Project Notification Form

Submitted Pursuant to Article 80 of the Boston Zoning Code

THE CLARION

DORCHESTER, MASSACHUSETTS

Submitted to:

BOSTON REDEVELOPMENT AUTHORITY
One City Hall Square
Boston, MA 02201

Submitted by:

THE COMMUNITY BUILDERS, LLC

Prepared by:

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In Association with:

MCCLURG TRAFFIC
ANDREW MCCLURG, AICP CTP

March 6, 2015

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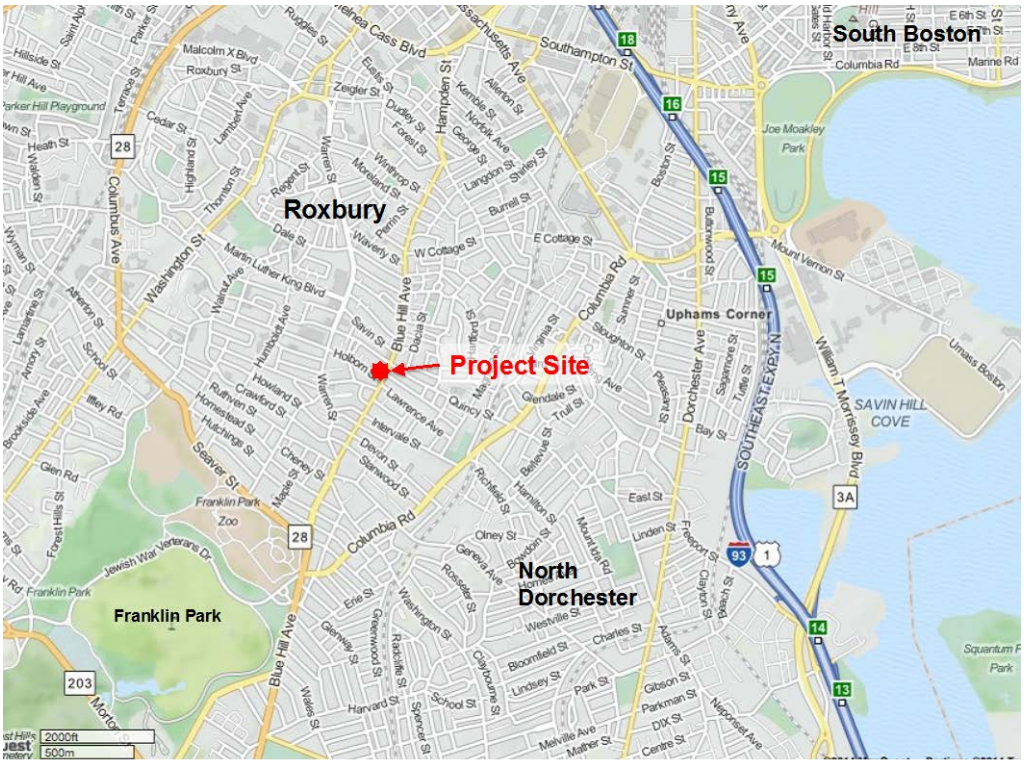


1.0 PROJECT SUMMARY

1.1 Project Identification

Project Name:	The Clarion
Location:	The Project site is located on Blue Hill Avenue in the Roxbury Neighborhood of the City of Boston. The site is on the northern side of Blue Hill between Quincy and Holborn Streets.
Proponent:	The Community Builders, Inc. 95 Berkeley Street Boston, MA 02116 617-695-9595 Eliza Datta, Vice President
Architects/Permitting Consultants:	Stull and Lee, Inc. 103 Terrace Street, Second Floor Boston, MA (617) 246-0406 Mr. M. David Lee, FAIA Mr. Thomas Maistros, AIA
Transportation and Parking Consultant:	McClurg Traffic 81 Oakley Road Belmont, MA 02478 (617) 484-6137 Mr. Andrew McClurg
Legal Counsel:	The Community Builders, Inc. 95 Berkeley Street, Suite 500 Boston, MA 02116
Structural Engineer:	Goldstein Milano, LLC 125 Main Street Reading, MA 01867 (781-670-9930 Mr. Chris Milano, PE
MEP Engineer:	Wozny Barbar & Associates, Inc. 1090 Washington Street Hanover, MA 02339 (781) 826-4144 Mr. Zbigniew Wozny, P.E.
Construction Manager:	The Community Builders, Inc. 95 Berkeley Street, Suite 500 Boston, MA 02116

Site/Civil Engineer: Doyle Engineering, Inc.
14 Spring Street, Second Floor
Waltham, MA 02454
(781) 507 5455
Mr. William Doyle, P.E.

1.2 Project Description

1.2.1 Project Site

The Clarion (the "Project") will be located on a series of parcels on Blue Hill Avenue (281A to 311) in the Roxbury Neighborhood of Boston, occupying the entire block between Quincy and Holborn Streets. The site also includes parcels 1-8 Quincy Street and 46-48 Holborn Street. The parcels are currently vacant and combined total an area of 44,047 square feet. The site is in a moderately dense urban neighborhood. To the west is the Quincy Street Play Lot (a City of Boston Park) and multi-family housing along Holborn. To the north are the Revered Michael E. Haynes Early Education Center (on the opposite corner of Quincy Street) and the nearly completed Quincy Commons, a mid-rise, mixed use building on the eastern corner of Blue Hill Avenue and Quincy Street. On the opposite side of Blue Hill Avenue are; a service station, vacant lots and mixed use residential buildings and on the corner of Holborn and Blue Hill to the south is a mixed use residential apartment building.

The Project site has been vacant for several decades but was at one time developed the entire length by masonry and wood framed, mixed-use structures. It is anticipated that the original foundations are still in place as well as some debris from the demolished structures.

1.2.2 Proposed Development

The Community Builders, Inc. ("TCB") is the Proponent for the Project. TCB is proposing to construct two buildings on the combined site - a four story, mixed-use building sited along Blue Hill Avenue and a 2½ story, two family residence on Holborn Street. The program for the Blue Hill Ave building includes approximately 6,000 square feet of ground floor retail, 38 residential units (one and two bedrooms) and 32 parking spaces. Ground floor space will also be provided for management offices, bicycle storage and a mechanical equipment room. The Holborn Street two-family will have three bedroom units and two off street parking spaces. Of the 40 total units, 27 will be affordable per DND's RFP requirements. Of the thirteen other units, five (5) units will be designated as workforce housing affordable to households between 75 and 100% of AMI and covered by the City's Inclusionary Development Program.

Figure 1-1 Locus Map

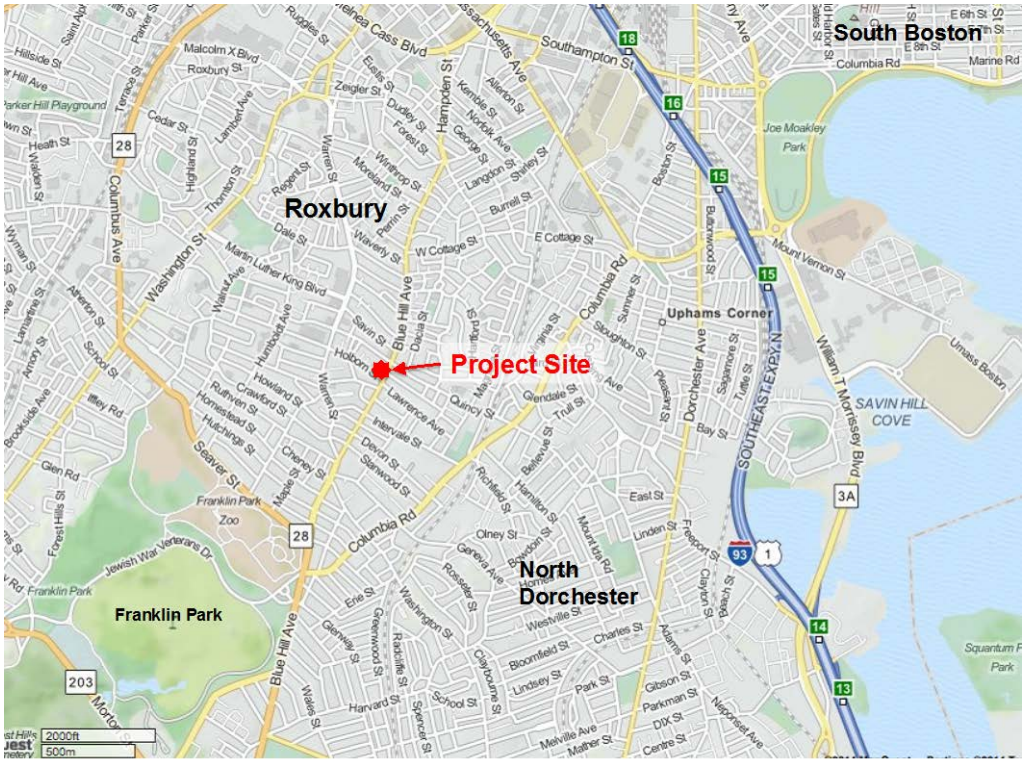
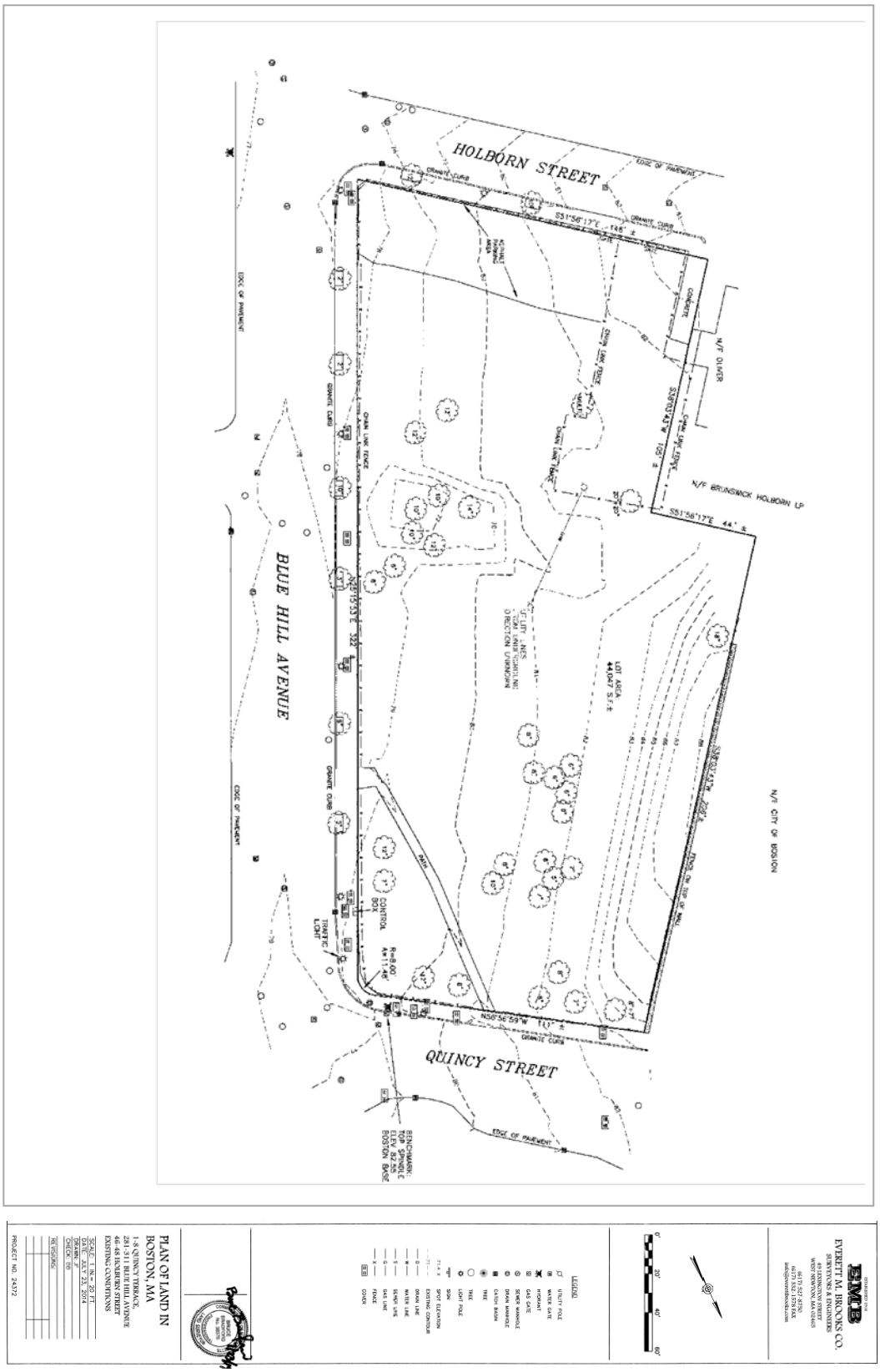


Figure 1-2 Context

Figure 1-3 Survey Plan



The on-site parking will be accessed via a driveway from Quincy Street to minimize potential impacts on Blue Hill Avenue and the one-way, residential Holborn Street. The parking area will extend part way into the first floor while still allowing sufficient depth for ground floor retail space. The site program also includes a dedicated, contemplative/memorial open space on the Blue Hill Avenue/Quincy Street corner.

Loading will be from Blue Hill Avenue with a designated space for the retail and by permit for the residences.

1.2.3 Approximate Dimensions

Table 1-1 presents the approximate dimensions of the Project:

Table 1-1 Approximate Project Dimensions and Table of Uses

Project Element	Dimension
Project Site	44,047 SF
Residential Space (Blue Hill Ave Building)	38 units/32,150 NSF
Retail Space (Blue Hill Ave Building)	6,160 NSF
Blue Hill Ave Building Total Area	54,336 GSF
Residential Space (Holborn St. Two Family)	2 Units/3,635GSF
Parking – at grade	34 spaces
Total Building Area	57,971 GSF
Open Space	7,812 SF – SF/Unit
Building Height (maximum)	43 feet

1.2.4 Project Background

These parcels on Blue Hill Avenue have been vacant for decades. The recent revitalization of the Blue Hill Avenue corridor has created the opportunity to sustain redevelopment, with Quincy Commons, a new elderly housing development under construction across Blue Hill Avenue from the Site, as well as the efforts of the Quincy Corridor Choice Neighborhood grant.

In May of 2011, The City of Boston Department of Neighborhood Development released a Request for Proposals for the redevelopment of these publicly held parcels. Submissions were to include a mixed-use development that also included several privately held parcels to re-establish the strong urban street/building relationship that had typified this important arterial. The RFP set a development schedule requiring the site improvements be completed for occupancy by the winter of 2013.

The proponent team received tentative designation from DND in 2011 and has been actively engaged with DND to complete the development review process toward receiving final designation. The Proponent has met with the Holborn, Gannett, Gaston, and Otisfield Betterment Association to refine the site proposal, as well as engaging with

the Mothers for Justice and Equality, around the uses and design of the open space. This process has resulted in the site development concept shown in this PNF.

The Proponent has also negotiated with the private parcel owners to acquire those individual parcels. These three parcels are all under option to purchase by The Community Builders, Inc.

The Proponent retained Stull and Lee Architects to design this mixed-use project that would conform to the objectives established in the Roxbury Neighborhood Plan and Article 50 of the Boston Zoning Code. The newly created Neighborhood Shopping Sub-district calls for commercial office or retail on the ground floor extending the pattern of uses along Blue Hill Avenue and utilizing the upper levels for residential use. The design concept also conforms to the Boulevard Planning District Guidelines that encourage "apartment style" building form along the avenues.

1.2.5 Public Review

The Proponent has met with, and plans to meet with, a broad range of neighborhood association groups, elected officials, and government agencies to solicit feedback on the proposed development.

The Proponent was designated by the City of Boston's Department of Neighborhood Development to develop these long-vacant parcels on Blue Hill Avenue and has been engaged with DND and the Boston Redevelopment Authority in a development planning process. The City of Boston Department of Neighborhood Development sponsored public meetings on 4/20/11, 7/12/11, 5/21/12, 6/10/13, and 8/7/13 to solicit input on the project. DND also participated in working meetings with the community on 6/25/12, 9/24/12, 11/20/12, 9/11/13, and 6/11/14.

This process has included two meetings with BRA staff prior to filing this project notification form to identify issues and concerns related to the design; the project program; and evaluation of public funding opportunities to increase the number of affordable units.

The Proponent has met with the Holborn, Gannett, Gaston, and Otisfield Betterment Association on a regular basis since 2011 with monthly meetings through 2013 and 2014. These meetings included community input on site layout, unit mix, affordability, retail location, parking, and transportation needs. Since 2013, the Proponent has also met with the Wall Park Committee to review the design and layout of the green space on the North corner of the site.

1.2.6 Public Benefits

The Project will provide the following public benefits to the City of Boston:

1.2.6.1 Neighborhood Revitalization

The Project will redevelop a vacant site that has been a blight on the neighborhood for decades and when redeveloped will contribute to the continued revitalization of the

Blue Hill Avenue Corridor. The added retail and housing uses will further energize and enliven the resurgent neighborhood as a desirable place to live and shop.

1.2.6.2 Affordable Housing

The Clarion will help advance the City's housing goals by creating 40 new rental apartment units that will serve Bostonians with a broad range of incomes. The development program will include 27 affordable apartments expanding housing opportunities for Roxbury residents. The three bedroom units in the two family building will provide apartments for larger families.

The development also includes five units designated as workforce housing affordable to households making between 75 and 100% of area median income. The development of one and two bedroom units will also include market rate housing targeting working professionals, and young married couples starting families.

1.2.6.3 Smart Growth/Transit-Oriented Development

The redevelopment of this site into an attractive mixed-use development will complement the thriving Grove Hall shopping district. With 5,000 gross square feet of local service retail use catering primarily to walk-in traffic and with the residents being provided direct access to mass transit, the project will generate fewer vehicle trips than the traditional mixed-use development. The 33 on-site parking spaces will insure on-street parking remains available to existing residential and retail uses. The proximity to local bus routes and the Grove Hall shopping area will encourage walking as a means of transport and support sustainable design and Transit-Oriented Development/ Smart Growth objectives.

