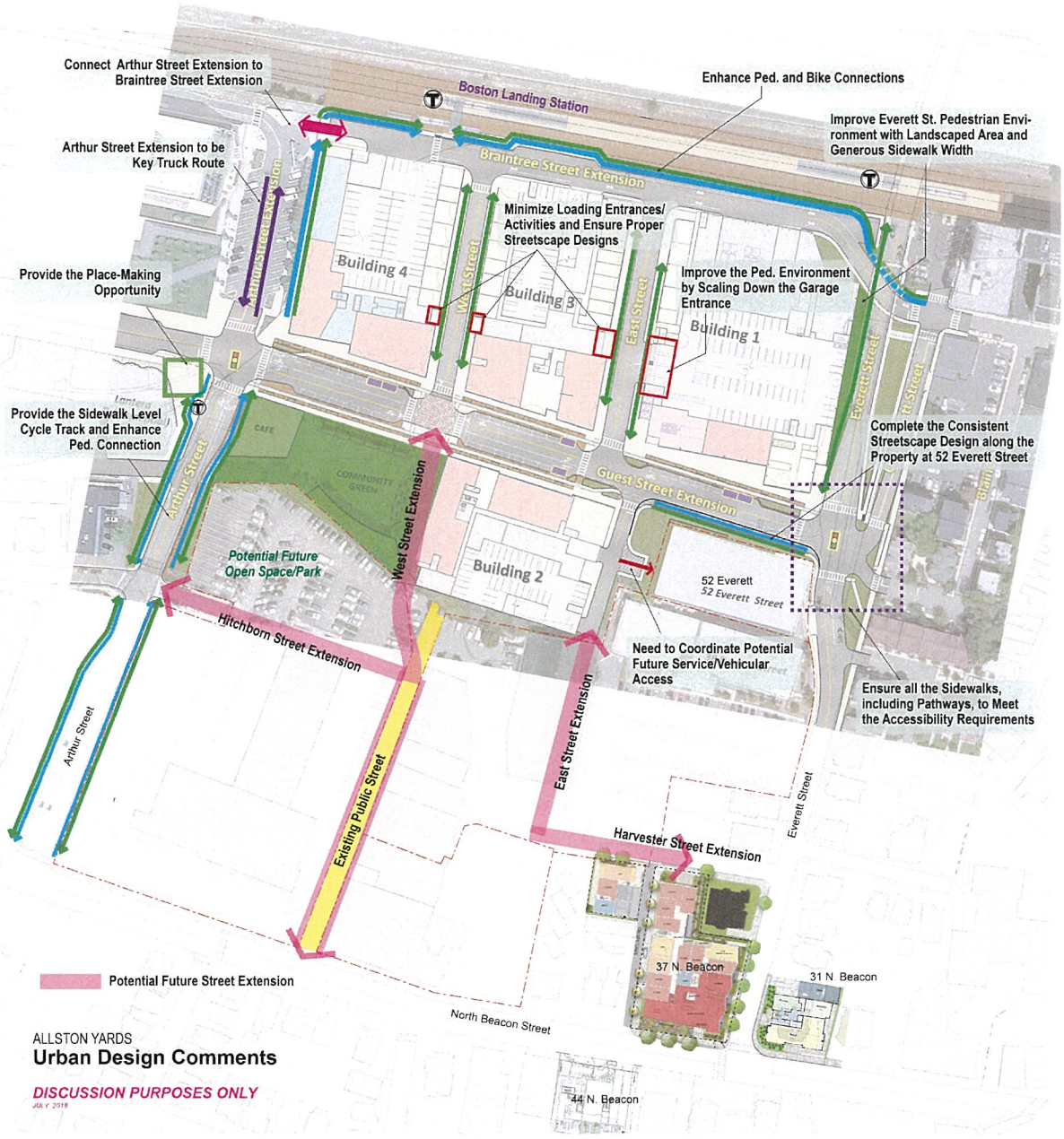
The intersection of Arthur and the Guest Street Extension should be more fully considered, including the area to the west of the intersection where the 64 bus stop is. 1.29 Opportunities to add street trees to Arthur Street should be advanced. While the earlier idea of a boulevard may not be right for this street, providing it with a generous tree canopy will make it a much more pleasant and functional approach to Boston Landing and Allston Yards for all modes of transportation, and adding tree canopy, wherever possible, works toward dissipating heat island effect. 1.30

The last block of the south side of the Guest Street Extension where it meets Everett Street appears narrow and less conforming with Complete Streets. Is there a way to set this up so that there is space for a sidewalk similar to the ones in the other blocks. For example, understanding that the slope issues in the adjacent intersection are complicated, could that block swing north slightly to reduce the unused sidewalk in front of Building 1 and increase the needed sidewalk on the south side of the street. 1.31

Evaluate the sidewalks from the Guest Street extension to the Everett Street Bridge. This should meet Complete Streets Guidelines in the reconstructed portions, particularly on the west side of the street. See comments in the Architecture section on the relationship of Building 1 to Everett Street for more information. 1.32

The new crosswalk at the north side of the Guest Street Extension and Everett Street appears to have accessibility issues created by grade issues. Provide larger scale drawings of the proposal at this intersection including grading information. 1.33

See UD Comments diagram below:



Open Space

The proposed restaurant at the corner of Arthur Street and the Guest Street extension should be eliminated to allow that corner to fully function as open space 1.34

and extend the streetscape along the eastern edge of Arthur Street. Consider the relationship of this space with the smaller area across Arthur Street. 1.34 (cont.)

The open space at the corner of Arthur and Guest Streets should be designed to anticipate the possible future West Street extension. So rather than using that area as a focus of landscape design (as has been shown in recent meetings), it should laid out and paved like a street and program currently proposed there should be moved into the body of the park, so that the future street extension is not perceived as a loss of open space. 1.35

Similarly, the southern edge of the park should be designed so that the park could be readily expanded into the adjacent Volvo Village site.

Include street cross sections showing the detail of the sidewalks and planted edge. 1.36

Consider infilling between Building 1 and Everett Street to better allow a complete street sidewalk and a row of trees between the sidewalk and the building. 1.37

The connection across the turnpike on Everett is going to be increasingly important to the development of the larger area and it needs to work for pedestrians and bicycles as well as cars and trucks. 1.38

Architecture

Note that if Building 1 is anticipated to be reviewed and approved concurrently with the PDA, the typical Article 80 large project review documentation for that project. Of particular importance in this review is the relationship to Everett Street.

While a particular style of building is not needed for a development, it is encouraged that this architecture have variety in color and form across the buildings. The Boston Landing PDA Master Plan has a fairly cohesive design language. This area should not be an extension of that, rather there should be variety in the materials and details of the buildings. The north-south orientation of the tower portions of the buildings is not ideal for energy use, so perhaps that leads to some design solutions that help manage energy while giving some form/detail to the towers. Smaller, punched openings and creative use of facade material shapes and forms could be explored. 1.39

Signage will be reviewed and approved with each individual building. An area signage master plan is encourage in addition to building specific signage plans. Note that retail and residential signage is generally located at entrances to those establishments. 1.40

As the redesign of the Everett Street abutment advances to accommodate the relocated intersection at the Guest Street Extension and the steeper grades that will be required to meet the existing bridge, efforts should be made to reuse the granite that currently comprises the abutment walls, particularly where they land in areas that are visible from or immediately adjacent to public realm. Alternatively, the granite should be salvaged and incorporated into the public realm. 1.41

We reserve the right to add additional concerns during the course of the process of combined BPDA Staff, IAG, and BCDC review, which may affect the responses detailed in the DPIR. The following urban design materials for the Proposed Project's schematic design must be submitted for the DPIR:

1. Written description of program elements and space allocation (in square feet) for each element, as well as Project totals. 1.42
2. Neighborhood plan, elevations and sections (in multiple directions) at an 1.43

appropriate scale (1"=100' or larger as determined by the BPDA) showing relationships of the proposed project to the neighborhood context:

a. Massing
b. Building height
c. Scaling elements
d. Open space
e. Major topographic features
f. Pedestrian and vehicular circulation
g. Land use

1.43 (cont.)

3. Color, or black and white 8"x10" photographs of the site and neighborhood. 1.44

4. Sketches and diagrams to clarify design issues and massing options. 1.45

5. Eye-level perspective (reproducible line or other approved drawings) showing the proposal (including main entries and public areas) in the context of the surrounding area. Views should display a particular emphasis on important viewing areas such as key intersections, pathways, or public parks/attractions. A few of such viewpoints have already been used in presentations to the public. Long-ranged (distanced) views of the proposed project must also be studied to assess the impact on the skyline or other view lines. At least one bird's-eye perspective should also be included. All perspectives should show (in separate comparative sketches) at least both the build and no-build conditions; any alternatives proposed should be compared as well. The BPDA should approve the view locations before analysis is begun. We suggest at least the following viewpoints: up and down Everett, Arthur, and Guest Streets including from outside of the project site by several blocks; from across the turnpike and the crest of the Everett Street overpass; the crest of the Cambridge Street overpass; any visibility from the southern crests of Dustin or Cambridge Streets. View studies should be cognizant of light and shadow, massing and bulk. 1.46

6. Additional aerial or skyline views of the project, if and as requested. 1.47

7. Site sections at 1"=20' or larger (or other scale approved by the BPDA) showing relationships to adjacent buildings and spaces. Multiple sections through the site and the surrounding context (two to three blocks on all sides) should be provided. 1.48

8. Site plan(s) at an appropriate scale (1"=20' or larger, or as approved by the BPDA) showing:

a. General relationships of proposed and existing adjacent buildings and open spaces
b. Open spaces defined by buildings on adjacent parcels and across streets 1.49
c. General location of pedestrian ways, driveways, parking, service areas, streets, and major landscape features
d. Pedestrian, handicapped, vehicular and service access and flow through the

parcel and to adjacent areas
e. Survey information, such as existing elevations, benchmarks, and utilities
f. Phasing possibilities
g. Construction limits

1.49 (cont.)

9. Massing model (ultimately in basswood) at 1":40'0" for use in the Agency's Downtown Model.

1.50

10. Study model(s) at 1" = 16' or 1" = 20' showing preliminary concept of setbacks, cornice lines, fenestration, facade composition, etc. are recommended.

1.51

11. Drawings at an appropriate scale (e.g., 1":16'0", or as determined by BPDA) describing architectural massing, facade design and proposed materials including:
a. Building and site improvement plans. Include any exterior utilities like transformers.
b. Neighborhood elevations, sections, and/or plans showing the
c. Development in the context of the surrounding area
d. Sections showing organization of functions and spaces, and relationships to adjacent spaces and structures
e. Preliminary building plans showing ground floor and typical upper floor(s).
f. Phasing, if any, of the Proposed Project

1.52

12. A written and/or graphic description of the building materials and its texture, color, and general fenestration patterns is required for the proposed development.

1.53

13. Electronic files describing the site and Proposed Project.

1.54

14. Full responses, which may be in the formats listed above (and more), to any urban design-related issues raised in preliminary reviews or specifically included in the BPDA scoping determination, preliminary adequacy determination, or other document requesting additional information leading up to BPDA Board action, inclusive of material required for Boston Civic Design Commission review.

1.55

15. Proposed schedule for submission of all design or development-related materials.

1.56

16. Diagrammatic sections through the neighborhood (to the extent not covered in item #2 above) cutting north-south and east-west at the scale and distance indicated above.

1.57

17. True-scale three-dimensional graphic representations of the area indicated above either as aerial perspective or isometric views showing all buildings, streets, parks, and natural features.

1.58

<u>Daylight Component</u>

A daylight analysis for both build and no-build conditions shall be conducted by measuring the percentage of skydome that is obstructed by the Proposed Project

1.59

building(s) and evaluating the net change in obstruction. If alternative massing studies are requested (which see above) or result as part of the Article 80 development review process, daylight analysis of such alternatives shall also be conducted for comparison. The study should treat three elements as controls for data comparisons: existing conditions, the 'as-of-right' massing, and context examples. The areas of interest include Federal and Devonshire Streets, and Winthrop Square itself. Daylight analyses should be taken for each major building facade fronting these public ways / spaces. The midpoint of each public roadway, and a reasonably centered point in the Winthrop Square space, should be taken as the study points. The BRADA program must be used for this analysis. 1.59 (cont.)

If a Proponent wishes to substitute a more contemporary computer program for the 1985 BRADA program, its equivalency must first be demonstrated to the satisfaction of BPDA staff before it is utilized for inclusion in the DPIR, and it must be commonly available to Boston development team users.

Infrastructure Systems Component

An infrastructure impact analysis must be performed.

The discussion of Proposed Project impacts on infrastructure systems should be organized system-by-system as suggested below. The applicant's submission must include an evaluation of the Proposed Project's impact on the capacity and adequacy of existing water, sewerage, energy (including gas and steam), and electrical communications (including telephone, fire alarm, computer, cable, etc.) utility systems, and the need reasonably attributable to the proposed project for additional systems facilities.

Any system upgrading or connection requiring a significant public or utility investment, creating a significant disruption in vehicular or pedestrian circulation, or affecting any public or neighborhood park or streetscape improvements, comprises an impact which must be mitigated. The DPIR must describe anticipated impacts in this regard, including specific mitigation measures, and must include nearby Proposed Project build-out figures in the analysis. The standard scope for infrastructure analysis is given below: 1.60

1. Utility Systems and Water Quality

a. Estimated water consumption and sewage generation from the Proposed 1.61

Project and the basis for each estimate. Include separate calculations for air conditioning system make-up water — 1.61 (cont.)

b. Description of the capacity and adequacy of water and sewer systems and an evaluation of the impacts of the Proposed Project on those systems; sewer and storm drain systems should include a tributary flow analysis as part of this description — 1.62

c. Identification of measures to conserve resources, including any provisions for recycling or 'green' strategies, including green roofs — 1.63

d. Description of the Proposed Project's impacts on the water quality of Boston Harbor or other water bodies that could be affected by the Project, if applicable — 1.64

e. Description of mitigation measures to reduce or eliminate impacts on water quality — 1.65

f. Description of impact of on-site storm drainage on water quality — 1.66

g. Information on how the Proposed Project will conform to requirements of the Ground Water Trust under Article 32, if applicable, by providing additional recharge opportunities — 1.67

h. Detail methods of protection proposed for infrastructure conduits and other artifacts, including the MBTA tunnels and station structures, and BSWC sewer lines and water mains, during construction — 1.68

i. Detail the energy source of the interior space heating; how obtained, and, if applicable, plans for reuse of condensate. — 1.69

Thorough consultation with the planners and engineers of the utilities will be required, and should be referenced in the Infrastructure Component section.

2. Energy Systems

a. Description of energy requirements of the project and evaluation of project impacts on resources and supply — 1.70

b. Description of measures to conserve energy usage and consideration of the — 1.71

feasibility of including solar energy provisions or other on-site energy provisions, including wind, geothermal, and cogeneration.

Additional constraints or information required are described below. Any other system (emergency systems, gas, steam, optic fiber, cable, etc.) impacted by this development should also be described in brief.

The location of transformer and other vaults required for electrical distribution or ventilation must be chosen to minimize disruption to pedestrian paths and public improvements both when operating normally and when being serviced, and must be described. If necessary, storm drain and sewage systems should be separated or separations provided for in the design of connections.

1.71 (cont.)

The Proponent should investigate energy strategies that take advantage of this scale of construction, including those that incorporate green roof strategies as well as solar orientation and materials/systems that maximize efficiencies, daylighting strategies, wind, solar, and geothermal systems, and cogeneration.

Letter 2: BPDA Climate Change & Environmental Planning Department

Comment 2.1

The shadow analysis shall evaluate the following conditions:

1. No-Build-the existing site conditions and environs to establish the baseline condition

2. Future Build Condition-the proposed development as described in the Project Notification Form (or the most current design, if changes have been made since the filing of the PNF).

3. Alternative Build Condition-any alternative development concept(s) to the Future Build Condition required to be studied.

Response:

Refer to Section 6.3 of Chapter 6, Environmental Protection, for details on the shadow analysis.

Comment 2.2

Shadow analysis shall be conducted for the hours of 9:00 a.m., 12:00 noon, and 3:00 p.m. for the vernal equinox, summer solstice, autumnal equinox and winter solstice and for 6:00 p.m. during the summer and fall. Net new shadows shall have a clear graphic distinction and for purposes of clarity, new shadows shall be shown in a dark, contrasting tone distinguishable from the existing shadows. The shadow impact analysis shall include the existing shadow and incremental effects of the proposed project on existing and proposed open spaces, plazas, park areas, sidewalks, pedestrian areas and walkways, adjacent to, and in the vicinity of the proposed project. If deemed necessary, design or other mitigation measures to minimize or avoid any adverse shadow impacts must be identified and described. The shadow analysis results shall be provided in both animation and graphic representations, so as to best understand the extent to which shadows from the proposed project are anticipated to affect the overall shadow conditions both on the proposed project site as well as within the surrounding area.

Response:

Refer to Section 6.3 of Chapter 6, *Environmental Protection*, for details on the shadow analysis.

Comment 2.3

Wind tunnel testing shall be required, as the proposed project, as described in the PNF, includes buildings that are greater than 150 feet in height.

1. No-Build-the existing site conditions and environs to establish the baseline condition.

2. Future Build Condition-the proposed development as described in the Project Notification Form (or the most current design, if changes have been made since the filing of the PNF).

3. Alternative Build Condition-any alternative development concept(s) to the Future Build Condition required to be studied.

The analysis shall determine potential pedestrian level winds adjacent to and in the vicinity of the proposed project site and shall identify areas where wind velocities are expected to exceed acceptable levels, including the BPDA's guideline of an effective gust velocity of 31 miles per hour (mph) not to be exceeded more than 1% of the time. The analysis shall determine the suitability of locations for various activities (walking, sitting, standing, etc.) as appropriate (in accordance with the recognized criteria Melbourne or Lawson comfort categories, or equivalent). Particular attention shall be given to public and other areas of pedestrian use, including, but not limited to, entrances to the proposed project and adjacent buildings, sidewalks adjacent to and in the vicinity of the proposed project buildings and parks and plazas and other open spaces and pedestrian areas near the proposed project. Winds shall be measured in miles per hour. For areas where wind speeds are projected to be dangerous or to exceed acceptable levels, measures to reduce wind speeds and to mitigate potential adverse impacts shall be identified and, if appropriate, tested.

Response:

Refer to Section 6.2 of Chapter 6, *Environmental Protection*, for details on the wind tunnel testing conducted.

Comment 2.4

The model shall include all buildings within at least 1,600 feet of the proposed project site and all buildings recently completed, under construction, and planned within 1,500-2,000 feet of the proposed project site. Prior to testing, a revised wind sensor plan shall be submitted to the BPDA for review and approval.

Response:

Refer to Section 6.2 of Chapter 6, *Environmental Protection*, for details on the wind tunnel testing conducted.

Comment 2.5

The Proponent shall be required to re-analyze the potential noise impacts that may occur during construction as well as during the subsequent occupancy/operation of the proposed project based on the current design. The noise assessment shall include monitoring of the existing sound levels as well as calculations of future sound levels

associated with the proposed project's mechanical equipment including, but not limited to exhaust fans, cooling towers and emergency generators.

Response:

Refer to Section 6.7 in Chapter 6, *Environmental Protection*, for an updated Noise analysis.

Comment 2.6

…an evaluation of the study area shall include sensitive receptor locations, locations with outdoor activities, which may be sensitive to noise associated with the proposed project.

Response:

Refer to Section 6.7 in Chapter 6, *Environmental Protection,* for an updated Noise analysis.

Comment 2.7

The Proponent shall be required to demonstrate that the proposed project, as currently designed, complies with all applicable City of Boston, Commonwealth of Massachusetts and Federal (including Housing and Urban Development noise standards) regulations and guidelines.

Response:

Refer to Section 6.7 in Chapter 6, *Environmental Protection*, for an updated Noise analysis.

Comment 2.8

The Proponent shall be required to conduct an analysis of the solar glare impact on potentially affected streets and roadways, including but not limited to the Massachusetts Turnpike, public open spaces and pedestrian areas, to determine the potential for visual impairment or discomfort due to reflective spot glare.

Response:

Refer to Section 6.5 of Chapter 6, *Environmental Protection*, for details on the solar glare analysis.

Comment 2.9

The Proponent shall also be required to conduct an analysis of the potential for solar heat buildup in any nearby buildings receiving reflective from the proposed project.

Response:

Refer to Section 6.5 of Chapter 6, *Environmental Protection*, for details on the solar glare analysis, including solar heat buildup.

Comment 2.10

…the Proponent shall be required to demonstrate that the proposed project, as currently designed, complies with all applicable regulatory requirements, including, the 1990 Clean Air Act (inclusive of all applicable Amendments), as applied to the City of Boston and the Commonwealth of Massachusetts.

Response:

Refer to Section 6.6 in Chapter 6, *Environmental Protection,* for the Air Quality evaluation.

Comment 2.11

The Proponent shall be required to submit copies of all environmental site assessment reports (ASTM Phase I, Phase II, etc.).

Response:

The Proponent is in the process of obtaining an updated Phase I ESA. When completed, a copy or summary of such report can be provided upon request.

TO: Casey Hines

FROM: Katie Pedersen

DATE: July 31, 2018

RE: Environmental Comments in response to the Allston Yards Project Notification Form

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Shadow

As the Project Notification Form (the "PNF") includes the results of a "preliminary" shadow impact assessment, the Proponent shall be required to conduct a shadow analysis, reflecting the most current which reflects the proposed development as described in the PNF (or if changes have been made, the most current). The shadow analysis shall evaluate the following conditions:

1. No-Build-the existing site conditions and environs to establish the baseline condition
2. Future Build Condition-the proposed development as described in the Project Notification Form (or the most current design, if changes have been made since the filing of the PNF). 2.1
3. Alternative Build Condition-any alternative development concept(s) to the Future Build Condition required to be studied

Shadow analysis shall be conducted for the hours of 9:00 a.m., 12:00 noon, and 3:00 p.m. for the vernal equinox, summer solstice, autumnal equinox and winter solstice and for 6:00 p.m. during the summer and fall. Net new shadows shall have a clear graphic distinction and for purposes of clarity, new shadows shall be shown in a dark, contrasting tone distinguishable from the existing shadows. The shadow impact analysis shall include the existing shadow and incremental effects of the proposed project on existing and proposed open spaces, plazas, park areas, sidewalks, pedestrian areas and walkways, adjacent to, and in the vicinity of the proposed project. If deemed necessary, design or other mitigation measures to minimize or avoid any adverse shadow impacts must be identified and 2.2

described. The shadow analysis results shall be provided in both animation and graphic representations, so as to best understand the extent to which shadows from the proposed project are anticipated to affect the overall shadow conditions both on the proposed project site as well as within the surrounding area. 2.2 (cont.)

Wind

The Proponent shall be required to conduct a quantitative (wind tunnel) analysis of the pedestrian level winds for existing (No-Build) and Build (Future Build and Alternative Build) Conditions. Wind tunnel testing shall be required, as the proposed project, as described in the PNF, includes buildings that are greater than 150 feet in height.

1. No-Build-the existing site conditions and environs to establish the baseline condition.
2. Future Build Condition-the proposed development as described in the Project Notification Form (or the most current design, if changes have been made since the filing of the PNF).
3. Alternative Build Condition-any alternative development concept(s) to the Future Build Condition required to be studied. 2.3

The analysis shall determine potential pedestrian level winds adjacent to and in the vicinity of the proposed project site and shall identify areas where wind velocities are expected to exceed acceptable levels, including the BPDA's guideline of an effective gust velocity of 31 miles per hour (mph) not to be exceeded more than 1% of the time. The analysis shall determine the suitability of locations for various activities (walking, sitting, standing, etc.) as appropriate (in accordance with the recognized criteria Melbourne or Lawson comfort categories, or equivalent). Particular attention shall be given to public and other areas of pedestrian use, including, but not limited to, entrances to the proposed project and adjacent buildings, sidewalks adjacent to and in the vicinity of the proposed project buildings and parks and plazas and other open spaces and pedestrian areas near the

proposed project. Winds shall be measured in miles per hour. For areas where wind speeds are projected to be dangerous or to exceed acceptable levels, measures to reduce wind speeds and to mitigate potential adverse impacts shall be identified and, if appropriate, tested. 2.3 (cont.)

The model shall include all buildings within at least 1,600 of the proposed project site and all buildings recently completed, under construction, and planned within 1,500-2,000 feet of the proposed project site. Prior to testing, a revised wind sensor plan shall be submitted to the BPDA for review and approval. 2.4

Noise

The Proponent has stated in the PNF that a noise assessment was conducted based on the "preliminary design" and thus the Proponent shall be required to re-analyze the potential noise impacts that may occur during construction as well as during the subsequent occupancy/operation of the proposed project based on the current design. The noise assessment shall include monitoring of the existing sound levels as well as calculations of future sound levels associated with the proposed project's mechanical equipment including, but not limited to exhaust fans, cooling towers and emergency generators. 2.5

Additionally, an evaluation of the study area shall include sensitive receptor locations, locations with outdoor activities, which may be sensitive to noise associated with the proposed project. 2.6

The Proponent shall be required to demonstrate that the proposed project, as currently designed, complies with all applicable City of Boston, Commonwealth of Massachusetts and Federal (including Housing and Urban Development noise standards) regulations and guidelines. 2.7

Solar Glare

The Proponent shall be required to conduct an analysis of the solar glare impact on potentially affected streets and roadways, including but not limited to the Massachusetts 2.8

Turnpike, public open spaces and pedestrian areas, to determine the potential for visual impairment or discomfort due to reflective spot glare 2.8 (cont.)

The Proponent shall also be required to conduct an analysis of the potential for solar heat buildup in any nearby buildings receiving reflective from the proposed project. 2.9

Air Quality

The Proponent has stated in the PNF that a "preliminary" mobile source assessment was conducted, thus the Proponent shall be required to demonstrate that the proposed project, as currently designed, complies with all applicable regulatory requirements, including, the 1990 Clean Air Act (inclusive of all applicable Amendments), as applied to the City of Boston and the Commonwealth of Massachusetts. 2.10

Daylight

(Please see Urban Design comments)

Solid and Hazardous Waste

The Proponent shall be required to submit copies of all environmental site assessment reports (ASTM Phase I, Phase II, etc.). 2.11

Letter 3: BPDA Transportation & Infrastructure Planning Department

Comment 3.1

The outline of the District Energy Microgrid Feasibility Assessment (attached) consists of Part A and Part B. Part A should be submitted with any initial filing (i.e., PNF, NPC) or early during the Article 80 development review process. Part B should be submitted with any major filing during the Article 80 development review (i.e., DPIR) prior to project approval by the BPDA Board.

Response:

As discussed in Section 7.3.5 in Chapter 7, *Greenhouse Gas Emissions Assessment*, while the Proposed Project is below the applicable review threshold of "at or below 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 Project.

As mentioned in Section 4.4 in Chapter 4, *Sustainability and Climate Change Resiliency*, the Project Team is in the initial stages of data gathering for the District Energy Microgrid Feasibility Study (Part A). Through design revisions made to respond to IAG, community and agency comments, the Proposed Project's square footage has been reduced below the 1.5 million SF District Energy Microgrid Pilot Policy threshold. While the Proposed Project is no longer technically subject to the Pilot Policy, the Proponent has volunteered to participate on a consultative basis. As such, the Project Team filed the Part A of the District Energy Microgrid Feasibility Study required by the Policy on January 7, 2019. The Project Team will continue to voluntarily consult with the BPDA as it prepares and files Part B, which is anticipated to identify potential renewable and other energy system alternatives and study their feasibility.

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MEMORANDUM

TO: Casey Hines, Senior Project Manager
FROM: John (Tad) Read, Senior Deputy Director for Transportation & Infrastructure Planning
Manuel Esquivel, Senior Infrastructure & Energy Planning Fellow
DATE: July 11, 2018
SUBJECT: Allston Yards - **Smart Utilities Comments**

On June 14, 2018 the BPDA Board adopted the *Smart Utilities Policy for Article 80 Development Review*. The policy (attached) calls for the incorporation of five (5) Smart Utility Technologies (SUTs) into new Article 80 developments. Table 1 describes these five (5) SUTs. Table 2 summarizes the key provisions and requirements of the policy, including the development project size thresholds that would trigger the incorporation of each SUTs.

Conversations about and review of the incorporation of the applicable SUTs into new Article 80 developments will be carried out by the BPDA and City staff during every stage of the review and permitting process, including a) prefile stage; b) initial filing; c) Article 80 development review prior to BPDA Board approval; d) prior to filing an application for a Building Permit; and e) prior to filing an application for a Certificate of Occupancy.

Specific to the District Energy Microgrid policy, the BPDA has prepared outlines of the minimum required contents of the District Energy Microgrid Feasibility Assessment and the District Energy Microgrid Master Plan. The outline of the District Energy Microgrid Feasibility Assessment (attached) consists of Part A and Part B. Part A should be submitted with any initial filing (i.e., PNF, NPC) or early during the Article 80 development review process. Part B should be submitted with any major filing during the Article 80 development review (i.e., DPIR) prior to project approval by the BPDA Board.

In conjunction with the policy, the BPDA and City staff will review the installation of SUTs and related infrastructure in right-of-ways in accordance with the *Smart Utility Standards* ("SUS"). The SUS set forth guidelines for planning and integration of SUTs with existing utility infrastructure in existing or new streets, including cross-section, lateral, and intersection diagrams. The *Smart Utility Standards* are intended to serve as guidelines for developers, architects, engineers, and utility providers for planning, designing, and locating utilities. The *Smart Utility Standards* are currently available in "draft" form and will be finalized soon after adoption of the *Smart Utilities Policy for Article 80 Development Review*.

The *Smart Utilities Policy for Article 80 Development Review*, the *Smart Utility Standards*, and further information regarding the Boston Smart Utilities Vision project are available on the project's website: http://www.bostonplans.org/planning/planning-initiatives/boston-smart-utilities-project.

Manuel Esquivel, BPDA Senior Infrastructure and Energy Planning Fellow, will soon follow up to schedule a meeting with the proponent to discuss the Smart Utilities Policy. For any questions, you can contact Manuel Esquivel at manuel.esquivel@boston.gov or 617.918.4382.

Table 1 - Summary description of 5 Smart Utility Technologies (SUTs) included in the *Smart Utilities Policy for Article 80 Development Review*

Smart Utility Technology (SUTs)	Summary Description
District Energy Microgrid	Energy system for clusters of buildings. Produces electricity on development site and uses excess "heat" to serve heating/cooling needs. By combining these two energy loads, the energy efficiency of fuel consumed is increased. The system normally operates connected to main electric utility grid, but can disconnect ("island") during power outages and continue providing electric/heating/cooling needs to end-users.
Green Infrastructure	Infrastructure that allows rainwater to percolate into the ground. Can prevent storm runoff and excessive diversion of stormwater into the water and sewer system.
Adaptive Signal Technology	Smart traffic signals and sensors that communicate with each other to make multimodal travel safer and more efficient.
Smart Street Lights	Traditional light poles that are equipped with smart sensors, wifi, cameras, etc. for health, equity, safety, traffic management, and other benefits.
Telecom Utilidor	An underground duct bank used to consolidate the wires and fiber optics installed for cable, internet, and other telecom services. Access to the duct bank is available through manholes. Significantly reduces the need for street openings to install telecom services.