1.2.6.4 Sustainable Design/ Green Building

All developments proposed in the City of Boston must now follow the Boston Green Building Regulations including standards established under Article 37 of the Boston Zoning Code. The Project as currently conceived will meet or exceed the U.S. Green Council's Leadership in Energy and Environmental Design (LEED) system to achieve a Silver standard. A complete summary of how the project addresses each checklist category is included in Section 2.6 of the Environmental Component of this PNF. The completed Climate Change Preparedness Questionnaire is also included.

1.2.6.5 Increased Employment

The Project will create approximately 100 construction jobs and approximately 16 permanent jobs. The permanent jobs will result from the commercial retail use and management of the multifamily property.

1.2.6.6 New Property Tax Revenue

The Project will generate approximately $30,500 in annual property taxes.

1.2.6.7 Open Space: Memorial Park

5,000 square feet of the site is dedicated for the creation of a park intended as a contemplative memorial space. The Proponent has pledged both the space and basic landscape elements. Additional memorial features may be added at a later date and will seek separate permitting. The Proponent has also committed to providing long term management and maintenance of the open space.

1.3 Consistency with Zoning

The subject property is on the northeast side of Blue Hill Avenue between Quincy and Holborn Streets, and is comprised of a combined land area of approximately 44,047 square feet.

Zoning for the site is defined in Article 50 of the Boston Zoning Code, the Roxbury Neighborhood. The majority of the parcels comprising the site are in a MFR/LS Multifamily Residential/Local Services Sub District with a Boulevard Planning Overlay Design Review designation as shown on Map 6b/c. The exceptions are parcels that fall in the adjacent 3F/4000 sub-district - the Holborn Street parcels and a small section of 303-305B Blue Hill Ave which straddles both zoning sub-districts.

The Proposed Development is for a mixed use building allowed as-of-right under the Code. Potential variances are expected to be limited to Maximum Floor Area Ratio and Parking for commercial and residential use. The Blue Hill Avenue building conforms to all other dimensional use regulations established for this site. The Holborn Street two-family may require minor side and rear yard variances.

The Project is also within a Boulevard Planning Overlay District. As stated in Section 50-37 of the Code, the BPDs are an acknowledgement of the significance of major boulevards as the entryways to Roxbury's neighborhoods. As gateways to the residential areas they establish a design image and are focal points for the surrounding neighborhoods. Within the BPDs, special design review requirements and design guidelines apply as set forth in Subsection 50-38.1, Section 50-39, and Section 50-40, and screening and buffering requirements apply as set forth in Section 50-41.

The Proponent will seek approval of the Project through the Article 80 Development Review Process - Large Project Review. If approved, the Project will seek variances for dimensional and parking requirements.

1.4 Legal Information

1.4.1 Legal Judgments Adverse to the Proposed Project

The Proponent is not aware of any legal judgments in effect or legal actions pending that are adverse to the Project.

1.4.2 History of Tax Arrears on Property

The Proponent does not have a history of tax arrears on any property owned within the City of Boston. The Proponent is not aware of any tax arrears on the Properties with titles controlled by the City of Boston.

1.4.3 Evidence of Site Control/Nature of Public Easements

The site is composed of multiple parcels with multiple owners. The Proponent has received tentative designation from DND on Parcels 281-A Blue Hill Ave, 287-293 Blue Hill Ave, 295-297 Blue Hill Ave, 309 Blue Hill Ave, 1-8 Quincy Terrace, 46 Holborn St. and 48 Holborn St. Parcels 303-305 Blue Hill Ave, 307 Blue Hill Ave and 311 Blue Hill Ave are under option to purchase by the Proponent.

The Proponent is not aware of any public easements that traverse the site.

1.5 Public Agencies

Table 1-2 below presents a list of state and local agencies from which permits or other actions are expected to be required:

Table 1-2 Anticipated Permits and Approvals

Agency Name	Permit / Approval
STATE	
Department of Environmental Protection, Division of Water Pollution Control	Sewer Connection and Extension Permit
Massachusetts Water Resources Authority	Sewer Use Discharge Permit
LOCAL	
Public Facilities Department	Property Conveyance
Department of Neighborhood Development	First Source Agreement Land Disposition Agreement
Boston Civic Design Commission	Determination to Review
Boston Redevelopment Authority	80B Large Project Review;
Boston Water and Sewer Commission	Sewer Use Discharge Permit; Site Plan Approval; Sewer Extension/ Connection Permit; Stormwater Connection
City of Boston Inspectional Services Depart.	Building and Occupancy Permits
Boston Public Improvement Commission	Street and Sidewalk Occupation Permits; Specific Repair Plan;
Boston Board of Appeals	Variance Approvals
Boston Parks and Recreation Commission	Review and Approval
Interagency Green Building Committee	Green Building Report Climate Change and Resiliency Checklist

1.6 Schedule

Construction is expected to begin in the fall of 2015 and require 14 months to complete for occupancy by the winter of 2016.

1.7 Design

1.7.1 Design Objectives

The Project is being designed to conform to the following design and program objectives as stated in the DND's RFP:

"The development of this site will return a series of vacant parcels to active use. Proposals are to comply with the community's vision for a development, which addresses the commercial fabric at street level with retail and above contains residential dwellings for families. The building is being designed to complement the massing, scale and density of the existing housing fabric within the neighborhood and provide sufficient parking and open space for both the residential and commercial uses. Special attention is to be paid to avoiding any adverse traffic/parking impacts on the residential neighborhood adjacent to the site."

By meeting these objectives the Project will take advantage of an underutilized site in the Roxbury neighborhood to provide needed residential and locally oriented commercial space. The development of ground floor commercial use reinforces the Project's strategic location along a major arterial that feeds the local shopping district and current retail uses along this Avenue. The apartment style building also supports the general building typology of this neighborhood shopping sub-district - residential use above ground floor retail. This style and density reinforces the Avenue as a retail corridor providing needed services to the adjacent community with active ground floor uses that will increase and support pedestrian activity.

The Project will be built to a height and mass that is in keeping with the existing context yet takes advantage of access to mass transit in the form of local buses to support the Smart Growth Policies advocated by the City and the Commonwealth. The result will be a mixed-use project that will contribute to the life and vitality of this Roxbury Neighborhood 24 hours a day.

1.7.2 Design Summary

The Project will create a four story building of approximately 43 feet in height. This height is consistent with other existing and recently constructed buildings along Blue Hill Avenue.

The exterior treatment is planned to evoke the character of traditional apartment building typologies developed along this section of Blue Hill Avenue nearly a century ago. These were primarily masonry clad structures with metal clad bays and cornices.

The building will be setback from Quincy Street to allow for development of a public open space but will hold the desired "street wall" along the public streets. The Project will provide ground floor retail to both activate the street and position the residential component above the street level increasing privacy and reducing exposure to street level noise. As noted, the ground floor will have parking accessed from the rear of the retail eliminating the need for expensive underground spaces. Open space will be provided via the Park planned for the Blue Hill Ave/Quincy Street corner as well as the Quincy Street Playground that abuts the property to the west.

Figures 1-4 through 1-14 display images of the Project including existing conditions, floor plans, elevation and perspectives.

Figure 1-4 Photographs - Existing Site – View from Blue Hill Avenue looking North

Figure 1-5 Photograph - Existing Site – View from Blue Hill Ave looking South

Figure 1-6 Context – 315 Blue Hill Ave (left) and 42 Holborn Street (right)

Figure 1-7 Site Plan

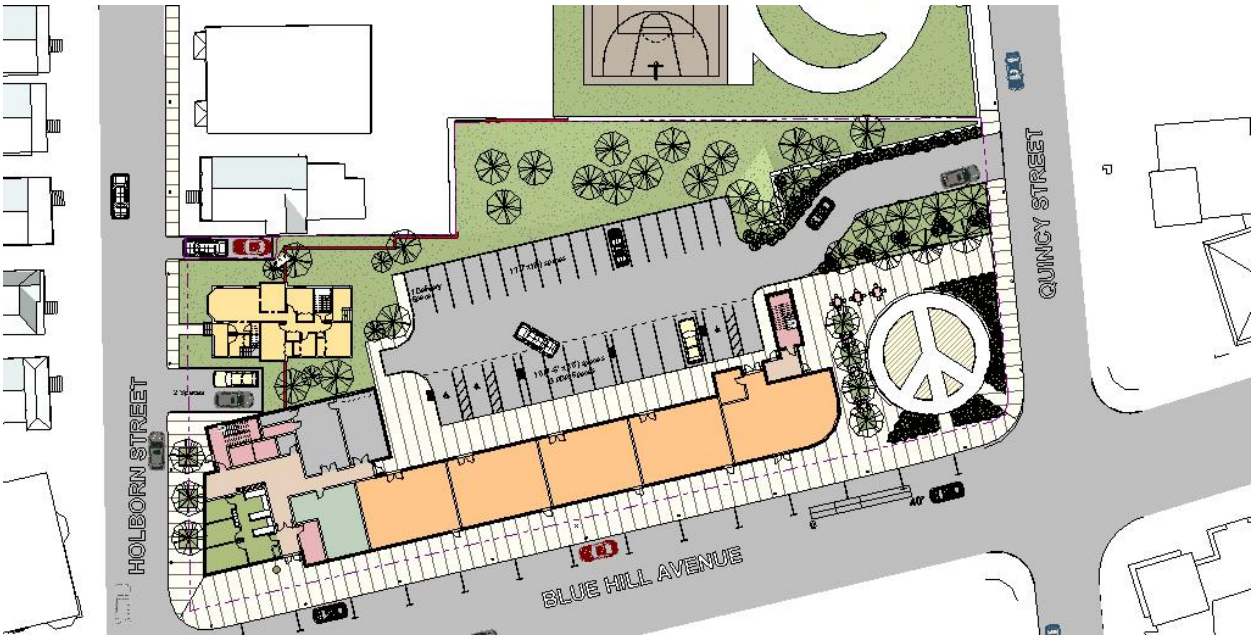


Figure 1-8 First Floor Plan

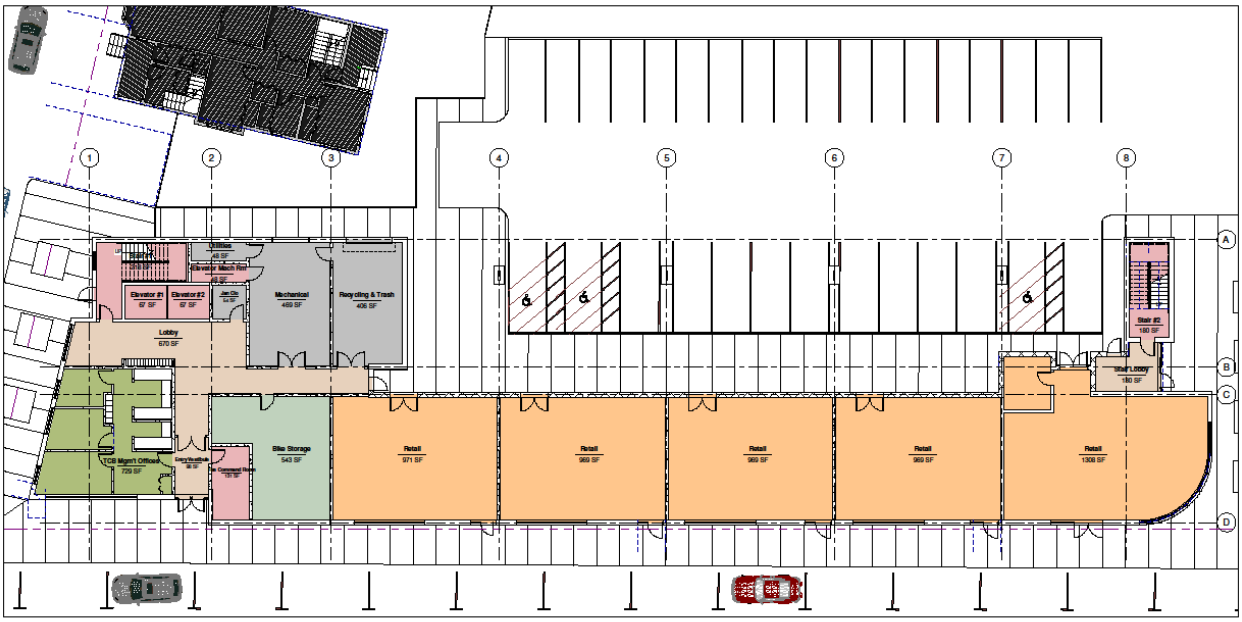


Figure 1-9 Second/Third Floor Plans

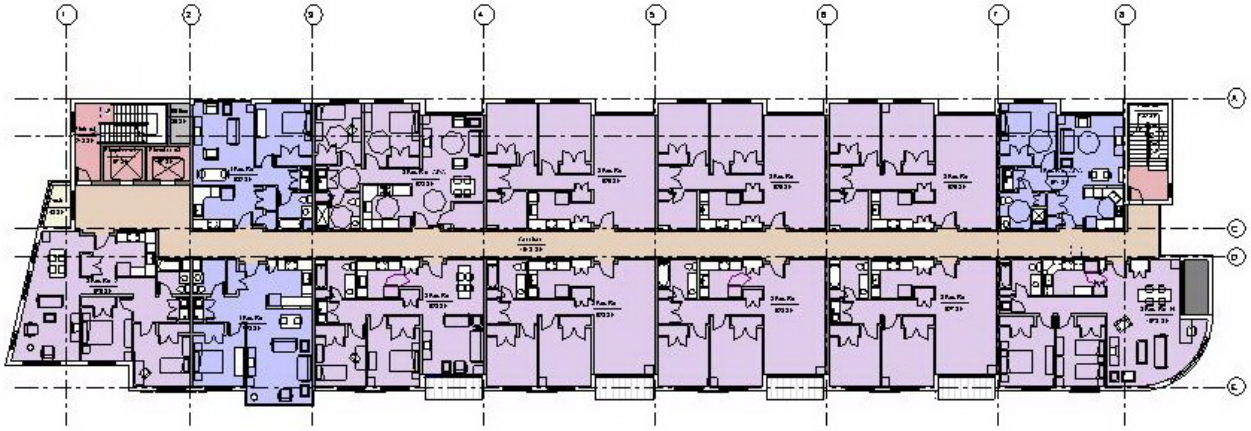


Figure 1-10 Fourth Floor Plan

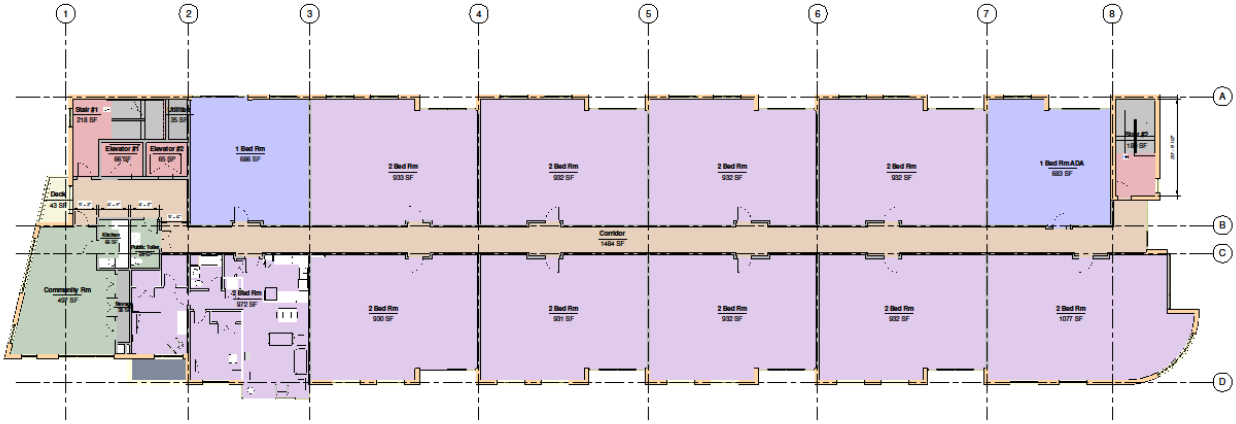
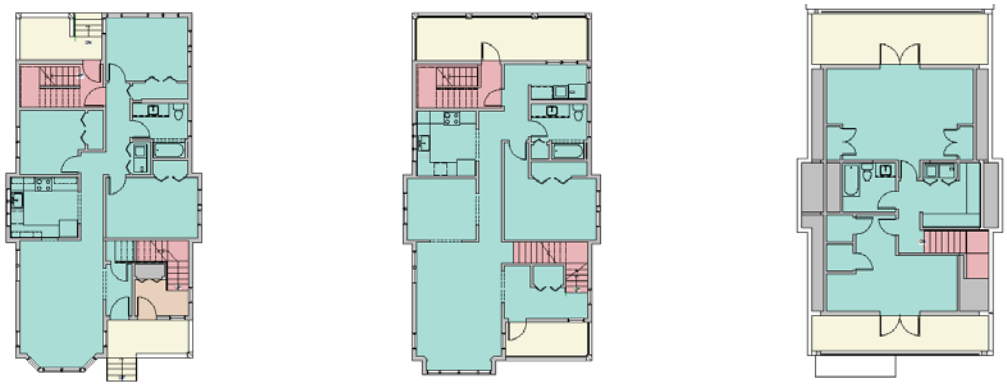


Figure 1-11 Holborn Street Two Family – Floor Plans



First Floor Second Floor Third Floor

Figure 1-12 Elevations

BLUE HILL AVENUE ELEVATION

HOLBORN STREET ELEVATION

ELEVATION ALONG QUINCY STREET

WEST ELEVATION FROM PARKING LOT

Figure 1-13 Perspective View from Blue Hill Avenue Looking Southwest

Figure 1-14 Perspective View from Blue Hill Avenue Looking North

2.0 ASSESSMENT OF DEVELOPMENT REVIEW COMPONENTS

Article 80 of the Code specifies that the BRA may require a Scoping Determination that defines studies to be prepared by the Proponent to determine the direct or indirect impact to the environment reasonably attributable to a proposed project. The development review components include transportation, environmental protection, urban design, historic resources, and infrastructure systems. Where potential for direct or indirect impacts exist, design measures are required to mitigate the impacts, to the extent economically feasible. The following is an assessment of the potential impacts that could be attributed to the Project and proposed mitigation measures.

2.1 Transportation

2.1.1 Project Description & Site Access

The Clarion is a proposed mixed-use, primarily residential project situated in Roxbury, four-tenths of a mile north of Grove Hall. There will be one main building along the Blue Hill Ave. frontage of the site, with a second, two-family structure on Holborn St. Figure 2-1 shows the site.

Vehicular access to the site will be via a single driveway onto Quincy St. approximately 140 feet from the center of its intersection with Blue Hill Ave.

Public pedestrians will enter the retail stores via doorways along the building's Blue Hill Ave. frontage. The doorway to the office will be at the southern end of the frontage at the corner of Blue Hill Ave. and Holborn St.

Figure 2-1 Project Site

2.1.2 Transportation System

2.1.2.1 Study Area

The study area consists of the following intersections, also shown on Figure 2-2:

- Blue Hill Avenue/Quincy Street
- Blue Hill Avenue/Lawrence St.
- Blue Hill Avenue/Holborn Street
- Blue Hill Avenue/Fayston Street

The study intersections are shown in Figure 2-2 below. The study area for the traffic operations analysis contains the segments of Blue Hill Ave. and Quincy St. that pass the project site as well as the intersections of Blue Hill Ave. with Fayston, Holborn and Lawrence Streets.

Figure 2-2 Study Intersections

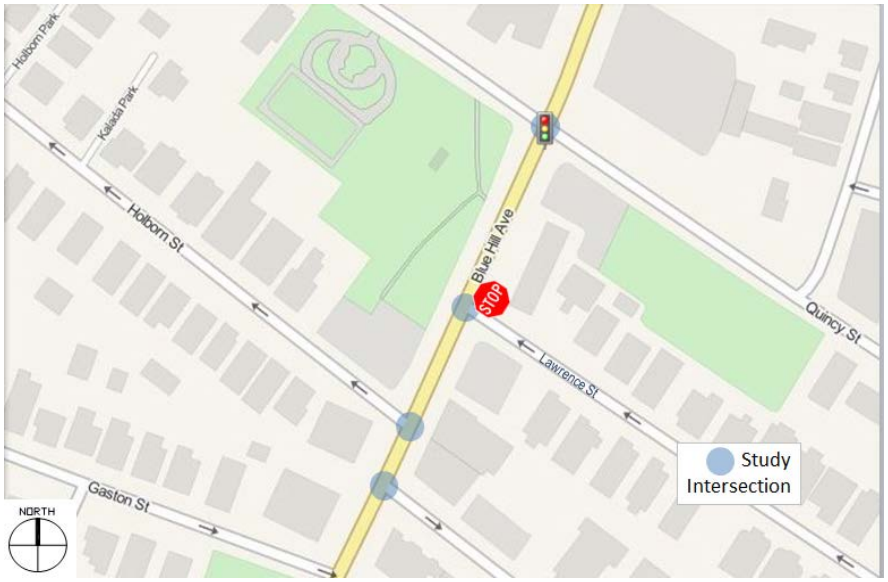
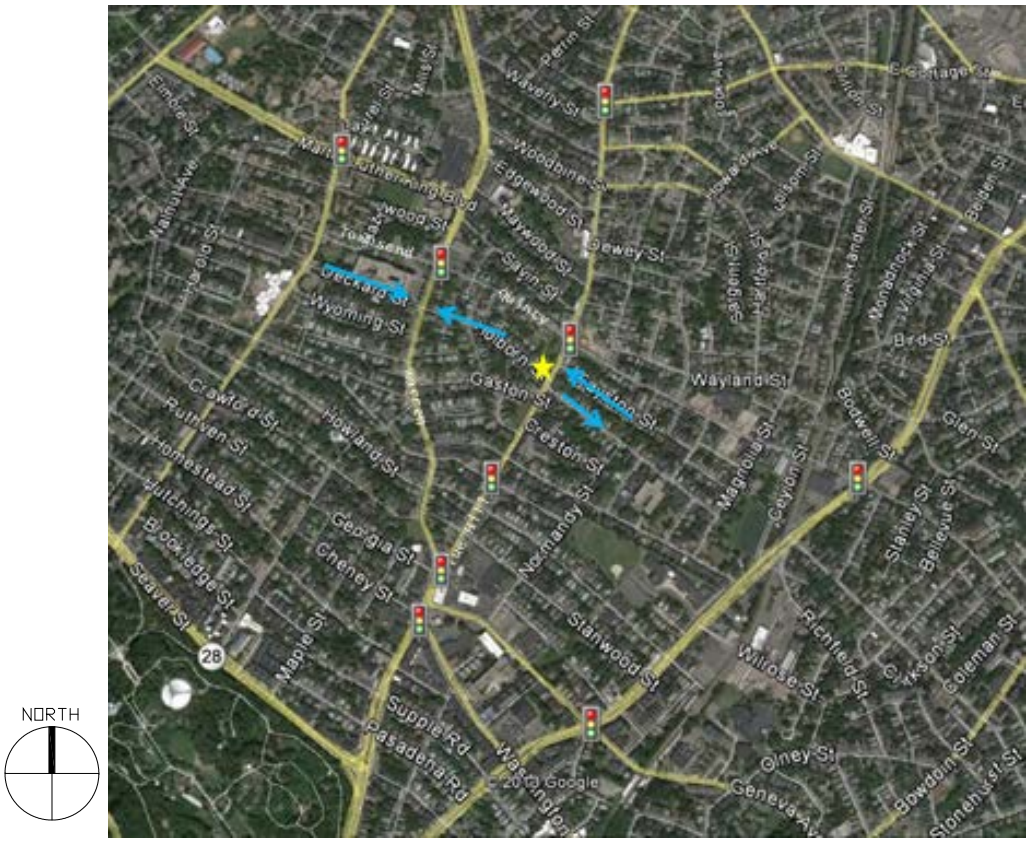


Figure 2-3 shows the site in the context of the Roxbury/Dorchester street network. Traffic signals are indicated.

Figure 2-3 Area Street Network



Streets. Blue Hill Ave. is a two-way arterial street with one travel lane in each direction as it passes the site. Quincy St. is also one lane in each direction. Holborn St. runs one-way west, away from Blue Hill Ave., with one travel lane. Almost opposite Holborn St., but offset by about 65 feet, Lawrence St. runs one-way east, away from Blue Hill Ave., with one travel lane. About 210 feet north of Lawrence St., Fayston St. runs one-way west, toward Blue Hill Ave., with one travel lane.

Intersections. Blue Hill Ave.'s intersections with Quincy, Fayston, Holborn and Lawrence Streets are the framework of the circulation pattern around the project site. Quincy/Blue Hill Ave. is signalized; the Fayston St. approach is stop-controlled.

Surrounding Conditions. The Haynes Early Education Center, on the northwest corner of Blue Hill Ave. and Quincy St., has a drop-off/pick-up area on the north side of Quincy St. opposite the project site. See Figure 2-4. Activity in this area is intense during school change. The neighborhood generally is subject to high volumes of school bus traffic. See Figure 2-5. Across Blue Hill Ave. is, between Lawrence and Fayston Sts., the Project RIGHT offices and a few service/retail establishments; across Fayston St., a Citgo gas station, with a wide (38') curb cut; and an MBTA bus stop.

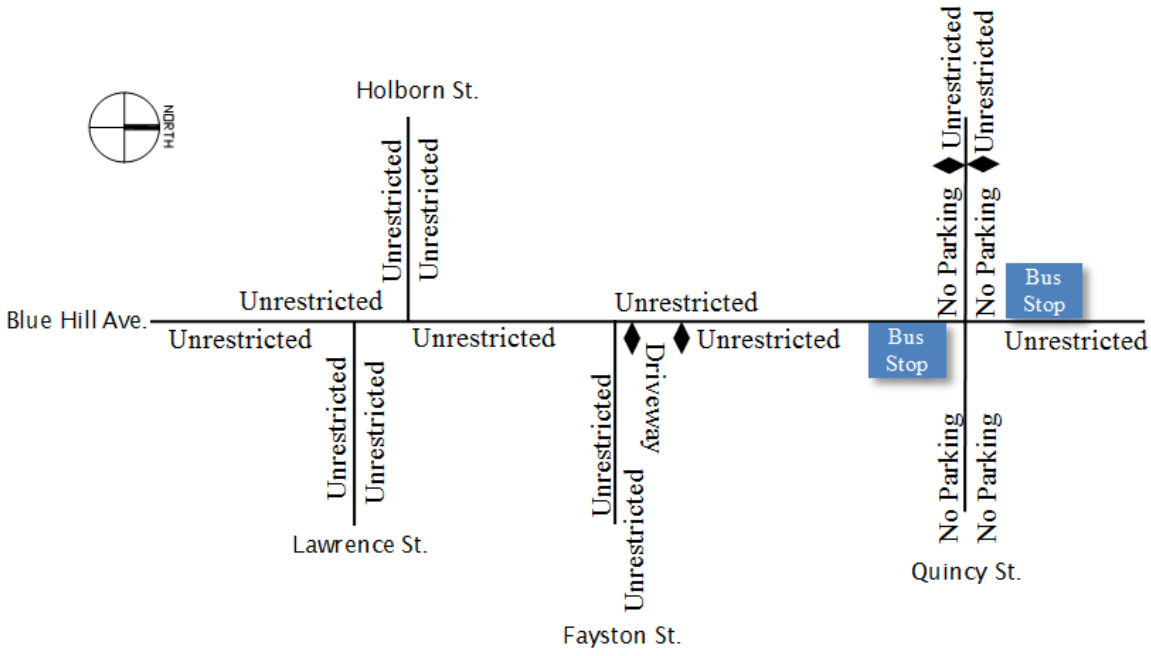
Figure 2-4 Drop-off/pick-up area at Haynes Center

Figure 2-5 School bus traffic

2.1.2.2 On-Street Parking

On-street parking is generally allowed within the study area, with exceptions. All unrestricted parking is nevertheless subject to street cleaning for some hours monthly, and prohibited at fire hydrants. Figure 2-6 shows on-street parking regulations.

Figure 2-6 On-Street Parking Regulation



2.1.2.3 Sidewalks

Sidewalks around the site – on Quincy St., Blue Hill Ave. and Holborn St. – are in good condition. The Blue Hill Ave. sidewalk is 11' 4" wide inclusive of a 7" curb, with tree pits that vary between 32" and 36" and reduce the effective width to approximately 8'.

Handicapped-accessible curb ramps are installed at both the Quincy St./Blue Hill Ave. and Holborn St./Blue Hill Ave intersections. The latter, however, is also equipped with tactile warning curb ramps, having been recently reconstructed as part of the repaving of Holborn St.

2.1.2.4 Transit

The site is immediately served by the MBTA's 45 bus route, which runs between Franklin Park and the Orange Line stops at Roxbury Crossing and Ruggles. Headways are six to twelve minutes between 7:30 and 9:00 AM, sixteen to twenty-eight minutes until 3:00 PM, eleven to fifteen minutes until 7:00, and twenty-five to thirty minutes until midnight.

Figure 2-7 shows the site's place in the transit system. The site is approximately a mile and a quarter walking distance from the Upham's Corner station on the Fairmount Line. Upham's Corner is also a bus hub, served by:

- Bus 15 - Kane Sq. or Fields Corner Sta. – Ruggles Station

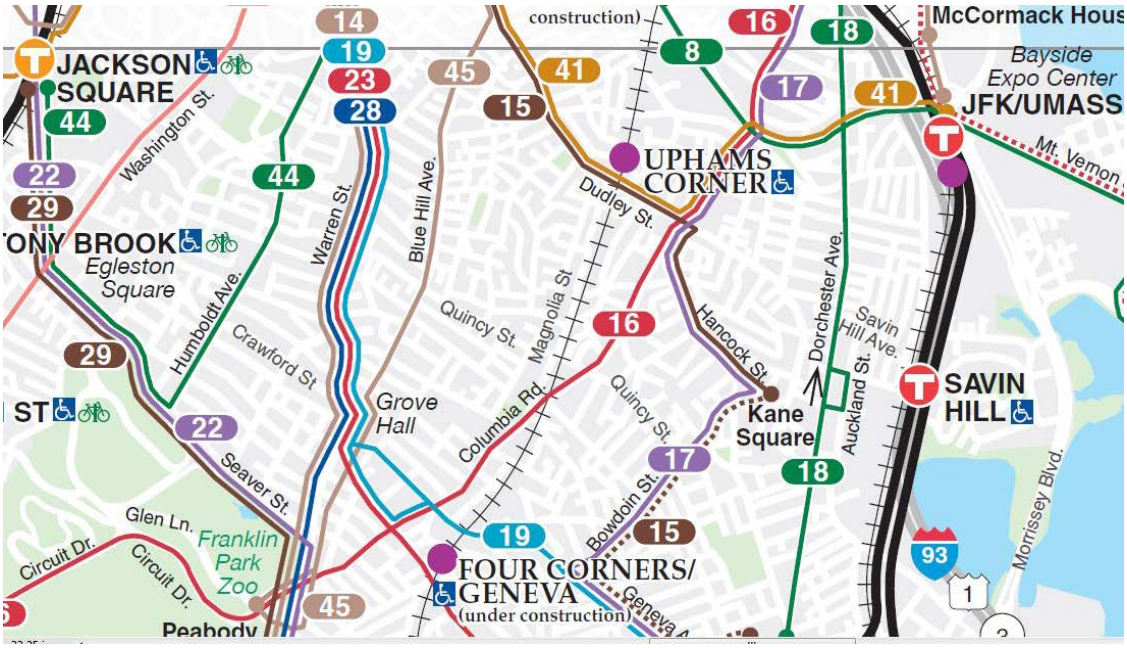
- Bus 16 - Forest Hills Station – Andrew Station or U. Mass. (accessible at Columbia Blvd./Quincy St., a half-mile away)
- Bus 17 - Fields Corner Station – Andrew Station
- Bus 41 - Centre & Eliot Sts. – JFK/UMass Station
- Bus 8 - Harbor Point/UMass – Kenmore Station

Buses also run along Warren Avenue, one-quarter mile from the site:

- Bus 14 - Roslindale Sq. – Heath Street
- Bus 19 - Fields Corner Station – Kenmore or Ruggles Station
- Bus 23 - Ashmont Station – Ruggles Station
- Bus 28 - Mattapan Station – Ruggles Station

The site, therefore, although it is not within a mile of a rail station, is exceptionally well served by transit. This fact should be taken into account in determining the Project's parking requirement.

Figure 2-7 MBTA System Map Detail



2.1.2.5 Bicycle Conditions and Facilities

There are no bicycle lanes or other bicycle facilities in the area. On the City of Boston's Bike Routes of Boston map, Quincy St. is shown as Advanced: "Suitable for experienced and traffic-confident cyclists."

2.1.2.6 Car Sharing

Car sharing refers to vehicles are rented on an hourly or daily basis. Currently the nearest car sharing pickup site is at the Forest Hills station two miles away.

2.1.3 Traffic Analysis

2.1.3.1 Study Methodology

This transportation study and supporting analyses were conducted in accordance with BTD guidelines. To accurately assess the transportation and parking impacts of the proposed project, the following aspects were analyzed.

- Vehicular traffic operations
- Pedestrian conditions and project pedestrian traffic generation
- Project parking needs and policies
- Transit service availability (above)
- Bicycle usage

On the basis of this analysis, appropriate measures are proposed to ensure that the project has minimal or positive impacts on the transportation system and the local public realm.

This Access Plan follows a standard method to assess the transportation impacts of the proposed project. Existing conditions are compared to two alternative future scenarios: a No-Build scenario, which takes into account traffic that will be generated by planned but not yet operational land development, and a Build scenario, in which the proposed project is also considered. The impacts of future development are projected through a four-step process:

- Trip Generation
- Mode Split
- Trip Distribution
- Route Assignment

In this case, the project taken into account under the No-Build scenario, the Quincy Commons project on the northeast corner of Quincy St. and Blue Hill Ave., was not required to submit an Access Plan or transportation impact study (although its traffic impacts will be greater than those of the Clarion project). It is therefore necessary for this study to perform an analysis of Quincy Commons' traffic impacts in order to include it in the No-Build and Build scenarios. The trip generation rates and trip distribution assumptions that apply to the Clarion project are also applicable to Quincy Commons. Accordingly, trip generation rates, mode split statistics and trip distribution assumptions are presented here under Methodology, and then applied to the Quincy Commons and Quincy Terrace projects in their respective scenarios.

Trip Generation. The volume of vehicular trips that a land use will generate is projected on the basis of rates provided in the Institute of Transportation Engineers' *Trip Generation* manual[1]. For the Clarion (and also Quincy Commons), the applicable land use categories and trip generation rates are as shown in Table 2-1.

[1] Institute of Transportation Engineers, Trip Generation, 9th Edition, 2012.