Table 2 - Summary of size threshold and other specifications for the 5 SUTs advanced in the *Smart Utilities Policy for Article 80 Development Review* (**Note: This table is only for informational purposes. Please refer to the complete *Smart Utilities Policy for Article 80 Development Review* to review the details.**)

	Article 80 Size Threshold	Other specifications
District Energy Microgrid	>1.5 million SF	Feasibility Assessment; if feasible, then Master Plan & District Energy Microgrid-Ready design
Green Infrastructure	>100,000 SF	Install to retain 1.25" rainfall on impervious areas (Increase from 1" currently required by BWSC)
Adaptive Signal Technology	All projects requiring signal installation or improvements	Install AST & related components into the traffic signal system network
Smart Street Lights	All Projects requiring street light installation or improvements	Install additional electrical connection & fiber optics at pole
Telecom Utilidor	>1.5 million SF of development, or >0.5 miles of roadway	Install Telecom Utilidor

Letter 4: BPDA Compliance Department

Comment 4.1

I would like the proponent to consider options for incorporating artist housing and artist work spaces within the development.

Response:

The Proponent will explore the possibility of incorporating artist live-work units/space into the Proposed Project, specifically into Buildings B, C or D depending on market conditions. The inclusion of affordable exhibition or performance space for use by occupants of the Proposed Project will also be considered. If such units are feasible, the intent is that the units would be income restricted and counted as part of the Proponent's Inclusionary Development Policy commitment.

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boston planning & development agency

July 18, 2018

Casey Hines
Boston Planning & Development Agency
One City Hall Plaza
Boston, MA 02201

Re: Allston Yards Scoping

Dear Ms. Hines,

With approximately 1,000 residential units (with over a 100 that would be income restricted) across multiple buildings, the Allston Yards proposal presents a unique opportunity to address a variety of housing needs in Allston/Brighton. In this respect, I am pleased that the proponent is seeking to provide both rental and homeownership units.

In addition, given the challenges artists are having in finding artist live/work and artist work space citywide, and especially in Allston, where an established artist community is facing rapid market changes, I would like the proponent to consider options for incorporating artist housing and artist work spaces within the development. Options to consider include taking a portion of the expected IDP/income restricted rental units and creating a group of artist live/work units within the project, or consider providing some of the first floor space (especially in location where retail may less viable) as artist work space. For either the live/work or the work space, the proponent could consider how they are using the ground floor space on Building 1 on the Everett Street side of the building, though there may be other areas of the project to consider. 4.1

Overall, I am pleased to see a development that preserves the existing Stop & Shop, while bringing much needed housing, density, and vibrancy to a location adjacent to upgraded transit.

Sincerely,

Tim Davis
Housing Policy Manager

Letter 5: IGBC

Comment 5.1

Please amend Table 2-1 Anticipated Project Permits and Approvals to include Boston Interagency Green Building Committee, Zoning Article 37 Compliance.

Response:

Table 2-1-Anticipated Project Permits and Approvals in Chapter 2, *Regulatory Context and General Information*, has been updated to include Article 37-Green Buildings Review.

Comment 5.2

Subsequent to your initial filing, the BPDA Climate Resiliency checklist was updated to include additional data points; please provide an updated Climate Resiliency Report by completing the online form.

Response:

The Proponent has completed the online Climate Resiliency Report.

Comment 5.3

The IGBC requests the project team commit to at least one LEED Platinum building, no more than one LEED Silver building, and LEED Gold for the remaining buildings and the grocery store.

Response:

Refer to Section 4.3 of Chapter 4, *Sustainability and Climate Change Resiliency*, for an evaluation of achieving Platinum and Gold level LEED certifiable buildings.

Comment 5.4

[Following are specific credits that the project team should give priority to achieving:]

Reduced Parking Footprint —40% below ITE Transportation Planning Handbook guidelines (1 point).

Response:

Refer to Section 4.3 of Chapter 4, *Sustainability and Climate Change Resiliency*.

Comment 5.5

Heat Island Reduction — pursue both non-roof and roof solutions (+1 point).

Response:

Refer to Sections 4.3.3 of Chapter 4, *Sustainability and Climate Resiliency*.

Comment 5.6

Indoor Water Use Reduction — include additional water reduction strategies. (+2 points).

Response:

Refer to Sections 4.3.4 through 4.3.6 of Chapter 4, *Sustainability and Climate Resiliency*.

Comment 5.7

Enhanced Commissioning, Option 1 - Path 2 and Option 2 — include advance commissioning and envelope commissioning ensure that the completed building performs optimally and often results in immediate savings beyond the commissioning costs (+4 points).

Response:

Refer to Sections 4.3.3 of Chapter 4, *Sustainability and Climate Change Resiliency*.

Comment 5.8

Optimize Energy Performance — the project anticipates performance only 12% below the ASHRAE 90.1-20 13 baseline model. In comparison, recent peer projects are exceeding 21% below the baseline model. The project should identify additional carbon reduction strategies to significantly improve performance beyond the proposed design (+5 points).

Response:

Energy modeling has been refined to reflect current project conceptual design. The overall project energy savings has increased to 27.2% and stationary source GHG emissions reductions has improved to 20.6% - consistent with peer projects. Refer to Section 7.3 of Chapter 7, *Greenhouse Gas Emissions Assessment*, for the updated energy model results by building.

Comment 5.9

Demand Response — commercial building scale energy storage systems have proven performance benefits and are rapidly progressing. The project should assess both thermal and electrical energy storage and include energy demand response system(s) and equipment (1-2 points).

Response:

Refer to Section 7.3.5 of Chapter 7, *Greenhouse Gas Emission Assessment*, for more details.

Comment 5.10

Renewable Energy Production — the project identifies opportunities for building rooftop or integrated solar PV, see below (1-3 points).

Response:

Refer to Section 7.3.5 of Chapter 7, *Greenhouse Gas Emissions Assessment*, for the solar PV feasibility assessment.

Comment 5.11

[In support of the City of Boston's Resiliency and greenhouse gas (GHG) emissions reduction goals including Carbon Neutral 2050 the IGBC requests that the project:]

Please provide the baseline reference building and proposed building model conditions used in the Energy / GHG summaries. Please include proposed envelope performance conditions (see Climate Resiliency Checklist section A.3 Building Envelope).

Response:

Refer to Section 7.3 of Chapter 7, *Greenhouse Gas Emissions Assessment*, for more details.

Comment 5.12

Maximize building envelope performance strategies including right-sizing building window to wall ratios, increasing opaque curtain wall insulation, improving glazing Solar Heat Gain Coefficient, and increasing framed wall, roof, and exposed floor insulation levels.

Response:

As discussed in Section 7.3 of Chapter 7, *Greenhouse Gas Emissions Assessment*, the current conceptual design includes a 50% WWR for the office component and 35% for residential components. Specific façade design criteria for WWR and glazing performance may change as design advances.

Comment 5.13

As discussed in Section 7.3 of Chapter 7, Greenhouse Gas Emissions Assessment, the current conceptual design includes a 50% WWR for the office component and 35% for residential components. Specific façade design criteria for WWR and glazing performance may change as design advances.

Response:

Refer to Section 7.3.7 in Chapter 7, *Greenhouse Gas Emissions Assessment*, for more details.

Comment 5.14

Include solar photovoltaic (PV). At a minimum, the system should be sized to meet common area and load requirements. Please provide the Solar PV evaluation referenced in section 4.4.2 of the PNF including system(s) location, size, and output information.

Response:

Refer to Section 7.3.5 of Chapter 7, *Greenhouse Gas Emissions Assessment*, for the solar PV feasibility assessment.

Comment 5.15

Include demand reduction and clean energy systems — see above. Please provide the CHP evaluation referenced in section 4.4.2 of the PNF.

Response:

Refer to Section 7.3.5 in Chapter 7, *Greenhouse Gas Emissions Assessment*, for the CHP analysis for the residential components of the Proposed Project.

Comment 5.16

Please provide an updated Climate Resiliency Report by completing the online form. The building specific data fields should reflect the proposed conditions for Building 1 assuming this will be the first structure to be constructed.

Response:

The Proponent has completed the online Climate Resiliency Report.

Comment 5.17

Please review the Boston Transportation Department's Bicycle Parking Guidelines; the project should exceed the minimum requirements.

Response:

Refer to Section 5.8.5 of Chapter 5, *Transportation*, for more details.

Martin J. Walsh
Mayor

Article 37 Interagency Green Building Committee

June 21, 2018

Mr. Guy Stutz
Stop & Shop Supermarket Company
1385 Hancock Street
Quincy, MA 02467

Mr. Stephen Karp
New England Development Company
75 Park Plaza
Boston, MA 02116

Re: Allston Yards PNF Filing – IGBC Comments

Dear Mr. Stutz and Mr. Karp,

The Boston Interagency Green Building Committee (IGBC) has reviewed Allston Yards Project Notification Form (PNF) for compliance with Boston Zoning Article 37, Green Buildings.

Please amend Table 2-1 Anticipated Project Permits and Approvals to include Boston Interagency Green Building Committee, Zoning Article 37 Compliance. 5.1 Subsequent to your initial filing, the BPDA Climate Resiliency checklist was updated to include additional data points; please provide an updated Climate Resiliency Report by completing the online form. 5.2

The PNF indicates that the project will use the LEED v4 New Construction, Core & Shell, and Commercial Interiors rating systems and employ a Master Site approach for all of the buildings. The IGBC accepts the rating system selections for the specific buildings and the Master Site approach for all of the buildings. The proposed specific point commitments (buildings 1, 2 & 3 - 44 points, building 4 – 49 points, and grocery store – 44 points) fall far short of Stop & Shop's and development teams sustainability visions and the measures necessary to reduce the adverse impacts of the proposed development. As an innovated mixed used development, Allston Yards offers a remarkable opportunity for a visionary vibrant and sustainable community.

The IGBC requests the project team commit to at least one LEED Platinum building, no more than one LEED Silver building, and LEED Gold for the remaining buildings and the grocery store. 5.3 Following are specific credits that the project team should give priority to achieving:

- Reduced Parking Footprint – 40% below ITE Transportation Planning Handbook guidelines (1 point). 5.4
- Heat Island Reduction – pursue both non-roof and roof solutions (+1 point). 5.5
- Indoor Water Use Reduction – include additional water reduction strategies. (+2 points). 5.6

- Enhanced Commissioning, Option 1 - Path 2 and Option 2 – include advance commissioning and envelope commissioning ensure that the completed building performs optimally and often results in immediate savings beyond the commissioning costs (+4 points). 5.7
- Optimize Energy Performance – the project anticipates performance only 12% below the ASHRAE 90.1-2013 baseline model. In comparison, recent peer projects are exceeding 21% below the baseline model. The project should identify additional carbon reduction strategies to significantly improve performance beyond the proposed design (+5 points). 5.8
- Demand Response – commercial building scale energy storage systems have proven performance benefits and are rapidly progressing. The project should assess both thermal and electrical energy storage and include energy demand response system(s) and equipment (1-2 points). 5.9
- Renewable Energy Production – the project identify opportunities for building roof top or integrated solar PV, see below (1-3 points). 5.10

In support of the City of Boston's Resiliency and greenhouse gas (GHG) emissions reduction goals including Carbon Neutral 2050 the IGBC requests that the project:

- Please provide the baseline reference building and proposed building model conditions used in the Energy / GHG summaries. Please include proposed envelope performance conditions (see Climate Resiliency Checklist section A.3 Building Envelope). 5.11
- Maximize building envelope performance strategies including right-sizing building window to wall ratios, increasing opaque curtain wall insulation, improving glazing Solar Heat Gain Coefficient, and increasing framed wall, roof, and exposed floor insulation levels. 5.12
- Access all available utility and state DOE and CEC representatives to maximize utility and state-funding for energy efficiency and clean/renewable energy support. Please provide specific information on any assistance including energy modeling that will be afforded to the project. 5.13
- Include solar photovoltaic (PV). At a minimum, the system should be sized to meet common area and load requirements. Please provide the Solar PV evaluation referenced in section 4.4.2 of the PNF including system(s) location, size, and output information. 5.14
- Include demand reduction and clean energy systems – see above. Please provide the CHP evaluation referenced in section 4.4.2 of the PNF. 5.15

Climate Resiliency Report

Please provide an updated Climate Resiliency Report by completing the online form. The building specific data fields should reflect the proposed conditions for Building 1 assuming this will be the first structure to be constructed. 5.16

Please review the Boston Transportation Department's Bicycle Parking Guidelines; the project should exceed the minimum requirements. See attached. 5.17

Please follow up on the IGBC comments and requests for additional information including an updated Climate Resiliency Report prior to submission of the Draft Project Impact Report. The

IGBC would be happy to meet with your project team to discuss comments and your potential responses. Please contact your BPDA Project Manager if you would like to schedule a meeting.

Please let me know if you have any questions or if I or the IGBC can be of any assistance.

Sincerely,

John Dalzell
On behalf of the Interagency Green Building Committee

617-918-4334 / John.Dalzell@Boston.gov

Cc: Casey Hines, BPDA
IGBC

Letter 6: Mayor's Office of Arts & Culture

Comment 6.1

It seems like there is potential to locate some artist commercial space or live/work space in the first building with the Stop and Shop or along Guest St or Everett St. They should consider clustering any live/work units so that they create more of an artist community.

Response:

The Proponent will explore the possibility of incorporating artist live-work units/space into the Proposed Project, specifically into Buildings B, C or D depending on market conditions. The inclusion of affordable exhibition or performance space for use by occupants of the Proposed Project will also be considered. If such units are feasible, the intent is that the units would be income restricted and counted as part of the Proponent's Inclusionary Development Policy commitment.

Comment 6.2

...in buildings of this size there may be some opportunities to repurpose less desirable areas around parking/the grocery store/service areas to create artist work spaces.

Response:

Refer to the response to Comment 6.1 above.

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Casey Hines <casey.a.hines@boston.gov>

Allston Yards Follow Up

1 message

Kara Elliott-Ortega <kara.elliott-ortega@boston.gov> Tue, Jun 26, 2018 at 6:13 PM
To: Casey Hines <casey.a.hines@boston.gov>

Hi Casey,

I sat in on the meeting today but the conversation was mostly about massing and traffic - it didn't seem like the program of the buildings was too thought through other than where the grocery story is located.

Could you communicate to the development team some of our comments re: artist live/work housing and artist work space? It seems like there is potential to locate some artist commercial space or live/work space in the first building with the Stop and Shop or along Guest St or Everett St. They should consider clustering any live/work units so that they create more of an artist community. Lastly, in buildings of this size there may be some opportunities to repurpose less desirable areas around parking/the grocery store/service areas to create artist work spaces. 6.1 6.2

There were a couple of constituent comments along these lines, so I think it's appropriate for the development team to explore these options as they continue to specify building program.

Thanks!
Kara

--

Kara Elliott-Ortega
Director of Planning and Policy
Mayor's Office of Arts and Culture, City of Boston
617.635.2437 (w)

Letter 7: Boston Parks and Recreation Commission

Comment 7.1

It is not clear where the restaurant's handicapped and other parking, loading, trash facilities, etc. will be located in relation to the open space.

Response:

The previously proposed standalone restaurant within the Community Green has been removed in lieu of an expanded green space in response to community comments.

Comment 7.2

The proponent should clarify if pets are to be allowed in this development, as a project of this density can create a burden on the public realm unless pets are accommodated on site.

Response:

The Community Green will include a fenced dog run/park of approximately 2,200 square feet. Refer to Section 3.6.3 of Chapter 3, *Urban Design*, for more details.

Comment 7.3

The project should address how it is addressing the public open space needs outlined in the City's Imagine Boston 2030, which includes the Open Space and Recreation Plan 2015-2021. The active recreation needs of this new population should be provided onsite or mitigated offsite so as not to impact already overburdened public parks.

Response:

Refer to Section 3.6 of Chapter 3, Urban Design, for more details.

Comment 7.4

The proponent should provide the maximum projected population of residents and other users. The proponent should also detail the open space acreage that is being provided Streets, sidewalks, plazas and parking should be counted as public realm, not conflated with park land.

This assessment will inform the demand for park land for active recreation use at buildout, compared to the amount of open space to be provided by the project~ the resulting impacts to existing public open space in the neighborhood and the appropriate mitigation of this impact.

Response:

Refer to Section 3.6 of Chapter 3, *Urban Design*, for more details on public realm and park areas, as well as open space need analysis.

Comment 7.5

The community green will be open to the public but privately owned. The provision of permanently protected public open space is critical to balance development in this neighborhood.

Land that is provided as impact mitigation should be permanently protected through conservation restrictions or through transfer to public ownership. It may be privately managed.

Response:

Refer to Section 3.6 of Chapter 3, *Urban Design*, for more details on preservation of the Community Green as open space, long-term maintenance, and programming.

Comment 7.6

BPRD respectfully requests that this development make a substantial contribution to the acquisition and creation of a new publicly owned park to serve the active recreational needs of the residents of this neighborhood This contribution should be at a level commensurate with the impact of over 1000 new households which will otherwise rely on existing public open spaces.

Response:

The Proponent will provide monetary support through the Public Realm Fund for improvements of nearby active-use playgrounds and community gardens. Refer to Section 3.6.5 of Chapter 3, *Urban Design*, for more details.

BOSTON

Martin J. Walsh, Mayor

May 7, 2018

Ms. Teresa Polhemus
Boston Planning and Development Agency
One City Hall Square
Boston, MA 02201

RE: Allston Yards at 60 Everett Street

Dear Ms. Polhemus:

Boston Parks and Recreation Department (BPRD) has reviewed the PNF for the Allston Yards at 60 Everett Street, a mix of uses which includes 1050 residential units, and office and retail use.

The plans show open space in the form of roof top terraces as well as a "Community Green" that will be .5 acre in size. This passive use space will be privately owned and controlled rather than truly public. It will be anchored by a restaurant. It is not clear where the restaurant's handicapped and other parking, loading, trash facilities, etc. will be located in relation to the open space. 7.1

The proponent should clarify if pets are to be allowed in this development, as a project of this density can create a burden on the public realm unless pets are accommodated on site. 7.2

Needs Assessment

Mayor Walsh endorsed the Trust for Public Land's "Ten Minute Campaign" to ensure that all residents live within a 10 minute walk of a public park. The attached map from the City's *Open Space Plan 2015-2021*, shows that the location of this project is beyond any park service area.

Nearby public parks such as Portsmouth Playground and Penniman Park are already in high demand and in need of improvement. The DCR parcel at Leo Birmingham Parkway is under consideration for housing, which could lead to a further deficit of public open space in the area.

The project should address how it is addressing the public open space needs outlined in the City's Imagine Boston 2030, which includes the Open Space and Recreation Plan 2015-2021. The active recreation needs of this new population should be provided onsite or mitigated offsite so as not to impact already overburdened public parks. 7.3

Impact Assessment

This mixed use project will include 1050 residential units. The number of anticipated residents was not provided in the PNF, but can be roughly estimated at 1000 – 4000 residents, with additional users of the office, retail and restaurant space.

Boston Parks and Recreation Department
1010 Massachusetts Ave., Boston, MA 02118 / Tel.: 617-635-4505 / Fax: 617-635-3173

This project includes a marginal amount of open space with no active recreation amenities. Residents will rely on existing public open space and impact an underserved neighborhood.

The proponent should provide the maximum projected population of residents and other users. The proponent should also detail the open space acreage that is being provided. Streets, sidewalks, plazas and parking should be counted as public realm, not conflated with park land. 7.4

This assessment will inform the demand for park land for active recreation use at buildout, compared to the amount of open space to be provided by the project, the resulting impacts to existing public open space in the neighborhood, and the appropriate mitigation of this impact.

Protection in Perpetuity

The community green will be open to the public but privately owned. The provision of permanently protected public open space is critical to balance development in this neighborhood.

Land that is provided as impact mitigation should be permanently protected through conservation restrictions or through transfer to public ownership. It may be privately managed. 7.5

Mitigation

The proponent has initially proposed $15 million in transportation improvements and $4 million for a community and public realm fund for neighborhood projects. However, this proposal does not include a strong commitment to public parks. There is an imbalance between the investment in traffic management and the investment in open space infrastructure.

The Allston neighborhood continues to increase in density, without a commensurate investment in public open space to balance the development, nor serve the existing community.

BPRD respectfully requests that this development make a substantial contribution to the acquisition and creation of a new publicly owned park to serve the active recreational needs of the residents of this neighborhood. This contribution should be at a level commensurate with the impact of over 1000 new households which will otherwise rely on existing public open spaces. 7.6

Thank you for your consideration of the above.

Sincerely,

Carrie Marsh, Executive Secretary
Boston Parks and Recreation Commission

cc: Christopher Cook, Commissioner, BPRD
Liza Meyer, Chief Landscape Architect, BPRD
Jon Greeley, Director of Development Review, BPDA
David Carlson, Deputy Director of Urban Design, BPDA
Casey Hines, Project Manager, BPDA

0 0.2 0.4 0.6 0.8 1 Miles
N
WATERTOWN
CAMBRIDGE
BROOKLINE
NEWTON
Western Avenue
North Beacon Street
Everett Street
Cambridge Street
Soldiers Field Road
Commonwealth Avenue
Access: Park Service Areas
Beyond any park service area
Served by 1 park
Served by 2 parks
Served by 3 or more parks
Neighborhood Boundary
Publicly Accessible Open Space
Other Open Space
Martin J. Walsh, Mayor
Map 10: Park Service Areas
Allston-Brighton
Boston Open Space Plan 2015-2021
December 2014
Prepared by the City of Boston
Parks & Recreation Department

Letter 8: BWSC

Comment 8.1

The Proponent must submit a site plan and General Service Application to the Commission for the proposed Project. The site plan must show the location of the water mains, sewers and drains serving the Project site, as well as the locations of existing and proposed service connections. To assure compliance with the Commission's requirements, the Proponent should submit the site plan and General Service Application to the Commission's Engineering Customer Service Department for review when the design for the Project is at 50 percent complete.

Response:

A site plan will be submitted to BWSC for approval before construction begins.

Comment 8.2

Any new or relocated water mains, sewers and storm drains must be designed and constructed at the Proponent's expense. They must be designed and constructed in conformance with the Commission's design standards, Water Distribution System and Sewer Use Regulations, and Requirements for Site Plans.

Response:

Refer to Chapter 8, *Infrastructure*, for more details.

Comment 8.3

With the site plan the Proponent must provide detailed estimates for water demand (including water required for landscaping), wastewater generation, and stormwater runoff for the Project.

Response:

Refer to Section 8.4 in Chapter 8, *Infrastructure*, for more details.

Comment 8.4

With the site plan, the Proponent must include a detailed capacity analysis for the water and sewer systems serving the Project site, as well as an analysis of the impact the Project will have on the Commission's systems and the MWRA's systems overall. The analysis should identify specific measures that will be implemented to offset the impacts of the anticipated flows on the Commission and MWRA sewer systems.

Response:

Refer to Section 8.4 in Chapter 8, *Infrastructure*, for more details.

Comment 8.5

Developers of projects involving disturbances of land of one acre or more are required to obtain an NPDES General Permit for Construction from the Environmental Protection Agency. The Proponent is responsible for determining if such a permit is required and for obtaining the permit. If such a permit is required for the proposed Project, a copy of the Notice of Intent and any pollution prevention plan submitted to EPA pursuant to the permit must be provided to the Commission's Engineering Services Department prior to the commencement of construction.

Response:

The Project will acquire necessary permits, including those covered under the NPDES/Construction General Permit which will be included in the BWSC site plan submission.

Comment 8.6

Before the Proponent demolishes the existing structure, existing water and drain connections that won't be re-used must be cut and capped in accordance with Commission standards. The Proponent must complete a Termination Verification Approval Form for a Demolition Permit, available from the Commission. The completed form must be submitted to the City of Boston's Inspectional Services Department before a Demolition Permit will be issued.

Response:

Cut and caps will be in accordance with BWSC and coordinated with the Commission prior to demolition.

Comment 8.7

Oil traps are required on drainage systems discharging from enclosed parking garages. Discharges from the oil traps must be directed to a building sewer and must not be mixed with roof or other surface runoff.

Response:

Oil traps will be included in all enclosed parking garages.

Comment 8.8

The Commission will require the Proponent to develop an inflow reduction plan consistent with the regulation. The 4:1 reduction should be addressed at least 90 days prior to activation of water service, and will be based on the estimated sewage generation provided with the Project site plan.

Response:

Refer to Section 8.4 in Chapter 8, *Infrastructure*.

Comment 8.9

The discharge of dewatering drainage to a sanitary sewer is prohibited by the Commission and the MWRA. The discharge of any dewatering drainage to the storm drainage system requires a Drainage Discharge Permit from the Commission. If the dewatering drainage is contaminated with petroleum products for example, the Proponent will be required to obtain a Remediation General Permit from the EPA for the discharge.

Response:

The Project will evaluate if dewatering is required and will obtain the necessary permits if needed.

Comment 8.10

The site plan must show in detail how drainage from the building's rooftop and from other impervious areas will be managed. Roof runoff and other stormwater runoff must be conveyed separately from sanitary waste at all times.

Response:

The BWSC site plan will include all proposed drainage infrastructure.

Comment 8.11

To accomplish the necessary reductions in phosphorus the Commission requires developers of projects in the lower Charles River watershed to infiltrate stormwater discharging from impervious areas in accordance with DEP requirements. The Proponent must submit with the site plan a phosphorus reduction plan for the Project.

Response:

Refer to Section 8.3 in Chapter 8, *Infrastructure*.

Comment 8.12

In addition to Commission standards, the proposed Project will be required to meet MassDEP' s Stormwater Management Standards.

Response:

Refer to Section 8.3 in Chapter 8, *Infrastructure*.

Comment 8.13

In conjunction with the site plan and General Service Application the Proponent will be required to submit a Stormwater Pollution Prevention Plan. The plan must:

-Specifically identify how the Project will comply with the Department of Environmental Protection's Performance Standards for Stormwater Management both during construction and after construction is complete.

-Identify specific best management measures for controlling erosion and preventing the discharge of sediment, contaminated stormwater or construction debris to the Commission's drainage system when construction is underway.

-Include a site map which shows, at a minimum, existing drainage patterns and areas used for storage or treatment of contaminated soils, groundwater or stormwater, and the location of major control or treatment structures to be utilized during construction.

Response:

The Proposed Project will include a Stormwater Pollution Prevention Plan with the site plan submission.

Comment 8.14

The Commission requests that the Proponent install a permanent casting stating: "Don't Dump: Drains to Charles River" next to any new catch basin installed as part of the Project. The Proponent may contact the Commission's Operations Division for information regarding the purchase of the castings.

Response:

"Do Not Dump" Plaques will be located at all catch basins and trench drains on site.

Comment 8.15

The Commission encourages the Proponent to explore additional opportunities for protecting stormwater quality by minimizing sanding and the use of deicing chemicals, pesticides and fertilizers.

Response:

The Project Team will explore additional opportunities for protecting stormwater quality as the design develops.

Comment 8.16

The Proponent is required to obtain a Hydrant Permit for use of any hydrant during construction of the Project. The water used from the hydrant must be metered. The Proponent should contact the Commission's Operations Department for information on obtaining a Hydrant Permit.

Response:

The Project will evaluate the need for a hydrant permit during construction and coordinate temporary water with BWSC.

Comment 8.17

Where a new water meter is needed, the Commission will provide a Meter Transmitter Unit (MTU) and connect the device to the meter. For information regarding the installation of MTUs, the Proponent should contact the Commission's Meter Installation Department.

Response:

The Project Team will coordinate the MTU with BWSC.

Comment 8.18

The Proponent should explore opportunities for implementing water conservation measures in addition to those required by the State Plumbing Code. In particular the Proponent should consider indoor and outdoor landscaping which requires minimal use of water to maintain. If the Proponent plans to install in-ground sprinkler systems, the Commission recommends that timers, soil moisture indicators and rainfall sensors be installed. The use of sensor-operated faucets and toilets in common areas of buildings should also be considered.

Response:

The Project Team will explore additional water conversation measures as the design develops.

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Boston Water and Sewer Commission

980 Harrison Avenue
Boston, MA 02119-2540
617-989-7000

February 20, 2017

Ms
~~Mr.~~ Casey Hines
Boston Planning & Development Agency
One City Hall Square
Boston, MA 02201

Re: Allston Yards-Project Notification Form

Dear Ms. Hines:

The Boston Water and Sewer Commission (the "Commission" or "BWSC") has reviewed the Project Notification Form ("PNF") for the proposed Allston Yards Project (the "Project"). The Project site is located at 60 Everett Street in Boston's Allston neighborhood. The Project consists of the redevelopment of the property to include a mixed-use, transit-oriented development consisting of residential, office, restaurant, fitness and retail uses, including a flagship grocery store, and a new approximately 0.5-acre green. The Project is anticipated to be built out over several years.

Water, sewer, and storm drain service for the site is provided by the Boston Water and Sewer Commission. For water service the Project site has an 8-inch private loop that is metered at the corner of Everett Street and Braintree Street Extension. The mains range in size from a 12-inch main on Guest Street and Everett Street, to a 6-inch main in Hichborn Street. Water demand for the Project is estimated at 225,833 gallons per day (gpd).

For sanitary sewer service the Project site is served by an existing 15-inch sanitary sewer which runs through an easement along the back side of the existing building in the Braintree Street Extension area and a 26-inch by 39-inch sewer in Everett Street. Wastewater flow for the Project is estimated at 205,303 gpd. The Project plans to maintain the existing 15-inch sewer on Braintree Street Extension and proposes a new main on Guest Street Extension that will connect to the existing 26-inch by 39-inch sewer in Everett Street.

According to the PNF site run-off is currently collected through a series of catch basins throughout the existing parking lot and are directed through a vortechs water quality unit before discharging to the BWSC drain in Everett Street.

The Commission has the following comments regarding the proposed Project:

General

1. The Proponent must submit a site plan and General Service Application to the Commission for the proposed Project. The site plan must show the location of the water mains, sewers and drains serving the Project site, as well as the locations of existing and proposed service connections. To assure compliance with the Commission's requirements, the Proponent should submit the site plan and General Service Application to the Commission's Engineering Customer Service Department for review when the design for the Project is at 50 percent complete.