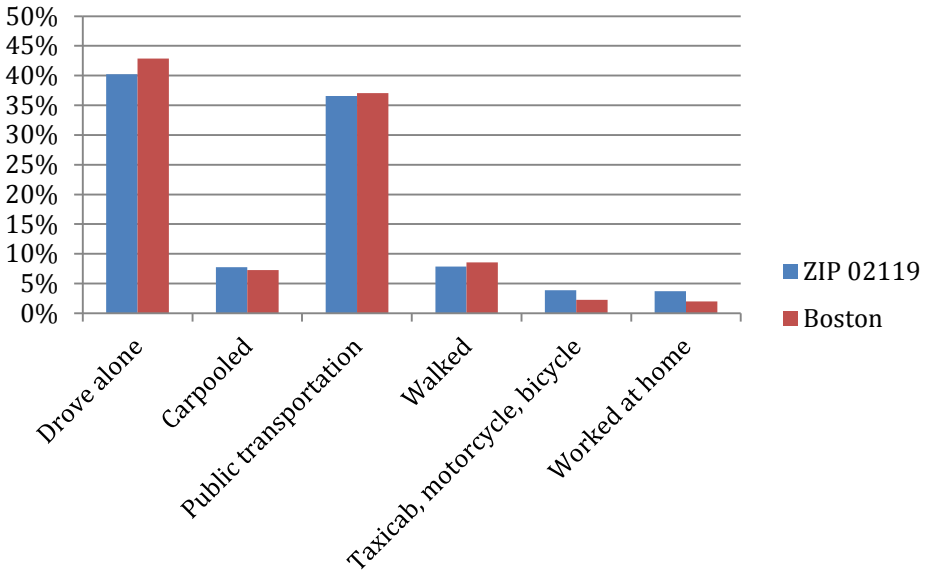
Table 2-1 ITE Trip Generation Rates

Land Use/ITE Code	Units	Weekday	AM	AM In	AM Out	PM	PM In	PM Out
Mid-Rise Apartment 223	DU	NA	0.30	31%	69%	0.39	58%	42%
Condo/Townhouse 230	DU	5.81	0.44	17%	83%	0.52	67%	33%
Specialty Retail Center 826	KSF[2]	44.32	6.84	48%	52%	2.71	44%	56%
General Office 710	KSF[2]	11.03	1.56	88%	12%	1.49	17%	83%

The Clarion will be a mixed-use project in that it combines residential, retail and office uses. As such it is likely that there will be some level of internal capture, by which trips are contained within the site and not generated externally. However, given the small numbers of trips that the Clarion will generate, as shown in Table 2-9 below, no deduction from those numbers was taken for internal capture.

Mode Split. The ITE's trip generation rates are based on observations of land uses all over the United States, where transit is largely unavailable and the vast majority of trips are made by private automobile. In contrast, Boston is a walkable and transit-rich city with a significantly lower level of auto-dependence. To illustrate, Figure 2-8 shows mode splits in Boston and the 02119 zip code, which includes the project site, from US Census data.[2] In the study area, combined drive-alone and carpool shares are 48%.

Figure 2-8 Census Mode Split Data



[2] B08101: MEANS OF TRANSPORTATION TO WORK BY AGE - Universe: Workers 16 years and over.

Boston Transportation Department Development Review Guidelines give the following mode shares for the area.

Table 2-2 Mode Split from BTD Development Review Guidelines

Mode	All Trip Purposes	Home	Work	Other
Auto	56%	57%	59%	53%
Transit	17%	17%	24%	12%
Walk	27%	26%	17%	35%

In this study, the BTD's mode split assumptions are applied to the ITE trip generation rates as a way to take non-auto trip-making into account. Table 2-9, in Build Scenario below, shows the vehicle-trip volume projections for the Clarion.

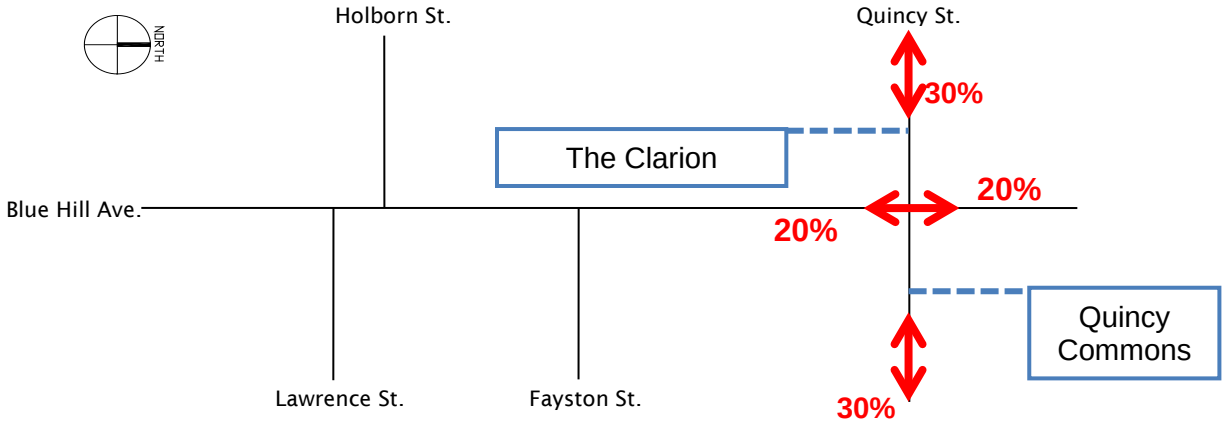
Trip Distribution. The primary determinants of The Clarion residents' vehicular trip distribution their orientation to work and shopping. These factors are summarized for The Clarion below.

Table 2-3 Factors Affecting Trip Distribution

Residential orientation to work	• Northwest - Warren St.: LMA • Northeast - Blue Hill Ave.: Newmarket, Boston Medical Center • East - Quincy St.: U Mass • South - Blue Hill Ave.: Grove Hall, Mattapan, Readville
Residential orientation to shopping	• Northwest - Warren St.: The Mall of Roxbury, Dudley Sq. • Northeast - Blue Hill Ave.: Dudley Common, Newmarket • East - Quincy St.: South Bay Center, Fields Corner • South - Blue Hill Ave.: Grove Hall, Mattapan

On the basis of the above considerations, trip distribution assumptions for the Clarion are as shown in Figure 2-9, which also shows how traffic generated by Quincy Commons will be distributed through the study area intersections.

Figure 2-9 Local Trip Distribution



Route Assignment. As Figure 2-1 illustrates, access to the Clarion site will be via a single driveway off Quincy St. As such, all trips oriented toward Warren St. and points west will use Quincy St. west of the site, and all other trips (north and south on Blue Hill Ave., east on Quincy St. will use Quincy St. east of the site. See Driveway Location in Section 2.1.3.5 below, under the Build Scenario, for discussion of the location of the Clarion driveway.

2.1.3.2 Existing Traffic

Vehicular Traffic Volumes. Turning movement traffic counts were taken at the intersections of Blue Hill Ave. with Quincy and Holborn/Lawrence Streets, on Saturday, March 8 2014 between 12:00-2:00 PM; and Tuesday, March 11 2014 between 7:00-9:00 AM and 2:00-6:00 PM. Within those periods, the peak hours were:

- AM – 8:00-9:00
- PM – 5:00-6:00
- Saturday – 12:30-1:30

Figures 2-10 and 2-11 show the traffic volumes in fifteen-minute intervals within the AM and PM peak periods. Detailed counts are shown in the appendix.

Field observations reveal a large number of school buses in the area, both those associated with the Haynes Center and others engaged in transporting students who live in the area. Bus drop-offs and pickups complicate and slow traffic operations in ways that are not captured by intersection level-of-service analysis. To capture the activities of school buses and general activity during the mid-afternoon, extended weekday PM counts were taken, from 2:00 to 6:00.

Total approach volumes at the Blue Hill Ave./Quincy St. intersection range between 1,750 and 2,100 per hour during all periods. Total volumes were similar on the weekday and Saturday. There is not a pronounced weekday 'peak hour': traffic volumes are relatively

constant throughout the four hours of the afternoon counting period, hovering around 500 vehicles per fifteen minutes. Figures 2-10 and 2-11 show the fluctuations in total approach volumes at the Blue Hill Ave./Quincy St. intersection in the morning and afternoon.

Figures 2-10 and 2-11 also show the numbers of school buses passing through the intersection. School bus traffic peaks at 4:30 PM, when 30 school buses were observed during a 15-minute period.

Figure 2-10 Total Approach and School Bus Volumes, Blue Hill Ave./Quincy St., 7:00-9:00 AM, in 15-minute Intervals

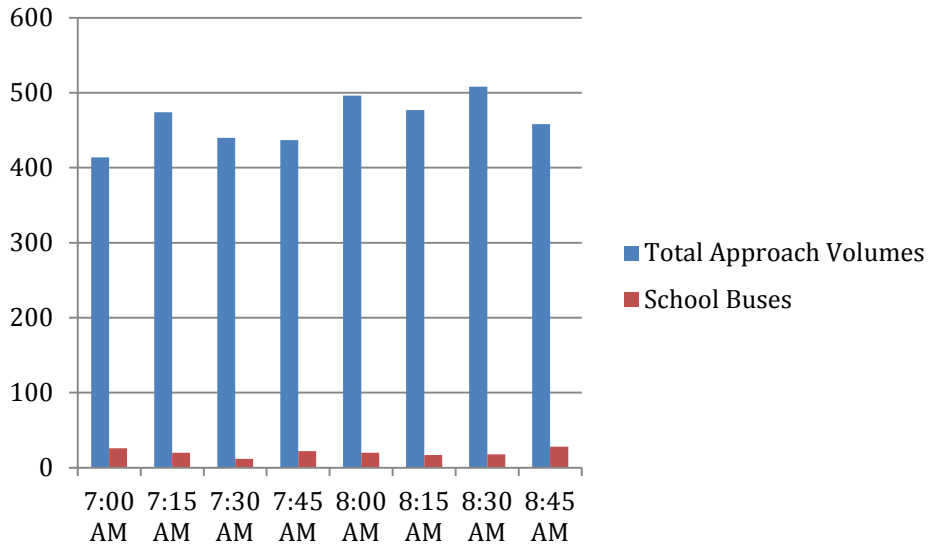
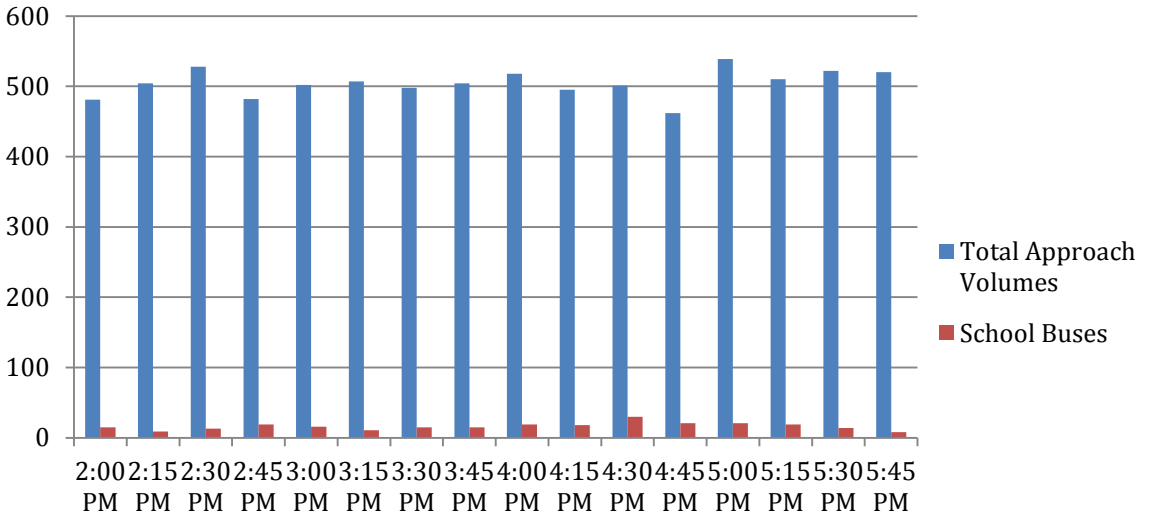


Figure 2-11 Total Approach and School Bus Volumes,

Blue Hill Ave./Quincy St., 2:00-6:00 PM, in 15-minute Intervals



Pedestrian Traffic. This segment of Blue Hill Ave. is characterized by residential, school and retail uses, including the gas station directly across the street from the project site. The Haynes Early Education Center generates pedestrian traffic, mostly students, across Blue Hill Ave. and Quincy St. Most of these crossings take place at the intersection, as the gas station and the construction site for Quincy Commons, on the northwest corner, do not attract jaywalkers. The Route 45 bus stops, on the near sides of Blue Hill Ave.'s intersection with Quincy St., gather transit patrons throughout the day and evening. Further south on Blue Hill Ave., where the side streets are offset and close together, pedestrians cross more randomly, often outside of the single crosswalk between Holborn and Lawrence Sts.

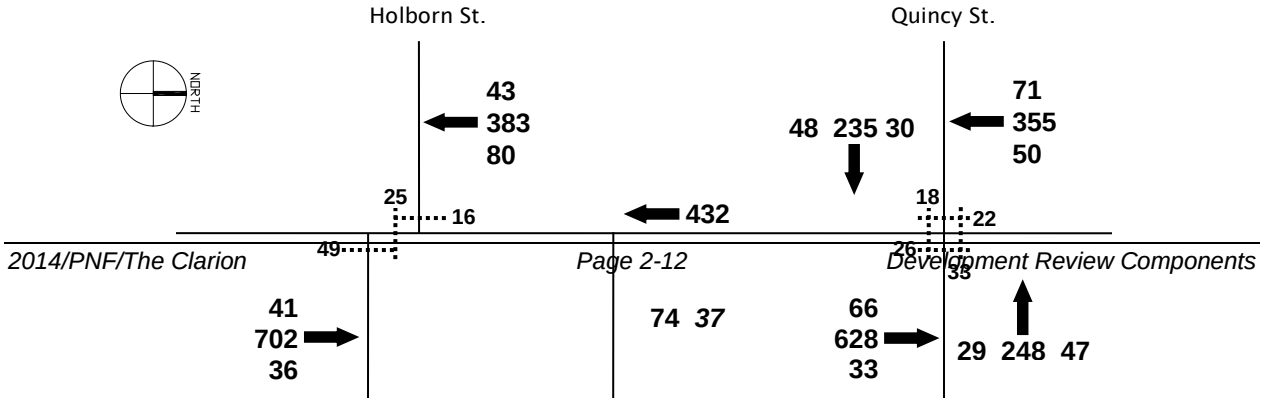
The approximate width of the sidewalks along the project site is as follows:

- Holborn St.: 6 feet
- Blue Hill Ave.: 8 feet
- Quincy St.: 6 feet
-

The sidewalks are generally unobstructed, except by telephone/sign poles and tree pits, particularly along Blue Hill Ave., that narrow the walkway by as much as 2.5 feet and are situated as little as 15 feet apart.

Figures 2-12, 2-13 and 2-14 show pedestrian and vehicular traffic volumes in the AM, PM and Saturday peak hours, respectively. Volumes across Blue Hill Ave. are aggregated at crosswalks even though they do not necessarily take place there.

Figure 2-12 Existing (2014) AM Peak-Hour Vehicular & Pedestrian Volumes



Blue Hill Ave.

Figure 2-13 Existing (2014) PM Peak-Hour Vehicular & Pedestrian Volumes

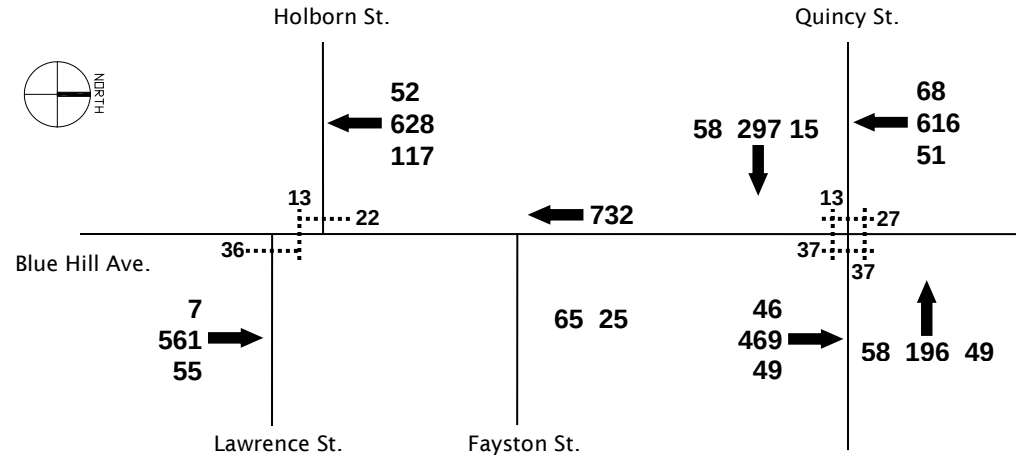
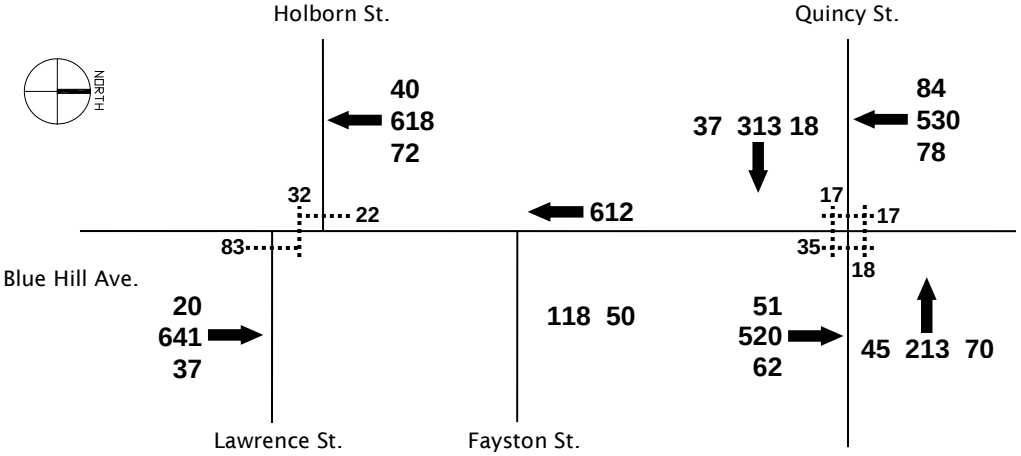


Figure 2-14 Existing (2014) Saturday Peak-Hour Vehicular & Pedestrian Volumes



Bicycles. Bicycle traffic volumes in the study area are low. Table 2-4 shows the total numbers of bicycles passing through the Blue Hill Ave./Quincy St. intersection in each of the peak hours.

Table 2-4 Bicycles at Blue Hill Ave./Quincy St. Intersection

	AM	PM	Sat.
Bicycles	3	14	7

In the PM peak hour, when bicycle volumes are much higher than at other times, they amount to less than seven-tenths of one percent of all traffic.

2.1.3.3 Capacity Analysis – Existing Conditions

The criterion for evaluating traffic operations is level of service (LOS), which is determined by assessing average delay experienced by vehicles at intersections and along intersection approaches. Trafficware's Synchro (version 8) software package was used to calculate average delay and associated LOS at the study area intersections. This software is based on the traffic operational analysis methodology of the Transportation Research Board's 2000 Highway Capacity Manual (HCM). Intersection geometry – numbers of turning lanes, lane lengths, and widths – is incorporated into the operations analysis.

Level of service (LOS) is measured in terms of letter grades from A to F, representing average delays as shown in Table 2-5. LOS A indicates the most favorable condition, with minimum traffic delay, while LOS F represents the worst (unacceptable) condition, with significant traffic delay. LOS D or better is typically considered acceptable in an urban area. However, LOS E or F is often typical for a stop controlled minor street that intersects a major roadway.

Table 2-5 Level of Service Criteria

Level of Service	Average Stopped Delay (sec./veh.)	
	Signalized Intersections	**Unsignalized Intersections**
A	≤10	≤10
B	>10 and ≤20	>10 and ≤15
C	>20 and ≤35	>15 and ≤25
D	>35 and ≤55	>25 and ≤35
E	>55 and ≤80	>35 and ≤50
F	>80	>50
Source: 2000 Highway Capacity Manual, Transportation Research Board.		

Table 2-6 shows the results of capacity analysis at the study intersections under existing conditions.

Table 2-6 Existing Peak-Hour Delay and Level of Service

		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
	Intersection	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**
Sig.	**Blue Hill Ave./Quincy St.**	**24.3**	**C**	**29.4**	**C**	**27.4**	**C**
	Northbound	22.1	C	18.1	B	22.6	C
	Southbound	14.2	B	24.1	C	31.8	C
	Eastbound	33.9	C	42.0	D	27.7	C
	Westbound	34.6	C	48.0	D	27.1	C
Unsig.	**Blue Hill Ave./Fayston St.**						
	Westbound	39.8	E	70.7	F	180.0	F
Unsig.	**Blue Hill Ave./Holborn St./Lawrence St.**						
	Northbound	1.2	A	0.3	A	0.8	A
	Southbound	3.2	A	3.5	A	2.6	A

Detailed Highway Capacity Analysis worksheets are provided in the Appendix.

2.1.3.4 No-Build Scenario

Changes in General Traffic Volumes. There is evidence that traffic volumes in the area are stable or declining. In January 2011, weekday traffic counts were taken at the Blue Hill Ave./Quincy St. intersection. Total approach volumes at the intersection varied between January 2011 and March 2014 as shown in Table 2-7.

Table 2-7 Changes in Total Approach Volumes, Blue Hill Ave./Quincy St. Intersection

	2011	2014	% change
AM	1,940	1,840	-5%
PM	2,201	1,972	-10%

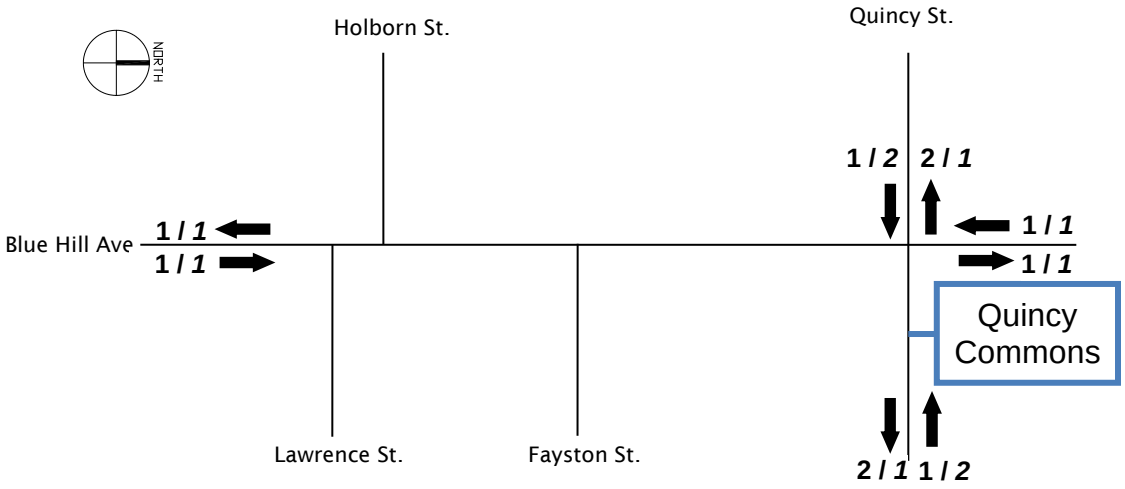
On the basis of these data, it is not estimated that general traffic volumes will increase over the time between the present and the completion of the project.

Background Development. According to the Boston Redevelopment Authority[3], the only pending significant project in the area between Cottage St., Columbia Rd., Intervale St. and Warren St. is the Quincy Commons residential development on the northeast corner of Blue Hill Ave. and Quincy St., currently under construction, comprising 48 rental apartments. As noted in the Methodology section above, the trip generation, distribution and mode split characteristics of the Quincy Commons project will be similar to those of the Clarion project. On the basis of those factors, the vehicular trips

[3] E-mail from Lance Campbell, March 25 2014.

generated by Quincy Commons in the study area AM and PM peak-hour will be as shown in Figure 2-15.

Figure 2-15 Quincy Common-Generated Peak-Hour Trips, AM/PM Peak Hours



The traffic generated by the Quincy Commons project will therefore have a negligible impact on traffic conditions in the study area.

2.1.3.5 Build Scenario

Driveway Location. In studying options for the Clarion's site plan, the developers and their designers considered all options, and met with the BRA as well as community representatives, to analyze the issues of off-site traffic conditions, site access and neighborhood impacts as they affect the optimal placement of the project driveway. The matrix in Table 2-8 shows the considerations for each alternative driveway location: Quincy St., Blue Hill Ave. and Holborn St.

On the basis of the above considerations, the Boston Transportation Department has indicated its support for the Quincy St. driveway alternative. This traffic analysis is based on the assumption that the driveway is located in the general location indicated in Figure 2.1.

Table 2-8 Comparison of Driveway Alternatives

	PRO	CON
Quincy St.	• Most direct access with least neighborhood impact	• Westbound lefts off Quincy St. • Difficult turns out of driveway
Blue Hill Ave.	• Avoids interaction with Haynes	• New exit onto Blue Hill Ave. • pedestrians crossing drive • northbound lefts off Blue Hill Ave.
Holborn St.	• Avoids interaction with Haynes	• Generates traffic onto Holborn St. • Costs parking spaces • making east end two-way needs City approval • Enforcement • If two-way not instituted, residents will have to exit via Warren St.

Vehicular Traffic Impacts. The Clarion project will generate traffic from both its residential and commercial components. The residential traffic will approach and depart the project site via the driveway on Quincy St. Traffic generated by the retail and office components will be somewhat more diffused, since on-site parking will not be provided. For purposes of this analysis, it is assumed that vehicles driven by employees and customers of the commercial components will be parked along Blue Hill Ave. between Quincy and Holborn Streets. See the Mitigation section below for a discussion of commercial parking opportunities.

Table 2-9 shows the resulting numbers of trips generated by the project, inbound and outbound, in the AM and PM peak hours.

Table 2-9 Calculated Project Trip Generation

Land Use	Daily	AM	AM In	AM Out	PM	PM In	PM Out	Sat	Sat In	Sat Out
Mid-Rise Apartment	*160*	*11*	*4*	*8*	*15*	*9*	*6*	*13*	*6*	*7*
Residential Condo/Townhouse	*12*	*1*	*0*	*1*	*1*	*1*	*0*	*1*	*0*	*1*
Total residential	*171*	*12*	*4*	*9*	*16*	*9*	*7*	*14*	*6*	*8*
x auto share: 57%	**98**	**7**	**2**	**5**	**9**	**5**	**4**	**8**	**4**	**4**
Specialty Retail Center	*222*	*34*	*16*	*18*	*14*	*6*	*8*	*24*	*11*	*13*
x 'other' share: 53%	**117**	**18**	**9**	**9**	**7**	**3**	**4**	**13**	**6**	**7**
General Office	*11*	*2*	*1*	*0*	*1*	*0*	*1*	*2*	*1*	*1*
x work share: 59%	**7**	**1**	**1**	**0**	**1**	**0**	**1**	**1**	**0**	**0**
Grand Total	**222**	**26**	**12**	**14**	**17**	**9**	**8**	**22**	**10**	**11**

Figure 2-16 shows the projected trips generated by the Clarion in the AM and PM peak hours, based on the trip generation, mode split, trip distribution and trip assignment analysis shown in the Methodology section above. The assignment of trips around the site takes into account that residential traffic will enter and exit via the Quincy St. driveway; trips generated by the retail and office space are assigned to the proposed parking lane on Blue Hill Ave. See the Parking and Mitigation and Potential Improvements sections, below.

Figure 2-16 Peak-Hour Trips Generated by the Clarion Project, AM/PM/Sat

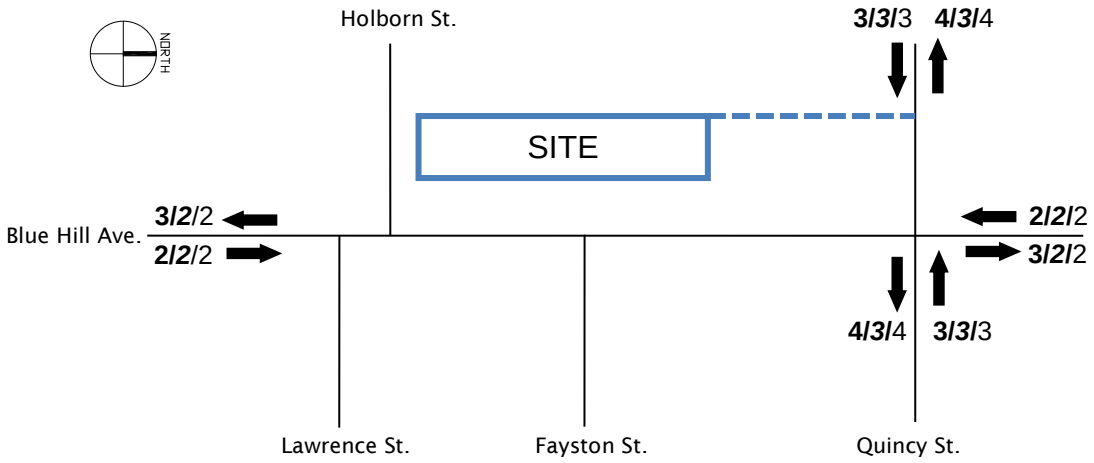


Table 2-10 shows the results of capacity analysis at the study intersections under the Build Scenario.

Table 2-10 Build-Scenario Peak-Hour Delay and Level of Service

		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
	Intersection	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**
Sig.	**Blue Hill Ave./Quincy St.**	**24.6**	**C**	**30.2**	**C**	**28.0**	**C**
	Northbound	22.6	C	18.3	B	23.9	C
	Southbound	14.3	B	24.6	C	32.0	C
	Eastbound	34.1	C	42.6	D	28.7	C
	Westbound	35.1	C	50.4	D	27.6	C
Unsig.	**Blue Hill Ave./Fayston St.**						
	Westbound	41.0	E	75.2	F	180.0	F
Unsig.	**Blue Hill Ave./Holborn St./Lawrence St.**						
	Northbound	1.3	A	0.3	A	0.8	A
	Southbound	3.2	A	3.6	A	2.6	A

Comparison of Tables 2-6 and 2-10 shows that the difference between the existing scenario and the build scenario (which takes into account the impact of both the Clarion and Quincy Commons projects) is negligible. Calculated increase in delay is in most cases in the fractions of a second.

Project-generated Transit Trips. On the basis of the mode and split trip generation factors in Tables 2-2 and 2-9, respectively, the Clarion project will generate an estimated 38 new transit trips on a daily basis. Approximately 4 new transit trips (2 alighting and 2 boarding) will occur during the AM peak hour and 17 new trips (9 alighting and 8 boarding) will occur during the p.m. peak hour.

2.1.4 Parking

The Project will provide a total of approximately 34 parking spaces on the site in a surface parking lot, resulting in a parking ratio of 0.85 spaces per unit. This parking ratio is consistent with the district-based parking goals developed by the BTD for Roxbury (maximum of 1.0-parking spaces per unit for residential units/0.7-spaces for affordable units).

Parking need for the commercial uses within the project will be minimal, as the total square footage of office and retail will be 6,420 square feet. Retail tenants have not been identified, but it is expected that they will be local businesses generating primarily foot traffic. Parking for the commercial establishments will be readily available in front of the development where currently parking activity is rare, as well as on surrounding streets.

To ensure that curb parking along the Project's Blue Hill Ave. frontage is consistently available, the Proponent will work to institute a shared parking arrangement between the commercial and residential occupants of the Clarion. During the day, when resident parking is less fully occupied, parking will be made available for use by the owners and employees of the commercial space, so that curb parking remains open for customers.

2.1.5 Impact Mitigation & Potential Improvements

As demonstrated above, the Clarion project will have no appreciable impact on local traffic operations. However, existing conditions at the Blue Hill Ave./Quincy St. intersection are less than optimal, with heavy volumes constrained by limited capacity. In discussions with the Boston Transportation Department[4] the desirability of increasing the intersection's capacity by adding a center left-turn lane on Blue Hill Ave. was identified. This measure is not necessitated by the Clarion project, nor could it be facilitated by its developers. Nonetheless, in an effort to further the improvement of traffic conditions in the area, the benefits of adding left-turn lanes to the Blue Hill Ave. approaches to Quincy St. were tested.

2.1.5.1 Road Improvements

For long periods during weekdays and Saturdays the Blue Hill Ave./Quincy St. intersection is congested. Although calculated levels of service are acceptable, queues, especially

[4] Meeting with Patrick Hoey, March 12 2014.

on the Blue Hill Ave. approaches, are lengthy, with the 50th percentile queue on the northbound approach calculated at 352', extending beyond Holborn St. In practice, with the heavy school bus and other activity noted under Surrounding Conditions above, queues can extend beyond Lawrence or even Gaston Streets further south.

Vehicles turning left from Blue Hill Ave. in either direction are a significant contributor to the backups. Adding a center left-turn lane for Blue Hill Ave. at the Quincy St. intersection would greatly improve the situation. Table 2.11 compares existing PM peak-hour conditions at the intersection with future conditions if the lanes were added (and taking into account the traffic that will be generated by both the Quincy Commons and Clarion projects).

Table 2-11 Effect of Adding Center Left-Turn Lanes on Blue Hill Ave. at Quincy St.

	Existing Condition				Improved			
	Ave. Delay in Seconds	LOS	Queues in feet 50%	95%[5]	Ave. Delay in Seconds	LOS	Queues in feet 50%	95%
Overall	**29.4**	**C**			**17.7**	**B**		
Northbound	18.1	B	282	403	14.4	B	116	201
Southbound	24.1	C	435	625	18.9	B	180	376
Eastbound	42.0	D	272	390	20.5	C	105	187
Westbound	48.0	D	229	377	20.0	C	83	157
Overall	**29.4**	**C**			**17.7**	**B**		
Northbound	18.1	B	282	403	14.4	B	116	201
Southbound	24.1	C	435	625	18.9	B	180	376
Eastbound	42.0	D	272	390	20.5	C	105	187
Westbound	48.0	D	229	377	20.0	C	83	157

Given the value of adding left-turn lanes on the northbound and southbound approached to the Blue Hill Ave./Quincy St. intersection, it is worthy of further study. A preliminary assessment of the feasibility of the improvement was conducted as part of this Access Plan, and is summarized as follows.

Blue Hill Ave. is 42' wide between Quincy and Holborn Sts, and slightly wider, about 42'6", north of Quincy St. Currently it operates with one lane in each direction. As shown in Figure 6, there are no parking restrictions between Quincy and Holborn, except, on the

[5] The 50th percentile queue length represents the maximum queue length during typical (or median) traffic volumes. The 95th percentile queue length represents the farthest extent of the vehicle queue (to the last stopped vehicle) upstream from the stop line during five percent of all signal cycles. The 95th percentile queue will not be seen during each cycle and would typically not occur during off-peak hours. It is also unlikely that the 95th percentile queues for each approach to the intersection will occur simultaneously.

east side, the Fayston St. intersection, the Citgo driveway and the MBTA bus stop. North of Quincy St., parking is unrestricted except for the MBTA bus stop on the southbound approach to the intersection as Figure 2-17 illustrates.