2. Any new or relocated water mains, sewers and storm drains must be designed and constructed at the Proponent's expense. They must be designed and constructed in conformance with the Commission's design standards, Water Distribution System and Sewer Use Regulations, and Requirements for Site Plans. 8.2

3. With the site plan the Proponent must provide detailed estimates for water demand (including water required for landscaping), wastewater generation, and stormwater runoff for the Project. 8.3

4. It is the Proponent's responsibility to evaluate the capacity of the water and sewer system serving the Project site to determine if the systems are adequate to meet future Project demands. With the site plan, the Proponent must include a detailed capacity analysis for the water and sewer systems serving the Project site, as well as an analysis of the impact the Project will have on the Commission's systems and the MWRA's systems overall. The analysis should identify specific measures that will be implemented to offset the impacts of the anticipated flows on the Commission and MWRA sewer systems. 8.4

5. Developers of projects involving disturbances of land of one acre or more are required to obtain an NPDES General Permit for Construction from the Environmental Protection Agency. The Proponent is responsible for determining if such a permit is required and for obtaining the permit. If such a permit is required for the proposed Project, a copy of the Notice of Intent and any pollution prevention plan submitted to EPA pursuant to the permit must be provided to the Commission's Engineering Services Department prior to the commencement of construction. 8.5

6. Before the Proponent demolishes the existing structure, existing water and drain connections that won't be re-used must be cut and capped in accordance with Commission standards. The Proponent must complete a Termination Verification Approval Form for a Demolition Permit, available from the Commission. The completed form must be submitted to the City of Boston's Inspectional Services Department before a Demolition Permit will be issued. 8.6

Sewage/Drainage

7. Oil traps are required on drainage systems discharging from enclosed parking garages. Discharges from the oil traps must be directed to a building sewer and must not be mixed with roof or other surface runoff. The requirements for oil traps are provided in the Commission's Requirements for Site Plans. 8.7

8. The Department of Environmental Protection (DEP), in cooperation with the Massachusetts Water Resources Authority (MWRA) and its member communities are implementing a coordinated approach to flow control in the MWRA regional wastewater system, particularly the removal of extraneous clean water (e.g., infiltration/ inflow ("I/I")) in the system. Pursuant to the policy new developments with design flow exceeding 15,000 gpd of wastewater are subject to the Department of Environmental Protection's regulation 314 CMR 12.00, section 12.04(2)(d). This regulation requires all new sewer connections with design flows exceeding 15,000 gpd to mitigate the impacts of the development by removing four gallons of infiltration and inflow (I/I) for each new gallon of wastewater flow added. The Commission will require the Proponent to develop an inflow reduction plan consistent with the regulation. The 4:1 reduction should be addressed at least 90 days prior to activation of water service, and will be based on the estimated sewage generation provided with the Project site plan. 8.8

9. The discharge of dewatering drainage to a sanitary sewer is prohibited by the Commission and the MWRA. The discharge of any dewatering drainage to the storm drainage system requires a Drainage Discharge Permit from the Commission. If the dewatering drainage is contaminated with petroleum products for example, the Proponent will be required to obtain a Remediation General Permit from the EPA for the discharge. 8.9

10. The site plan must show in detail how drainage from the building's roof top and from other impervious areas will be managed. Roof runoff and other stormwater runoff must be conveyed separately from sanitary waste at all times. 8.10

11. A Total Maximum Daily Load (TMDL) for Nutrients has been established for the Lower Charles River Watershed by the Massachusetts Department of Environmental Protection (DEP). In order to achieve the reductions in phosphorus loadings required by the TMDL phosphorus concentrations in stormwater discharges to the lower Charles River from Boston must be reduced by 64%. To accomplish the necessary reductions in phosphorus the Commission requires developers of projects in the lower Charles River watershed to infiltrate stormwater discharging from impervious areas in accordance with DEP requirements. The Proponent must submit with the site plan a phosphorus reduction plan for the Project. 8.11

12. The Massachusetts Department of Environmental Protection (MassDEP) has established Performance Standards for Stormwater Management. The Standards address stormwater quality, quantity and recharge. In addition to Commission standards, the proposed Project will be required to meet MassDEP's Stormwater Management Standards. 8.12

13. In conjunction with the site plan and General Service Application the Proponent will be required to submit a Stormwater Pollution Prevention Plan. The plan must:

    - Specifically identify how the Project will comply with the Department of Environmental Protection's Performance Standards for Stormwater Management both during construction and after construction is complete.

    - Identify specific best management measures for controlling erosion and preventing the discharge of sediment, contaminated stormwater or construction debris to the Commission's drainage system when construction is underway. 8.13

    - Include a site map which shows, at a minimum, existing drainage patterns and areas used for storage or treatment of contaminated soils, groundwater or stormwater, and the location of major control or treatment structures to be utilized during construction.

14. The Commission requests that the Proponent install a permanent casting stating: "Don't Dump: Drains to Charles River" next to any new catch basin installed as part of the Project. The Proponent may contact the Commission's Operations Division for information regarding the purchase of the castings. 8.14

15. The Commission encourages the Proponent to explore additional opportunities for protecting stormwater quality by minimizing sanding and the use of deicing chemicals, pesticides and fertilizers. 8.15

Water

16. The Proponent is required to obtain a Hydrant Permit for use of any hydrant during construction of the Project. The water used from the hydrant must be metered. The Proponent should contact the Commission's Operations Department for information on obtaining a Hydrant Permit. 8.16

17. The Commission utilizes a Fixed Radio Meter Reading System to obtain water meter readings. Where a new water meter is needed, the Commission will provide a Meter Transmitter Unit (MTU) and connect the device to the meter. For information regarding the installation of MTUs, the Proponent should contact the Commission's Meter Installation Department. 8.17

18. The Proponent should explore opportunities for implementing water conservation measures in addition to those required by the State Plumbing Code. In particular the Proponent should consider indoor and outdoor landscaping which requires minimal use of water to maintain. If the Proponent plans to install in-ground sprinkler systems, the Commission recommends that timers, soil moisture indicators and rainfall sensors be installed. The use of sensor-operated faucets and toilets in common areas of buildings should also be considered. 8.18

Thank you for the opportunity to comment on this Project.

Yours truly,

John P. Sullivan, P.E.
Chief Engineer and Operations Officer

JPS/as
cc:
Maura Zlody, Boston Environment Department
Phil Larocque, Boston Water and Sewer Commission

Letter 9: IAG

Comment 9.1

[Items of major concern:]

• *Traffic*

Response:

Refer to Chapter 5, *Transportation*, for more details.

Comment 9.2

• *Transportation*

Response:

Refer to Chapter 5, *Transportation*, for more details.

Comment 9.3

• *Density*

Response:

Refer to Section 1.4.2 of Chapter 1, *Project Description and Alternatives*, for more details regarding changes to the Project's proposed site plan, building heights, and building massing, in response to comments on the PNF.

Comment 9.4

• *Height*

Response:

Refer to Section 3.4 of Chapter 3, *Urban Design,* for more details.

Refer also to Section 1.4.2 of Chapter 1, *Project Description and Alternatives*, for more details regarding changes to the Project's proposed site plan, building heights, and building massing, in response to comments on the PNF.

Comment 9.5

• *Design*

Response:

Refer to Section 3.4 of Chapter 3, *Urban Design,* for more details.

Comment 9.6

• *Open Space*

Response:

Refer to Section 3.6 in Chapter 3, *Urban Design*, for more details.

As discussed in Section 1.4.3 of Chapter 1, *Project Description and Alternatives*, the Community Green has increased in size 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 previously proposed stand alone restaurant.

Comment 9.7

• *Use*

Response:

Refer to Table 1-1 and Sections 1.3 and 1.4 of Chapter 1, *Project Description and Alternatives,* for more details on use.

Comment 9.8

• *Housing*

Response:

Refer to Section 1.1 of Chapter 1, Project Description and Alternatives, for more details.

Comment 9.9

• *Homeownership condos*

Response:

Refer to Section 1.1 of Chapter 1, *Project Description and Alternatives,* for more details.

The approximately 895 housing units will be provided in a variety of sizes and price points, including affordable units and home ownership units. Approximately 110 for-sale units are projected. The homeownership residences now make up 12% of the total project – a 20% increase from the PNF.

Comment 9.10

Affordable units

Response:

Refer to Section 1.1 and 1.6 of Chapter 1, *Project Description and Alternatives,* for more details.

The approximately 895 residences will be provided in a variety of sizes and price points, including affordable units and home ownership units. In compliance with the Inclusionary Development Policy, the Proposed Project will provide 13%, or approximately 116 units, as affordable. Building A is proposed to consist of 176 rental units with 23 units as affordable.

Comment 9.11

MBTA drop off size

Response:

As noted in Section 5.8.1 of Chapter 5, *Transportation*, the Proposed Project is anticipated to include a generous "Kiss & Ride" area on Braintree Street Extension, adjacent to the Boston Landing MBTA commuter rail station. This area is intended to serve shuttle buses as well as pick-up and drop-off activity.

Comment 9.12

• *Conforming to Guest St Planning*

Response:

Refer to Section 1.8 of Chapter 1, *Project Description and Alternatives*, for more details.

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B

Casey Hines <casey.a.hines@boston.gov>

Stop and Shop IAG letter

1 message

Anabela <bela@mail.com> Mon, Jun 25, 2018 at 8:10 AM
To: casey.a.hines@boston.gov

Casey Hines, Project Manager
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

RE: Stop and Shop

Dear Ms. Hines,

We, the Impact Advisory Board (IAG), have too many unresolved issues that will adversely impact our community with the Stop & Shop proposal. At this time we request the BPDA to issue a scoping determination that will require the developer to submit a draft project impact report. Items of major concern:

- Traffic 9.1
- Transportation 9.2
- Density 9.3
- Height 9.4
- Design 9.5
- Open Space 9.6
- Use 9.7
- Housing 9.8
- Homeownership condos 9.9
- Affordable units 9.10
- MBTA drop off size 9.11
- Conforming to Guest St Planning 9.12

We can not support this project as currently proposed. The proponent needs to make significant changes.

Sincerely,

Anabela Gomes
Colin Akerly
John Bligh
John Cusack
Dan Daly
Rosie Hanlon

Bernadette Lally

Andrea Howard

11.3 Responses to Elected Officials

Comment EO.1

The proposed project is significantly denser than the recommendations of the study. It calls for nearly 1,000 residential units and buildings up to 20 stories tall. We feel this density must be reduced to match the scale of the surrounding neighborhood.

Response:

As discussed in Sections 1.4.1 and 1.4.2 of Chapter 1, *Project Description and Alternatives*, the height and massing of the proposed buildings have been revised in response to community concerns about density resulting in a reduction of overall residential units (from 1,050 to 895).

Comment EO.2

Given the size of this proposal, however, we feel a larger amount of public green space is needed.

Response:

As discussed in Section 1.4.3 of Chapter 1, *Project Description and Alternatives*, the Community Green has increased in size 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 previously proposed standalone restaurant.

Comment EO.3

The developer must take the further step of participating in the Allston-Brighton TMA and contributing to the shuttle service.

Response:

Refer to Section 5.11 of Chapter 5, *Transportation*, for details on the proposed Transportation Demand Management plan, including participation in the Allston-Brighton TMA. Section 5.6.2 describes the proposed enhancements to the existing Boston Landing MBTA commuter rail station, including a "kiss-and-ride" area to supplement the one already provided on Arthur Street Extension. This area also has been designed to accommodate shuttle busses, which may be picking up or dropping off passengers at the station independent of the Proposed Project.

Comment EO.4

The addition of nearly 1,000 units will place a strain on transit, parking, and public resources. We expect substantial community mitigation and benefits to be negotiated.

Response:

The Proposed Project is expected to result in significant public benefits, as summarized in Section 1.7 of Chapter 1, *Project Description and Alternatives*.

Furthermore, as described in Section 1.7, the Proposed Project will 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 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.

MARK CIOMMO
BOSTON CITY COUNCIL
DISTRICT 9

July 30, 2018

Dear Casey,

We, the undersigned elected officials representing the Allston-Brighton community, submit the following comment letter regarding the Allston Yards proposal. Stop & Shop Supermarket Company, working with New England Development, plans to renovate their existing store and build large-scale residential and commercial developments on site.

Neighborhood Context
The proposal will create an entirely new mixed-use neighborhood with thousands of residents. This is a transformative project that, in addition to developments at New Balance, will greatly impact our neighborhood. Allston-Brighton is seeing unprecedented levels of development. We feel it is incumbent on developers to always consider the needs of the existing community.

Density, Guest Street Study, and Green Space
The 2012 Brighton Guest Street Planning Study laid out recommendations for suitable development in the Guest Street corridor. These recommendations were completed before the opening of the Boston Landing MBTA station. It therefore seems likely that the new transit options in the area may allow for greater density than the study predicts.

However, the proposed project is significantly denser than the recommendations of the study. It calls for nearly 1000 residential units and buildings up to 20 stories tall. We feel this density must be reduced to match the scale of the surrounding neighborhood.

We are encouraged by the expansion of green space. Given the size of this proposal, however, we feel a larger amount of public green space is needed.

Transit and Parking
The existing transit network is already strained by congestion and MBTA bus services that are over capacity. We are encouraged by the developer's plans to make significant transit improvements at the start of the proposed construction. However, the developer must take the further step of participating in the Allston-Brighton TMA and contributing to the shuttle service.

Mitigation
Given the scale of this proposal, we recognize it will have substantial impacts on the neighborhood. The addition of nearly 1,000 units will place a strain on transit, parking, and public resources. We expect substantial community mitigation and benefits to be negotiated.

BOSTON CITY HALL • ONE CITY HALL SQUARE • BOSTON, MASSACHUSETTS 02201
617-635-3113 • FAX: 617-635-4203 • Mark.Ciommo@boston.gov

Sincerely,

Mark Ciommo
Boston City Councilor
District 9

Kevin Honan
State Representative
17th Suffolk District

Michael Moran
State Representative
18th Suffolk District

11.4 Responses to Public Comments by Topic

Because many of the comments from the members of the public (Letter No. 10 through 29 copies of which are provided in Appendix H) expressed a similar array of concerns global responses are provided by topic below. The public comments and concerns fall into the following key categories:

1. Traffic impacts;
2. Parking availability;
3. Public transportation;
4. Green/open space;
5. Community benefits;
6. Building height and density;
7. Building design;
8. Wind impacts;
9. Noise impacts;
10. Housing types/Affordability housing; and
11. Retail use.

The responses below aim to address key community issues and refer to specific sections of the EENF/DPIR for further information. Copies of all public comments received are provided in Appendix H for reference.

Comment Theme 1: Traffic Impacts

Example comments:

"The fears of many IAG members regarding a staging area for the commuter rail stop that will underserve the demand, pedestrian and bike safety and sidewalks that will not safely accommodate the commuters who choose to enter and exit the station from the Everett St bridge. Will additional signaling as proposed help or bring the whole area to gridlock during rush hour?"

"The traffic at the north end of the Everett Street Bridge also needs to improve traffic flow and safety to and from the "Old" Everett Street section which connects to Lincoln Street."

"This section of the neighborhood is already impacted by both congestion, cut-through traffic, and speeding - depending on time of day (North Beacon Street and Everett Street specifically) and with the influx of housing within the area... Traffic reports for each of these developments only include the traffic impacts by each development, not all of the developments as a whole. I would be curious to see what all the traffic impacts look like together."

"The access to Allston Yards from Everett St is likely to be very problematic for even a portion of the projected traffic."

"There are limited roads to provide access to an area that has had no road additions for the most recent building."

"The intersection of "Old" Everett Street with Lincoln Street is a T with only a stop sign on "Old" Everett Street. I expect this project to increase north traffic over the Everett Street Bridge, then East on Lincoln Street and eventually to the Mass Pike as the alternative is often very congested. The Waze app will have them going this way to the Mass Pike. Making the "Old" Everett Street intersection with Lincoln Street a 3 way stop intersection will greatly increase the present and future safety without impeding the traffic flow. A traffic light would be even better."

Response:

Through ongoing coordination with the MBTA, the Proponent is proposing to enhance pedestrian access to the Boston Landing MBTA commuter rail station from the Project Site. The details of this plan are presented in Chapter 5, *Transportation*. Both the new signals at Guest Street's intersections with Arthur Street and Everett Street are projected to operate at good levels of service, and both locations will be added to BTD's central signal system to allow for continuous traffic monitoring at these locations. As part of this Project, the Proponent is implementing significant improvements at the Everett Street/Old Everett Street intersection to the south of I-90. It is expected that similar improvements may be possible but at the northerly end, but those are more appropriately undertaken in conjunction with any access plans for nearby potential development project at that location.

The future conditions analysis for the Project includes not only the Project, but the combined traffic generated by nineteen nearby development projects.

The proposed Everett Street access plan has been designed to safely and efficiently process site-generated traffic with minimal disruption to Everett Street. With the new signal control and pedestrian enhancements, conditions should be considerably improved compared to the current configuration of this intersection.

While the Project Site currently is surrounded by multiple roadways, access and egress are somewhat limited due to turn restrictions and one-way designations. With the Project Site plan, full access and egress will be provided at Everett Street under signalized control, and the current one-way, enter-only designation for the Braintree Street driveway will be modified to allow for two-way traffic. These measures will help to more efficiently dissipate Site traffic while helping to prevent any one driveway or roadway from being overburdened.

While the Project is not anticipated to generate significant traffic volumes at the Lincoln Street/Old Everett Street intersection, the Proponent is not opposed to this intersection being converted to all-way Stop control as suggested if allowed by BTD.

Comment Theme 2: Parking Availability

Example comments:

"Parking spaces need to be set aside for Commuter Rail."

"Parking should be at least one per bedroom."

"Too much parking for a development so close to public transportation."

"Allston already has a parking shortage and the number of parking places being lost (in the Stop & Shop lot) and then added (0.5 per unit) will add to this existing problem."

"Residential buildings in this location should have a 1:1 unit-to-parking ratio, or very close to it (and preferably a higher ratio for multi-bedroom units), as well as visitor and service parking…"

Response:

Chapter 5, *Transportation*, includes a detailed parking analysis. The overall 0.5 spaces per unit residential parking ratio is appropriate for the area given the proximity to the MBTA Boston Landing commuter rail station and availability of bus service. Limiting parking to the appropriate levels provided for the residential and commercial uses helps reduce automobile dependency as compared to a condition where unlimited parking is provided. This practice is in keeping with the goals of the City and should help to minimize traffic congestion in general.

Comment Theme 3: Public Transportation

Example Comment

"There needs to be an integrated plan for the MBTA bus service on this site, providing adequate bus stops (pleural!) with bus shelters, a drop off for the commuter rail, and turning circle for MBTA buses and Shuttle buses. The level of anticipated commuter rail ridership drawn from across the neighborhood might justify a permanent mini bus station…"

Response:

As part of the Project, pedestrian access to the Boston Landing MBTA commuter rail station from the Project Site and the surrounding neighborhoods will be enhanced significantly. A new 100-foot long pick-up/drop-off area usable by both passenger vehicles and shuttle busses will be provided at the northerly end of Braintree Street Extension adjacent to the Boston Landing MBTA commuter rail station. This feature combined with the more expansive kiss-and-ride area provided at Arthur Street Extension west of and adjacent to the site will be able to accommodate the expected demands in this area.

Comment Theme 4: Green Space

Example Comments

"…the Allston Yards developer proposes to allocate just 0.5 acre for the so-called "community green". This is not enough — it should be 1 acre, given the enormity of the proposed development, and the density that was created by New Balance."

"In a congested neighborhood that is destined to become more crowded with the new building and development underway, it is very important to preserve some open space for the enjoyment of the community."

"As a long time resident of Allston/Brighton (45 years) I wish to offer my strong support to idea of a public park of some size, an acre or so, as part of the Allston Yards project."

"...curious about the programming for this green space. Who is going to manage it? Will the plan be effective?"

"The proposed urban green space inadequate. The neighborhood already suffers from inadequate park and playground space."

"Open space should incorporate active playgrounds/fields/ in addition to passive green space. "

"The ownership of the land allocated for the Park needs to be formally transferred to the Boston Parks Department. We are adamantly opposed to the Park being privately owned. Also, the development plan should provide for very generous sidewalks that can accommodate LARGE street trees (planted in structural soil, with irrigation), as well as outdoor sitting areas."

Response:

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 the first phase of the Proposed Project, will have approximately 7,000 SF of rooftop amenity area for building resident use. This rooftop amenity space will ease demand on the Community Green and neighborhood parks from these specific residents. Upon completion of the development, the Project Site will have approximately one-acres of open passive recreational space. Each of the subsequent three buildings will also have an amenity deck for the building residents of approximately 5,000 SF.

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. The Community Green will be maintained by the site owner upon completion, as well as to be programmed with input from the community for activities such as open air music, art, and food markets.

Furthermore, to maintain the recreational diversity of the neighborhood the Proponent will 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.

Refer to Section 3.6 of Chapter 3, *Urban Design*, for more details.

Comment Theme 5: Community Benefits

Example Comments

"I strong support including an ARTS CENTER at Allston Yards."

"I suggest considering space that allows for light manufacturing, small startups, and boutique retails. Also, consider the need for artist live/work space."

"Should also provide more benefits to the local culture with artist and green space."

Response:

Refer to Section 1.7 of Chapter 1, *Project Description and* Alternatives, for a full summary of community benefits associated with the Project.

Comment Theme 6: Building Height & Density

Example Comments

"The Guest Street Plan calls for buildings 110 - 150 feet high - this project is proposing 200- 235 feet high. What happened to the the recommendation of the Guest Street Study? The proposed height and mass of Building #1 is totally out of proportion to the adjacent residential neighborhood across the street at the Honan Apartments."

"Buildings are 1/3 too tall, height should be between those of the houses to the east and Bruins or New Balance to the west."

"The size and scale of these projects are out of character for the rest of the neighborhood and are exacerbating already overloaded roadways and infrastructure."

"The proposed Allston Yards project greatly exceeds tolerable height and density standards for this area."

"There are too many units, the buildings are too tall (far exceeding the agreed upon Guest Street development plan), the gradation of building size is the opposite of what it should happen (tallest should be pike side) and it brings nothing of value to the existing members of the community."

Response:

Refer to Sections 1.4.1 and 1.4.2 of Chapter 1, *Project Description and Alternatives*, for more details regarding changes to the Project's proposed site plan, building heights, and building massing, in response to comments on the PNF.

Comment Theme 7: Building Design

Example comments

"The 2 buildings near the Pike need to be of different heights with spacing (cf GSA study) to prevent the 'wall effect' from generating noise reflection to the neighbors across the Pike."

"There is no attempt to scale the street fronts of these large buildings so that they allow for an attractive pedestrian zone. Instead, Allston Yards seems eager to repeat the mistakes made further west on Guest Street, where the Lantera apartments and the office buildings across the street form a forbidding, sterile canyon of concrete and glass."

"We implore BPDA Design Review team to require that this project create buildings that are truly beautiful and have visual interest/complexity. This development should not imitate the "corporate" look of the New Balance site, but have a softer, and even perhaps playful, artistic and whimsical feel that enhances and fits with residential uses."

Response:

Refer to Chapter 3, *Urban Design*, for more details regarding changes to the Project's proposed building designs, in response to comments on the PNF.

Comment Theme 8: Wind Impacts

Example comments

"It's a tiny quarter of an acre that sits at the foot of a 17 story building on its EAST side? a tiny space that will be in the shadow of a tall building much of the day, and will face gale-force winds from the surrounding structures."

"This sort of soulless wind tunnel ruins any appeal the buildings might have to tenants and shoppers..."

Response:

Overall, the Project is not expected to result in unsafe wind conditions that would limit pedestrian access. With the implementation of mitigation measures, such as landscaping, locating entrances, pick-up/drop-offs, outdoor cafes, etc., away from the building corners, and/or incorporating canopies, recessed entrances, windscreens, planters, etc., it is expected that the Project will further improve conditions for sitting, standing, and walking throughout the Project Site. Refer to Section 6.2 of Chapter 6, *Environmental Protection*, for more details.

Comment Theme 9: Noise Impacts

Example comments

"The Allston Yard buildings needs to be design to minimize noise pollution. This could be using materials, shapes, angles, sound phase cancellation techniques, or whatever to stop sound reflections."

"There has always been some noise near the Mass Pike. However now it goes deeper into the neighborhoods and has reach safety hazardous levels, light rain intensifies the sound even more. Even homes near Boston Logan Airport have less noise pollution then we do."

Response:

The noise analysis demonstrates that the Proposed Project will comply with City of Boston noise regulations and the United States Department of Housing and Urban Development's (HUD's) guidelines. Based on preliminary design, the Proposed Project's operations will have no adverse noise impacts at nearby sensitive receptor locations nor impacts on proposed residential units. Refer to Section 6.7 of Chapter 6, *Environmental Protection*, for more details.

Comment Theme 10: Housing Types (Rentals vs. Ownership)/Affordable Housing

Example comments

"Offer fewer small residential units and more two- and three-bedroom units that would be appropriate for families."

"Home-ownership in Allston Brighton is at an all-time low, people have to be invested in their community for it to thrive and the best way to achieve this is having residents own their own homes. The proposed 10% of units for home ownership is not nearly enough..."

"A percentage of the condos will need to have owner-occupant deed restrictions tied to them, not just the ones set aside as affordable by the BPDA. Additionally, I would like to see a percentage of the condos be affordable."

"With this proposal being over 1,000 units, we feel that the developer of this project can exceed the 13% requirement; 20% of affordable units can be feasible in this size of a project in my opinion."

"Boston and Allston proper have more than enough luxury units, but have a significant lack of affordable and safe housing."

"...We feel very strongly that the development should have a 50/50 mixture of homeownership and rentals. The homeownership component should be designed for

owner-occupancy, and include a generous number of larger units that can accommodate family households."

Response:

The approximately 895 residences will be provided in a variety of sizes and price points, including affordable units and home ownership units. Approximately 110 for-sale unit and 785 rental units are projected. In compliance with the Inclusionary Development Policy, the Proposed Project will provide 13%, or approximately 116 units, as affordable. Building A is proposed of 176 rental units with 23 units as affordable.

Comment Theme 11: Retail Use

Example comments

"I do not want to lose Stop & Shop, an affordable regular super market."

"On top of the affordability of the apartments, I want reassurance from the developers that when the new Stop & Shop is built, the prices of the groceries will not be affected. When I read "state of the art, urban grocery story," I read "price increases." This grocery store is a close and affordable option for people who live nearby, and we need to keep it that way. The Dollar Tree and Home Goods losses will also affect affordable shopping options for neighbors."

"We need an improved Stop & Shop on the ground floor with accessible parking nearby also on the ground floor. Neighbors are not happy with the 2nd story plan. It is a hardship, inefficient, & time-consuming for the elderly, disabled, parents with small children, and all busy shoppers. The neighbors want to keep the other retail stores and added stores for weekly needs plus a cafe & or restaurant would be an appropriate addition. If necessary to place some retail on the 2nd floor it shouldn't be the groceries."

"We are pleased that the site will continue to have Stop & Shop, but we would like to see the HomeGoods store stay as well, given all of the residential development in the area. We also would like to see a collection of smaller retail establishments."

Response:

Since the PNF, building design and site-wide improvements have been further advanced, and Building A is now considered as part of the initial phase of development. 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. Refer to Figures 3.11 through 3.20 for more details of Building A.

Appendix A: MEPA Distribution List

Appendix A: Distribution List

Commonwealth of Massachusetts

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

Commissioner Martin Suuberg
Department of Environmental Protection,
One Winter Street
Boston, MA 02108

DEP/Northeast Regional Office
Attn: MEPA Coordinator
205B Lowell Street
Wilmington, MA 01887

MA Department of Transportation
Public/Private Development Unit
Attn: Lionel Lucien
10 Park Plaza
Boston, MA 02116

Massachusetts Department of Transportation – District #6
Attn: MEPA Coordinator
185 Kneeland Street
Boston, MA 02111

Massachusetts Historical Commission
Attn: Brona Simon
The MA Archives Building
220 Morrissey Boulevard
Boston, MA 02125

Metropolitan Area Planning Council
Attn: Marc D. Draisen
60 Temple Place, 6th Floor
Boston, MA 02111

Department of Conservation and Recreation
Attn: MEPA Coordinator
251 Causeway St. Suite 600
Boston MA 02114

Department of Energy Resources
Attn: Paul F. Ormond
100 Cambridge Street, Suite 1020
Boston, MA 02114

Massachusetts Water Resources Authority
Attn: MEPA Reviewer
100 First Avenue, Building 39
Charlestown Navy Yard
Boston, MA 02129

Massachusetts Bay Transportation Authority
Attn: MEPA Coordinator
10 Park Plaza, 6th Fl.
Boston, MA 02116-3966

Representative Kevin G. Honan
State House
24 Beacon Street, Room 38
Boston, MA 02133

Representative Michael J. Moran
State House
24 Beacon Street, Room 39
Boston, MA 02133

City of Boston

Boston City Council
Attn: Mark Ciommo, District 9
One City Hall Square, 5th Floor
Boston, MA 02201

Boston Planning & Development Agency
Attn: Brian P. Golden, Director
One City Hall Square, 9th Floor
Boston, MA 02201

Boston Conservation Commission
One City Hall Square, Room 709
Boston, MA 02201

Boston Public Health Commission
Attn: Monica Valdes Lupi
1010 Massachusetts Avenue
Boston, MA 02118

Boston Public Library
700 Boylston Street
Boston, MA 02116

Boston Public Library
Honan-Allston Branch
300 North Harvard Street
Allston, MA 02134

Appendix B: Metes & Bounds

Note: Materials are provided on the enclosed CD-ROM due to large file size. Hard copies are available upon request.

Appendix C: BPDA Checklists

Article 80 – Accessibility Checklist

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

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

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

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

Accessibility Analysis Information Sources:

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

Glossary of Terms:

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

Article 80 | ACCESSIBILTY CHECKLIST

1. Project Information:

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

Project Name:	**Allston Yards**
Primary Project Address:	**60 Everett Street**
Total Number of Phases/Buildings:	**Multi-phases/Four (4) buildings**
Primary Contact (Name / Title / Company / Email / Phone):	**John Twohig** **New England Development** **jtwohig@nedevlopment.com, (617)-965-8700** **Guy Stutz** **The Stop & Shop Supermarket Company, LLC** **gstutz@ahold.com, (781) 380-8000**
Owner / Developer:	**The Stop & Shop Supermarket Company, LLC/New England Development**
Architect:	**Elkus Manfredi Architects** **Stantec Architecture**
Civil Engineer:	**VHB**
Landscape Architect:	**Copley Wolff Design Group**
Permitting:	**VHB**
Construction Management:	**Skanska**

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

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

Do you anticipate filing for any variances with the Massachusetts Architectural Access Board (MAAB)? ***If yes,*** identify and explain.	**At this stage of design, no variances are anticipated. This will be revisited as drawings are refined.**

2. Building Classification and Description:

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

What are the dimensions of the project?

Site Area:	**461,304 SF**	Building Area:	***±1.9 GSF***
Building Height:	**±232 Ft.**	Number of Stories:	***Up to 22 Stories***

First Floor Elevation:	**+34.76 Elev.**	Is there below grade space:		***Yes***
What is the Construction Type? (Select most appropriate type)				
	Wood Frame	Masonry	**Steel Frame**	Concrete
What are the principal building uses? (IBC definitions are below – select all appropriate that apply)				
	Residential – One - Three Unit	**Residential - Multi-unit, Four +**	Institutional	Educational
	Business	**Mercantile**	Factory	Hospitality
	Laboratory / Medical	Storage, Utility and Other		
List street-level uses of the building:	**Residential, Retail and Restaurant, Office, Parking**			

3. Assessment of Existing Infrastructure for Accessibility:

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

Provide a description of the neighborhood where this development is located and its identifying topographical characteristics:	**The Proposed Project is located at 60 Everett Street in the Allston-Brighton neighborhood of Boston and consists of the redevelopment of approximately 10.6 acres with a flagship grocery store, residential buildings, an office building and a new one-acre community park. The Proposed Project will integrate the new development at Boston Landing with the existing, residential neighborhood across Everett Street.**
List the surrounding accessible MBTA transit lines and their proximity to development site: commuter rail / subway stations, bus stops:	**The new Boston Landing Commuter Rail MBTA station is directly adjacent to the Project Site, and an MBTA bus stop for Route 64 is located at Arthur and Guest Streets adjacent to the Project Site. Additionally, bus routes 57, 66, 86, and 70/70A all operate within a half-mile of the Project Site. Slightly over a half mile from the Project Site is the B Branch of the MBTA Green Line at Warren Street.**
List the surrounding institutions: hospitals, public housing, elderly and disabled housing developments, educational facilities, others:	**Institutions located within a mile of the Project Site are St. Elizabeth Medical Center, Boston Housing Authority/Faneuil Gardens, Brian J. Honan Apartments, and Jackson Mann K-8 School.**
List the surrounding government buildings: libraries, community centers, recreational facilities, and other related facilities:	**Key public use facilities within a mile of the Project Site are Jackson Mann Community Center, DEAF Inc., Honan-Allston Branch of Boston Public Library, and Warrior Ice Arena.**

4. Surrounding Site Conditions – Existing: *This section identifies current condition of the sidewalks and pedestrian ramps at the development site.*	
Is the development site within a historic district? ***If yes,*** identify which district:	**No portion of the Project Site is within a historic district.**
Are there sidewalks and pedestrian ramps existing at the development site? ***If yes***, list the existing sidewalk and pedestrian ramp dimensions, slopes, materials, and physical condition at the development site:	**No, the Project Site is basically flat with smooth transitions to adjacent parcels with no accessibility obstructions anticipated.**
Are the sidewalks and pedestrian ramps existing-to-remain? ***If yes,*** have they been verified as ADA / MAAB compliant (with yellow composite detectable warning surfaces, cast in concrete)? ***If yes,*** provide description and photos:	**No, the entire Project Site is being redeveloped with new and improved sidewalks and pedestrian ways.**
5. Surrounding Site Conditions – Proposed *This section identifies the proposed condition of the walkways and pedestrian ramps around the development site. Sidewalk width contributes to the degree of comfort walking along a street. Narrow sidewalks do not support lively pedestrian activity, and may create dangerous conditions that force people to walk in the street. Wider sidewalks allow people to walk side by side and pass each other comfortably walking alone, walking in pairs, or using a wheelchair.*	
Are the proposed sidewalks consistent with the Boston Complete Street Guidelines? ***If yes***, choose which Street Type was applied: Downtown Commercial, Downtown Mixed-use, Neighborhood Main, Connector, Residential, Industrial, Shared Street, Parkway, or Boulevard.	**Yes –** **Downtown Mixed-Use: Guest Street Extension** **Neighborhood Main: Arthur Street** **Shared Street: East Street, West Street, and West Street Extension** **Industrial: Braintree Street Extension**
What are the total dimensions and slopes of the proposed sidewalks? List the widths of the proposed zones: Frontage, Pedestrian and Furnishing Zone:	**All sidewalks will have a cross slope of 1.6%** **Guest Street Extension: South Side – Retail: Pedestrian/Frontage Zone 13'-8"; Greenscape/Furnishing Zone (includes raised bikeway) 8'-0"; bump-outs at corners additional 9'-0"** **Guest Street Extension: North Side – Building B – Pedestrian/Frontage Zone varies 13'-8"; Greenscape/Furnishing Zone (includes raised bikeway) 8'-0"; bump-outs at corners additional 9'-0"**

	Building C – Pedestrian/Frontage Zone 13'-8"; Greenscape/Furnishing Zone (includes raised bikeways) 8'-0"; bump-outs at corners additional 9'-0" Building D – Pedestrian/Frontage Zone (varies) 13'-8" to 14'-8"; Greenscape/Furnishing Zone (includes raised bikeways) 8'-0". Arthur Street – south of Guest Street: Pedestrian Zone 5'-8"; Greenscape/Furnishing Zone (including raised bikeways) varies 8'-21' Arthur Street – north of Guest Street: Pedestrian/Frontage Zone 11'-8". West Street: Frontage Zone Townhouses [west side] 2'-6"; Pedestrian Zone 8'-0'; Greenscape/Furnishing Zone 4'-0"; [east side] Front Zone [west side] 2'-6"; Pedestrian Zone 8'-0"; Greenscape/Furnishing Zone 4'-0" West Street Extension: Pedestrian Zone [west side] varies 13'-6" to 14'-6"; Pedestrian Zone [east side] varies 10'-6" to 14'-8". East Street: Frontage Zone Townhouses [west side] 2'-6"; Pedestrian Zone 8'-0"; Greenscape/Furnishing Zone 4'-0"; [east side] Frontage Zone 2'-6"; Pedestrian Zone 8'-0"; Greenscape/Furnishing Zone 4'-0" Braintree Street Extension: Pedestrian Zone [north side] varies 4'-6" to 18'; Greenscape/Furnishing Zone [varies] 0' to 7'-6" Braintree Street Extension: Pedestrian Zone [south side] varies 5'-0" to 8'
List the proposed materials for each Zone. Will the proposed materials be on private property or will the proposed materials be on the City of Boston pedestrian right-of-way?	Frontage Zone: Unit pavers and raised planters Pedestrian Zone: Concrete pavement with light broom finish Greenscape/Furnishing Zone: Permeable pavers with raised planters with seating incorporated into edges; 5' width bike track All improvement zones are on private property with public access.
Will sidewalk cafes or other furnishings be programmed for the pedestrian right-of-way? ***If yes,*** what are the proposed dimensions of the sidewalk café or furnishings and what will the remaining right-of-way clearance be?	Guest Street [south] No cafes – retail with benches and trees; R.O.W clearance 13'-0"

If the pedestrian right-of-way is on private property, will the proponent seek a pedestrian easement with the Public Improvement Commission (PIC)?	**The ownership of the streets internal to the Project Site will be discussed with PIC and other stakeholders. If necessary, easements will be granted.**
Will any portion of the Project be going through the PIC? ***If yes,*** identify PIC actions and provide details.	**Yes, the streets internal to the Project Site will be reviewed and approved by PIC.**
6. Accessible Parking: *See Massachusetts Architectural Access Board Rules and Regulations 521 CMR Section 23.00 regarding accessible parking requirement counts and the Massachusetts Office of Disability – Disabled Parking Regulations*.	
What is the total number of parking spaces provided at the development site? Will these be in a parking lot or garage?	**Up to 1,400 structured parking spaces are proposed as part of the Proposed Project.** **Building A will have approximately 323 spaces allocated within the building provided in parking decks below grade, at grade, and mezzanine levels. 8 spaces will be required to be Accessible with 1 of the 8 being Van Accessible. The spaces will be located on accessible routes with (4) at grade, including the Van Accessible, near the retail and residential entries and (4) located in the below grade garage adjacent to the Retail Lobby Core**
What is the total number of accessible spaces provided at the development site? How many of these are "Van Accessible" spaces with an 8 foot access aisle?	**A total of 23 accessible parking spaces will be provided as part of the Proposed Project, and 3 of those spaces will be available as "Van Accessible."**
Will any on-street accessible parking spaces be required? ***If yes,*** has the proponent contacted the Commission for Persons with Disabilities regarding this need?	**The number and location of on-street accessible parking spaces is dependent on whether the internal roads will be private or turned over to the city as public streets. The roads are anticipated to be private, therefore the number of accessible on-street parking spaces will be proportional to the total on- and off-street supply based on the attached AAB standards.**
Where is the accessible visitor parking located?	**In all buildings.**
Has a drop-off area been identified? ***If yes,*** will it be accessible?	**Yes, and it will be accessible.**

7. Circulation and Accessible Routes: *The primary objective in designing smooth and continuous paths of travel is to create universal access to entryways and common spaces, which accommodates persons of all abilities and allows for visitability with neighbors.*	
Describe accessibility at each entryway: Example: Flush Condition, Stairs, Ramp, Lift or Elevator:	**All site conditions will provide a smooth paved accessible path-of-travel to building entrances and egresses as required by the Architectural Access Board and Commission of Persons with Disabilities.**
Are the accessible entrances and standard entrance integrated? ***If yes,*** *describe.* ***If no,*** what is the reason?	**All site conditions will be improved with a smooth paved accessible path-of-travel to building entrances and egresses as required by the Architectural Access Board and Commission of Persons with Disabilities.**
If project is subject to Large Project Review/Institutional Master Plan, describe the accessible routes way-finding / signage package.	**At this stage of design, wayfinding/signage package has yet been developed. This will be revisited as drawings are refined.**
8. Accessible Units (Group 2) and Guestrooms: (If applicable) *In order to facilitate access to housing and hospitality, this section addresses the number of accessible units that are proposed for the development site that remove barriers to housing and hotel rooms.*	
What is the total number of proposed housing units or hotel rooms for the development?	**The Proposed Project includes approximately 895 residential units. Building A is proposed at 176 residential units.**
If a residential development, how many units are for sale? How many are for rent? What is the breakdown of market value units vs. IDP (Inclusionary Development Policy) units?	**The approximately 895 housing units will be provided in a variety of sizes and price points, including affordable units and home ownership units. Approximately 110 for-sale unit and 785 rental units are projected. In compliance with the Inclusionary Development Policy, the Proposed Project will provide 13%, or approximately 116 units, as affordable. Building A is proposed of 176 rental units with 23 units as affordable.**
If a residential development, how many accessible Group 2 units are being proposed?	**There are 45 (5% of total) proposed accessible Group 2A units and 18 (2% of total) hearing impaired units per MAAB.** **Building A is proposed of 176 units of which 9 will be Group 2A units and 4 will be hearing impaired units.**
If a residential development, how many accessible Group 2 units will also be IDP units? ***If none***, describe reason.	**TBD**

If a hospitality development, how many accessible units will feature a wheel-in shower? Will accessible equipment be provided as well? ***If yes,*** provide amount and location of equipment.	N/A
Do standard units have architectural barriers that would prevent entry or use of common space for persons with mobility impairments? Example: stairs / thresholds at entry, step to balcony, others. ***If yes***, provide reason.	The standard units do not have architectural barriers that would prevent entry or use of common spaces. All units will be designed to comply with Group 1 or Group 2A per MAAB.
Are there interior elevators, ramps or lifts located in the development for access around architectural barriers and/or to separate floors? ***If yes***, describe:	No
9. Community Impact: *Accessibility and inclusion extend past required compliance with building codes. Providing an overall scheme that allows full and equal participation of persons with disabilities makes the development an asset to the surrounding community.*	
Is this project providing any funding or improvements to the surrounding neighborhood? Examples: adding extra street trees, building or refurbishing a local park, or supporting other community-based initiatives?	• The Proposed Project includes transportation and infrastructure improvements totaling approximately $20 million, which will facilitate redevelopment of the Project Site and surrounding sites with an interconnected, multi-modal street grid. • Provide an approximately 1.0-acre Community Green to be actively managed and programmed by the Proponent for community use. • Endow a "Public Realm Fund" available to the community including schools, community groups, athletic organizations and others to promote wellness, education and public realm and transportation enhancements.
What inclusion elements does this development provide for persons with disabilities in common social and open spaces? Example: Indoor seating and TVs in common rooms; outdoor seating and barbeque grills in yard. Will all of these spaces and features provide accessibility?	All common social and open spaces within the individual buildings will be fully accessible following ADA guidelines. In addition, all spaces open to the public will be fully accessible following ADA guidelines at all hard and soft (vegetated) zones.
Are any restrooms planned in common public spaces? ***If yes,*** will	Building A will have Retail space located on Ground and Second Floor and will accommodate single-stall, ADA compliant, Family / Companion

any be single-stall, ADA compliant and designated as "Family"/ "Companion" restrooms? ***If no***, explain why not.	**restrooms based on coordination with plumbing code and required fixture counts.**
Has the proponent reviewed the proposed plan with the City of Boston Disability Commissioner or with their Architectural Access staff? ***If yes,*** did they approve? ***If no,*** what were their comments?	**Not at this time.**
Has the proponent presented the proposed plan to the Disability Advisory Board at one of their monthly meetings? Did the Advisory Board vote to support this project? ***If no,*** what recommendations did the Advisory Board give to make this project more accessible?	**Not at this time.**

10. Attachments

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

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

- **See Figure C.1 – Full Build Accessibility Diagram**
- **See Figures C.2a-b – Phase 1 Condition Accessibility Diagram**

Provide a diagram of the accessible route connections through the site, including distances.

- **See Figure C.1 – Full Build Accessibility Diagram**
- **See Figures C.2a-b – Phase 1 Condition Accessibility Diagram**

Provide a diagram the accessible route to any roof decks or outdoor courtyard space? (if applicable)

- **See Figure C.1 – Full Build Accessibility Diagram**
- **See Figures C.2a-b – Phase 1 Condition Accessibility Diagram**

Provide a plan and diagram of the accessible Group 2 units, including locations and route from accessible entry.

- **See Figure C.1 – Full Build Accessibility Diagram**
- **See Figures C.2a-b – Phase 1 Condition Accessibility Diagram**

Provide any additional drawings, diagrams, photos, or any other material that describes the inclusive and accessible elements of this project.

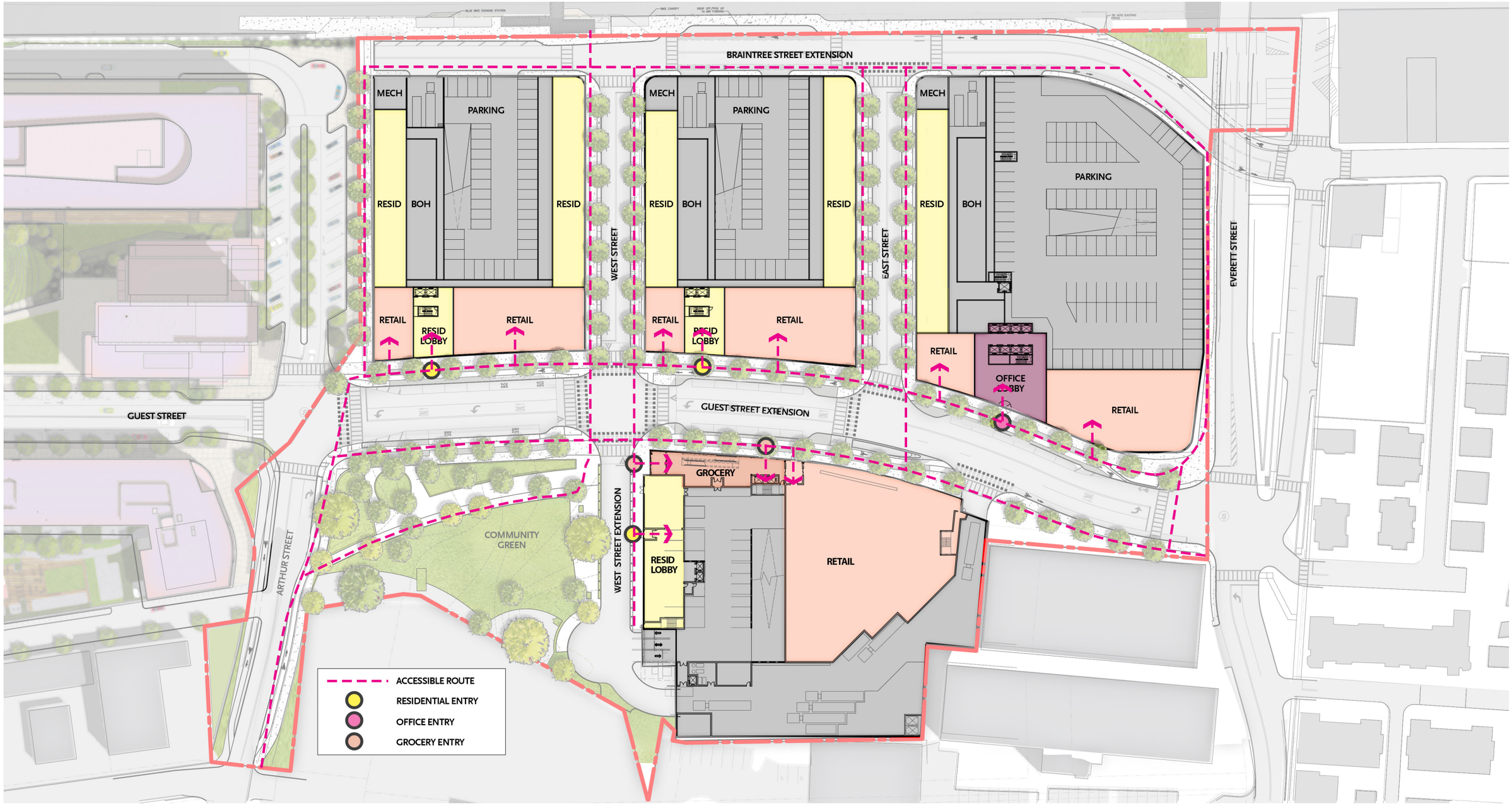
Article 80 | ACCESSIBILTY CHECKLIST

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

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

The Mayor's Commission for Persons with Disabilities
1 City Hall Square, Room 967,
Boston MA 02201.
Architectural Access staff can be reached at:

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

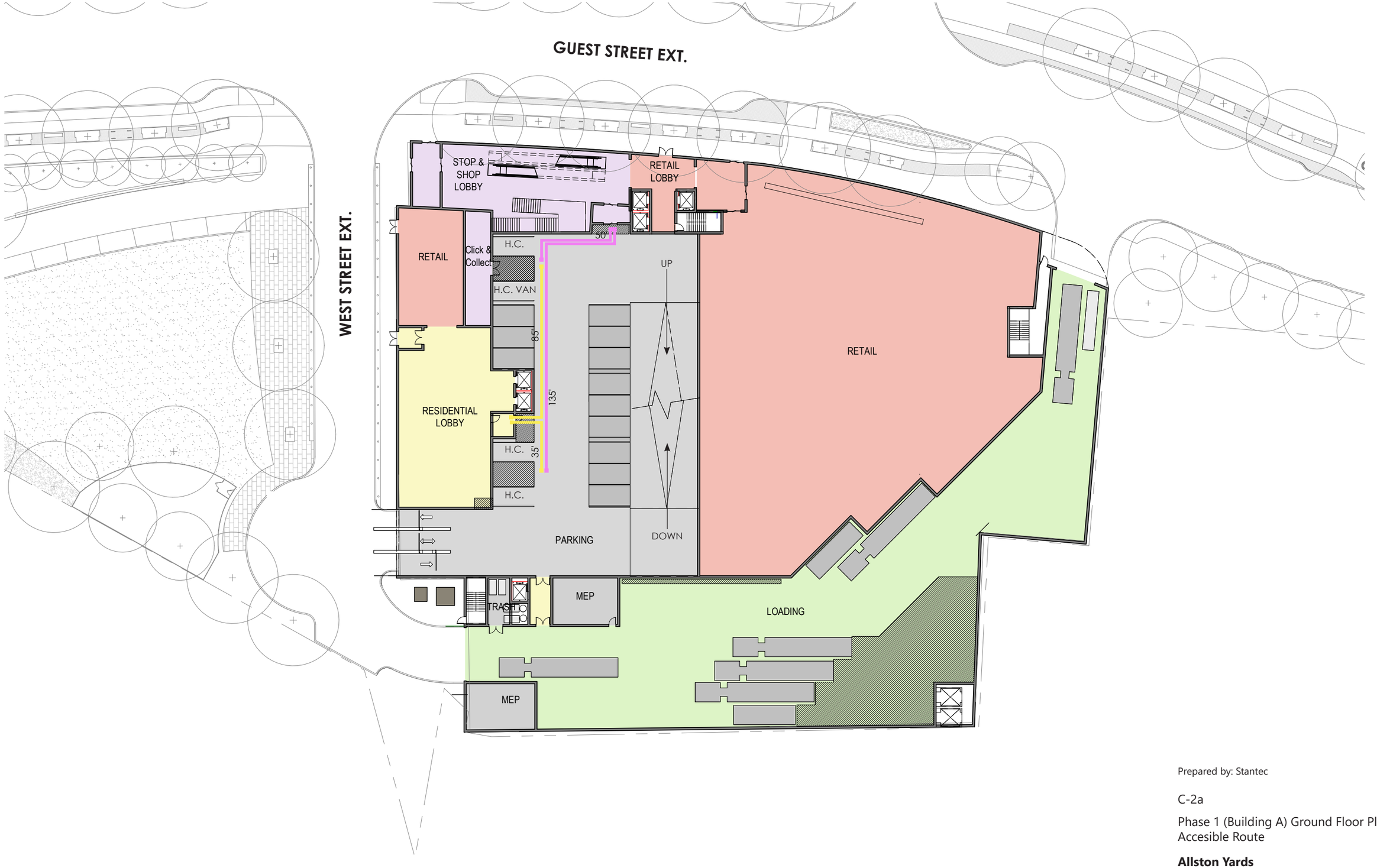


Prepared by: Elkus Manfredi Architects

C-1

Full Build Accessibility Diagram

Allston Yards
Allston, Massachusetts

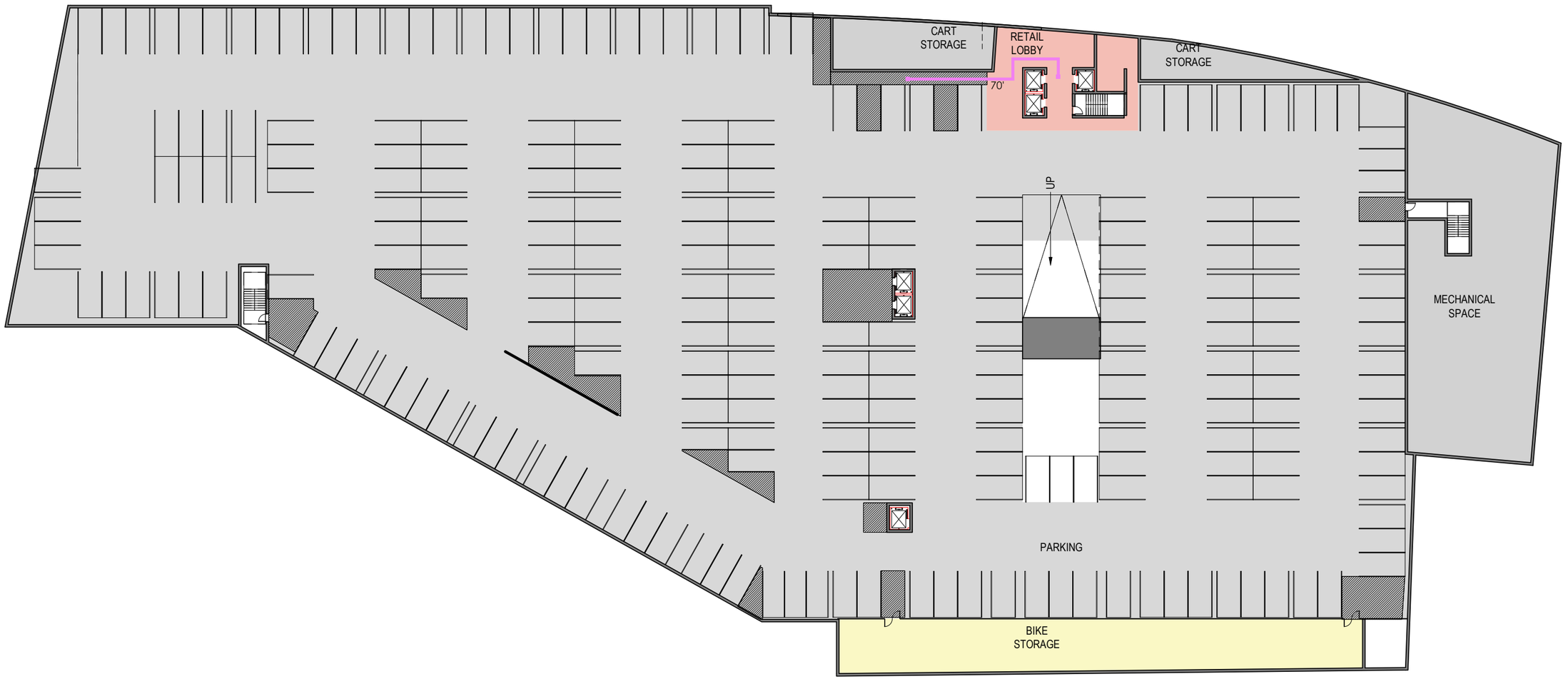


Prepared by: Stantec

C-2a

Phase 1 (Building A) Ground Floor Plan
Accesible Route

Allston Yards
Allston, Massachusetts



Prepared by: Stantec

C-2b

Phase 1 (Building A) Below Grade Plan
Accesible Route

Allston Yards
Allston, Massachusetts

boston planning & development agency

Climate Resiliency Checklist

NOTE: Project filings should be prepared and submitted using the online Climate Resiliency Checklist.

A.1 - Project Information

Project Name:	**Allston Yards**			
Project Address:	**60 Everett Street, Allston, MA 02134**			
Project Address Additional:				
Filing Type (*select*)	*Initial (PNF, EPNF, NPC or* **other substantial filing - DPIR**) *Design / Building Permit (prior to final design approval), or* *Construction / Certificate of Occupancy (post construction completion)*			
Filing Contact	**John Twohig and Guy Stutz**	**New England Development The Stop & Shop Supermarket Company, LLC**	**jtwohig@nedevelopment.com; gstutz@ahold.com**	**617)-965-8700** *(781) 380-8000*
Is MEPA approval required	**Yes**		Date: **EENF filed on 2/15/2019**	

A.3 - Project Team

Owner / Developer:	**New England Development, Master Developer; The Stop & Shop Supermarket Company, LLC, Developer and Owner**
Architect:	**Stantec Architecture/Elkus Manfredi Architects**
Engineer:	**WSP (building systems), VHB (site/civil engineering)**
Sustainability / LEED:	**The Green Engineer**
Permitting:	**VHB**
Construction Management:	**Skanska**

A.3 - Project Description and Design Conditions

List the principal Building Uses:	**Residential, Retail, Office**
List the First Floor Uses:	**Residential, Retail and Restaurant, Office, Parking**
List any Critical Site Infrastructure and or Building Uses:	**N/A**

Site and Building:

Site Area:	**±460,000 SF**	Building Area:	**±1.26 million GFA**
Building Height:	**Building C: Up to ±232 Ft**	Building Height:	**Building C: Up to 22 stories**
Existing Site Elevation – Low:	**28.53 Ft BCB**	Existing Site Elevation – High:	**34.67 Ft BCB**
Proposed Site Elevation – Low:	**34' BCB**	Proposed Site Elevation – High:	**35' BCB**

Proposed First Floor Elevation:	**+34.67 Ft BCB**	Below grade levels:	**Yes, 1 level (Building A)**

Article 37 Green Building:

LEED Version - Rating System :	**LEED v4 for: New Construction (residential), Core & Shell (office), and Commercial Interior (grocery)**	LEED Certification:	**All buildings will be designed to be LEED certifiable, per Article 37**
Proposed LEED rating:	*Certified/***Silver***/ Gold/Platinum*	Proposed LEED point score:	**NC -52 Pts; C&S – 51 Pts; CI– 52 Pts.**

Building Envelope

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

Roof:	**R-32c.i.**	Exposed Floor:	**N/A**
Foundation Wall:	**N/A**	Slab Edge (at or below grade):	**N/A**

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

Area of Opaque Curtain Wall & Spandrel Assembly:	**N/A**	Wall & Spandrel Assembly Value:	**N/A**
Area of Framed & Insulated / Standard Wall:	**Parcel A:** **-Residential: 60%** **-Grocery: 93%** **Parcel B: 60%** **Parcel C:** **-Residential: 60%** **-Retail 93%** **Parcel D:** **-Residential: 60%** **-Retail: 93%**	Wall Value	**Assembly U-0.055 (all buildings)**
Area of Vision Window:	**Parcel A:** **-Residential: 40%** **-Grocery: 7%** **Parcel B: 40%** **Parcel C:** **-Residential: 40%** **-Retail: 7%** **Parcel D:** **-Residential: 40%** **-Retail: 7%**	Window Glazing Assembly Value:	**Assembly U-0.38 (all buildings)**
		Window Glazing SHGC:	**SHGC-0.4 (all buildings)**
Area of Doors:	**N/A**	Door Assembly Value:	**Assembly U-0.38 (all buildings)**

Energy Loads and Performance

For this filing – describe how energy loads & performance were determined	*Annual energy simulation for all four buildings using eQUEST energy modeling software.*		
Annual Electric:	Parcel A: 2,054,216 kWh Parcel B: 2,551,021 kWh Parcel C: 2,508,216 kWh Parcel D: 1,956,447 kWh Garage: 1,191,294 kWh	Peak Electric:	Parcel A: 659 kW Parcel B: 1,350 kW Parcel C: 943 kW Parcel D: 781 kW
Annual Heating:	Parcel A: 446 MMBTU Parcel B: 2,122 MBTU Parcel C: 530 MMBTU Parcel D: 413 MMBTU	Peak Heating:	Parcel A: 0.9 MMBTU/hr Parcel B: 5.37 MMBTU/hr Parcel C: 1.57 MMBTU/hr Parcel D: 1.30 MMBTU/hr
Annual Cooling:	Parcel A: 59,263 Tons Parcel B: 52,047 Tons Parcel C: 69,226 Tons Parcel D: 53,997 Tons	Peak Cooling:	Parcel A: 194 kW Parcel B: 294 kW Parcel C: 281 kW Parcel D: 233 kW
Energy Use - Below ASHRAE 90.1 - 2013:	Parcel A: 32.5% Parcel B: 17.0% Parcel C: 30.2% Parcel D: 30.2% Garage: 22.8%	Have the local utilities reviewed the building energy performance?:	No
Energy Use - Below Mass. Code:	Parcel A: 32.5% Parcel B: 17% Parcel C: 30.2% Parcel D: 30.2% Garage: 22.8%	Energy Use Intensity:	Parcel A: 37.0 kBTU/SF Parcel B: 28.9 kBTU/SF Parcel C: 32.6 kBTU/SF Parcel D: 32.6 kBTU/SF Garage: 6.7 kBTU/SF

Back-up / Emergency Power System

Electrical Generation Output:	Parcel A: 750(kW) Parcel B: 750(kW) Parcel C: 500(kW) Parcel D: 750(kW)	Number of Power Units:	Parcel A: 1 Parcel B: 1 Parcel C: 1 Parcel D: 1

System Type:	Combustion Engine	Fuel Source:	Diesel with Day Tank

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

Electric:	Parcel A: 290(kW) Parcel B: 375(kW) Parcel C: 322(kW) Parcel D: 290(kW)	Heating:	N/A *(MMbtu/hr)*
		Cooling:	N/A *(Tons/hr)*

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

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

B.1 – GHG Emissions - Design Conditions

For this Filing - Annual Building GHG Emissions: **4,230 (Tons)**

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

The Proposed Project buildings will be designed to be energy efficient to the extent possible. Buildings will include a high-performance envelope designed specifically for the building use. The Proponent plans to register the proposed buildings with the ENERGY STAR Portfolio Manager® program to record and monitor whole-building electricity, gas, and water use.