Figure 2-17 Blue Hill Ave. Traffic Management: Existing Condition

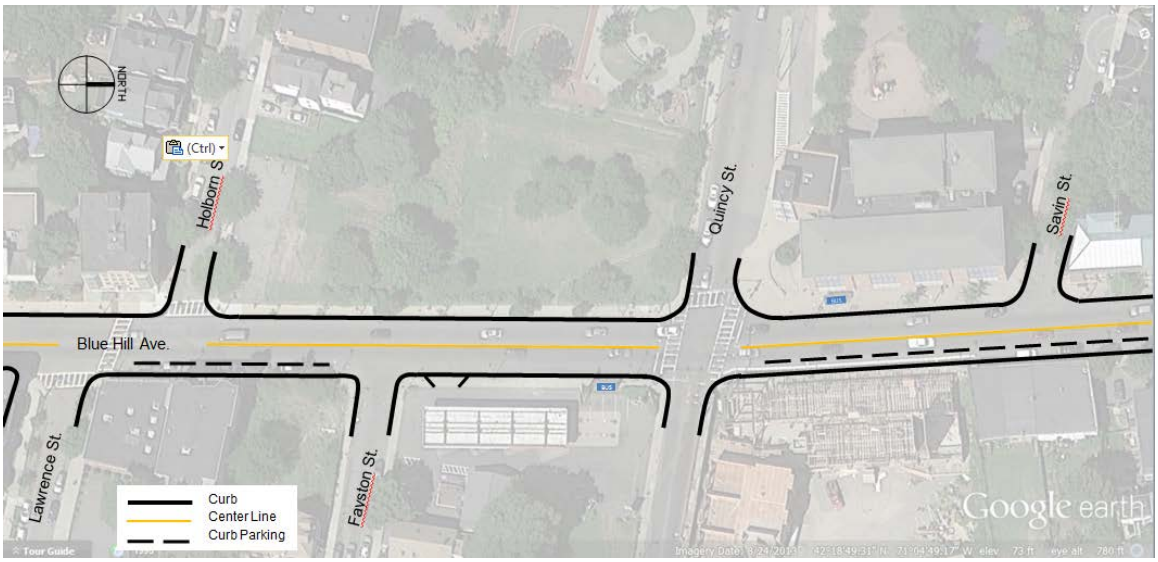
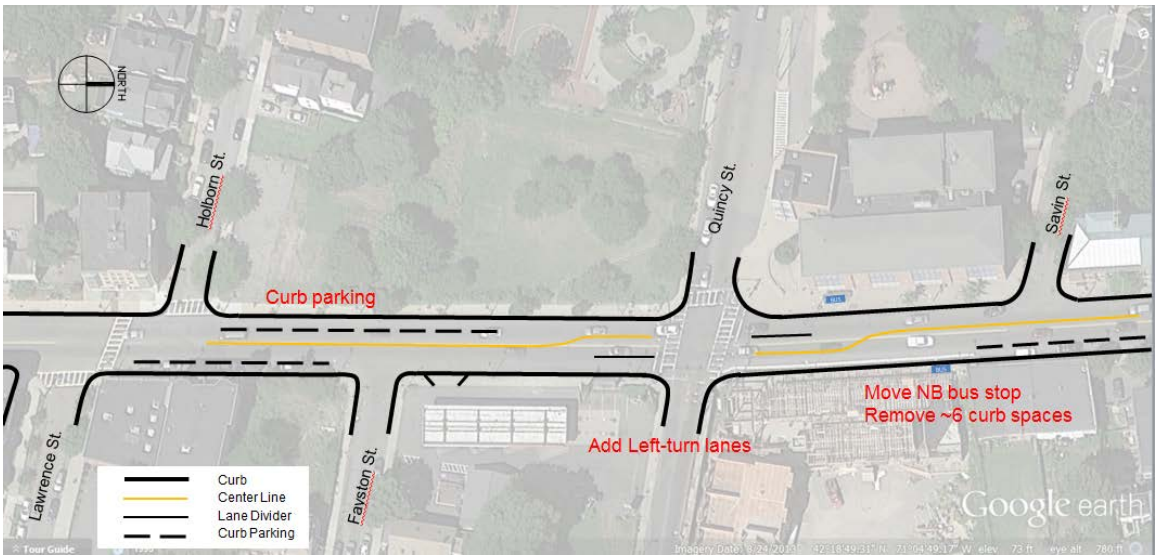


Figure 3-18 shows a possible configuration of Blue Hill Ave. in the study area with left-turn lanes on the approach to Quincy St. in both directions.

Figure 2-18 Blue Hill Ave. Traffic Management: with Left-Turn Lanes



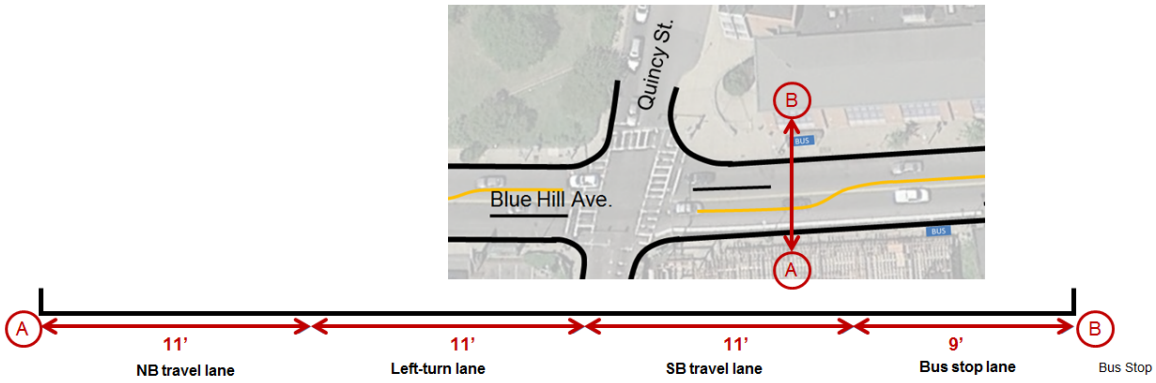
The plan shown in Figure 2-18 indicates three moving lanes on the northbound and southbound approaches to Quincy St.: one thru lane in either direction and a center left-turn lane. To accommodate the added center lane, the plan shows two new conditions:

- Restriction of parking on both sides of Blue Hill Ave. for the length of the turning lanes

- Relocation of the northbound bus stop from the near side of the Quincy St. intersection to the far side, to a point beyond the end of the southbound turn lane; with a further restriction of parking on the east side of Blue Hill Ave. to a point beyond the relocated bus stop.

Blue Hill Ave. is wide enough to accommodate the insertion of a center turn lane under these circumstances. At 42' wide, three 14' lanes can be dedicated variously to the three travel lanes or to two travel lanes and a bus stop or parking lane. North of Quincy St., at the existing southbound MBTA bus stop, it would be necessary to accommodate the bus stop, two travel lanes and the center turn lane. This suggests a cross-section similar to the one shown in Figure 2-19. On the south end of the block, between Blue Hill Ave.'s intersection with Fayston and Lawrence Streets, two travel lanes and two parking lanes are shown. This is the existing condition and is not proposed to change.

Figure 2-19 Potential Blue Hill Ave. Cross-Section at MBTA Bus Stop



This concept is presented here to suggest the opportunity for the improvement of traffic operations in the Blue Hill Ave. and Quincy St. corridors. The development of the concept through design and construction is the responsibility of others.

2.1.5.2 Parking

As stated above, the Proponent will work to institute a shared parking arrangement between the commercial and residential occupants of the Clarion. During the day, when resident parking is less fully occupied, parking will be made available for use by the owners and employees of the commercial space, so that curb parking remains open for customers.

2.1.5.3 Bicycle Accommodation

BTD has established guidelines requiring projects subject to Transportation Access Plan Agreements to provide secure covered bicycle parking for residents and employees, and short-term bicycle racks for visitors. The Project will provide approximately 20 covered bicycle storage spaces on-site, in or near the rear parking area.

2.1.5.4 Loading/Service

The level of loading and service activity at the site is expected to be minimal and will have little impact on the public roadway, sidewalks or parking activity. The Project is expected to generate approximately 1 to 2 deliveries per day. It is anticipated that the majority of these deliveries will occur between 7:00 a.m. and 1:00 p.m. These numbers do not include trash truck trips. Loading will be accommodated with designated space in the rear parking area.

2.1.5.5 Access Plan Agreement

The Community Builders, Inc. takes responsibility for preparation of the Transportation Access Plan Agreement (TAPA), a formal legal agreement between the Proponent and the BTD. The TAPA will formalize the findings of the transportation study, mitigation commitments, elements of access and physical design, travel demand management measures, and any other responsibilities that are agreed to by both the Proponent and the BTD. Because the TAPA must incorporate the results of the technical analysis, it must be executed after these other processes have been completed. The proposed measures listed above and any additional transportation improvements to be undertaken as part of this Project will be defined and documented in the TAPA.

Transportation Demand Management. The above analysis demonstrates that the Clarion will not generate significant amounts of vehicular traffic, and will not materially affect the operations of study area streets or intersections. However, to ensure this outcome, and to play a positive role in the City's efforts to minimize traffic impacts of development and to support sustainable transportation practices, the Academy will adopt a Transportation Demand Management program. The program will consist of operational commitments regarding parking policies, mobility, alternative modes and pedestrian amenities, and will include:

- TDM will be facilitated by the nature of the Project (which does not generate significant peak hour trips) and its proximity to public transit alternatives.
- On-site management will keep a supply of transit information (schedules, maps, and fare information) to be made available to the residents and patrons of the site. The Proponent will work with the City to develop a TDM program appropriate to the Project and consistent with its level of impact.
- The Proponent is prepared to take advantage of transit access in marketing the site to future residents by working with them to implement the following TDM measures to encourage the use of non-vehicular modes of travel.
- The TDM measures for the Project may include but are not limited to the following:
    - Orientation Packets: The Proponent will provide orientation packets to new residents containing information on available transportation choices, including transit routes/schedules and nearby vehicle sharing and bicycle sharing locations, if applicable. On-site management will work with residents as they move in to help facilitate transportation for new arrivals.
    - Transportation Coordinator: The Proponent will designate a transportation coordinator to oversee transportation issues, including parking, service and

loading, and deliveries, and will work with residents as they move in to raise awareness of public transportation, bicycling, and walking opportunities.

- o Project Web Site: The web site will include transportation-related information for residents, workers, and visitors.

2.1.6 Construction Management Plan

A Construction Management Plan (CMP) will address construction-period issues and will be submitted by the general contractor to BTD in support of the building permit application. The CMP will be filed with BTD in accordance with the City's transportation maintenance plan requirements. The CMP will cover issues including truck routes, occupancy of public ways, noise and dust attenuation and hours of construction activity. The CMP will detail the schedule, staging, parking, delivery, and other associated impacts of the construction of the Project. Details of the overall construction schedule, working hours, number of construction workers, worker transportation and parking, number of construction vehicles, and routes will be addressed in detail in. The CMP will also address the need for pedestrian detours, lane closures, and/or parking restrictions, if necessary to accommodate a safe and secure work zone. To minimize transportation impacts during the construction period, the following measures will be considered for the CMP:

- Construction workers will be encouraged to use public transportation and/or carpool;
- A subsidy for MBTA passes will be considered for full-time employees; and
- Secure spaces will be provided on-site for workers' supplies and tools so they do not need to be brought to the site each day.

The CMP will be executed with the City prior to commencement of construction and will document all committed measures.

Appendices (on separate CD): Turning movement traffic counts; Synchro traffic analysis files

2.2 Environmental Protection

2.2.1 Wind

The objective of a Wind Assessment is to determine the effect a proposed development would have on the pedestrian level winds in the vicinity of the Project. The primary criteria used to determine impacts are the surrounding terrain and the height and façade treatment of a proposed building.

The Project will be a four story building reaching a height of approximately 46 feet on the Blue Hill Avenue Street frontage. Wind speed increases with height so that the taller the building, the greater the potential to accelerate pedestrian level winds at the lower levels of a building, particularly the corners. At 46 feet, the height of the proposed project does not meet the Article 80 requirement for a quantitative analysis (150 ft.) and is not expected to create any deterioration of pedestrian level winds on the project site or the immediate vicinity. As a result, quantitative and qualitative wind studies should not be required.

2.2.2 Shadow

A shadow study indicating the potential impacts of the Project has been prepared and shown on Figures 2-20 to 2.33. As the study reveals, the Project is in a densely developed area consisting of one to four story residential, institutional and mixed-use buildings. At four stories (43 feet) the Project complies with zoning and as a result will not create excessive new shadows on the existing structures and public and private open spaces. The Project is south of the Quincy Street Play Lot and the shadow impacts on the open space will be limited to the morning hours during the winter. These shadows will be brief in duration. The studies also show the Project's impacts on the adjacent sidewalks and public ways will be primarily in the late afternoon.

2.2.3 Daylight

The purpose of the daylight study is to estimate the extent to which the Project restricts the amount of light reaching the streets or pedestrian ways in the immediate vicinity of the Project Site. The impact is based on the length of façade on the public streets and the change in height of the facade from the existing condition.

In the case of the Project, the proposed building will have a significant impact as compared to the existing condition since the site is currently vacant. However, the impact to the Skydome will be similar to the values of the existing structures on adjacent blocks of Blue Hill Avenue. The Project complies with the underlying zoning with regard to height and setbacks and as a result of its modest overall height, the actual impact on the Skydome will be relatively low. Since a quantitative BRADA analysis would only support these general observations, it is concluded that a quantitative BRADA study would provide little additional information and should not be required.

Figure 2-20 Shadow March 21 – 9:00am

Figure 2-21 Shadow – March 21 – 12:00pm

Figure 2-22 Shadow – March 21 – 4:00p,

Figure 2-23 Shadow – June 21 – 9:00am

Figure 2-24 Shadow June 21 – 12:00pm

Figure 2-25 Shadow – June 21 4:00pm

Figure 2-26 Shadow – June 21 – 6:00pm

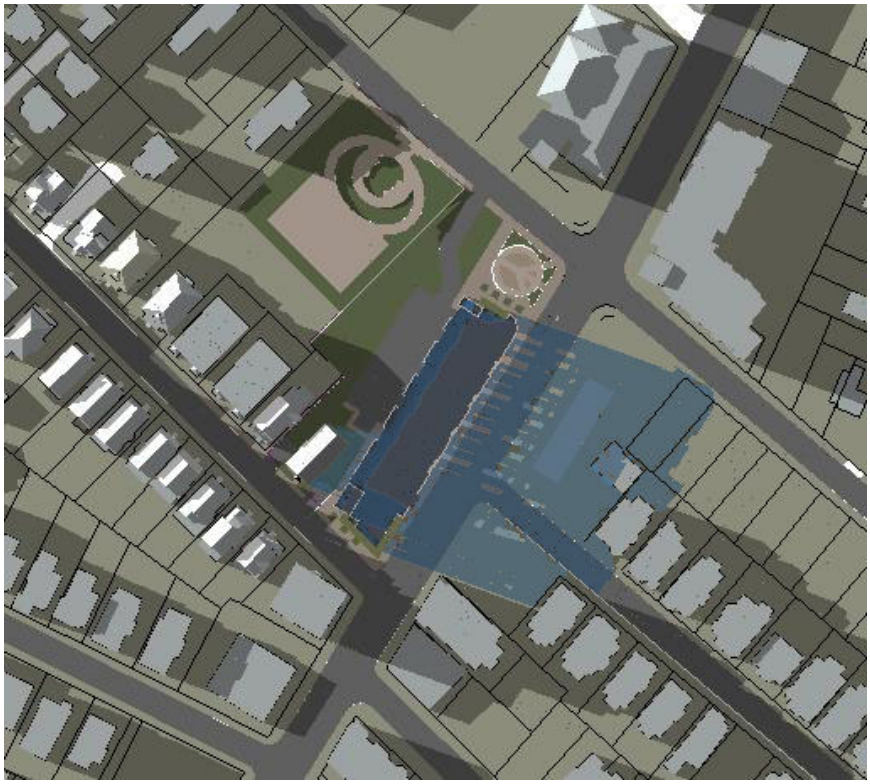


Figure 2-27 Shadow September 21 – 9:00am

Figure 2-28 Shadow – September 21 – 12:00pm

Figure 2-29 Shadow – September 21 – 3:00pm

Figure 2-30 Shadow – September 21 – 6:00pm

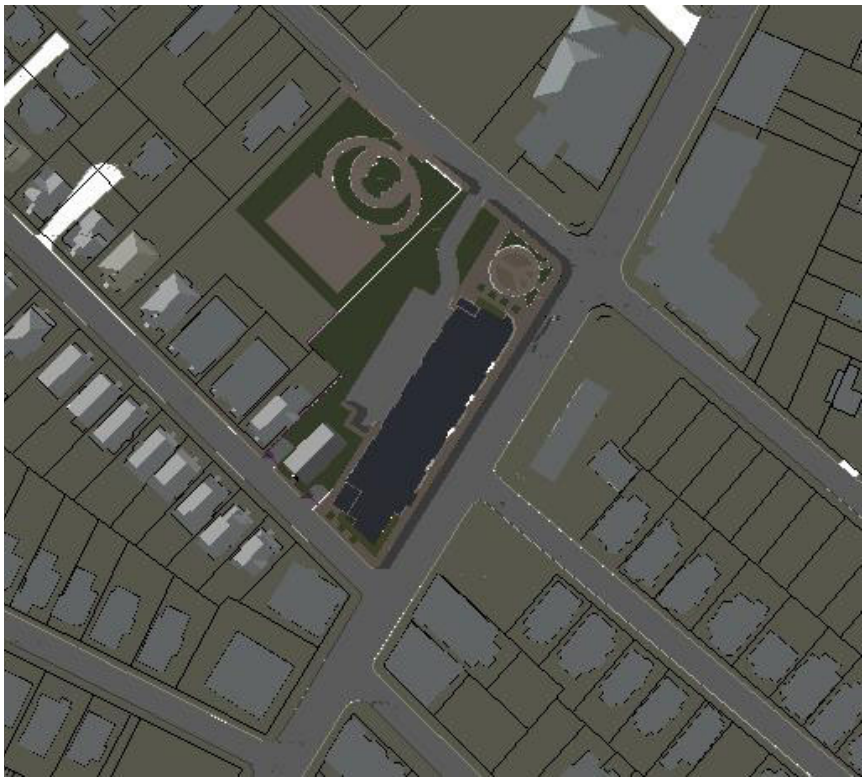


Figure 2-31 Shadow – December 21 – 9:00am

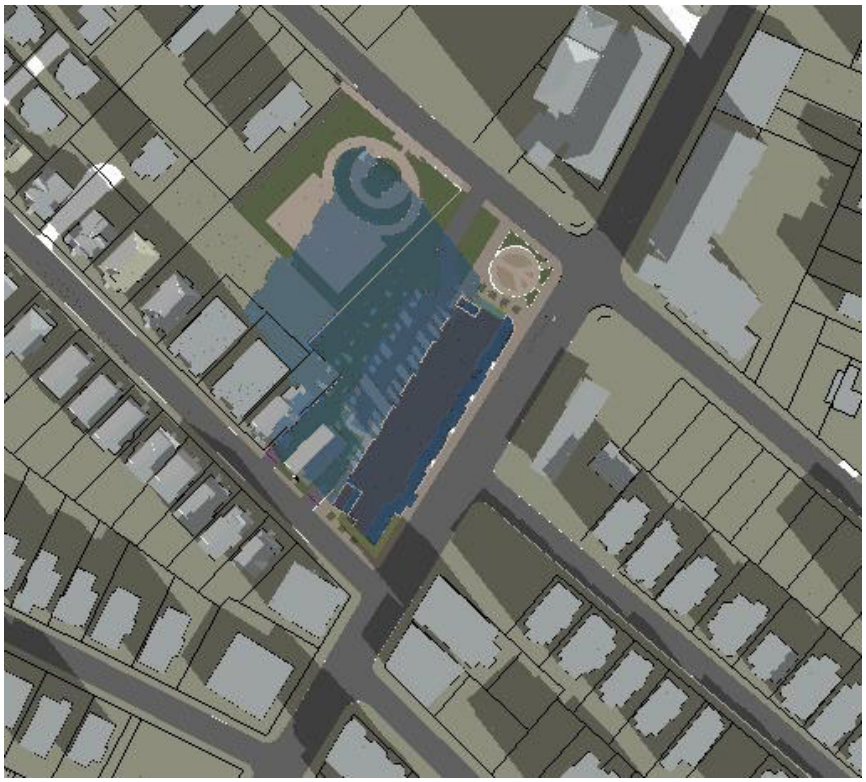


Figure 2-32 Shadow – December 21 – 12:00pm

Figure 2-33 Shadow – December 21 – 3:00pm

2.2.4 Solar Glare

The Solar Glare Analysis is intended to measure potential glare from buildings onto streets, public spaces and sidewalks in order to determine the potential visual impact or discomfort due to reflective spot glare as well as heat build-up on adjacent buildings. This analysis is required if a proposed project incorporates substantial glass facades as a part of the design.