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

Buildings will include a high-performance envelope designed specifically for the building use and orientation.

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

The Proponent will continue to evaluate energy efficiency measures ("EEMs") for possible inclusion in select portions of the Proposed Project. The EEMs may include high-performance glazing, increased insulation, low lighting power densities, low flow plumbing fixtures, high-efficiency mechanical and ventilation systems equipment and alternative energy sources. Whole building energy modeling was used for a preliminary analysis of possible energy efficient measures.

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

As design advances, the development team will continue to assess the viability of including small-scale Combined Heat Power (CHP) systems for each of the residential buildings.

For the rooftop and building-integrated solar feasibility study, each roof and southern-facing building facade was assessed for potential implementation of the technology. Since roof areas are also used to house mechanical equipment (such as cooling towers, stair pressurization fans, etc.), electrical equipment (generators) and stair access, solar is usually only feasible on a subset of total roof area. Due to the variable roof elevations and lines of the proposed buildings, PV was not considered on the lower roofs due to shading from the towers and due to the

aesthetic concern about tower occupants looking down onto PV on the lower roofs. The analysis considered a 38,885-sf system with a capacity of 544 kW. The study indicated that approximately 671,971 kWh of energy per year could be generated site-wide. This is equivalent to approximately $105,499 per year in utility costs and reduce site-wide GHG emissions by 239 tons per year. With the phased nature of the project, it unlikely that the current incentives will still exist when the projects are built however a payback period has been calculated that includes federal incentives. The simple payback period for the PV solar systems is estimated to 16.2 years (inclusive of the federal tax credit) for all buildings but could potentially be reduced with SMART incentives. Of note, the roof-mounted arrays had a significantly lower payback (~13 years) compared to the building-integrated arrays (32 to 37 years).

Fuel cells are being considered for application in the grocery store component of Building A. This technology is being studied as part of the BPDA Smart Utilities Pilot Policy's District Energy Microgrid Feasibility Study (mentioned above). The Project Team will continue examining the backup power required to maintain operation of critical loads for that program.

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

Through design revisions made to respond to IAG, community and agency comments, the Proposed Project's square footage has been reduced below the 1.5MM SF District Energy Microgrid Pilot Policy threshold. While the Proposed Project is no longer technically subject to the Pilot Policy, the Proponent has volunteered to participate on a consultative basis. As such, the project team filed the Part A Feasibility Assessment required by the Policy on January 7, 2019. The project team will continue to consult with the BPDA as it prepares and files Part B, which is anticipated to identify potential renewable and other energy system alternatives and study their feasibility.

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

The Proponent has held initial meetings with representatives of local utility companies serving the area to discuss the potential utility incentives programs available for each building and will continue to work with these utilities throughout the design process.

B.2 - GHG Reduction - Adaptation Strategies

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

Strategies to potentially achieve carbon net zero or net positive performance need to be evaluated further for the Proposed Project.

C - Extreme Heat Events

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

C.1 – Extreme Heat - Design Conditions

Temperature Range - Low:	7 ºF	Temperature Range - High:	91ºF

!

Annual Heating Degree Days:	5512	Annual Cooling Degree Days	776

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

Days - Above 90°:	15	Days – Above 100°:	0
Number of Heatwaves / Year:	1 per year	Average Duration of Heatwave (Days):	3

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

At the street level, the Proponent aims to reduce the heat island effect through the use of 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.

C.2 - Extreme Heat – Adaptation Strategies

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

Incorporation of reflective roof materials and/or vegetated roofs will reduce heat island effect in project vicinity. Proponent's design team will run the HVAC load calculations to make sure that building systems can maintain safe indoor temperatures during heat wave conditions. This analysis will account for cooling capacity of HVAC system and building envelope performance.

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

- Designing the residential units for natural ventilation (i.e., operable windows, where appropriate), which help mitigate power disruptions by reducing the reliance on mechanical ventilation systems windows by providing fresh air when mechanical systems are down.
- As part of the energy modeling process, climate profiles that reflect the projected 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.)
- Proponent is studying the feasibility of the application of District Energy Microgrid, per the BPDA's Smart Utilities Pilot Policy. Backup power coupled with peak demand reduction capability and flexible HVAC system control will allow the buildings to run HVAC system to create safe indoor temperatures for occupants in the case of a simultaneous heat wave and grid outage.

D - Extreme Precipitation Events

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

D.1 – Extreme Precipitation - Design Conditions

10 Year, 24 Hour Design Storm:	7.88 In.

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

To manage stormwater, 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.

D.2 - Extreme Precipitation - Adaptation Strategies

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

- The Proposed Project plans to mitigate stormwater through a series of underground infiltration systems that will be sized in accordance with municipal and BPDA Smart Utilities Policy standards.
- The Project Site will be graded away from the proposed buildings and on-site drainage will be picked up by area drains, permeable pavers or infrastructure in the surrounding streets.
- The Proposed Project is considering rainwater harvesting for re-use applications.
- Vegetated roofs may will be integrated throughout the Proposed Project, where reason.

E – Sea Level Rise and Storms

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

Is any portion of the site in a FEMA SFHA?	No	What Zone:	A, AE, AH, AO, AR, A99, V, VE
		Current FEMA SFHA Zone Base Flood Elevation:	*Ft BCB*

Is any portion of the site in a BPDA Sea Level Rise - Flood Hazard Area? Use the online BPDA SLR-FHA Mapping Tool to assess the susceptibility of the project site.	No

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

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

Proposed projects should identify immediate and future adaptation strategies for managing the flooding scenario represented on the BPDA Sea Level Rise - Flood Hazard Area (SLR-FHA) map, which depicts a modeled 1% annual chance coastal flood event with 40 inches of sea level rise (SLR). Use the online BPDA SLR-FHA Mapping Tool to identify the highest Sea Level Rise - Base Flood Elevation for the site. The Sea Level Rise - Design Flood Elevation is determined by adding either 24" of freeboard for critical facilities and infrastructure and any ground floor residential units OR 12" of freeboard for other buildings and uses.

Sea Level Rise - Base Flood Elevation:	*Ft BCB*

Sea Level Rise - Design Flood Elevation:	*Ft BCB*	First Floor Elevation:	*Ft BCB*
Site Elevations at Building:	*Ft BCB*	Accessible Route Elevation:	*Ft BCB*

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

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

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

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

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

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

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

A pdf and word version of the Climate Resiliency Checklist is provided for informational use and off-line preparation of a project submission. NOTE: Project filings should be prepared and submitted using the online Climate Resiliency Checklist.

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

Appendix D: Transportation Supporting Documentation

Note: Materials are provided on the enclosed CD-ROM due to large file size. Hard copies are available upon request.

Appendix E: Environmental Supporting Documentation

Note: Materials are provided on the enclosed CD-ROM due to large file size. Hard copies are available upon request.

Appendix F: Air Quality/Greenhouse Gas Supporting Documentation

Note: Materials are provided on the enclosed CD-ROM due to large file size. Hard copies are available upon request.

Appendix G: Construction Supporting Documentation

Note: Materials are provided on the enclosed CD-ROM due to large file size. Hard copies are available upon request.

Appendix H: Public Comments on the PNF

B

Casey Hines <casey.a.hines@boston.gov>

Allston Yards Comments 06/15/2018

1 message

Anthony D'Isidoro <AnthonyDIsidoro@msn.com> Fri, Jun 15, 2018 at 6:15 PM
To: Casey Hines <casey.a.hines@boston.gov>
Cc: Anabela Gomes <bela@mail.com>, Andrea Howard <ahoward@westendhouse.org>, Bernadette Moran Lally <birdlal@yahoo.com>, "Bligh, John" <johnjoe75@yahoo.com>, Colin Akerly <cakerly@gmail.com>, "Daly, Dan" <dd103@comcast.net>, Emma Walters <emma@allstonvillage.com>, Jean Powers <jean.powers@gmail.com>, John Cusack <jcusack@nercc.org>, "Leis, Peter" <peteleis@gmail.com>, Monica Rodriguez-Hernandez <jacquline98@yahoo.com>, Rosie Hanlon <Rosie.Hanlon@boston.gov>, Warren O'Reilly <warren.oreilly@boston.gov>

Hi Casey,

Let me say I fully support the positions taken by the Brighton Allston Community Coalition (BACC) in their comment letter dated June 8, 2018.

A few additional thoughts.

The Lantera Building at Boston Landing should be treated as an exception to the rule and not the standard for the site bordered by Everett St, North Beacon St, Market St and the Massachusetts Turnpike. It should never have been approved at 195 feet with a 20-25 foot mechanical penthouse.

The spirit of the Guest Street Planning study should be adhered to. It was a recent study the community worked in good faith with the City to produce. What standing would the City have with the community if they simply choose to not hold potential developers accountable. With additional development coming to the site, if every project "maxed" out their holdings, the outcome would be catastrophic for this community.

Again, Allston Brighton is not a downtown neighborhood. Let's stop approving projects as if it is.

On parking. If the developer is going to charge extra for the .5 parking (except for the supermarket), what assurances do we have that residents and local workers who own cars and don't want to pay the extra fee simply secure a resident parking permit and grab what remaining public spaces exist. Charging for resident parking permits and increasing fines for parking violations will not get it done.

Finally without exaggeration, this project is right up there with Barry's Corner and the Massachusetts Turnpike Extension with its potential to land a devastating blow to a community where others have imposed their will simply because of who we are and where we are located. To this day, those two events, emotions still run deep.

For the residents of Allston Brighton it all about respect for those who came before us, for those who now call this community home and for what we leave behind for those to come.

We look to the Mayor and the Boston Planning & Development Agency to show leadership for the long term, to do what is right and use this historic cycle to help us build a community we all can be proud of.

Tony

B

Casey Hines <casey.a.hines@boston.gov>

Keolis adding 4 more stops at Boston Landing (Bruce Mohl, Commonwealth Magazine: May 15, 2018)Re: Allston Yards Parking Discussion

1 message

Anthony D'Isidoro <AnthonyDIsidoro@msn.com> Thu, May 17, 2018 at 9:39 PM
To: Casey Hines <casey.a.hines@boston.gov>
Cc: Anabela Gomes <bela@mail.com>, Andrea Howard <ahoward@westendhouse.org>, Bernadette Moran Lally <birdlal@yahoo.com>, "Bligh, John" <johnjoe75@yahoo.com>, Colin Akerly <cakerly@gmail.com>, "Daly, Dan" <dd103@comcast.net>, Emma Walters <emma@allstonvillage.com>, Jean Powers <jean.powers@gmail.com>, John Cusack <allstoncusacks@yahoo.com>, "Leis, Peter" <peteleis@gmail.com>, Monica Rodriguez-Hernandez <jacquline98@yahoo.com>, Rosie Hanlon <Rosie.Hanlon@boston.gov>

Hi Casey,

The article below raises again the fear of increased drop-off and pickup traffic passing through our neighborhood streets and onto the New Balance/Stop & Shop site, competing with traffic associated with the New Balance and Stop & Shop developments; the fears of many IAG members regarding a staging area for the commuter rail stop that will underserve the demand, pedestrian and bike safety and sidewalks that will not safely accommodate the commuters who choose to enter and exit the station from the Everett St bridge. Will additional signaling as proposed help or bring the whole area to gridlock during rush hour?

With all the development yet to come in close proximity to New Balance and Stop & Shop, the transportation presentations to date have yet to convince me that sustainable mobility is achievable.

Tony

Keolis adding 4 more stops at Boston Landing (Bruce Mohl, Commonwealth Magazine: May 15, 2018)

Increased traffic could have implications for West Station

THE MBTA'S COMMUTER RAIL OPERATOR said that four additional trains will stop at Boston Landing Station starting Monday to accommodate increased passenger traffic, which advocates for a proposed West Station say is a positive sign of customer demand in the area.

Boston Landing, located on the Framingham-Worcester Line, opened a year ago adjacent to a mixed-use development that includes the New Balance headquarters. Traffic estimates have varied dramatically for the station, but officials at Keolis Commuter Services decided passenger growth warranted adding one stop on inbound train 500, which leaves Worcester at 4:45 a.m., and so-called flag stops on the outbound 511, 513, and 515 trains. With flag stops, the train stops if a passenger is waiting on the platform or if an on-board passenger asks to be let off.

Currently, 34 trains stop at Boston Landing every weekday.

Jim Aloisi, a former state secretary of transportation and a board member of TransitMatters, said the need for increased service at Boston Landing is a strong indicator of demand for rail service in the area. "For me, that's an affirmation that if we build a station like West Station you will attract

riders. This is not a theoretical proposition," he said. "I think the demand at West Station would be even greater."

Aloisi and other transit advocates want to build West Station toward the beginning of a massive development initiative being led by Harvard University in the Allston area. By contrast, state officials have suggested holding off on construction of the station until 2040, when Harvard's development will be further along and traffic models forecast 250 daily commuter riders and 2,900 bus riders.

At Boston Landing, Keolis officials estimate 300 passengers a day are passing through the station just a year after it opened. Occasionally, traffic is much higher; Keolis spokesman Justin Thompson said 575 to 600 passengers used the station during one week in April. A large chunk of the 1.75 million square foot development at Boston Landing is already built out.

Keith Craig, director of development at New Balance Development, said in an interview in December that his company did passenger counts during a week in October and found between 700 and 900 daily passenger trips. The state in 2009 forecasted 2,400 boardings eventually at Boston Landing.

In a telephone interview Tuesday evening, Craig said he expects traffic at the station to increase this summer because the prime office space is now fully occupied and units in residential buildings are currently being leased.

Aloisi thinks West Station could be even more attractive to riders than Boston Landing because of its proximity to Harvard and Boston University, as well as its access to a possible rail connection to Kendall Square in Cambridge and North Station. Harvard has offered $8 million toward an interim West Station (basically a commuter rail stop between Boston Landing and Yawkey) and $50 million toward the full buildout.

The Worcester-Framingham Line has made a big turnaround over the last year, going from one of the worst performers in terms of on-time performance to being on time at least 90 percent of the time.

B

Casey Hines <casey.a.hines@boston.gov>

Allston Yards Comment Letter 05/01/2018

1 message

Anthony D'Isidoro <AnthonyDIsidoro@msn.com> Tue, May 1, 2018 at 4:36 PM
To: Casey Hines <casey.a.hines@boston.gov>

Hi Casey,

I wanted to provide some additional thoughts regarding the issue of parking.

I have serious reservations regarding the current parking ratios for residents and workers.

In the article below, Politico estimates that 52% of millennials in Boston rely on alternative modes of transportation. Therefore 48% of those do not.

I would suspect that the bulk of the 52% includes those with no transportation options primarily due to income and those who do have choices and do the right thing by taking private and public transportation, walking and biking.

I suppose the 48% is primarily those who have transportation choices and pick the car.

The concern I have as I stated last night is as you know I have shared some recent analysis with you that concludes for an individual who wants to rent or own the smallest unit in these new developments they must be earning at least $100,000 (for homeownership, $100,000 down payment as well) or be an empty nester or someone who is downsizing with considerable assets in the bank.

The third of the millennials funneling at least 35% of their income to rent or homeownership in the article, probably fall in the 52% category.

All my tenants are young millennials with good jobs and all of them have cars. The costs to live in these new developments and the people who can comfortably afford it, many of them will want to own a car.

Continued reliance on the MBTA coming to our rescue any time soon is dangerous. Even many of the young people have given up and utilize Uber and Lyft, which by the way is generating a lot of motor vehicle traffic.

Public transit right now can't compete with the car and now that the battery glass ceiling has been shattered (one charge=400 miles, rapid recharging stations), electric cars will also be extremely attractive to those who promote clean energy.

When you move from a studio to a one, two or three bedroom unit and the income/assets that will require, I can't believe car(s) would not factor in, especially for the homeownership units.

On office space, I believe they stated the urban guideline is one car per 1,000 square feet of office space. The general rule of thumb is to allow anywhere between 125 and 225 usable square feet of office space per person. This of course, depends upon the type and style of the business and the workspace layout. That scares me as well. One car for 4-8 office people.

Tony

Boston Has the Second-Most Impactful Millennial Population Nationwide (Hayley Glatter, Boston Magazine: April 30, 2018)

According to new rankings from Politico, the size and productivity of the Hub's 25- to 34-year-olds are second only to San Francisco.

Boston may not be the nation's millennial powerhouse, but at least we've earned the biggest participation trophy.

According to a new study from Politico, the size, composition, and impact of San Francisco's population between the ages of 25 and 34 makes it the country's most millennial-molded metropolis. Meanwhile, Boston's large, dynamic population of young people snagged the Hub the silver.

The rankings are based on several factors aimed at quantifying millennials' impact and productivity across the country. Criteria include the relative size and education level of a city's young population; the robustness of an urban center's economy; the percentage of new arrivals in a metropolis; and how common it is for young people to rely on a city's public transportation system.

Adults ages 25 to 34 make up 23 percent of the Hub's population, and 15 percent of those folks moved to Boston within the last year. Politico noted that the majority of young people—52 percent—rely on alternative modes of transportation like the MBTA or walking to get around the city. The data also paints a picture of Boston's expensive, crowded housing market, finding that nearly a third of millennials funnel at least 35 percent of their income toward rent or homeownership fees.

While the Hub's millennials kept pace with those who call San Francisco home in several demographic categories, the Northern California powerhouse pulled away from us in terms of job growth and median income level. Between 2012 and 2016, the number of jobs in the Hub grew by 12 percent, while in San Francisco, the number of open positions jumped 27 percent. And while the average income level of a millennial-headed household in Boston stands at $74,000, the figure totals $120,000 in San Francisco.

Politico's rankings support the idea that young people are gravitating toward coastal destinations. Aside from Denver, Minneapolis, and Austin, the top 10 cities shaped by millennials all touch either the Atlantic or Pacific Ocean. Along with San Francisco and Boston, Washington, D.C., rounds out the list's top-three, while New York came in at no. 11, and Chicago notched the 19th-place spot.

Ms. Casey Hines
Boston Planning and Development Agency

June 14, 2018

Dear Ms. Hines,

As a member of the Stop and Shop Allston Yards IAG and a resident home owner in Allston. I have sat through every Allston Yards IAG meeting continually expressing my thoughts on this massive project. I have lived in this neighborhood for over 45 years and have been an involved community member. I have been approached by more neighbors with questions about this development project than any other project I have been involved in. They continually ask about the number of new condos being proposed and wonder "how they can possibly fit that many apartments in that location" and "will they ever be able to drive to the grocery store again because the traffic is already so bad around this area".

I believe this project has many issues with density and height and transportation/traffic being at the top of the list.

I am **opposed** to this project as it is now proposed.

The following are a list of issues that most concern me.

1. After asking for a deduction in both **density and height** at every IAG meeting the developer finally deduced the number of units from 1090 to 960 and the height by a few stories. This is just not enough! I suggested that they consider 3 building as opposed to 4 leaving more green space and parking for those who do not want to park in a building garage, Uber/Lift drop off and pick up areas, HUB way etc.

2. **Transportation and traffic** are the biggest issue in this area now. The developer seems to think by adding a traffic signal and removing a wall on the Everett Street Bridge they will solve the traffic issues of this area. They fail to recognize that by adding **1090 addition units of housing** to this area will only make it much more congested. The commuter rail does not run all day and no one can predict what will happen with the MBTA therefore people will need to seek alternative means of transportation. Our neighborhood streets cannot take any more traffic from people trying to avoid the main streets that are already congested. The developer did not even address the safety issue on the other side on the Everett Street Bridge near the now vacant Harvard building. The neighborhood is trying to absorb the increased foot traffic from the new commuter rail riders, the sidewalk are not wide enough to accommodate this amount of people let alone adding more without taking this problem needs to be involved in any new development discussion. With every new building built in Allston Brighton the traffic study becomes obsolete. They suggest that by looping traffic down Arnold Street to North Beacon Street then onto Everett Street that it will solve the traffic issues. This might make sense in solving the present traffic issues but when adding 1090 units of housing, retail, increased commuter riders, bikes, and Uber/Lift drivers along with

pedestrian traffic their solution will not begin to touch the potential traffic nightmare this will create for Allston Brighton.

3. **Parking** in our neighborhood is nonexistent. As part of the Boston Landing development 2 hour parking limit signs were posted and people still park and walk to the train every day causing a loss in street parking. Potential Allston Yards resident's leases and deeds need to have a deed restriction prohibiting tenants from receiving resident parking stickers so they will be discouraged from parking on Allston Brighton streets. This should be part of their deeds and leases and the City of Boston should enforce the program.

4. **Home-ownership** in Allston Brighton is at an all-time low, people have to be invested in their community for it to thrive and the best way to achieve this is having residents own their own homes. The proposed 10% of units for home ownership is not nearly enough, I believe 40-50% would be a good place to start; these units need to be affordable. The rental units also need to have a higher percentage earmarked as affordable housing.

5. **The proposed green space** being expanded to 1 acre is a move in the right direction. I believe the 1 acre green space/park area should be owned by the City of Boston not the developer.

Allston Brighton is overrun by development, we have 17 IAG projects and we cannot support any more large developments. I believe this project is much too large and urge the BPDA to consider all the development that is taking place in Allston Brighton before approving this project as it's currently proposed. I am opposed to the project.

Bernadette Moran Lally
Allston Yards IAG Member
11 Alcott Street
Allston, Ma 02134

BRAINTREE STREET REALTY LLC

April 2, 2018

BY EMAIL AND FIRST CLASS MAIL

Ms. Casey Ann Hines
Boston Planning and Development Agency
One City Hall Square, 9th Floor
Boston, MA 02201

Re: Allston Yards Project, 60 Everett Street, Allston

Dear Ms. Hines,

On behalf of Braintree Street Realty LLC ("BSR"), I am writing in support of the Allston Yards project.

We are a direct abutter on the northeast corner of the project, where the Braintree Street extension road intersects with Everett Street. We support the important goals of the project to promote a transit-oriented mixed use project in a location that directly abuts the new Boston Landing train station. Inclusion of new housing, along with an affordable housing component, as well as a new Stop & Shop Supermarket improves this community. As such, we wholeheartedly support their development. We believe this is the type of smart growth project that the City should support.

We have reviewed the PNF and wanted to share the following additional observations. The project will result in important transportation improvements to the existing infrastructure, as well as providing substantial housing opportunities and open space. The current configuration of the street grid and supporting street extensions is an important part of the project and results in our full support.

Finally, the project proponent has been responsive to comments we have made on the project's specific impact on our property, and while the positive resolution of these comments may not be of as much concern to the general public, the project proponent's flexibility and cooperation reflects an extremely responsive approach that will bode well for the City and its residents as the project moves forward.

Sincerely,

BRAINTREE STREET REALTY LLC

Michael Blank, Manager

Casey Hines <casey.a.hines@boston.gov>

Replaces my earlier comment, correcting typo

1 message

Chandler R <chandler814@gmail.com> Fri, May 18, 2018 at 9:51 AM
To: Casey.A.Hines@boston.gov

Dear Ms. Hines:

I am writing as a close abutter to the Allston Yards project to express my deep dissatisfaction with the designs I have seen for one of the largest projects in the City of Boston.

My wife and I have owned our house on Aldie Street for 12 years; we have two small children and are deeply committed to a vibrant and appealing neighborhood. I am a great supporter of investments in the neighborhood and have never opposed any project here. But I am very upset about Allston Yards, which seems unusually ugly and ill-considered.

My chief concern is the design, which seems to be an attempt to squeeze as many apartments onto the available land as cheaply as possible. The buildings proposed are the kinds of faceless blocks that have ruined Kendall Square. There is no attempt to scale the street fronts of these large buildings so that they allow for an attractive pedestrian zone. Instead, Allston Yards seems eager to repeat the mistakes made further west on Guest Street, where the Lantera apartments and the office buildings across the street form a forbidding, sterile canyon of concrete and glass.

This sort of soulless wind tunnel ruins any appeal the buildings might have to tenants and shoppers. We, for example, were very excited when Flatbread Pizza opened on Guest Street; it's easily accessible from our house on foot. But we have not gone back since opening night. Why would we again walk through that gigantic Legoland, with noise from the Pike echoing off its dreary walls of glass?

It's one thing for Kendall Square developers to build sterile office blocks: they never expected their tenants to live there. But I'm amazed that the Allston Yards developers think they are maximizing their returns. As it is now designed, Allston Yards looks like the kind of place that no one could possibly live in for more than a year or two. Are the developers looking for high turnover? Do they want to drive their own tenants away?

If not, I strongly encourage them to invest in much better street-level design, and to include much more green space. If they would like to see what appealing and profitable buildings look like, I strongly encourage them to consider the thoughtful design of Continuum in Barry's Corner. Sadly, what they are prepared to build looks more like the floundering Trac 75 building on Braintree Street.

In conclusion, let me stress that I am not an opponent of development: we want the developers of Allston Yards to earn substantial profits from a great development. I write only to implore them not to waste their money and wreck our neighborhood at the same time.

Yours sincerely,

Chandler Rosenberger
4 Aldie Street
Allston

Casey Hines
Senior Project Manager
Boston Planning and Development Agency
One City Hall Square, Boston, MA 02201

April 4th, 2018

Dear Ms. Hines

I look forward to a future public meeting on the Allston Yards development. It would be great to give the developers insight to what people in the neighborhood think about the project. I live on Western Ave., just a 10 minute walk away from the project site, and I work in an office at the 119 Braintree St. office building next door to the development. This project affects both my home and work life, so it means a lot to me. Here are some points I would like to bring up with the developers.

Affordability: We have an affordable housing shortage in the neighborhood and residents who wish to stay in the neighborhood are unable to do so, if their living situations change – such as starting families, or seniors looking to downsize. This section of Allston is being besieged by development, with over 1,800 units of housing currently being proposed within a half mile of Everett Street. A majority of this new housing will be luxury/upper-middle income rentals, with only the minimum required as affordable. With this proposal being over 1,000 units, we feel that the developer of this project can exceed the 13% requirement; 20% of affordable units can be feasible in this size of a project in my opinion. The median income in Allston is around $52,000 a year. Most of us living in Allston can definitely not afford all of the new, luxury developments, and even at 13% of units at 70% AMI, it is tough for us to make ends meet. I live in one of these units at Continuum and know this first hand. We want neighborhood stabilization in Allston, and this will give people the opportunity to call Allston home in the long run. **In order to receive my support as a neighbor, a greater percentage of the overall units need to be affordable**. Additionally, there are not enough family-oriented apartments being built in the neighborhood (mostly studios and one-to-two-bedrooms). **I would like to see three-bedroom units included in the proposal – specifically offered as affordable, so families can continue to stay in the neighborhood.**

On top of the affordability of the apartments, I want reassurance from the developers that when the new Stop & Shop is built, **the prices of the groceries will not be affected.** When I read "state of the art, urban grocery story," I read "price increases." This grocery store is a close and affordable option for people who live nearby, and we need to keep it that way. The Dollar Tree and Home Goods losses will also affect affordable shopping options for neighbors.

Homeownership: Similar to the growing affordable housing shortage with rental housing, we are experiencing dwindling opportunities for homeownership in the neighborhood. Allston has less than a 10% homeownership rate, and although developers commit to building condos, these only end up being condos in theory and not in practice. Investors end up purchasing these condos and renting them out – this is currently playing out in the short-term rental market. **In order to receive my support as a neighbor, a percentage of the condos will need to have owner-occupant deed restrictions tied to them, not just the ones set aside as affordable by the BPDA. Additionally, I would like to see a percentage of the condos be affordable.** A condo without a deed restriction is simply a rental by another name. **I would also like to see restrictions within the condo documents limiting investors' ability to rent non-owner-occupied units as short-term rentals.** This further destabilizes the neighborhood and adds to the housing shortage. Studies have shown that short-term rentals through apps like AirBnb or companies like Sonder lead to higher rents in the surrounding area. These investments opportunities would hurt the entire rental market in Allston.

Transit and Traffic: With over 1,800 units of housing in the pipeline, for a such a small area, we need some real investments in transit and efforts in traffic reduction. This section of the neighborhood is already impacted by both congestion, cut-through traffic, and speeding - depending on time of day (North Beacon

Street and Everett Street specifically) and with the influx of housing within the area, this will only get worse! **In order to receive my support as a neighbor, I will need to see streets in-and-around the development be safe for users of all types, specifically pedestrians and those with mobility challenges.** Traffic reports for each of these developments only include the traffic impacts by each development, not all of the developments as a whole. I would be curious to see what all the traffic impacts look like together. It sounds frightening to be honest.

The development must also look to the future. Although it is situated next to the new Commuter Rail stop, people living in the development who don't work a normal 9-5 work schedule will need to get to work on time. I see a lot of these residents using services like Lyft and Uber, and there must be a drop off/pick up loading zone built into the roadways for the development to prevent traffic backups from cars pulling over willy nilly.

Green/Open Space: Allston has one of the lowest ratios of open space per resident anywhere in the city, and the developer's proposal of 0.5 acres for 1,050 units - doesn't come close to enough. **In order to receive my support as a neighbor, a greater percentage of green space needs to be included in the project.** I'm also curious about the programming for this green space. Who is going to manage it? Will the plan be effective? It sounds like a promise not tied to any strings, and the greenspace will essentially become a dog waste mine field for the residents of the development.

Opportunities for artists: With such a large project on the table, I would love to see some opportunities for local artists brought into the mix. The developers of 40 Rugg Rd. were very open to having live/work spaces within their development, and it would be great for the Allston Yards project to have the same since it will be such a large development. **I would also love to see an art gallery/event space somewhere within the ground floor retail area that an outside organization can manage to bring some more art and music programming to Allston.** I am heavily involved in the art and music community here in Allston, and we are running out of affordable and open spaces for us to showcase our work. It would be great to have another space here.

Thank you for reading my comments on the Allston Yards development. I look forward to learning more about this project and to having the opportunity to discuss these concerns in greater detail with both the developer and the BPDA in future meetings.

Sincerely,
Christine Varriale
219 Western Ave. Apt S317
Allston, MA 02134

May 10th , 2018

Comments on the proposed development at 60 Everett Street / Stop & Shop

Dear Ms Hines,

Thank you for the opportunity to comment on this important development in our neighborhood.

Our opposition to this project relates to serious concerns which are as follows.

1) Density

We fully appreciate that a site of this size located at a commuter rail stop is an ideal location to build a large number of units. However this project is too dense and too high. **The Guest Street Plan calls for buildings 110 - 150 feet high - this project is proposing 200- 235 feet high.** What happened to the the recommendation of the Guest Street Study? The proposed height and mass of Building #1 is totally out of proportion to the adjacent residential neighborhood across the street at the Honan Apartments.

We are not against developement per se but what is being proposed here is a dormitory community where people just come to sleep. On a site this size there was the potential to build and interesting and inovative "Urban Village" on a human scale, that is economically and demographically diverse.

2) **More Family Units**

The proposal of 1,200 bedrooms in 1050 rental units is not the type of housing we need in Allston Brighton. This configuration means that **the vast majority of units will be studios or one bedrooms with only thirty 3-bedroom units.** Allston Brighton has had 5-7 years of intense development and the vast majority of those thousands of units have been studios and one bedroom rental aparments. We have thousands of over priced studios and one bedrooms and **very few three and four bed units suitable for middle income and working families.** This type of housing further encourages a transient community of young people that is unable afford to stay and but down roots in the neighborhood. This is not good for the long term health and stability of our community. The millenial generation are getting older. They will want to partner up and start families and there will not be housing to meet their needs. (This is already happening in other high demand metro areas, Boston is just a behind the curve.) If Boston wants to attract and keep these talented young people we need to have a plan that makes our community attractive to familes.

3) Affordable Units

With a project of this size there is an opportunity to partner with an affordable housing developer to incorporate **at least 20% affordable units that are more deeply affordable than the 70% AMI.** We have an affordable housing shortage in the neighborhood and residents who wish to stay in their community are unable to do so.

4) More Home Ownership

Building1050 units of exclusively rental housing is an unmitigated disaster for a community that is at a tipping point interms of owner occupancy. Allston's owner occupancy is around 10% and Brighton's owner occupancy has plumetted to 21% from 25% a few years ago. This is well below the city wide average of 35%.

5) No investor units: No Short term rentals

We would like to see restrictions within the condo documents limiting investors ability to rent non-owner occupied units as short term rentals. This further destabilizes the neighbordood and adds to the housing shortage.

6) Parking

The developer' assumes that there is no need for more that 0.5 parking spaces per unit because of the close proximity to Boston Landing. So why are there 600 parking spaces allocated to the office building? The residential parking ratio is being justified by comparisons with developments in the West End and Fenway. This is not valid comparison. Apart from the commuter rail which has infrequent service during the day, evenings and on weekends, this location is poorly served by public transit. It is not close to the Green line and the MBTA bus service is over extended and above capacity.

7) Transportation

Public Transit - MBTA buses
There needs to be an intrgrated plan for the MBTA bus service on this site, providing adequate bus stops (pleural!) with bus shelters, a drop off for the commuter rail, and turning circle for MBTA buses an Shuttle buses. The level of anticipated commuter rail ridership drawn from across the neighborhood might justify a permanent mini bus station.

Little attention has been paid to how this project will connect with the rest of the neighborhood especially to the west and on a North/South axis. With the rapid development in Allston Brighton we need to hear more from the MBTA on how they are planning to improve service to this area especially to Cambridge and the Longwood Medical Area.

The present Stop & Shop supermarket is an essential neighborhood amenity and it needs to be well served by a regular, and reliable bus service in addition to adequate parking for customers using cars and vans.

Bike Lane and Pedestrian Access to the Charles River
The bike lane improvements on site are to be applauded. However inprovements in pedestrian and cycle access to the Charles river and the surrounding neighborhood are much needed.

8) More Green Space

Approximately 30,000 sq' of green space in a 1,900,000 sq' development far from adequate. Allston has the lease amount of greenspace of any Boston neighborhood. This project needs more green space in the form of a well meaintained public park with of least 1 acre, with a committment to planting mature trees. A public park on this site would enhance the quality of life and make it a more desirable.

Thank you for the opportunity to comment.
We look forward to further community dialogue about this improtant development.

Sincerely,

Elizabeth A. Breadon &. Mary A. McCarthy

33 Champney Street,
Brighton
MA 02135

Casey Hines <casey.a.hines@boston.gov>

Allston Yards: Oppose current proposal - added comments

1 message

Eileen Houben <eileenkh@gmail.com> Mon, Jun 18, 2018 at 12:48 AM
To: Casey Hines <casey.a.hines@boston.gov>
Cc: Mark.Ciommo@boston.gov, A.E.George@boston.gov, Ayanna.Pressley@boston.gov, Michelle.Wu@boston.gov, Michael.Flaherty@boston.gov, "City Council Pres." <andrea.campbell@boston.gov>, kevin.honan@mahouse.gov, michael.moran@mahouse.gov, William.Brownsberger@masenate.gov, Warren O'Reilly <warren.oreilly@boston.gov>, mayor@boston.gov

Dear Casey,

First, a correction. In my May letter I thought it was Stop & Shop with one building a hotel, when it's actually an office building. (Evidently it's NB contemplating a hotel on the last vestige of green space they didn't build over.)

I support the BACC letter and the HUAB (enroute) letter, though I personally think that the concession portion would have been more appropriate after a post-comment counter proposal by the developer.

I think that it's important to keep proposals to the article 51 &/or GSA guidelines. This is especially true
since as of a few weeks ago ~30% of approved new units were
in S. Boston/waterfront and ~30% in Allston Brighton.
That leaves only 40% of the mayor's goal for 23 other neighborhoods.
This is not fair for an overcrowded neighborhood without current infrastructure to handle increased traffic and increased need for currently inadequate public transportation.
Requirements for proposals to meet zoning or GSA guidelines **before** filing would be a great step to help cool the overheated AB real estate market and help protect current residents.

Height and Density

The 2 buildings near the Pike need to be of different heights with spacing (cf GSA study) to prevent the 'wall effect' from generating noise reflection to the neighbors across the Pike -
which is already a problem since the NB buildings were built.
NB ignored the acoustic & integrated green plus park advice of the GSA study and neighbors are now impacted with a poorer quality of life. We can't afford to exacerbate that with similar overbuilding on this site. One of the buildings should be maximum 150 feet and the other, with wide spacing between should be at the lower level of the allowed range (~100ft).

We need the proposed park, preferably at least 1.5 acres, and it would work better if the building next to it were removed.

Retail

We need an improved Stop & Shop on the ground floor with accessible parking nearby also on the ground floor. Neighbors are not happy with the 2nd story plan. It is a hardship, inefficient, & time-consuming for the elderly, disabled, parents with small children, and all busy shoppers. The neighbors want to keep the other retail stores, and added stores for weekly needs plus a cafe & or restaurant would be an appropriate addition. If necessary to place some retail on the 2nd floor, it shouldn't be the groceries.

Parking and traffic

They have underestimated the residential and retail parking needs.
We need minimum 1:1 for residential, plus added spaces for larger units, plus a serious number of visitor spaces. There needs to be more space for deliveries, drop offs, Boston Landing drop offs & vans.
Based on a recent count on a quiet day their formula for how many S&S spots are needed most of the day is too low. And spaces need
to be added for retail and the office building. Most office workers can't afford to live here unless plans are changed (though tha twould help the traffic situation) and many won't live where the commuter rail can help. There needs to be more work on improving the T and the road infrastructure for cars & people. Currently, it's overburdened **before** any of the Allston Yard or nearby developments are constructed.

Thank you,
Eileen Houben
Corey Hill

From: Eileen Houben <eileenkh@gmail.com>
Date: Thursday, May 31, 2018
Subject: Allston Yards: Oppose current proposal
To: Casey Hines <casey.a.hines@boston.gov>
Cc: mark ciommo <mark.ciommo@cityofboston.gov>, michelle.wu@boston.gov, Annissa Essaibi-George <annissa.essaibi-george@boston.gov>, Ayanna.Pressley@boston.gov, Michael.Flaherty@boston.gov, kevin.honan@mahouse.gov, michael.moran@mahouse.gov, William.Brownsberger@masenate.gov, Warren O'Reilly <warren.oreilly@boston.gov>, mayor@boston.gov

Dear Casey,

The only positive parts of the current proposal are the town houses, the smidgen beginning of a park, and possibly the street & intersection improvements.

Stop and Shop did not pay the current overheated inflated prices for Allston/Brighton land so they should be able to develop the land in a way that meets the needs and budget of the people who live here plus the detail of the Guest St Area Plan.

We are not Manhattan or downtown Boston or Sunny Isles (a spin off from Miami Beach to aid development). The first two are dense and expensive. The latter went from low family motels along the beach to dense, expensive giant towers blocking the view of all the residents behind the beach,where the majority of condos seem to be owned by absentee investors as most of the apartments

are not lit at night, even at the height of winter.

That density is alien to our neighborhoods and if enough housing is built in a price range far above the income of residents and targeted professionals, that's exactly what we'll be left with. Plus an increase in absentee investor owners is a trend we need to stop not encourage. Continuing with allowing any development (as has been happening with too many pnfs) will not succeed in adding units lived in by residents - to ease the housing issues- and those who want to move here and live here.

The BPDA and the mayor's office need to oversee quality and neighborhood fit (in style, need, and cost) if adding the needed housing is going to work and be a positive legacy for the mayor and his administration and the BPDA rather than an embarrassment like 50's urban renewal that cleared houses for an "inner belt" that was never built. I remember that area - my family drove through it weekly to visit my grandmother in Roxbury.

We need to take more time, especially with the larger proposals, so that there is enough time to evaluate it well. Currently, this is not possible. Just in the last 3 years, I've seen the caseload increase for the BPDA staff and watched the change in details and the change in personality that exhaustion and overload bring.

If Boston respected its zoning, and studies like the Guest area plan, and **refused proposals unless they first met zoning with only minor variances**, then the risk would be back where it belonged..on the developers and their investors, and they would need to be efficient and creative so developments met neighborhood needs. This would encourage developers of small and medium projects to work in the neighborhoods and those specializing in large-scale projects to stay & work in more appropriate areas like downtown, rather than pouring too much money into neighborhoods like Allston Brighton, then expecting to build units with Manhattan size rent or cost to recoup their speculative, overpriced investment in a neighborhood of median incomes in the $40 & $50,000 range.

Changing the method this way would also decrease the BPDA workload back to a more normal size, allow residents time for their families and a normal life instead of constant defense against a tsunami of development proposals battering their neighborhood and lifestyle while also adding pressure with multiple meetings most weeks.

We need low height housing with prices that match the residents and people who want to move here, not the unrealistic prices driven by overheated land prices and unrealistic developers.

Also, though the current trend in supermarkets is the 2nd floor store, that is not what we need. Especially for the elderly, the disabled, and those shopping with children, but also to those in between, this and garages add time and inconvenience to the shopping trip - and not in a way that adds to the store's profit (as just shopping longer in the store does).

What we need is a shopping center with the grocery and other stores on the1st floor, possibly 2 stories of housing above them, and liveable townhouses.

A large park (perhaps 2 acres, especially since the integrated green space of the Guest area plan on the NB side was built over) is needed as there are none closeby, which is worsened by the increasing density of the area. The Boston Parks Dept. is very willing to cooperate in this as it is a need for this area. Perhaps a lowscale hotel of 6-7 stories could be added, if not on N. Beacon or Everett - as the streetscapes described in the Guest area plan are low (meeting article 51) and set back.

Stop and Shop needs to go back to the drawing board and design something that truly matches and integrates into the neighborhood and meets the spirit as well as the details (not max. heights plus) of the professional Guest area plan which took so much time, effort(by citizens & BRA), and taxpayer money that it should be respected, not ignored. This parcel needs to be a transition between the unique, alien Boston Landing and the real Allston Brighton across Everett and across N.Beacon and the few houses left between Boston Landing and N Beacon.

Sincerely,
Eileen Houben
Corey Hill Brighton

Casey Hines <casey.a.hines@boston.gov>

Allston Yard proposed project

1 message

Farah Cole <farahcole@gmail.com> Fri, May 25, 2018 at 9:02 AM
To: Casey.A.Hines@boston.gov

Dear Mr Hines,

Hope you are well.

I am a resident of Allston / Brighton and am writing to express my thoughts about the proposed project for Allston Yard.

As you are aware, Allston / Brighton neighborhood of Boston is getting clobbered by developments with not much respect for the residents and a livable community. Most proposed developments lack enough green spaces where people can enjoy lives with their families and friends. In addition, most proposed developments are for rentals with absentee owners who do not necessarily have the interest of the community residents in mind.

Therefore, I see necessary as a resident to urge the city to make sure a new Allston Yard project will be with residential units for sale instead of rent and, with a percentage affordable units allowed for low or moderate income people. In addition, there needs to be adequate green space and tree and flowering shrubs lined around the developments.

We are tax payer residents and as people in JP, Beacon Hill, Back Bay, etc.. want and need clean, green and livable neighborhoods and would like the city to pay attention to us.

Thank you for your attention.

Sincerely,

Farah Ravanbakhsh
35 Langley Road
Brighton, Ms. 02135

Casey Hines <casey.a.hines@boston.gov>

Allston Yards

1 message

Gerard Teichman <gteichman08@gmail.com> Fri, May 4, 2018 at 6:51 PM
To: Casey.A.Hines@boston.gov

Hi Casey,

I was walking around my neighborhood to find housing developments that are on a humane scale. These pictures were taken off Allston St. In Allston.
Residents don't want high rise development adjacent to traditional wood frame neighborhoods.

The plans call for a gated community. Is this the future for Allston Brighton? Do you want to wall off more of the city for the tax revenue? Don't let the carrot of a grocery store become a factor in a design that is not appropriate for this neighborhood.

Thanks for your time,

Gerard

Gerard Teichman

3 attachments

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IMG_20180504_160637165_HDR.jpg
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IMG_20180504_160429260_HDR.jpg
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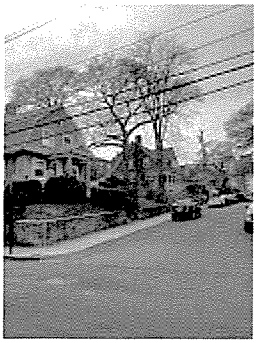

33 Brainerd Road, #208
Allston, MA 02134
June 15, 2018

Ms. Casey Hines
Project Manager
Boston Planning & Development Agency
One City Hall Square
Boston, MA 02201

RE: Allston Yards Project (Stop & Shop) at 60 Everett Street, Allston

Dear Ms. Hines:

Thank you to you and to the BPDA for continuing to get input from the community regarding the development of the Stop and Shop property on Everett St. in Allston. This site is of great importance and concern to the residents of Allston-Brighton.

I join with other members of the community in making the following recommendations:

Height/Density Decrease the project's density, including the height of the proposed buildings.

Homeownership Require that at least half of the residential units be condominiums available for homeownership. Most of these condominium units should have a deed restriction to ensure that they remain owner occupied.

Affordability Increase the number of affordable units.

Transportation Make significant improvements in public transportation in an effort to reduce traffic congestion produced by this and other nearby developments.

Housing for Families Offer fewer small residential units and more two- and three-bedroom units that would be appropriate for families.

Green Space Require that a significant amount of green space be included as part of the project. A large portion of this green space could be publicly owned by the city's Parks and Recreation Department. This would ensure that the green space would remain a park for years to come.

It is my hope that the developer will continue to work with the city, the BPDA, and the community to produce an even better project that will enhance and help stabilize our neighborhood.

Sincerely,
Gloria Tatarian
Allston Resident

Homeowners Union of Allston- Brighton

HUAB

HomeownersUnionAB@gmail.com

June 15, 2018

By electronic mail

Ms. Casey Hines
Project Manager
Boston Planning and Development Agency
Boston City Hall, Boston, Mass.

Re. Allston Yards Development – public comments

Dear Ms. Hines:

As homeowners and permanent residents in Allston-Brighton, we are very concerned about the proposed magnitude and potential negative impacts of development on the parcel of land in Brighton dubbed "Allston Yards". We do not support the current plan.

The 10.5-acre site is spacious enough to theoretically accommodate a significant amount of development similar to what the New Balance site has become. However, Allston-Brighton's streets were never meant to accommodate, and realistically cannot accommodate, the cumulative volume of traffic that numerous ambitious developments in the area, with more to come, generate.

The existing neighborhood context and traffic conditions make developing the Allston Yards site in an overly ambitious manner a rather risky proposition. Overall, traffic gridlock and an "urban jungle" atmosphere that results from too much random development would inflict irreversible harm on tens of thousands of residents, and might even diminish the area's appeal to employers and workers. Ultimately, overdevelopment and its consequences could be judged as an abysmal failure of Boston planners.

To prevent that, we would like the BPDA project review process for Allston Yards and other nearby projects (such as the multi-building "Allston Square") **to focus heavily on quality of life issues** -- to ensure that all who reside here, and will live, work, and visit destinations around here in the future, find the area attractive and easy to navigate -- not a congested and oppressive urban "beehive" perpetually clogged with traffic, and full of unremarkable, cookie-cutter buildings.

We offer the following specific comments regarding the Allston Yards proposal:

HEIGHT & DENSITY:

It is troubling and disappointing that developers are allowed to file proposals that blatantly violate planning for the Guest Street Area (http://www.bostonplans.org/getattachment/dc935a9c-f754-492c-a07b-baa22f912037), which the BPDA (BRA at that time) sponsored and approved only six years ago -- especially now that the agency has the word "Planning" in its name.

The GSA Plan has a section on "Density and Building Height" (page 45/47). It contains a map-like image (see below) that shows most of the Stop & Shop/Allston Yards site marked in dark blue color -- which indicates that the area should have development ranging from FAR 3.0 to 4.0, and a variety of building heights up to 150 ft. (up to 10-13 stories).

HEIGHT AND DENSITY GUIDELINES ARE PAIRED TO PROMOTE A RICH AND DIVERSE RANGE OF BUILDING FORM AND MASSING.

The remaining portion of the site, marked in a lighter shade of blue, was envisioned to have development with FAR ranging from 1.25 to 3.25, and heights from 60 to 110 ft. (6-12 stories).

Nevertheless, the Allston Yards proposal calls for massive buildings that are much taller and denser than what is recommended by the GSA guidelines. Our position is that the proposed development should adhere to the GSA Plan, or deviate from it only slightly.

Alternatively, the buildings along the Turnpike could be somewhat taller than the recommendation in the GSA Plan – **but only if Building No. 2** (adjacent to the proposed park, and the smallest of the proposed 4 buildings) **is entirely and permanently eliminated** from the plan. This would further enlarge the Park, while also perhaps permitting a modest, low-height structure with park-friendly uses.

RESIDENTIAL PROGRAM:

The currently proposed 960 units of housing amounts to an approx. 100 units per acre (after subtracting 1 acre for the park). This volume of density may be too great, given that the development is also to include an office building and large retail.

Regardless of the number of housing units that will be built, we feel very strongly that the development should have a 50/50 mixture of homeownership and rentals. The homeownership component should be designed for owner-occupancy, and include a generous number of larger units that can accommodate family households.

The condominium documents need to be structured to ensure that 80% of units are owner-occupied.

GREEN SPACE:

It is extremely important that this project includes a generously proportioned public park – a traditional park designed for passive recreation, with a lot of robust vegetation, a place where the area's residents and visitors will be able to decompress by communing with nature. In terms of its size, one acre should be considered the very minimum, and larger would better.

A dog run, or any other green space that would be accommodating active uses, should be provided in addition to the 1-acre park (the dog run should be contiguous with the Park).

NOTE: The ownership of the land allocated for the Park needs to be formally transferred to the Boston Parks Department. We are adamantly opposed to the Park being privately owned.

Also, the development plan should provide for very generous sidewalks that can accommodate LARGE street trees (planted in structural soil, with irrigation), as well as outdoor sitting areas.

The development plan should indicate locations of street trees, and provide sidewalk dimensions.

NON-RESIDENTIAL USES:

We are pleased that the site will continue to have Stop & Shop, but we would like to see the HomeGoods store stay as well, given all of the residential development in the area. We also would like to see a collection of smaller retail establishments.

We are not in a position to judge how much office space, if any, this development should have, but we are concerned that office use has heavier traffic impacts than residential use, even if one factors in the presence of the commuter rail station.

TRAFFIC IMPROVEMENTS:

As was mentioned repeatedly in public meetings for this project, the Everett Street corridor needs

to be redesigned, and not just to improve vehicular traffic, but for pedestrian traffic as well. Also, the development site needs to be fully connected (via two-way traffic) with Braintree Street. The area adjacent to the commuter rail stop needs to be able to accommodate pick-ups and drop-offs, including short-term parking for vans. The City also needs to work with the MBTA to improve public transit.

While we would like to see roadway improvements take place as soon as possible, we are concerned that use by heavy construction trucks while the project is getting built could damage newly installed improvements. Therefore we suggest that roadway improvements be put in place after the excavation and building framing phases are completed.

PARKING:

Residential buildings in this location should have a 1:1 unit-to-parking ratio, or very close to it (and preferably a higher ratio for multi-bedroom units), as well as visitor and service parking.

Adequate parking is necessary to minimize the impact on on-street parking in the neighborhood, and to ensure that the buildings have stable occupancy (residents without a parking space are often forced to move if their employment or other circumstances require that they have a car).

Additionally, this project needs to accommodate all commercial vehicles, including large moving and delivery vehicles, as well as passenger pick-ups and drop-offs in designated off-street areas.

ARCHITECTURE:

We do not appreciate buildings that are overly simplistic, boxy, sterile, minimalist in appearance, while also being oppressive due to heavy massing and a lack of human scale.

We implore BPDA Design Review team to require that this project create buildings that are truly beautiful and have visual interest/complexity. This development should not imitate the "corporate" look of the New Balance site, but have a softer, and even perhaps playful, artistic and whimsical feel that enhances and fits with residential uses.

Please ensure that all our comments are thoughtfully considered in the BPDA internal project review process.

Thank you.

HUAB Executive Committee (on behalf of the Board):
Rollin Crittendon
Eileen Houben
Eric Porter
Kirsten Ryan
Eva Webster

Janice S. Bradlee
199 North Harvard Street
#623
Allston, MA 02134

April 3, 2018

Casey Hines
Boston Planning & Development Agency
City of Boston
Boston, MA 02210

Dear Ms. Hines:

As a neighborhood resident I write in support of the Allston Yards project.

The Stop & Shop and New England Development team have proposed a transformative, mixed-use project that will bring much needed housing, streetscape and traffic improvements, and open space to our community. The City desperately needs transit-oriented housing options like this, and the phased approach will allow the Stop & Shop to remain open in our neighborhood.

I know the developer will continue to work with our neighborhood to refine the project, but I want to lend my support for the initial plans that are under review.

Thank you,
Jan Bradlee

B

Casey Hines <casey.a.hines@boston.gov>

Re: Allston Yards : opposed

1 message

Jeffrey Houben <jl.houben@gmail.com> Sun, Jun 17, 2018 at 11:34 PM
To: Casey Hines <casey.a.hines@boston.gov>

Dear Casey,
I just learned of the extended deadline and wanted to add a few more details.

Green Space
The area needs a park, of at least 1 acre, but preferably 1.5-2 acres, to balance the impact of their development and all the development in the area.

Height
The heights and density must comply with the limits and spirit of the GSA plan.
The two buildings on the Pike side need to be well spaced and of different heights, with only one up to 150 ft and the other at the lower end of the limit (dark blue in the study). This will help mitigate the wall effect sending increased sound to neighbors across the Pike, which is already an issue with the NB buildings. (cf GSA plan)

Scope

4 buildings is too many for the site. The one closest to the park should be eliminated.

Stop & Shop & other retail
Grocery shopping is a necessity with heavy bundles and should be on the ground floor, with parking on the ground floor - possibly of the neighboring building if there is no street space within the complex. For the disabled, elderly, parents with infants and toddlers, as well as all busy shoppers, a ground floor store is more convenient, saves time, and is preferred by the neighbors.
The current fad for 2nd floor stores is not appropriate for the neighborhood.

This is also a place where more retail would be a good fit - from the existing stores that neighbors would like to see remain, to small stores for weekly needs of residents and workers in the 2 complexes such as laundry/dry cleaner, shoemaker,etc., & cafe or restaurant. If necessary, this other retail would be a better fit for 2nd floor if all won't work on the 1st.

Traffic
The proposed street changes will help, but will not be sufficient without a reduced project, pedestrian improvements on Everett, more off street drop off and delivery zones, expanded drop off and van zones for Boston Landing, and increased service for the commuter rail & local bus routes.

Parking

There needs to be a minimum of 1:1 parking for residential units, plus additional spaces for 2-3 BR units, plus a serious number of visitor spots, an increased number of retail spots and enough office spots if one tower does become an office building.
A stop & Shop rep at the public meeting mentioned that most times only 75 spaces were needed for the Stop & Shop. Last week, on a quiet, **not busy** Fri aft., there were >100 cars in the lot. Their parking estimates are too low and there is ZERO street space.

Thank you,
Jeffrey Houben
Corey Hill

On Fri, May 18, 2018 at 8:05 PM, Jeffrey Houben <jl.houben@gmail.com> wrote:
> need 1st floor supermkt better for elderly, disabled, & shoppers w/kids
> fewer less dense blgs

2 acre park

Jeffrey Houben

B

Casey Hines <casey.a.hines@boston.gov>

Allston Brighton Parks

1 message

Leone, Linda <LINDA.LEONE@childrens.harvard.edu> Wed, May 16, 2018 at 4:01 PM
To: "Casey.A.Hines@Boston.gov" <Casey.A.Hines@boston.gov>

Good afternoon,

I have been asked to send along my feelings about the onslaught of buildings and lack of green space in the Allston-Brighton area.

With additional high rise buildings being built in Allston Brighton area (see clip below) the need for green space, playground, walking paths, bike paths, etc. is enormous.

Please consider the local residents who have lived here for generations as new development PLOWS into our neighborhoods. Not adding a new park, or several, with a playground area sends a strong message to us, the local residents. I, as a lifelong resident, feel that we are not important & our needs are certainly not part of the big picture". I have lived in 02134/02135 my entire life and am **overwhelmed** with the construction and traffic. Please think of the needs of the residents. Children need a place to run and play with other children outside. Adults and seniors need a place where they can walk, talk and socialize with their friends and neighbors.

We all know change is eminent but we must also remember that the people who made Allston and Brighton wonderful deserve some small piece of their neighborhood to still be cheerful and feel like *home.*

Thank you for your time.

Linda Leone

Bayard Street and now Harriet Street

Taken from the Allston/Brighton group emails.....

Allston Yards, the proposed huge multi-high-rise development project on the Stop & Shop site, with 20-story buildings following in the footsteps of what New Balance built (and more NB buildings are still to come), may bring as many as 4,000 new residents to the area, and an unknown number of workers/employees. This is in addition to other dense projects mushrooming all over the neighborhood, with more in the pipeline.

Many of us are asking ourselves: What is the neighborhood going to get out

of all this rapid densification besides perpetual traffic congestion, darker streets, and loss of open views and mature trees?

Such a great increase in Allston-Brighton¹s population (it looks like it¹s going to be a 30% jump in just a few years) is going to be straining our public resources, including public parks. We need more protected public parkland, especially in areas that are getting lots of development, but lack green/open space. This is critical to public health, and to ensuring Allston-Brighton¹s desirability as a place to live.

Casey Hines <casey.a.hines@boston.gov>

Allston Yard (60 Everett St) Comments

1 message

Mike <mike_email@yahoo.com> Thu, Apr 26, 2018 at 10:30 AM
Reply-To: Mike <mike_email@yahoo.com>
To: "casey.a.hines@boston.gov" <casey.a.hines@boston.gov>
Cc: "william.conroy@cityofboston.gov" <william.conroy@cityofboston.gov>, "michelle.wu@boston.gov" <michelle.wu@boston.gov>, "mayor@cityofboston.gov" <mayor@cityofboston.gov>, Mark Ciommo <mark.ciommo@cityofboston.gov>

Ms Casey Hines
Senior Project Manager
Boston Planning & Development Agency
One City Hall Square
Boston, MA. 02201
casey.a.hines@boston.gov
617.918.4244

Subject:
Allston Yard (60 Everett St) Comments

Ms Casey Hines;

I have cc Boston's Senior Transportation Planner, Bill Conroy as a courtesy because I use him as a reference in my comments.

I am a resident of Portsmouth Street, Brighton, MA. I live on the other side of the Mass Pike near this project.

Noise Pollution
Noise reflected back across the Mass Pike from the tall buildings of the New Balance/Boston Landing project should have been considered during their review stage. An extreme example is the Warrior Ice Arena has multiple stories glass panels tilted downward, focusing the noise back across the Mass Pike onto the residential neighborhoods.

There has always been some noise near the Mass Pike. However now it goes deeper into the neighborhoods and has reach safety hazardous levels, light rain intensifies the sound even more. Even homes near Boston Logan Airport have less noise pollution then we do.

The Allston Yard buildings needs to be design to minimize noise pollution. This could be using materials, shapes, angles, sound phase cancellation techniques, or whatever to stop sound reflections.

In addition, the Allston Yard project needs to fund a sound barrier wall between the Mass Pike and Lincoln Street along the length of Lincoln Street.

Traffic
Traffic is always an issue, however I am encourage by the propose traffic improvements for the

south end of the Everett Street Bridge over the Mass Pike.

The traffic impact from one site impacts many other areas. The traffic at the north end of the Everett Street Bridge also needs to improve traffic flow and safety to and from the "Old" Everett Street section which connects to Lincoln Street.

The Boston Police does not have the manpower to enforce the speed limit along Lincoln Street. Vehicles often **exceed twice the speed limit** along the long, straight, without any traffic controls Lincoln Street.

The intersection of "Old" Everett Street with Lincoln Street is a T with only a stop sign on "Old" Everett Street. I expect this project to increase north traffic over the Everett Street Bridge, then East on Lincoln Street and eventually to the Mass Pike as the alternative is often very congested. The Waze app will have them going this way to the Mass Pike. Making the "Old" Everett Street intersection with Lincoln Street a 3 way stop intersection will greatly increase the present and future safety without impeding the traffic flow. A traffic light would be even better.

Additional, traffic from **all projects** need to be considered together, not just individually. This includes demolition, construction and built. Traffic issues and possible solutions needs to be transparent with community input. Construction vehicles must never use residential streets unless the residential street is on the construction site. The growth rate used to predict future traffic needs to be updated to a realistic number.

There should be a moratorium on building projects should the BPDA be unable to do this in the timely matter.

Parking
Parking should be at least one per bedroom. However this project is unwilling to attempt this goal. The proponent assumes most of the people will be using public transportation, bikes, or walk.

Therefor the proponent will have no issues with a condition for approval that the **BTD commits not to issue street parking permits** to anyone living in the buildings. The precedent has already been set by BTD doing the same for other areas within Boston. Boston's Senior Transportation Planner, Bill Conroy, is my reference.

Additional Comments
Because of all of the above plus the density, height, limited open space among other issues, this project should greatly be modified before consideration.