The Project is not expected to have adverse solar impacts for several reasons. The Project will not use reflective glass or other reflective materials. The facades are proposed to be combination of brick and metal panels with punched openings. The glass area is not expected to exceed 40% of the facades.

With regard to solar gain impacts, the adjacent buildings are similar in height to the proposed building the distance between structures is determined generally by existing right of ways. As a result, solar reflectance from the proposed building will be limited due to distance between structures with only the lower floors potentially exposed to reflectance and for limited periods.

The solar impact on the residential buildings to the northeast will also be limited again because of the limited glazing and other reflective materials. Also, the relative distance and angle of the proposed and existing buildings will create minimal solar gain.

Since the Project will not use reflective glass or other reflective materials on the building facades, there should not be any adverse impacts from reflected solar glare on adjacent buildings, streets and sidewalks.

2.2.5 Air Quality

Potential long-term air quality impacts are generally attributed to emissions from Project-related mechanical equipment and pollutant emissions from vehicular traffic attributed to the proposed development.

HVAC Equipment will be individual, gas-fired Aquatherm systems for apartment heating and domestic hot water that would not create elevated carbon monoxide levels and would not trigger microscale air quality analysis.

Regarding potential vehicle related impacts, the traffic analysis (Section 2.1) shows that the Blue Hill Avenue/Fayston intersection does have a failing level of service. However, this is an existing condition and the Project-generated traffic will not result in an increase in delays. Since the Project will not increase the traffic levels by more than 10% and does not result in a further decline in level of service at the studied intersections, the DEP/BRA criteria for a microscale analysis to determine potential exceedances of the NAAQS thresholds would not be met and such analysis should not be required.

2.2.6 Stormwater/Water Quality

The proposed Project will alter the water quality of the storm water runoff from the site as the existing open space will be significantly reduced. The stormwater runoff will be

managed through a recharge system under the parking lot and through new connections to the Boston Water and Sewer Commission's drain lines.

Site coverage in the proposed build condition will consist primarily of building roof area and landscaped open space that are not typically associated with pollutant loads. This is not the case for the parking area where mitigation measures including oil and grease separators will be included. In general, the storm water runoff will discharge into the Boston Water & Sewer Commission drainage system in Blue Hill Avenue.

The Project will comply with the Boston Water and Sewer Commission's regulations and standards regarding the design of the storm drainage system including methods to reduce the peak rates of runoff. As noted, oil and grease separators will be provided for parking areas and driveways as required to improve water quality prior to discharge into the storm sewer. Additionally, sediment and construction materials will be controlled during construction through a combination of hay bales, silt fence and catch basin filters.

2.2.7 Flood Hazard Zones/Wetlands

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the Site located in the City of Boston - Community Panel Number 25025C0079G indicates the FEMA Flood Zone Designations for the Site area. The map shows that the Project is located in a Zone X, Area determined to be outside the 0.2% annual chance flood plan.

The Site was developed and does not contain wetlands.

2.2.8 Geotechnical/Groundwater

This section addresses the below-grade construction activities anticipated for the Project. It discusses existing soil and groundwater conditions, anticipated foundation construction methods and excavation work anticipated for the Project based on available subsurface information and a conceptual foundation design study.

The below grade construction activities will be limited to the installation of foundations to support new construction with no basement being planned. The site is situated on glacial till with resistance ranging from two to eight feet. At this point in the project design it is assumed that the building can be supported by spread footing possibly supplemented by GeoPiers to achieve required bearing capacity. Due to the shallow depth to resistance and bearing capacities, an alternative may be drilled piles but it is not anticipated that driven piles will be required minimizing potential impact to adjacent structures.

Initial geotechnical analysis indicates the Project Site is not located within area monitored by the Boston Ground Water Trust so review and permitting by this organization is not required. Test borings did not encounter ground water so dewatering is not anticipated during excavation. Project specifications will include provisions for remedial measures for the contractor to implement to mitigate any movement or lowering of groundwater levels should conditions warrant. Foundation excavation will be

observed by an experienced geotechnical engineer for compliance with project specifications. The Proponent will secure all necessary construction dewatering and related permits from the City (BWSC) and State (MWRA) as required.

2.2.9 Solid and Hazardous Wastes

2.2.9.1 Existing Hazardous Waste Conditions

The following investigations were prepared for the subject property by GEI Consultants Inc.:

> *Phase I Environmental Site Assessment, Quincy Blue I, Blue Hill Avenue, Boston, Massachusetts* dated November 24, 2014. Project 01168.
>
> *Phase II Environmental Site Assessment Quincy Street and Blue Hill Avenue, Boston, MA,* dated January 16, 2015

According to the 2014 report, there are two incidences of environmental conditions at the subject property, both of which have been closed out of the Massachusetts Contingency Plan (MCP) process. They are summarized as follows:

> *"A recognized environmental condition (REC) is defined by the ASTM as a condition with the potential for a past, current, or future release of oil or hazardous materials (OHM) at a property. Based on our evaluation of current Property conditions and our review of available Property records, we have identified two RECs, defined as evidence of a past, current or future potential release of OHM, at the Property:*
>
> - *A portion of the Property is a Massachusetts Department of Environmental Protection (MassDEP)-listed disposal site based on the release of petroleum hydrocarbons in soil above the applicable Massachusetts Contingency Plan (MCP) reportable concentrations. The release was reported to MassDEP on July 5, 1996, and MassDEP assigned release tracking number (RTN) 3-13982. The RTN is associated with the parcels at 281, 287, 295, and 299 Blue Hill Avenue. The contaminant conditions were assessed by others in 1996 and 1997, and a cleanup was implemented, consisting of soil excavation. The site was closed with a Response Action Outcome (RAO). Further investigation is not necessary because the contaminant conditions have been assessed and remediated and the release has been closed.*
> - *There is a MassDEP disposal site adjacent to the Property (across Blue Hill Avenue) at 310 Blue Hill Avenue (RTN 3-22052). Historic gasoline releases have affected that site, which is a gasoline station. Although the site was closed on October 31, 2002 with a Class A-2 RAO, contamination in groundwater may have affected conditions at the Property because of the potential groundwater flow direction and the close proximity to the Property (about 100 feet)."*

The Phase II report found no subsurface conditions and no further action is required.

A search of the following federal and state databases indicates that the subject property has no history of reportable contamination, nor is there any evidence of above ground or underground storage tanks on the property. The following databases were accessed as part of this research:

- Federal NPL
- Federal Resource Conservation and Recovery Act (RCRA) CORRACTS
- Federal RCRA Non-CORRACTS TSD Facilities List
- Federal CERCLIS List
- Federal CERCLIS NFRAP Sites List
- Federal RCRA Generator List
- Federal Emergency Response Notification System (ERNS)
- State Listed Disposal Sites
- State Solid Waste / Landfill Facilities (SWLF)
- State Underground Storage Tank List (UST)
- State Institutional Control/Engineering Control Registries
- State Spills List
- Municipal File Review Findings
- Massachusetts Department of Environmental Protection Waste Sites and Reportable Releases database

2.2.9.2 Historical Land Use

The subject property has historically been a mix of residential and light commercial or retail. According to the 2011 GEI Consultants' report;

> *"Sanborn Maps and aerial photographs, in 1888 the Property contained buildings (dwellings and stores) on all parcels except for 281 and 299 Blue Hill Avenue and 48 Holborn Street. The 1897 map shows the same buildings except there are a row of apartment buildings on the 1 Quincy Terrace parcel. Between 1919 and 1964, the row of apartment buildings still remained, there was a row of stores on the 281, 287, 295, and 299 Blue Hill Avenue parcels (including a plumbing store and bakery), and other single-family dwellings remained on the other parcels. Between 1988 and 1990, the only building on any of the Property parcels was a vacant dwelling at 309 Blue Hill Avenue. Since 1992, all parcels on the Property have been vacant but parcels 309 and 311 Blue Hill Avenue were labeled as having parking. Abutting properties have historically been residential, commercial, a school and playground, or vacant."*

The Phase II report completed by GEI Consultants in January, 2015 found no evidence of soil or groundwater contamination above acceptable levels. Should evidence of contaminated soils be discovered during construction, the proponent will retain a licensed site professional (LSP) to monitor remediation and cleanup operations and will insure that monitoring and reporting requirements are followed. Soils removed from the

site during construction will be managed for off-site disposal in accordance the current regulations and policies of the Massachusetts DEP.

3.2.9.2 Operational Solid and Hazardous Wastes

The Project will generate solid waste typical of other residential/mixed-use projects. Solid waste generated by the Project will be approximately 80.8 tons per year (See Table 2-9).

Solid waste will include wastepaper, cardboard, glass and bottles. The Proponent will coordinate with the City's recycling coordinator to develop and implement a recycling program to minimize solid waste. A waste compactor will be provided for non-recyclable waste and compacted material will be removed by a waste hauler contracted by the Project.

Table 2-12 Solid Waste Generation

Unit Type	Program	Number of Beds	Generation Rate	Solid Waste (tons per year)
One, Two and Three Bedroom Units	App 73 Bedrooms	140	4 lbs/bedroom/day	53.3
Commercial/.5Retail	5,000 SF		5.5 tons/1,000 sf/year	27.5
Total Solid Waste Generation				80.8

With the exception of "household hazardous wastes" typical of residential and commercial retail uses (for example, cleaning fluids and paint), the residential and commercial uses will not generate hazardous waste.

2.2.10 Noise/Vibration

The noise analysis would be required to determine if the Project generated noise, principally from the roof mounted HVAC equipment exceeded the City of Boston Noise Zoning District Noise Standards for nighttime and residential zones, which are the most stringent of the applicable standards. The primary source of sound exterior to the Project will be the cooling towers that would be mounted on the roof. Noise generated from any rooftop units must be addressed, as the Site is within a residential neighborhood with existing residential buildings immediately adjacent to the north and west.

The Project is too early in the design and permitting process to determine what the equipment requirements and the associated sound generation would be and, as a result, noise analysis is not available at this time. However, since the Project intends to provide individual Aguatherm units to heat and cool the apartments (reducing the size requirements for the roof-top HVAC equipment) and the roof-top compressors would have integrated sound attenuation devises, the Project's mechanical equipment is not expected to result in a perceptible change in background noise levels. If required, a supplemental noise analysis can be prepared to insure the Project's compliance with the City of Boston Noise Ordinance.

Construction period noise impacts and mitigation are discussed below in Section 2.2.11.2.

2.2.11 Construction Impacts

A Construction Management Plan (CMP) will be submitted to the BTD for review and approval prior to issuance of a building permit. The CMP will include:

- A Construction Activity Schedule
- Defined Construction Staging Areas
- Parameters for the Demolition Phase
- Guidelines for Perimeter Protection/Public Safety
- Material Handling and Construction Waste Plan
- Construction Traffic Management including Worker Parking and Truck Routes
- Construction Air Quality and Noise management and mitigation

The Proponent will comply with all applicable state and local regulations governing construction of the Proposed Project. The Proponent will require that the general contractor comply with the Construction Management Plan, ("CMP") developed in consultation with, and approved by the Boston Transportation Department ("BTD"), prior to the commencement of construction. The construction manager will be bound by the CMP, which will establish the guidelines for the duration of the Project and will include specific mitigation measures and staging plans to minimize impacts on abutters.

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

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

2.2.11.1 Construction Air Quality

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

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

2.2.11.2 Construction Noise

The Proponent is committed to mitigate noise impacts from the construction of the Project. Increased community sound levels, however, are an inherent consequence of construction activities. Construction work will comply with the requirements of the City of Boston Noise Ordinance. Every reasonable effort will be made to minimize the noise impact of construction activities.

Mitigation measures are expected to include:

- Instituting a proactive program to ensure compliance with the City of Boston noise limitation policy;
- Using appropriate mufflers on all equipment and ongoing maintenance of intake and exhaust mufflers;
- Muffling enclosures on continuously running equipment, such as air compressors and welding generators;
- Replacing specific construction operations and techniques by less noisy ones where feasible;
- Selecting the quietest of alternative items of equipment where feasible;
- Scheduling equipment operations to keep average noise levels low, to synchronize the noisiest operations with times of highest ambient levels, and to maintain relatively uniform noise levels;
- Turning off idling equipment; and
- Locating noisy equipment at locations that protect sensitive locations by shielding or distance.

2.2.11.3 Construction Waste Management

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

2.2.12 Rodent Control

A rodent extermination certificate will be filed with the building permit application to the City. Rodent inspection monitoring and treatment will be carried out before, during, and at the completion of all construction work for the proposed Project, in compliance with the City's requirements. Rodent extermination prior to work start-up will consist of treatment of areas throughout the Site. During the construction process, regular service visits will be made.

2.2.13 Wildlife Habitat

The Site is within a fully developed urban area and, as such, the proposed Project will not impact wildlife habitats as shown on the National Heritage and Endangered Species Priority Habitats of Rare Species and Estimated Habitats of Rare Wildlife.

2.3 Urban Design

2.3.1 Design Theme

The Blue Hill Avenue Business District in Roxbury offers a great diversity of housing stock. The interior streets are populated by large, single-family and duplex homes designed in eclectic styles. The main avenues are lined with the handsome double block and courtyard type apartment buildings that proliferated in the first half of the twentieth century.

The Project site is centrally located on a section of Blue Hill Avenue, a major north/south boulevard, which links the Grove Hall and Dudley Square neighborhood shopping districts. Once lined with mixed use multi-family residential and commercial buildings, the long vacant site is a gap on the Avenue otherwise lined with a mix of street commercial, institutional and residential uses. This project is an opportunity to re-establish the previous continuity of the street façade. The design and massing of our proposed building restores the architectural integrity of the street with a new building fully compatible in scale and materiality with its neighbors along this important Boston Avenue.

In terms of the building's massing, height, façade treatment and landscape features, the intent of the design is to create a new mixed use apartment building that restores the integrity of the avenue but skillfully transitions from the traditional Main Street Business district scale that extends north and south along Blue Hill Avenue and the adjacent residential development that extends west along Quincy and Holborn Streets. The new design is similar in scale, and siting to its immediate abutters on the Avenue. The proposed building will be respectful of its context and relate to neighboring structures through the use of compatible building materials, its overall form, and landscape treatment.

2.3.2 Relationship to Urban Context

A bird's eye overview of the Roxbury/Dorchester neighborhoods reveals a wealth of examples of the traditional mixed use residential over commercial walkup apartment buildings that line arterial corridors similar to Blue Hill Avenue. These are contrasted and complemented by the wood frame multi and single family buildings on the cross streets. The proposed rear yard setback creates a significant open space and eases the transition in scale to the Holborn Street residences. Relatively similar in height and massing to its neighbors, the proposed building will complete the continuity of the Blue Hill Avenue streetscape. The first floor retail will help bring energy, transparency and life to the pedestrian environment on Blue Hill. At four stories, our studies show that the new building will not cast long shadows on the abutting park. The large windows on both principle façades will provide abundant natural light for the new residents.

2.3.3 Site Plan

The building is a typical double loaded corridor configuration that reinforces the street wall as found along the length of Blue Hill Avenue and is shallow enough to provide an extended setback from the Holborn Street residences. The side and rear setbacks

coupled with the slight north/south orientation of the building relative to Blue Hill Avenue will allows both direct and indirect natural light to the residences and affords significant sunshine to the rear open space in the summer and shoulder seasons.

The current plan includes a series of small retail areas that will total about 5,000 gross square feet on the first floor with multiple entrances to Blue Hill Avenue. The residential entrance is the corner of Blue Hill Avenue and Holborn Street, proximate to the other residential entrances and lobbies along those streets. Parking access is at the Northern end of the building off Quincy Street.

One crucial aspect of the planning for the site is the requirement to provide space for a Memorial Park. The project will provide an open space on the northern end of the site. The park will be completed to be useable by the public and is intended as a contemplative space. The interim park will provide a buffer to the adjacent residential properties and create a suitable edge for the Quincy Street Tot Lot. Additional seasonal plantings and flowering trees will mitigate the transition in scale and will enhance the privacy of the abutting properties and the new residences. Decorative lighting, at grade planters and street trees are planned to add green to the public realm.