Thank you for your time and consideration,
Michael Dziedzic
14 Portsmouth St
Brighton, MA

AllstonYardsComments.docx
16K

Casey Hines <casey.a.hines@boston.gov>

support of a 1-acre Allston Yards Public Park.

1 message

Nancy O'Hara <nohara3@verizon.net> Thu, May 17, 2018 at 8:35 AM
To: Casey.A.Hines@boston.gov
Cc: mark.ciommo@boston.gov, kevin.honan@mahouse.gov, Michael.Moran@mahouse.gov, HomeownersUnionAB@gmail.com

I write in support of a 1-acre Allston Yards Public Park. We want this park to be of significant size, and as nicely designed and planted with beautiful vegetation as the Allston Library park.

Currently, the Allston Yards developer proposes to allocate just 0.5 acre for the so-called "community green". This is not enough — it should be 1 acre, given the enormity of the proposed development, and the density that was created by New Balance. This Allston Yards neighborhood needs a REAL BEAUTIFUL NEIGHBORHOOD PARK – a place that can be enjoyed by people of different ages, from children to seniors.

Thank you.

Nancy O'Hara

B

Casey Hines <casey.a.hines@boston.gov>

Allston Yards

1 message

Peter Kingman <pkingman@earthlink.net> Tue, May 8, 2018 at 2:56 AM
To: Casey.A.Hines@boston.gov

Dear Casey A. Hines,

Everett St. is the dividing line between Brighton and Allston. West of Everett St. is Brighton. East of Everett St. is Allston. The only reason that Stop & Shop has a mailing address in Allston is because the nearest post office is in Allston. The old cattle yards were west of Everett St. in Brighton. The old Beacon Park railroad yard was about half a mile east of Everett St. in Allston. The bottom line is that Stop & Shop's property is in Brighton. Ann the name "Allston Yards" is inappropriate.

Peter B. Kingman

Casey Hines <casey.a.hines@boston.gov>

Allston Yards feedback 2

1 message

bobbuchanan1 <bobbuchanan1@comcast.net> Thu, Apr 26, 2018 at 2:33 PM
Reply-To: bobbuchanan1 <bobbuchanan1@comcast.net>
To: casey.a.hines@boston.gov

Casey

- Buildings are 1/3 too tall, height should be between those of the houses to the east and Bruins or New Balance to the west.
- 1000 units better have deeded parking spaces. If there are only going to be 500 spaces for 1000 units then deeded spaces a must.
- Parking spaces need to be set aside for Commuter Rail.
- Stop and Shop looks too crowded in space. If you make it too inconvenient to shop there then, the Star Market on Western Ave will win.
- No playground?
- Location of free parking spaces need to be highlighted and numerated

Robert Buchanan

1 Adamson Street

Allston, MA 02134

B

Casey Hines <casey.a.hines@boston.gov>

Allston Yard Park

1 message

Wayne Webster <twoifbyc@gmail.com> Thu, May 17, 2018 at 7:45 AM
To: Casey.A.Hines@boston.gov
Cc: mark.ciommo@boston.gov, kevin.honan@mahouse.gov, Michael.Moran@mahouse.gov, HomeownersUnionAB@gmail.com

Dear Ms. Hines,

I would like to weigh in in favor of a substantial public park as part of Allston Yard. In a congested neighborhood that is destined to become more crowded with the new building and development underway, it is very important to preserve some open space for the enjoyment of the community.

Thank you for your consideration regarding this matter. Ellen Webster

Casey Hines <casey.a.hines@boston.gov>

Allston Yards - Public Park

1 message

Wayne Webster <twoifbyc@gmail.com> Wed, May 16, 2018 at 1:53 PM
To: Casey.A.Hines@boston.gov
Cc: mark.ciommo@boston.gov, kevin.honan@mahouse.gov, Michael.Moran@mahouse.gov, HomeownersUnionAB@gmail.com

Dear Ms Hines,

As a long time resident of Allston/Brighton (45 years) I wish to offer my strong support to idea of a public park of some size, an acre or so, as part of the Allston Yards project. Living near Oak Square where several public parks exist I know that they have great benefit to the neighborhood. Allston Yards should have that same benefit. When one considers the density of both people and cars that will be created by this project (and other projects in the area) open space will be crucial to the quality of life of the Allston Yards neighborhood. Please consider this request when discussing this project with the many stakeholders. Thank you.

Sincerely,

Wayne L Webster

Date	First Name	Last Name	Organization	Opinion	Comments
2/3/2018	Rollin	Crittendon		Oppose	I happen to work at 20 Guest Street, right near where the proposed development is. My main concern has to do with traffic in that area. For example the address I work at just added about 10-20% additional capacity in terms of floors occupied. That change, in just that one building, has changed the parking garage there a bunch. In the evening they need security directing the traffic flow due to the increased utilization of that one garage. I am also concerned about making sure the neighborhood has a chance to be a community. Will the development be a figurative dormitory, or something where people can attain ownership, grow a community? The trend recently seemed to be Millennial focus. I have read that Boston went peak-Millennial ~2 years ago. What big need does the development solve for the area today and tomorrow? I think a discussion with the community could guide us all to a really good result.
2/21/2018	Cyrus	Tehrani	Resident	Support	I support this project as proposed. This project provides a huge benefit to the entire city adding over 1,000 homes to the housing market, including 13% being income-restricted affordable homes. Keeping at least this housing density should be a crucial part of this project, especially considering it's proximity to the Boston Landing Commuter Rail Station, re-affirming the city's commitment to transit-oriented development.
2/21/2018	Jason	Kaplan		Support	I support this project
3/5/2018	Harry	Mattison		Support	This project will bring considerable new traffic to Everett Street. Many people use Everett Street to walk between destinations including the Star Market supermarket, Charles River parkland, McNamara House senior housing, Gardner school, German school, and St Anthony's Church. Everett Street's pavement is badly cracked near the Stop & Shop. It needs to be repaved ASAP. There should also be a full set of traffic calming improvements including multiple raised crosswalks (or speed tables) from Western Ave to North Beacon Street to make Everett Street safer.
3/6/2018	Dan	Hartel	none	Neutral	I am here to express my concern over this development and my desire to see further developments in Allston be made with particular focus given to low and middle income families and individuals. This particular development is just one of a recent flurry that appears to continue the trend of luxury apartment units. As a resident of Allston, I'd like to see more developments for working class people who drive the vibrant culture of the Allston-Brighton neighborhood; particularly, more developments for artists and low and middle income families and individuals. I want to see developments that will attract people who intend to call the Allston-Brighton neighborhood 'home,' rather than pandering to a high-income demographic that is likely to relocate in a few years. Boston and Allston proper have more than enough luxury units, but have a significant lack of affordable and safe housing.
3/7/2018	Robert	Chapman	None	Support	Build as much housing and retail as you can along this corridor as it can become the next mass transit oriented area of the city. With the construction of Boston Landing/West Station/Fenway/Back Bay/South Station, we have the chance to build a strong transit corridor. As few parking spaces as possible and where needed put them underground.

3/12/2018	Jacob	Gilbertson		Oppose	Housing inequity in Allston Brighton is getting out of control. All the new developments are vastly overpriced an unattainable for most of the people that live in the neighborhood. Clearly the new development in general is not being targeted towards current residents. In addition, the shopping center as it currently is serves many low class and low income people from the surrounding area. Clearly the propose development Is meant to target the wealthy. The development taking place in Austin and Brighton and is egregious in the fact that it harms low income and longtime residents for the benefit of real estate developers and the wealthy. Please pull your heads out and start working on some sustainable development targeted towards lower and middle-class people. They are the ones that need new housing, not those who can already afford to live where ever they wish. Additionally, the arts and music community in Allston Brighton continues to be harmed by the further development. I believe that if developers want to continue building in this area, they should be required to establish, find, and maintain new arts and music spaces to compensate for the ones that they are forcing out. Very disappointed to see that the city continues to push for development that only benefits a very few.
3/28/2018	Gerhard	Mullican	Resident	Support	Cheaper housing with no income restriction. CHEAPER HOUSING WITH NO INCOME RESTRICTION. should I say it again?
3/29/2018	Connor	Ebsary		Support	I strongly support this project. The city of Boston and the greater Boston area require much more housing than we are currently producing. Too many hardworking residents are rent burdened because the supply of housing is artificially low. This project will bring more affordable housing to the city and is extremely important.
3/29/2018	Sam	Burgess		Support	I urge the BPDA to approve this project and streamline the review process as quickly as possible! I am an Allston resident who wants to see this project go forward! Boston needs more housing ASAP, and the 1,050 units in this wonderful mixed-use, TOD project would help mitigate the housing crunch currently hitting Allston and Brighton. The area is prime for new housing, given its location next to the booming Boston Landing development and commuter rail station (as well as the planned new neighborhood that will be built out as part of the I-90 Interchange project)! Allston as a whole still has a great deal of underutilized industrial space and parking fields that could be put to better use housing people. This project is a great example of such a use.
3/29/2018	Zack	Declerck		Support	This is a great project. It is crucial that we add thousands of residential units in the city where thousands have already moved. I would say that the parking ratio is a bit high for a new development. We should be putting in far less parking and replacing that space with more units. We?ll be kicking ourselves in 20 years if we add this much parking in a time when personal vehicle ownership in cities like Boston is shrinking. Now if only we could a project of this size on the MBTA lot in JP.
3/30/2018	Jason	Kaplan		Support	As a Boston resident, I?m concerned about the displacement of my neighbors and skyrocketing real estate prices. I believe the only way to fix this is by adding to the city?s small housing supply. This proposal adds over 1000 much-needed homes and promises over 100 income restricted units (under the city?s IDP rule). I support this project as proposed.
4/3/2018	Gavin	McCarthy		Oppose	Hello. First of all, without a public meeting, the public comment period CANNOT end. However, I have seen the PNF given to the IAG and it is concerning to say the least. An 8-10 year construction project in an already heavily trafficked area is untenable! From what I can see, the developer has done little to no due diligence, has not reached out to the community, nor have they addressed appropriate traffic issues. The 'community benefits' proposal is totally inadequate given the scope of the project. Thank you, Gavin McCarthy

4/4/2018	John	Quatrale	Unbound Visual Arts	Neutral	Dear Casey, Thanks for the opportunity to submit comments. Unbound Visual Arts, is the only 501c)(3) community-based visual arts organization in Allston-Brighton. As such, we?d like to strongly suggest, that one of the major needs for the Allston neighborhood is an art center. Though we don?t expect the developer to build and outfit a complete art center, we?d like to propose that this development is the perfect size and location for creating the space, where an experienced non-profit could raise the needed money and build it out. This art center would eventually have a dedicated and secure art exhibition space, and space for classes, seminars, and workshops. The total space should be at least 3,000 s.f. The formal exhibition space, managed by an experience non-profit, would have limited or no outdoor sunlight from windows or doors, four full floor to ceiling walls, painted a neutral white, approximately equal linear length walls; heights of at least 9 feet or 10 feet, and professional moveable and dimmable ceiling track lighting for all the walls and the center space. There are other elements that can also be discussed with the developer once the non-profit gallery manager is selected. Allston-Brighton does not currently have an art center and there has very limited dedicated, secure gallery spaces and this development, located in such a key location, would be a great location for such an art center. As such, this space should be for training artist and exhibiting art featuring artists from throughout Allston-Brighton. Best regards, John Quatrale Unbound Visual Arts 320 Washington St. Suite 200 Brighton, MA 02135
4/9/2018	John	Quatrale	Unbound Visual Arts	Neutral	These are revised comments that add a performing arts space into the proposed art center. These are general suggestions, that we hope to have an opportunity to expand on as the impacts of this development are considered by the Impact Advisory Group. 4-9-18 Dear Casey, Thanks for the opportunity to submit comments. Unbound Visual Arts, is the only 501c)(3) community-based visual arts organization in Allston-Brighton. As such, we?d like to strongly suggest, that one of the major needs for the Allston neighborhood is an art center for the visual and the performing arts. Though we don?t expect the developer to build and outfit a complete art center, we?d like to propose that this development is the perfect size and location for creating the space, where an experienced non-profit could raise money and build it out. This art center would eventually have a dedicated and secure art exhibition space, space for classes, seminars, and workshops. The total space should be at least 2,500 s.f. This formal space, managed by an experience non-profit, would have limited or no outdoor sunlight from windows or doors, four full floor to ceiling walls, painted a neutral white, approximately equal linear length walls; heights of at least 9 feet or 10 feet, and professional moveable and dimmable ceiling track lighting for all the walls and the center space. There are other elements that can also be discussed with the developer once the non-profit gallery manager is selected. Allston-Brighton does not currently have an art center and there has very limited dedicated, secure gallery spaces and this development, located in such a key location, would be a great location for such an art center. As such, this space should be for training artist and exhibiting art featuring artists from throughout Allston-Brighton. The art center should also have additional space sufficient for the performing arts for local musical and theatrical productions, with seating for approximately 100 guests and rehearsal space. This could be managed by another non-profit or by the same visual arts non-profit. Best regards, John Quatrale Unbound Visual Arts 320 Washington St. Suite 200 Brighton, MA 02135

4/13/2018	Pawel	Latawiec		Support	I am writing in enthusiastic support for the "Allston Yards" project. The proposal gets so much of what is needed in this stage of Boston's development right - It weaves an urban fabric, replaces wasteful parking lots, transforms concrete into green public space, increases density, and provides living and work space right next to where infrastructure can support it at an appropriate scale. If anything, the stated goal of 1,000+ residential units can and should be made more ambitious. Only with such far-sighted vision can the scale of Boston's housing crisis be met. I encourage the developers to continue with their excellent work, and not shy away from providing even more units or a more urban experience. I particularly enjoy the proposed height of the buildings and the resulting streetwall. Concerns of open space are more than offset by the thoughtfully planned park and restaurant. I'm looking forward to when the construction is done and outdoor seating opens. Please pursue this transit-oriented project as expediently as possible.
4/17/2018	Gerard	Teichman		Oppose	My concern is the emphasis on luxury rental housing and plans for office space. In Boston, this appears to be the default development plan. I suggest considering space that allows for light manufacturing, small startups, and boutique retail. Also, consider the need for artist live/work space. A loft areas such as Fort Point used be places for low rent space, then they became unaffordable. The related concerns are how the city expects to control the amount of student congregate living and short term rentals. These residents do not support strong communities. The scale of the apartment buildings seem out of character with the scale around the Guest Street development. Do we need another Assembly Sq. type of development?? This basically creates a gated community. I do not think that is appropriate for Allston Brighton The proposed urban green space inadequate. The neighborhood already suffers from inadequate park and playground space. People need trees, shrubs, benches and views, not more deep shadows, brick and concrete. How about taking down the scale of all the buildings and doubling or tripling the undeveloped space, making open space the focal point of the development, not high-rise buildings reserved for the financial elite? Is this the way to build a new neighborhood?? Transportation to Boston is also an issue. The frequency of the Commuter Rail is inadequate. The commuter rail does not make routine stops at the Brighton Station stop. Riders will put more pressure on the 57 bus or the B line trolley.
4/22/2018	Noreen	Kennedy		Oppose	This project is simply to large!! You are talking about a development that will permanently damage this neighborhood. Max housing units should be 500. Think about those of us who live here!!

4/23/2018	Michael	Clark		Support	I am writing to express my wholehearted support for the Allston Yards project. This project will help alleviate two significant issues affecting the Allston and Brighton neighborhoods, the City of Boston, and the Greater Boston region. 1. Boston is facing an acute housing affordability crisis. Time and again, other cities and regions have shown that simply increasing the housing stock available for residents desiring an apartment or home works to moderate housing price appreciation. In 2018, a staggering number of young professionals are either unable to pursue a decent job in economically-vibrant areas due to the shortage of apartments available at a reasonable rent, or unable to become homeowners at ages previous generations were allowed due to an inability to save money for a downpayment at the prices homes today command. The scale of the issue, and the scale of new housing needed to address it, is great, and not capitalizing on a site like Allston Yards to introduce over 1,000 new housing units would be a gigantic lost opportunity. Few will claim that our most housing-dependent populations will be able to live in developments like this - this is a highly-desirable location and prices will reflect that - but better those who can pay for new housing live here than displace others in the community. 2. The new Boston Landing Commuter Rail location has thus far been a modest success - successful in that it is well-utilized by workers and residents nearby, and modest in that it could be utilized much better. A one-story, auto-oriented shopping center is wholly inappropriate to be situated next to a rail station offering easy access to downtown Boston. Introducing new jobs and residents in proximity to transit services allows us to better capture the value of our public transit investments, and facilitates further investment in a mode of transportation which is safer and more environmentally-friendly than traveling by car, along with being less expensive at a household level. High-density housing and employment opportunities near our transit nodes serves an instrumental role in lessening our dependence on carbon-emitting travel, helping reduce and hopefully (along with other projects like this) reverse our warming atmosphere, perhaps the greatest challenge facing our society today. Please do not accede to demands to reduce the size of this development or remove housing and employment opportunities to devote more space for parking. Approve this project. Thank you for the opportunity to comment.
4/23/2018	Jason	Kaplan		Support	Thanks to developments around the Boston Landing commuter rail stop, this section of Allston is ripe with thousands of new jobs. The young residents drawn to these jobs need places to live. Proposals like Alston Yards address Boston's housing shortage and provide options that drive down housing prices for hopeful owners at all levels of income. My only critique is that there is too much parking for a development so close to public transportation. This is not forward thinking. How many more homes could be built in the spaces we're dedicating to cars? I adamantly support this project as proposed.
4/24/2018	Lauri	Wolff		Oppose	I very much oppose the plan to develop large buildings leaving little sidewalk space, little space for parks in the area and a large increase in the traffic in the area. I very much hope none of this goes through as it will be a clear disruption to the community. Thank you. Lauri
4/24/2018	Adam	Ballent	employed in Boston	Support	Atrociously sky high rents due to very limited supply hurt the local economy and keep those who would want to plant roots, such as myself, from being able to afford to do so. The solution is to build more housing. I support the project.
4/24/2018	Jacob	Oppenheim		Support	1000 new apartments, many affordable is going to help ease housing costs pressure in the city and allow many new people to live here. Working at a rapidly growing Boston biotech, expensive housing makes it harder for us to grow and retain our workforce. This project is vital to our future.
4/24/2018	Amy	Parzych		Support	I love the increased residential development, and the reduction in parking, but there should be a larger amount of green space dedicated to the sizable number of residential units. Also, open space should incorporate active playgrounds/fields in addition to passive green space.

4/24/2018	Jameson	Brown		Support	This is an excellent place for new development, and the city needs as much housing as we can build so my rent can go down. There's probably too much parking but whatever.
4/24/2018	Cyrus	Tehrani		Support	I attended the public meeting last night at the Jackson Mann Community Center and after hearing the development team's presentation I wanted to express my full support for this project as proposed. Jobs are pouring into Boston Landing and across the city and we need to be building housing to accommodate these new residents. If we don't build housing to accommodate job growth then we will turn into San Francisco. This area is already extremely competitive with students and we need to give people more options of places to live, or else current residents will be priced out. The density of this project is crucial and is a huge positive. We need to be building dense housing near transit. Dense housing will increase Commuter Rail ridership and funding that will be used to increase transit reliability and benefit the entire nearby community. It would be a complete waste of space if the density of this project was lowered. Any lowering of the 1,050 homes currently proposed just makes the neighborhood more competitive to live in. The density also means at least 135 IDP units will be created, which is infinitely more affordable units than what is currently on the site-a strip mall. Please keep the density of the project. Lastly, please keep the bedrooms mix of the project. We have an extreme shortage of supply of 1 bedrooms and studios in Boston (according to Sheila Dillon). This shortage inflates the prices of 1 bedrooms and studios across the city and forces single people to room together and take up 3/4 bedroom apartments. Families can't compete with 3/4 incomes to afford these larger units. If we want to create more housing for families, we need to make it more affordable for single people to live in their own units and that means building more 1 bedrooms and studios. This project improves housing affordability for residents across the city. Please approve this project as proposed and do not make any changes in the Expanded PNF filing.
4/25/2018	Brendan	Keegan		Support	Boston needs more housing near transit to provide existing residents with greater options for living and not being car dependent. As our region continues to attract talent, and seeks to retain it, we need to slow the rise in housing costs. Providing more housing units that include affordable units will help us to remain competitive.
4/25/2018	Jeff	Byrnes	Somerville YIMBY	Support	Somerville YIMBY supports this excellent, transit-oriented project. It will add much-needed income-restricted & market-rate hones for the region, without needing to add additional stress to our roads.
4/25/2018	Jason	Hamner	1976	Support	While I live in Somerville, I believe all of the Boston area needs more housing units so that more people can live an work in its many great neighborhoods. The inclusion of affordable housing units and green space in the plan addresses any concerns that accompany real estate development.
4/25/2018	Alex	Kennedy		Oppose	Do we really need another building of luxury apartments? I think this is too much, especially with so many other things inthe neighborhood that need attention.
4/28/2018	Elizabeth	McGuire		Oppose	This project needs 20% or more affordable housing for the Boston community being displaced. Should also provid more benefits to the local culture with artist and green space.

5/3/2018	Megan	Markov		Oppose	As a standalone project, this is one that is far, far, far too large. There are too many units, the buildings are too tall (far exceeding the agreed upon Guest St. development plan), the gradation of building size is the opposite of what should happen (tallest should be pike side) and it brings nothing of value to the existing members of the community, rather catering to the needs and wants of the imagined tenants. The greenspace is a joke -- in the shadow of the too-tall construction, off the beaten path of the residents of the neighborhood, and far to small to be meaningful. Taken in context of the many, many, many projects being proposed in the surrounding neighborhood, this project is even more offensive. The neighborhood cannot support or sustain such a large influx of residents. If housing is to be built in Allston/Brighton, it should be affordable, owner-occupied homes, built in quantity and scale with the rest of the residential neighborhood. Enough with the large buildings of overpriced residence. Stop Allston Yards.

5/8/2018	Carrie	Marsh	Boston Parks and Recreation Commission	Neutral	May 7, 2018 Ms. Teresa Polhemus Boston Planning and Development Agency One City Hall Square Boston, MA 02201 RE: Allston Yards at 60 Everett Street Dear Ms. Polhemus: Boston Parks and Recreation Department (BPRD) has reviewed the PNF for the Allston Yards at 60 Everett Street, a mix of uses which includes 1050 residential units, and office and retail use. The plans show open space in the form of roof top terraces as well as a ?Community Green? that will be .5 acre in size. This passive use space will be privately owned and controlled rather than truly public. It will be anchored by a restaurant. It is not clear where the restaurant's handicapped and other parking, loading, trash facilities, etc. will be located in relation to the open space. The proponent should clarify if pets are to be allowed in this development, as a project of this density can create a burden on the public realm unless pets are accommodated on site. Needs Assessment Mayor Walsh endorsed the Trust for Public Land's ?Ten Minute Campaign? to ensure that all residents live within a 10 minute walk of a public park. The attached map from the City?s Open Space Plan 2015-2021, shows that the location of this project is beyond any park service area. Nearby public parks such as Portsmouth Playground and Penniman Park are already in high demand and in need of improvement. The DCR parcel at Leo Birmingham Parkway is under consideration for housing, which could lead to a further deficit of public open space in the area. The project should address how it is addressing the public open space needs outlined in the City?s Imagine Boston 2030, which includes the Open Space and Recreation Plan 2015-2021. The active recreation needs of this new population should be provided onsite or mitigated offsite so as not to impact already overburdened public parks. Impact Assessment This mixed use project will include 1050 residential units. The number of anticipated residents was not provided in the PNF, but can be roughly estimated at 1000 ? 4000 residents, with additional users of the office, retail and restaurant space. ? This project includes a marginal amount of open space with no active recreation amenities. Residents will rely on existing public open space and impact an underserved neighborhood. The proponent should provide the maximum projected population of residents and other users. The proponent should also detail the open space acreage that is being provided. Streets, sidewalks, plazas and parking should be counted as public realm, not conflated with park land. This assessment will inform the demand for park land for active recreation use at buildout, compared to the amount of open space to be provided by the project, the resulting impacts to existing public open space in the neighborhood, and the appropriate mitigation of this impact. Protection in Perpetuity The community green will be open to the public but privately owned. The provision of permanently protected public open space is critical to balance development in this neighborhood. Land that is provided as impact mitigation should be permanently protected through conservation restrictions or through transfer to public ownership. It may be privately managed. Mitigation The proponent has initially proposed $15 million in transportation improvements and $4 million for a community and public realm fund for neighborhood projects. However, this proposal does not include a strong commitment to public parks. There is an imbalance between the investment in traffic management and the investment in open space infrastructure. The Allston neighborhood continues to increase in density, without a commensurate investment in public open space to balance the development, nor serve the existing community. BPRD respectfully requests that this development make a substantial contribution to the acquisition and creation of a new publicly owned park to serve the active recreational needs of the residents of this neighborhood. This contribution should be at a level commensurate with the impact of over 1000 new households which will otherwise rely on existing public open spaces. Thank you for your consideration of the above. Sincerely, Carrie Marsh, Executive Secretary Boston Parks and Recreation Commission cc: Christopher Cook, Commissioner, BPRD Liza Meyer, Chief Landscape Architect, BPRD Jon Greeley, Director of Development Review, BPDA David Carlson, Deputy Director of Urban Design, BPDA Casey Hines, Project Manager, BPDA

5/9/2018	Philippe	Maigret		Support	This project is great and will beautifully accompany and extend to Allston the current growth of Lower Allston brought by Harvard. As a new resident of Allston I'm looking forward to see this open and running. Philippe
5/13/2018	Daniel	Smith		Support	We desperately need more housing. Please build.
5/14/2018	Colin	Roald		Support	Boston needs new, dense housing.
5/16/2018	Nancy and Bob	Grilk and Pessek		Oppose	This is a massive, transformative project. Let's make sure that it becomes a neighborhood, one where people establish their home, use our schools, libraries, community centers, senior centers, and frequent our business districts. Let's not pretend that a neighborhood is having people rent for a year or two, enjoy the community room, gym, and private spaces and then settle elsewhere. Let's get this right and have development that people will look back at in 25 - 50 years and say; "yes, this was excellent urban planning". Let's make this the example for future developments to follow in providing a stable neighborhood, with affordable homeownership, great community amenities, including beautiful, public green spaces for all to enjoy, and excellent public transportation, including great sidewalks, bike paths, and sensible roadway configurations to accommodate the increased number of cars. The BPDA should not entertain any buildings exceeding the height established by your agency for the Guest Street Plan of 110-150 feet. All proposed buildings are 200 to 235 feet. Your agency is keenly aware that the Allston Brighton neighborhood is at a low point in owner occupancy; 10%. That is unacceptable. We need BPDA to make increasing affordable, owner occupied, deed restricted condominiums at a minimum of 30% of total units the starting point with developers. We need stability in our neighborhood; we are squandering every opportunity to provide good, stable homeownership. Be the hero; help us build a neighborhood that people want to set down roots and stay for years to come, not just rent for a year or two and move on. Traffic on Everett and North Beacon streets is gridlocked almost all day and night. It is frustrating to drivers, and horrible for the air quality. A single lane in each direction with hundreds of new vehicles added is unworkable. We cannot signalize our way out of this. The traffic studies do not include traffic from the new apartments at Boston Landing. Make no mistake, people who set down roots will want a car. The new train station has taken some of the burden away, but that is only works for Boston commuters. Not everyone works in downtown Boston. The neighborhood desperately needs an independent, comprehensive traffic study. We cannot hope for the best. BPDA needs to look at this proposed development and comprehensively at developments (yes, plural for each of the following) Everett Street, Penniman/Rugg Road, North Beacon Street and the intersection of Harvard and Brighton avenues. We are at capacity now. MBTA service is inadequate. Finally, we need to increase green space. Use this as an opportunity to vastly increase and improve open, public spaces. It is imperative that we use long range planning to improve and add to our neighborhood housing stock; more affordable home ownership, more attractive buildings, better transit, and beautiful inviting green spaces. We have one of the lowest ratios of green space to residents of any neighborhood. Let's work to insure that people move here and want to stay. This area is transforming, and that is good, but we need it to be a neighborhood, not just a canyon of tall buildings for people to rent an apartment for a year. Let's create a real neighborhood; let's create a neighborhood that others will look at as a template of good, neighborhood planning. There are a lot of smart, talented people at the BPDA and in our own community that can make this work for the neighborhood and the city. Let's do it. Thank you. Nancy Grilk and Bob Pessek

5/17/2018	Mary	Burns	- None -	Oppose	Hi Casey, I am a life-time Brighton resident (not too many of us left). I remember Brighton as a thriving community of families and 3 active Catholic parishes. I've watched as my street has become a dormitory for BC students, as out-of-town folks have bought up homes that used to hose families, and stuff them full of young guys working in the financial district. Sometimes I feel like I live in a frat house. What I do know is that I don't know my neighbors, the community fabric has frayed, and a development like Allston Yards only exacerbates, not helps that. The development is totally out of scale to the rest of the community and simply amplifies the disconnectedness that plagues our community. It doesn't help the housing affordability crisis; it adds to it. I envision hundreds of Air BnB units and rental unit investments like the ones now that plague my neighborhood. I agree that that area needs to be developed--but this is not the way. Allston-Brighton has the lowest owner-occupied rate in the city--and I believe because of this--the lowest rate of representation. Allston Yard, again adds to this.
5/17/2018	Kevin & Margarita	Norton & Montero		Oppose	Dear Ms Hines, I oppose this project as it stands on the following grounds: 1) Density The project is too dense and too high. The Guest Street Plan calls for buildings 110 - 150 feet high - this project is proposing 200- 235 feet high. The proposed height and mass of Building #1 is totally out of proportion to the adjacent 2-3 story residential neighborhood across the street at the Honan Apartments. More Family Units The proposal for 1,200 bedrooms in 1050 rental units is not what we need in Allston Brighton. We need a variety of housing types at different price points to make this an economically inclusive community with people of all ages and backgrounds. This proposal only has thirty 3-bedroom apartments the rest are studios and one bedroom units. Recent development Allston Brighton has produced thousands of these over priced studios and one bedrooms . We need more three and four bed units suitable for middle income and working families. Affordable Units A project of this size should have at least 20% affordable units that are more deeply affordable than the 70% Area Median Income (AMI). We have an affordable housing shortage in the neighborhood and residents who wish to stay in their community are unable to do so. Studio and one bedroom units renting for $2400 - $28,00 are totally unaffordable for the vast majority of the young professionals who live here. We need housing that reflects the economic reality of the people who live in Allston Brighton More Home Ownership We have a home ownership crisis in the neighborhood Allston?s owner occupancy is around 10% and Brighton?s owner occupancy has plummeted to 21% from 25% a few years ago. This is well below the city wide average of 35%. This project should have 30-50% home ownership opportunities with 20% affordable at different price points. No investor units: No Short term rentals Short term rentals destabilize the neighbordood and adds to the housing shortage. These units need to have restrictions within the condo documents limiting investors ability to rent non-owner occupied units as short term rentals such as Airbnb. 6) Transportation Mass Transit - MBTA buses In addition to the commuter rail which has a limited schedule, this location needs to have an integrated MBTA bus service, adequate bus stops, bus shelters. Drop off and pick up locations are needed at the commuter rail stop and especially at the Stop & Shop super market. MBTA improvements are needed to connect this project to surrounding neighborhoods especially on the North/South axis. Given the level of development in the immediate area the MBTA needs to have a hands on approach to ensuring an affordable, reliable and efficient mass transit service in Allston Brighton. This included a plan to improve service from Allston Yards and environs to Cambridge and the Longwood Medical Area. Bike Lane and Pedestrian Access to the Charles River Improvements in pedestrian and cycle access to the Charles river and the surrounding neighborhood are much needed. 8) More Green Space Green space is essential to mental health and well being. The proposed community green is only 30,000 sq? of green space for an almost 2 million square foot development. Allston has the least amount of green space of any neighborhood in Boston. This project needs more green space in the form of a well maintained public park which would be open to all and enhance the quality of life. Thank you for the opportunity to comment.

5/17/2018	Betty	Cawley, CSJ	Sisters of St. Joseph of Boston	Support	I attended the meeting at the Jackson Mann, and some of the concerns of the B-A residents I heard were: -size and density of the project; -affordability, especially for current residents or people in the same economic bracket; -lack of family-size units. I share these concerns, and in particular support the suggestion that 20% affordable would be a good target. Thank you.
5/17/2018	Arthur J.	Downey Jr	PCAB	Oppose	Dear Ms. Hines, I oppose this project for the following reasons: 1) Lack of Family Units. 2) The Density and. Height of the project. 3) Not enough affordable units Arthur J. Downey Jr.
5/17/2018	Maximilian	Kreisky	Mr	Oppose	Dear Ms Hines, I oppose this project as it stands on the following grounds: 1) Density The project is too dense and too high. The Guest Street Plan calls for buildings 110 - 150 feet high - this project is proposing 200- 235 feet high. The proposed height and mass of Building #1 is totally out of proportion to the adjacent 2-3 story residential neighborhood across the street at the Honan Apartments. More Family Units The proposal for 1,200 bedrooms in 1050 rental units is not what we need in Allston Brighton. We need a variety of housing types at different price points to make this an economically inclusive community with people of all ages and backgrounds. This proposal only has thirty 3-bedroom apartments the rest are studios and one bedroom units. Recent development Allston Brighton has produced thousands of these over priced studios and one bedrooms . We need more three and four bed units suitable for middle income and working families. Affordable Units A project of this size should have at least 20% affordable units that are more deeply affordable than the 70% Area Median Income (AMI). We have an affordable housing shortage in the neighborhood and residents who wish to stay in their community are unable to do so. Studio and one bedroom units renting for $2400 - $28,00 are totally unaffordable for the vast majority of the young professionals who live here. We need housing that reflects the economic reality of the people who live in Allston Brighton More Home Ownership We have a home ownership crisis in the neighborhood Allston?s owner occupancy is around 10% and Brighton?s owner occupancy has plummeted to 21% from 25% a few years ago. This is well below the city wide average of 35%. This project should have 30-50% home ownership opportunities with 20% affordable at different price points. No investor units: No Short term rentals Short term rentals destabilize the neighbordood and adds to the housing shortage. These units need to have restrictions within the condo documents limiting investors ability to rent non-owner occupied units as short term rentals such as Airbnb. 6) Transportation Mass Transit - MBTA buses In addition to the commuter rail which has a limited schedule, this location needs to have an integrated MBTA bus service, adequate bus stops, bus shelters. Drop off and pick up locations are needed at the commuter rail stop and especially at the Stop & Shop super market. MBTA improvements are needed to connect this project to surrounding neighborhoods especially on the North/South axis. Given the level of development in the immediate area the MBTA needs to have a hands on approach to ensuring an affordable, reliable and efficient mass transit service in Allston Brighton. This included a plan to improve service from Allston Yards and environs to Cambridge and the Longwood Medical Area. Bike Lane and Pedestrian Access to the Charles River Improvements in pedestrian and cycle access to the Charles river and the surrounding neighborhood are much needed. 8) More Green Space Green space is essential to mental health and well being. The proposed community green is only 30,000 sq? of green space for an almost 2 million square foot development. Allston has the least amount of green space of any neighborhood in Boston. This project needs more green space in the form of a well maintained public park which would be open to all and enhance the quality of life. Thank you for the opportunity to comment. Max Kreisky 2 Imrie Rd, Apt 3, Allston MA 02134

5/17/2018	Margaret	O'Connell		Oppose	I live in Allston very near by this project. I have lived here 20 years and in nearby Brighton another 10 more. I am opposed to this project as it is currently designed for these main reasons: 1. Allston already has a parking shortage and the number of parking places being lost (in the Stop and Shop lot) and then added (.5 per unit is my understanding) will add to this existing problem. Many (most?) houses in Allston do not include driveways for their car parking. This means that many of the residents are parking on the street. My little street is already tight for parking and I expect that the many cars which can not park at Allston Landing will now be added to our existing major on-street parking shortage problem. This issue is not evident in most parts of Brighton. It is is very unfortunate that Boston population density information always includes Brighton and Allston together so that Allston's acute parking problem in its high density population area can not be properly recognized. 2. The cost of the new units is much too high compared to the income levels in the area. As the pricing stands now, these units will not be an option for people who want to stay in our area. This means that new higher income people will arrive and force the cost of everything in the area to rise - the income levels of the new people will attract higher-charging stores and restaurants which also regrettably means the rents go up for businesses and drive out long-time business owners. The character of our area will go "upscale" which will greatly lower my comfort level in living here. 3. I do not want to lose Stop & Shop, an affordable regular super market. I hear the new version will be tailored towards the new people which I hear means more things like prepared meals (pricey) and less things like rice and beans and basic staple ingredients. I'll change to Market Basket in Waltham but, once I'm no longer able to drive, that kind of option will be unavailable. Currently, I can walk to Stop and Shop from my house.
5/17/2018	Naomi	Rubin		Oppose	Allston ALREADY has a serious parking shortage. For me personally, this is the biggest of all the many reasons why I oppose this project as it is now planned, so very close to our home. And no, Uber and biking certainly do not solve our nightly parking crisis. Uber actually makes the traffic worse since the cars have to come into the area for pickup before the trip itself. However, this project only supplies .5 of a parking space per unit. These units are too small for most families and too expensive. I understand the new supermarket will be too expensive for us local people, too. Allston needs a higher rate of home ownership, not condos bought by investors to rent out on a short-term basis. These new condos need to have owner-occupant restrictions tied to them. Please consider changing the plan for this project. We already have a shortage of housing that regular families can afford, even the families of professionals. I work at a library at Boston College, and people like me, let alone people who work waiting tables and so on, are having an increasingly hard time affording to live in our own neighborhood that we love.

5/18/2018	Thomas	Nunan	Saint Joseph Prep	Support	May 17, 2018 To Whom It May Concern: As a vital member of our vibrant Allston-Brighton neighborhood, Saint Joseph Prep, sponsored by the Sisters of St. Joseph of Boston, is committed to providing an education marked by academic excellence, authentic relationship, meaningful engagement, and dynamic innovation. Saint Joseph Prep offers a Catholic, co-ed, college prep experience that is both exceptional and accessible. Our richly diverse learning community is comprised of students from the City of Boston, from the surrounding towns, and from across the world; these young women and men, and the teachers who serve them, are inspiring. We are pleased to support the Allston Yards Project. We understand and appreciate the concerns raised by some regarding the following: ? Need for Affordable (and family-oriented) Housing ? Need for Additional Green Space ? Worry about Traffic Congestion ? Worry about Scope/Scale (height/density) We certainly want to see improved pedestrian, bike, car, and bus flow in our neighborhood; we believe, as a matter of justice, that housing should be affordable; and we are committed to working with all partners to increase green space and to maintain a community ?feel? to this wonderful part of Boston. We strongly believe that the Allston Yards Project should move forward, and we are pleased to support the owners and developers in their magnificent vision for the site at 60 Everett Street. First, we commend the team for addressing the major challenges facing this part of the neighborhood regarding the street grid. The proposal demonstrates clearly an effective and efficient reworking of Guest Street, Arthur Street, Everett Street, and all the related avenues. These major upgrades will provide much better?and much safer?transportation routes for everyone in the area, including our students. Indeed, many of our scholars are already using the commuter rail to come to SJP. Second, we support the project?s collaboration with New Balance, the MBTA, and a whole host of other community partners in developing the site as part of a comprehensive, creative, thoughtful, and intentional vision for Allston/Brighton. We need to bring everyone together in designing and dreaming a future filled with opportunity and prosperity for this part of Boston. Third, we are excited to work with Stop & Shop in addressing the concerns noted above, particularly in regard to green space. We will explore how Saint Joseph Prep might create additional green space, particularly related to parks and playing fields. Working together to advance this mixed-use development plan and to provide the accompanying green space, we can bring more families to our area. Thank you for your consideration of this public comment letter. We are pleased to support the Allston Yards Project and we look forward to partnering with Stop & Shop in creating a better and brighter future for everyone in our community. Take care. Sincerely, Tom Nunan, Jr. Head of School

5/18/2018	Barbara	Parmenter	self	Oppose	Dear Ms. Hines, As a resident of Allston/Brighton, I am writing to oppose the Allston Yards development proposal as it now stands. Our metropolitan region is experiencing a major crisis in affordable housing. The new development proposal does very, very little to seriously address that issue while having a tremendous impact now and decades into the future for this area of Allston/Brighton. This is such an opportunity to do things right, yet the development as proposed is wrong in so many ways, but affordability is the main issue. The proposed development will have 1050 apartments, and around 1300 bedrooms according to the developers? answers at the last public meeting. They also said that the target market is people making about 15% higher than area median income, although they didn?t say which area (typically this is the larger MSA area) and for what apartments. But this seems to be in line with current apartments next door at Lantera Boston Landing where studio apartments of betweeh 450 and 550 square feet are renting for between $2400 and $2800 a month. To be affordable, a person renting this apartment would have to make between $86,000 and $100,000 a year. According to the Bureau of Labor Statistics 2017 data for the Boston-Newton-Cambridge area (https://www.bls.gov/oes/current/oes_71654.htm#25-0000) , only 25% of employees in region could afford even a STUDIO apartment in the Lantera complex. Allston Yards is planning to build many more of these. Even the so-called ?affordable? set-asides will not be affordable to many workers in our region, much less the neighborhood. Yet who making $86,000-$100,000 a year would want to live in a tiny studio apartment? These 25% are highly paid professionals, most of whom would at least have spouses and/or other family, so they will not be renting these apartments. Given these facts, it seems to me as if the real market for these apartments is investors, not owners or renters. And the hope of many of these investors would be to use them for short-term rentals. At a minimum, the city should require that there be ZERO short-term rental units allowed. And that at least 20% of units be affordable at 70% the Boston (not MSA) median income. And that at least 50% are owner-occupied. And to contribute to Boston?s housing crisis, there should be a much higher mix than currently planned of family-size units. A development of this size, that would change the character of this area for decades to come, needs to PART OF THE SOLUTION FOR THE AFFORDABLE HOUSING CRISIS, NOT PART OF THE PROBLEM. As currently proposed, it will be a major part of the problem and do nothing to contribute to a true solution. The development also does nothing to address transit. The developers are benefiting from our tax-payer investment in creating the Boston Landing commuter rail station, and will presumably get the state subsidy for transit-oriented development, reaping a large profit for contributing nothing to our transit system. We need to have the developer make major contributions to the existing bus system in the area so that we can get more frequent and reliable service, not just tout the commuter rail station for which the service is very limited. The developer also needs to come up with a plan for connectivity for bicylists and pedestrians to existing bike/ped paths to the river and help improve bike/ped infrastructure around the neighborhood of Allston, not just in the development itself. On top of that, the community green space as proposed is completely inadequate. It?s a tiny quarter of an acre that sits at the foot of a 17 story building on its EAST side ? a tiny space that will be in the shadow of a tall building much of the day, and will face gale-force winds from the surrounding structures. And I did the mapping ? it?s the equivalent to two rows of the current parking at Stop and Shop. This is simply ludicrous. Higher density development is necessary but it must be development that truly works to solve multiple issues, not just impose more burdens on the community. For those reasons and more, I oppose the development as proposed. Thank you for your work on this project and for this opportunity to convey my comments, Barbara Parmenter 77 Harriet St. Brighton, MA 02135
5/18/2018	Mouna	Mahassine	1977	Support	great project that will transform the neighborhood, looking forward to the completion!

5/22/2018	Dorothy	Fleishman		Support	I strongly suggest that the developer be required to include a new community center as part of this development. Jackson Mann is in terrible shape and is not sufficiently updated to handle the needs of our community. This is a small addition to the developer's cost that would truly benefit the citizens of Allston/Brighton
5/23/2018	barbara	moss		Oppose	This proposal is deeply concerning both to the abutters as well as the overall community that is already burdened by incredible traffic. Where are all these cars going to go coming in and out of the community. The buses are already broken in our infrastructure. we do not have a t stop. There are no plans for that or any further way to move people around. There are old and narrow streets. How will they get from point a to point b? Guest street is overburden. How will they get in and out? What traffic studies have been done and research to see what the community can bare? This project is an affront to a community that has thrived fo hundreds o years. The building is too tall, casting tremendous shadows. The structure is architecturally institutional. The .5 acre is a joke for green space. Where are the trees? Walking paths. Park? Where is the homownership.? Is this built for transients? Who will choose to live there and for how long. It is not affordable to anyone who wishes to remain in the community. This project is shameful. Barbara Moss
5/29/2018	Lisa	Smith	Resident	Oppose	Good day: There are more pressing issues with Everett Street that have not been addressed. 1. Mounting traffic on Everett Street posing a hazard for existing children in the neighborhood and for the newly increased traffic from Boston Landing Station. 2.******** No mechanical crosswalk unit for blind individual living adjacent to Stop & Shop at Brian Honan Apartments. He waits for the sound of no traffic or for someone to blow their horn (which can be misconstrued). 3. There is only a one directional outlet to this parking lot. The entrance on Braintree Street needs to be a two-way exit/entrance for safety/evacuation purposes, as well as, for traffic flow. the exit on Arthur Street is always congested because of the short light. 4. Additional residents from the 1000 unit apartments will congest the area even more. Luxury apartments may bring high prices at Stop & Shop hurting the existing population of families. 5. The continued influx of luxury apartments will continue to push out existing long-time residents who can afford to live in Allston with increasing rents. 6. Builders are building condos and not including enough affordable housing, not enough home ownership or single family houses/townhomes for families, while reducing green space. 7. Implementation of housing for individuals looking to put roots in Allston are not being considered but housing for short-term money making units are on the rise. With such plans, proven increased crime is inevitable. 8. Additional public bus routes for Stop & Shop 9. Trash & rodent control plans. There is still a high infestation of BIG RATS 10. A Braintree Street ramp is needed, as well 11. Direct informational materials/correspondence to residents to keep us abreast of progress or lack there of. 12. Allston residents get first dibs on project jobs 13. Residents did not receive any correspondence of Boston Landing Construction. Immediate area residents need mailings preparing them for any projects. 14. Money for community parks, green space, and preserving housing for current residents/low income residents. 15. Promise to keep the community diverse. Public announcement against gentrification and visible action.
5/30/2018	Donna	McIsaac	Resident of Brighton	Oppose	Dear Ms. Hines: As a resident of Brighton, I strongly oppose the Allston Yards project as planned. Adding 1050 units (likely 2000 residents) to an already congested area in addition to the more than 20 other development projects within 1 mile of this proposed project that will bring approximately 1500 more units (likely 2500 residents) will make it impossible to travel Market St, North Beacon St and Western Av. Those numbers don't include the private developments that are too small to be on the radar of the BPDA as in my neighborhood where a developer wants to put 6 units/10 parking on 10,000 sq ft of land. The developers are trying to maximize their profit at the expense of the existing community. The Developer can still make a profit on their investment with a scaled-down project. The size of this project is not right for this location or for Allston/Brighton. Thank you. Donna Mcisaac

5/30/2018	Joel	Shaw		Oppose	How many more luxury apartments are you going to allow in Brighton?
5/30/2018	Deborah	Baye		Oppose	Opposed for some of this. 60 Everett Street, Allston 1) 0.5-acre community green is way too small for the amount of building going on in this area to combat the pollution that is created by the highway alone, not to mention the lack of trees highway side alread. 2) 1,050 residential units seem excessive and a % should be low income, designated for artists and or handicapped 3) 300,000 GSF of office use also seems excessive 4) 1,300 parking spaces needs to be addressed- I am assuming in a building-or underground?
5/30/2018	Max	Rome		Oppose	This is a great location for dense transit-oriented housing. However with added density we need to be extra careful to make sure the developments enhance the neighborhood by providing housing for an income diverse group of long-term residents and making improvement to the public realm. Owner occupancy and Affordability: 50% of the housing should be condos and of those 70% should be deed restricted owner occupied. 20% of units should be designated affordable for an average family currently living in the Allston or Brighton. Height: The building should conform to the height guidelines of the recent guest street study. Public space and green space: The development should create complete streets and increase pedestrian access over the bridge and to the river. Robust street tree planting should be part of this project as was done throughout the New Balance project.
5/30/2018	A	B	Resident	Oppose	More overpriced modernity designed to stamp out cultural diversity, flush out low-income residents, and decimate the arts and small businesses? I urge the city to do more to keep long term residents and those that add to the vitality and health of the city. Boston and the surrounding areas are flooded with cookie-cutter luxury properties. It is disappointing to see the city continue to turn its back on the history and the people. Please reconsider this project. Or at least require all residential & retail units go to hard working families, long term residents that have been priced out of everywhere else, and to small local businesses. Thank you.
5/30/2018	Joseph	Zina		Oppose	As it is proposed I feel the City of Boston is not demanding more concern for the neighborhood. There is little regard for community building with a new large park for children to play, elders to sit under trees, indoor winter exercise gym and pool for the community. The developers have also forgotten that tenants will have dogs and there needs to be a dog park. New Balance and Lantera have not provided any community benefits that they should have and now Allston Yards has not adequate community concern. The city of Boston needs to be more demanding and responsible for the future of a habitable community. With ten other development projects in the Allston area the city is not concerning to require owner occupied units and allowing for high priced rentals for small spaces for transients and rental units that will be used as AirBNB?s. The city must rearrange their priorities and concern for overbuilding.
5/30/2018	Sarah	Rodrigo		Oppose	This project is far too dense and does not include enough green space. On a broader note, the BPDA needs to start looking at Allston Brighton holistically rather than treating each individual project as though there is no surrounding context. When considered in context, it is obvious that this project does not forward any of the goals of the community, which have been clearly and formally identified over and over and over again. Please do not approve this project as-is. Please.

5/30/2018	Shelley	Bialka	Ms.	Neutral	The proposed project is both exciting and frustrating. Yes, it's nice to see a planned mixed use space, but there is not enough parking - 1900 for 1500 units, a large retail space and commuter rail stop! .5 ac green space? What happened to the "playing field for residents" promised in orig. New Bal plan and diminished to a much smaller sloping landscape feature will surely happen here. Why can't developers scale the projects so that there is mass, say the retail/ residential space, lower buildings nearby, green space - bike and pedestrian paths, smaller but multiple parking areas, with overall more spaces, underground garages. What about bringing more public tran to this area? Buses,if not transit. Can the roads accomodate the increased traffic? I know I am not going to bus it or uber it to Stop and Shop. Will I compete for space with residents? If any of the planners and officials involved in this project come to the public meetings by public transportation, I think they will see the impracticality of relying on public transportation, especially lugging maps and plans (read groceries, children, work papers, etc for the rest of us).
5/30/2018	Wilma	Wetterstrom		Oppose	I vehemently oppose this project. It is far too high and too dense and will have too little green space. The additional 4,000 or so new residents will exacerbate the traffic congestion that already plagues our community and further burden an overtaxed bus and T system. Parking problems will only get worse. All of this will further diminish our air quality as well as quality of life. Nor does the project offer many home ownership opportunities, thus only exacerbating the decline in long-term residents in A-B. In addition, the developer offers as public green space a measly plot?the equivalent of a residential city lot. This must be much larger to offer any respite from the oppressive hardscape and provide any environmental benefits. Moreover, it should be deeded to the city for use of its residents in perpetuity. And it should contribute to the mayor's plan to plant 100,000 trees in the city by 2020; this is, landscaped with native trees along with shrubs. Without the change in greenspace, the number of units and the height of the buildings, this project will only diminish the quality of life in A-B.
5/30/2018	Deborah	Reiff		Oppose	Anyone attending the community meeting on this project would have no doubt that, except for those who stand to gain from construction or other work, the community was united and strongly opposed to this project. Brighton needs development to help redevelop families with community ownership. Brighton needs green space. No one who lives here wants 4 high rise buildings with 1,050 mostly 1BR or studio units. We are all painfully aware that within a 1.5 mile radius of this project there are at least 20 other projects in various stages of approval/construction that are bringing an additional 1500+ units to that area. Does anyone at BPDA give a damn about Allston/Brighton?
5/30/2018	Susan	Kearns	private citizen	Oppose	The increase in density that will be added to this particular area is overwhelming. I have strong concerns about safety, traffic flow and potential for pedestrian and automobile accidents due to the colossal size of the entire project. I strongly oppose this project. Susan J. Kearns - homeowner in Brighton since 1983 Ward 21/13

5/30/2018	Paul	Dixon	Mr.	Oppose	This development is simply too large for the area. It will negatively worsen an ever-increasing traffic problem in the area, drawing more cars onto streets that are too full as it is. Additionally, it consists, in part, of a huge residential that the neighborhood simply cannot accommodate. Yes, you can construct the building. However, where are all those people going to park, which forms of public transportation are they going to take and how will that affect the ride for all? Yes, the train station is there. First, who wants to live near train tracks? I live a mile from tracks now, and in the summer, when the windows are open, we can't hear the television. And that's a mile away. Second, those train tracks serve only those who want to go into the city or possibly out to Newton, Framingham, or Worcester. What about everyone else who just wants to get around the city as a whole? What if you want to take the train, but because there's no RELIABLE OR REGULAR public transportation to get there, you need to drive. But there's nowhere to park. All in all, developments are not like mountains. You don't just build them because the land is there. This is the wrong plan at the wrong time, and as a long-time resident of Allston-Brighton, I oppose as an attempt to maintain the qualify of life for all of us in the 02134 and 02135.
5/30/2018	Liz	Breadon		Oppose	I oppose this project as it stands on the following grounds: 1) Density The project is too dense and too high. The Guest Street Plan calls for buildings 110 - 150 feet high - this project is proposing 200- 235 feet high. The proposed height and mass of Building #1 is totally out of proportion to the adjacent residential neighborhood across the street at the Honan Apartments. Cumulative impact: At this time the immediate neighborhood has approximately 1800 housing units under review (with more to come in the future). The impact of this rapidly increased density on traffic, utilities, green space, transportation, public safety etc need to be considered in aggregate. 2) More Family Units The proposal for 1,200 bedrooms in 1050 rental units is not what we need in Allston Brighton. We need a variety of housing types at different price points to make this an economically inclusive community. This configuration means that the vast majority of units will be studios or one bedrooms with only thirty 3-bedroom units. in Recent development Allston Brighton has produced thousands of over priced studios and one bedroom rental apartments. We need more three and four bed units suitable for middle income and working families. 3) Affordable Units A project of this size should have at least 20% affordable units that are more deeply affordable than the 70% AMI. We have an affordable housing shortage in the neighborhood and residents who wish to stay in their community are unable to do so. Studio and one bedroom units renting for $2400 - $28,00 is totally unaffordable for the vast majority of the young professionals who live in Allston Brighton. We need housing that reflects the economic reality of the people who live here. The developer could partner with an affordable housing developer to build 200-300 affordable units suitable for a more diverse demographic (including families) and priced at different price points (not just 70% of AMI) to help create a diverse and inclusive urban community. (See the 1550 Soldiers Field Road development) We need housing that is affordable for middle class workers, our firefighters, school teachers, administrative assistants, healthcare workers. 4) More Home Ownership We have a home ownership crisis in the neighborhood Allston?s owner occupancy is around 10% and Brighton?s owner occupancy has plumetted to 21% from 25% a few years ago. This is well below the city wide average of 35%.

					This project should have 50% homeownership opportunities with 20% affordable at different price points. 5) No investor units: No Short term rentals Short term rentals destabilize the neighborhood and adds to the housing shortage. These units need to have restrictions within the condo documents limiting investors ability to rent non-owner occupied units as short term rentals such as Airbnb. 6) Transportation Mass Transit - MBTA buses In addition to the commuter rail which has a limited schedule, this location needs to have an intergrated MBTA bus service, adequate bus stops, bus shelters. Drop off and pick up locations are needed at the commuter rail stop and especially at the Stop & Shop super market. MBTA improvements are needed to connect this project surrounding neighborhoods especially on the North/South axis. Given the level of development in the immediate area the MBTA needs to have a hands on approach to ensuring an affordable, reliable and efficient mass transit service in Allston Brighton. This included a plan to improve service from Allston Yards and environs to Cambridge and the Longwood Medical Area. 7) Bike Lane and Pedestrian Access to the Charles River Improvements in pedestrian and cycle access to the Charles river and the surrounding neighborhood are much needed. 8) More Green Space Green space is essential to mental health and wellbeing. The proposed community green is only 30,000 sq? of green space for an almost 2 million square foot development. Allston has the least amount of greenspace of neighborhood in Boston. This project needs more green space in the form of a well meaintained public park which would enhance the quality of life. 9) Pedestrian Infrastructure - not adequate for the growing density in this neighborhood. The Everett St Bridge has 7 (elevator side) and 5 (bridge & commuter rail access) foot sidewalks. The widths of the sidewalks on the Everett Street Bridge a major problem. Compared to the Market St Bridge which has 8 foot sidewalks, the Cambridge St Bridge has 7 and 8 foot sidewalks. This is exacerbated at rush hour, especially on the 5 foot side, people are walking on the street and crossing the street on the bridge because the sidewalk is full. This is a recipe for disaster. We need a safe sidewalk experience that will keep people moving north or south to the crosswalks. The problem is only going to get worse as demand increases.
6/1/2018	Jake	Dempsey	Homeowners Union of Allston-Brighton	Oppose	The size and scale of these projects are out of character for the rest of the neighborhood and are exacerbating already overloaded roadways and infrastructure. I welcome more opportunities for renting and buying in the neighborhood and also the retail options these projects bring, but I would rather that this development not come at the expense of the quality of life for the neighborhood. I live on the other side of the everett street corridor, just over the highway. For the past seven years I've driven over that bridge twice daily to take my kids to and from daycare, and over time the traffic has only gotten worse. Adding more than a thousand new units, not even factoring the new developments east of Everett street or on North Beacon, will only make that worse. Being a former industrial/commercial zone, this area is sorely lacking in greenspace. I would like to see more of it included in the plans.
6/4/2018	Steven	Bernstein	Self	Oppose	My concern is about infrastructure. There are limited roads to provide access to an area that has had no road additions for the most recent building.
6/13/2018	Nadia	Parsons	Inbound Visual Arts	Support	We need this in our community. Ian a long time resident and artist.
6/14/2018	Anne	Silber		Support	I strongly support including an ARTS CENTER at Allston Yards!!
6/15/2018	Connie	Glore		Support	The Allston Yards project is the ideal location for an Allston-Brighton Arts Center for the visual and performing arts.

6/15/2018	Karen	Smith		Oppose	The proposed Allston Yards project greatly exceeds tolerable height and density standards for this area. The standards set with community input for the Guest street area must be incorporated. In addition, I am opposed to the limited amount of home ownership proposed for this development. We should have at least 30% home ownership, with deed restrictions, for new projects in order to mitigate the decline in home ownership in Allston Brighton. This proposal would accelerate a serious decline in home ownership and create additional barriers for building community. This proposal has not adequately address many important design features in addition to the basic problems with height and density. *Inadequate greenspace *inadequate walkability for the expected foot traffic related to businesses and residences. *inadequate plans for resident parking. The city should prohibit resident parking permits for residents of buildings that have received variances related to parking requirements *inadequate planning for the traffic related to deliveries and rideshare services for residents and business patrons *inadequate consideration of the impact of limited public transportation; the Boston Landing schedule is not the solution for all commutes and commuters The access to Allston Yards from Everett St is likely to be very problematic for even a portion of the projected traffic. Everett St is already a cut through between Allston Village and Soldiers' Field Road, and traffic back ups now occur regularly Monday- Friday. This is a serious issue for residents in the current Honan apartments who cross Everett at that end of the bridge regularly, and commuters on the bridge as the access the commuter rail. This added traffic is an issue for the streets already accommodating morning and afternoon traffic related to the opening and closing transportation for two local grammar schools: 1.The German International School on the cornier of Everett and Holton, with traffic issue related to accessing the Everett St entrance to the school parking area 2. The Gardner Pilot Academy on the corner of Athol and Brentwood, accessed by Everett and Holton St. I am also concerned that this proposal does not reflect the added residential and business activity on North Beacon St, which has been approved or under review. These projects will have a compound effect on the ability to have a pedestrian friendly and safe area, and reasonable traffic patterns for cars and bicycles. Please do not approve this proposal, or any amended proposal for Allston Yards, that does not adequately address these concerns and provide a set of community benefits in addition to the mitigation, which are commensurate with the value to the developer. Thank you
6/15/2018	John	Quatrale	Unbound Visual Arts	Support	Dear Casey, Unbound Visual Arts, the only 501(c)(3) community-based visual arts organization in Allston-Brighton, believes that the Allston Yards project include an Art Center for visual and performing arts. The center would be for plays, musicals, exhibits, art studios, rehearsal spaces, and classrooms for children and adults. Allston Yards is at the crossroads of Allston and Brighton and as such is the perfect location for this center. We've collected 116 signatures (using a Google form) in the last 2 days and believe that if we had started earlier that we could have gotten 1,000 supporters. The center could be incorporated into the development or included as a community benefit. In both cases, the fundraising and build-out could be accomplished by a new non-profit entity if the developer provides the needed space. I'll email you the list of the 116 supporters that signed this request. The wording of the petition is as follows: Sign to support an Allston-Brighton Arts Center at the new Allston Yards: The Allston Yards project, at the current Stop & Shop near Boston Landing, is the ideal location for an Allston-Brighton Arts Center for the visual and performing arts. If you believe that the developer of this major real estate development should include the space for such an art center, please add your name below by JUNE 15! All names will be transmitted to the Boston Planning and Development Agency. The proposal includes 1,050 residential units and 300,000 GSF of Office use, 67,000 GSF of Grocery use, 50,000 GSF of Retail/Restaurant use, 0.5 acres Community Green, and up to 1,300 parking spaces. More at http://www.bostonplans.org/projects/development-projects/allston-yards Many thanks, John Quatrale

6/15/2018	Tom	Jackson		Support	This is an extremely important feature and project for the people and for the reputation of the community