2.3.4 Building Access

The new building will be fully accessible to the physically handicapped. Paving, grade changes and ramps will all conform to Massachusetts Architectural Access Board Guidelines. The entrances to the retail spaces will be along Blue Hill Avenue. The site location offers direct access to MBTA bus service and adequate parking is provided for physically impaired households. Appropriately, the Residential Access is located nearest Holborn Street which has a residential character. The residences are served by two (2) hydraulic elevators. The barrier free aspect of the development offers a variety of housing opportunities for access across a broad demographic range from young mothers to the elderly.

Loading for the retail and moving truck access will be provided on Blue Hill Avenue. This "loading zone" will have limited hours as set by neighborhood standards and will convert to on street parking for the majority of the day.

As previously stated, the main vehicular entrance is at the north end of the building on Quincy Street. It offers 32 grade level spaces primarily for residential use but could be managed parking to allow for shared use with the retail The Park will be accessible from Blue Hill and Quincy and to a limited degree from the Project – pedestrian access through the site to Holborn will be restricted to maintain a level of privacy for the parking and the private open space.

2.3.5 Height, Massing and Façade Treatment

The new building design is compatible with the height and massing of its neighboring buildings and responds to the setbacks that create the street walls of the surrounding 19th and 20th century walk-ups and the newer apartment buildings. It responds to the fundamental architectural character of its neighbors, offering a traditional horizontal

organization pattern of Base, Body and Cornice. The fenestration patterns help to capture the essential street rhythms of its neighbors and break down the scale of the building. The ground floor base is designed using modern storefront systems with details referencing its older neighbors. The main body is proposed to be of masonry and metal panels and is topped with a metal cornice.

The windows will be consistent in size and proportion to the fenestration patterns of the existing residential buildings along the Avenue.

The façade materials will reflect the rich texture of abutting buildings but interpreted in more modern and simple theme. Glass store fronts will be of similar size to other contemporary development on the Avenue. The entries to both the retail and residential will be distinctly defined.

2.4 Historic and Archaeological Resources

This Component addresses the potential impact of the proposed development on the City's historic resources located on or within a half of a mile of the site.

2.4.1 Historic Resources on the Project Site

The site is in the Roxbury neighborhood of Boston which has a rich architectural history that dates to the earliest settlements of the country. The site's development traces the evolution of Roxbury through three periods:

- Colonial settlement – Dating from the original settlement by the English in the 1630's, the area was primarily agriculture particularly orchards. Roxbury at this early time was an independent community extending to Canton and included West Roxbury.

- Streetcar Suburb – Development pressure starting in the 1830s saw the breaking up of farms and estates and the establishment of middle-class housing. It was during this pre/post civil war period when the Brush Hill Turnpike was created to link Roxbury to outlying farming communities and the eventual annexation to Boston.

- Urban Development – The transition from the Brush Hill Turnpike to Blue Hill Avenue at the turn of the twentieth century brought continued development pressure along this major arterial accessing Boston. Residential development continued with the site filling in with three and four story residential and residential/retail row houses and apartment blocks. Urban unrest of the 1960's saw a deterioration of the area, the demolition of all structures that occupied the site and the acquisition and landscaping by the City.

Sanborn maps indicate the site remained occupied with masonry and wood frame mixed-use buildings through the mid-twentieth century. There are no records of the historical significance of the site or any previous development in either the Environment Department's historic buildings survey files or the Inventory of Historic and Archeological Assets of the Commonwealth.

2.4.2 Historic Areas within a Half Mile of the Site

The Proposed Project is located in the Roxbury Neighborhood of Boston. The designated Historic Districts within a half mile of the site include:

2.4.2.1 Moreland Street Historic District (National Register District)

Bounded roughly between Blue Hill Avenue and Warren Street and Winthrop and Waverly, the district is significant for its substantial inventory of distinguished architecture representing a range of styles and residential building types prevailing in the Boston area from 1840 to the 1920's, for the evolution of the urban/suburban plan as an important example of Boston's streetcar suburb development and for its association with the lives of persons of national and local importance, particularly General Joseph Warren and members of his family.

This district is sufficiently removed from the Project and will not be impacted by the Proposed Project.

2.4.3 Historic Properties within a Half Mile of the Project Site

There are several properties of individual historic value that are within a half mile of the Project. Of note are the properties designated as National and Boston Landmarks:

2.4.3.1 Malcolm X – Ella Little-Collins House – 72 Dale Street – Boston Landmark

2.4.3.2 Roxbury Presbyterian Church – 328 Warren St

2.4.3.3 Eliot Congregational Church – 56 Dale St

2.4.3.4 Benedict Fenwick School – 150 Magnolia St

2.4.3.5 Congregation Adath Jerhurun – 397 Blue Hill Ave

2.4.3.6 Charles Street African Methodist Episcopal Church /All Souls Unitarian Church - 551 Warren St.

These resources are sufficiently removed from the Project and are unlikely to be impacted by the Proposed Project.

2.4.4 Historic Properties within a Mile of the Project Site

A complete list of properties and areas proximate to the site that are listed on the National Register of Historic Places and/or are designated Boston Landmarks are listed in Table 2-13 and located on Figure 2-34.

2.4.5 Archaeological Resources

The Site consists of a previously developed urban parcel. Due to previous development activities and disturbances, it is expected that the Site does not contain significant archaeological resources.

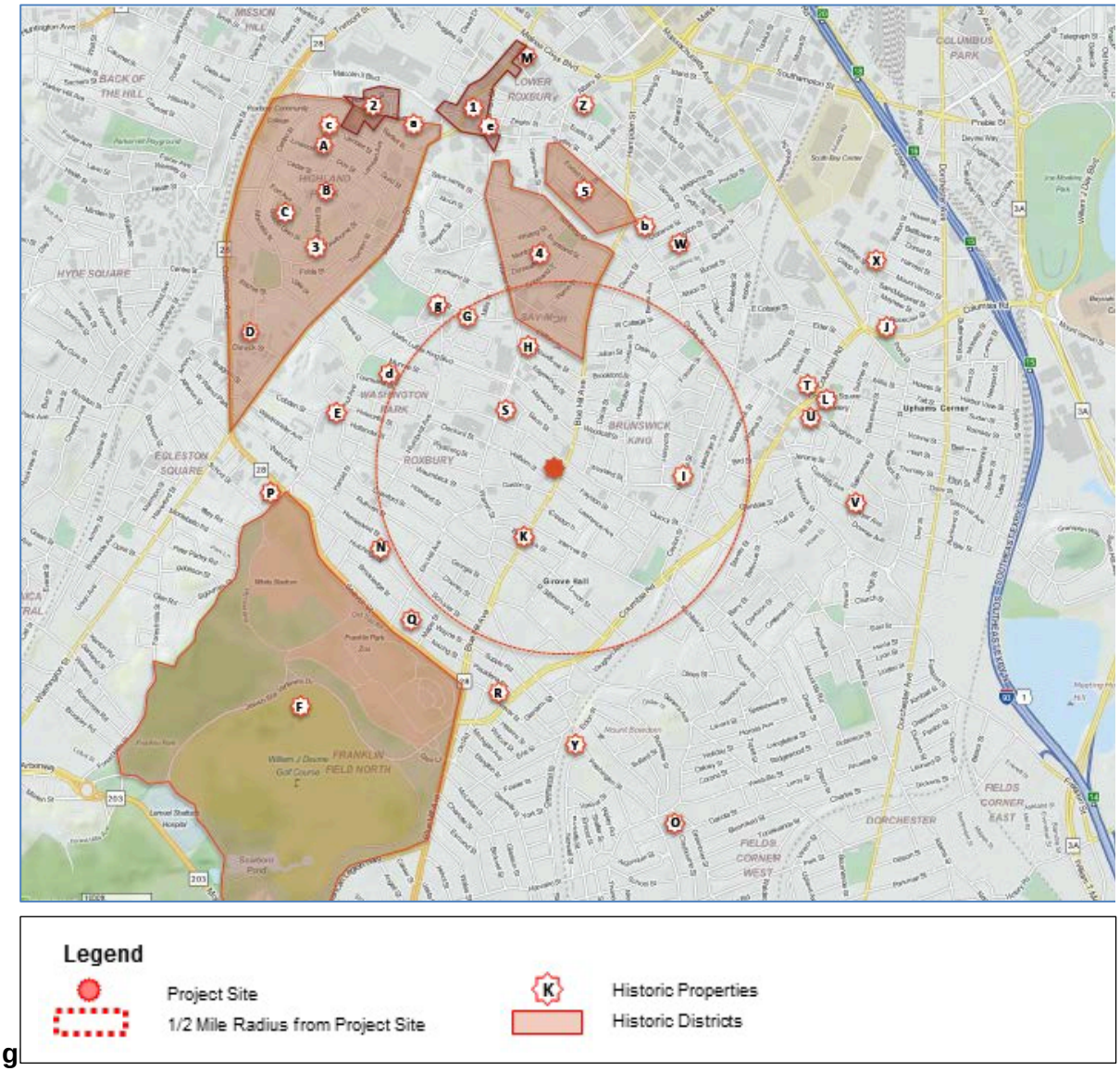
2.4.6 Impacts to Historic Resources

As noted, the Roxbury neighborhood's development dates back to the 17th century with the immediate vicinity of the project site currently developed as a traditional late 19th

and early 20th century urban residential neighborhood with numerous individual properties of historic significance.

Table 2-13 Designated Historic Resources

Key	Name
National Register of Historic Places listings – Historic Districts	
1:	Dudley Square Historic District
2:	John Eliot Square District
3:	Roxbury Highlands Historic District - Columbus Ave, Dudley St, and Washington St.
4.	Moreland Street Historic District – Blue Hill Ave; Warren, Waverly, and Winthrop Streets
5.	Mount Pleasant Historic District
National Register of Historic Places – State Listings	
A:	Alvah Kitterdge House – 12 Linwood Street
B.	William Lloyd Garrison House – 125 Highland
C.	Roxbury High Fort//Highland Park – Beech Glen Street
D.	New England Hospital for Women and Children/Dimock Community Health Center/– 41-55 Dimock Street
E.	Abbotsford/Museum of the Nat'l Center of Afro-American Artists - 300 Walnut St.
F:	Franklin Park
G.	Eliot Congregational Church – 56 Dale Street
H.	Roxbury Presbytarian Church, 328 Warren Street
I.	Benedict Fenwick School – 150 Magnolia St
J.	James Blake House – 735 Columbia Road
K.	Congregation Adath Jerhurun – 397 Blue Hill Ave
L.	Dorchester North Burial Ground – Columbia Road
M.	Eustis Street Architectural Conservation District (Eliot Burial Ground, Eustis Street Fire Station,
N.	William Lloyd Garrison School – 20 Hutchings Street
O.	Greenwood Memorial United Methodist Church – 378 Washington Street
P.	Home for Aged Couples – Walnut and Columbus Ave
Q.	Nazing Court Apartments – Nazing St
R.	Saint Mark's Episcopal Church – 73 Columbus Ave.
S.	Charles Street African Methodist Episcopal Church /All Souls Unitarian Church 551 Warren St.
T.	Upham's Corner Market – 600 Columbia Road
U.	St. May's Episcopal Church – 14-16 Cushing Ave
V.	William Monroe Trotter House - 97 Sawyer Avenue
W.	Shirley Eustis House – 31-37 Shirley St.
X.	Clapp Houses – 195 Boston Street
Y.	Coliins Building – 213 Washington St
Z.	Dearborne School – 25 Ambrose St
a.	Dillaway School – 16 Kenilworth St
b.	Francis and Isabella Apartments – 430 Dudley St.
c.	Edward Everett Hale House – 12 Morley
d.	Harriswood Crescent – 60 Harold St.
e.	Hibernia Hall – 182-186 Dudley St
Boston Landmarks/Massachusetts Historic Districts and Structures	
V:	William Monroe Trotter House - 97 Sawyer Avenue
J.	James Blake House – 210 East Cottage
f:	Cox Building – 1-7 Dudley Street (John Elliot Square)
g.	Malcolm X/Ella Little-Colins House – 72 Dale Street
h.	George Milliken House – 44 Virginia Street



Fig

The Proposed Project will develop an underutilized vacant parcel with a new structure that is keeping with Roxbury's existing urban scale and building geometries there by reestablishing a uniform urban street edge that typified this historic corridor prior to its decline in the later part of the twentieth century. The Project will not be reviewed by the Boston Landmarks Commission as it will not have an impact on historic resources of Roxbury specifically or the City in its entirety.

2.5 Infrastructure Systems

The following sections describe the existing water, sewer, and drainage systems surrounding the Site and explain how these systems will service the Project.

2.5.1 Sewage System

2.5.1.1 Existing Conditions

There is no existing sewer connection to BWSC sewer lines from the project site. There is a 10 inch sewer main on Holborn Street and a 12-inch sewer main on Blue Hill Ave. Based on the projected flow from this project, connections could be made to either one or both of these mains.

A sewer connection permit with the BWSC and MWRA is required and will be obtained for this project.

2.5.1.2 Proposed Sewage Generation

The Project's sewage generation rates were estimated using Massachusetts State Environmental Code (Title 5) at 310 CMR 15.203. This reference lists typical values for the source listed in Table 2-14. Other wastewater generation includes the cooling system. As shown in Table 2-14, the Project will have average daily flows of approximately 9,350 gpd of sanitary sewage.

Table 2-14 Project Sewage Generation

Use	Number	Sewage Generation Rate	Total GPD
One and Two Bedroom Units	85 bedrooms	110 GPD/BRM	9,350
Total			9,350

The net change in sewage generation is presented below in Table 2-15.

Table 2-15 Net Change in Sewage Generation

	Existing	Future	Net New Flow GPD
Estimated Sewage Flow	0	9,350	9,350

2.5.1.3 Proposed System Connections

The Project will utilize existing public sanitary sewer lines to meet new program requirements minimizing required permits and approvals. All sewage flows will be kept separate from all storm drain service connections. All appropriate permits and approvals will be obtained prior to construction.

A sewer connection permit with the BWSC is required and will be obtained for this project. Since flows are not expected to exceed 15,000 gallons per day, a certification statement and Sewer System Extension Permit with the Massachusetts Division of Water Pollution Control will not be required.

2.5.1.4 Sewer System Mitigation

There are no existing sewer connections to the BWSC sewer mains. Sanitary sewer and storm drains will be separated on site and connected to the existing BWSC sewer and drain lines respectively.

Storm drain lines will not be connected to BWSC sanitary sewer systems. Similarly, sanitary sewer lines will not be connected to the Combined Sewer on Quincy Street unless directed otherwise by BWSC.

An oil and grease separator will be provided in the off-site parking area as required by BWSC and MWRA to minimize the discharge of oil, grease or grit from discharging into the sanitary sewer.

2.5.2 Water Supply System

2.5.2.1 Existing Conditions

There are existing water mains on Quincy Street (8-inch cement lined cast iron), on Blue Hill Ave (16 inch cement lined cast iron) and Holborn Street (12 inch cement lined cast iron).

In addition, Quincy Terrace has a 6-inch H.S. line connected to the 8inch main on Quincy Street with a Boston Lowry hydrant at the dead end.

2.5.2.2 Proposed Water System

The Project's water demand estimates for domestic sources are based on the Project's estimated sewage generation. A conservative factor of 1.1 is applied to the average daily wastewater flows to estimate the average water use on a daily basis. This factor accounts for consumption and other miscellaneous losses. Therefore, it is estimated that the Project will consume approximately 10,285 gpd of domestic water. The water will be supplied by the BWSC.

Water capacity and pressure are not anticipated to be an issue for the Project based on the projected domestic and fire protection water demands.

A hydrant flow test at a nearby hydrant at 370-372 Blue Hill Avenue indicates adequate pressure and flow is available for the projected domestic and fire flow demands. Additional fire flow testing will be conducted to confirm this data, if required by BWSC. There are two hydrants on Quincy Street, one hydrant on Blue Hill Ave, and several on Holborn Street that can be used to obtain flow and pressure data in the vicinity of the project.

2.5.3 Stormwater System

2.5.3.1 Existing Condition

Boston Water and Sewer Commission has a 12 inch storm drain line on Holborn Street, a 12 inch storm drain line on Fayston Street and the combined sewer system on Quincy Street.

Research at the BWSC indicates that the combined sewer on Quincy Street flows to Dacia Street, where it continues to the Boston Harbor from Dacia Street in an 81 inch by 74 inch combined sewer line.

The dedicated storm drain line in Holborn Street flows southeast towards Blue Hill Avenue where it then flows into a combined sewer manhole in Blue Hill Avenue and continues in the Dorchester Brook Sewer Line before it eventually flows to the Dacia Street combined sewer line at the corner of Quincy Street and Dacia Street.

Similarly, the dedicated drain line on Fayston Street also connects with the Dorchester Brook sewer line and then on to the combined sewer line at the corner of Quincy Street and Dacia Street.

2.5.3.2 Proposed Stormwater System

Post construction stormwater management is proposed to consist of an on-site recharge system that will utilize the newly created park and perimeter landscape areas. The recharge system will serve to recharge the groundwater table and also to reduce flow to the BWSC drainage system.

Stormwater overflow will be directed to the BWSC stormwater system in one of the adjacent streets. Overflow to the existing storm drain system will aid in preventing impacts to abutting properties and the recharge system will prevent site sediment from reaching the BWSC drain lines and ultimately, the Boston Harbor.

The Project will yield no net increase in peak discharge rates and volumes of run-off and will be designed to improve ground water recharge. This is accomplished primarily by installing a stormwater system that infiltrates, at a minimum, the first inch of runoff per BWSC requirements.

This project will comply with BWSC Guidelines for Grit and Oil Separators. Outdoor parking and paved areas greater than or equal to 7,500 square feet require that a grit and oil separator (Particle Separator) be installed to capture drainage. The need for separators for indoor parking garages may also be required by the BWSC, which would include a

connection to the sanitary sewer system. This is described further under Section 2.5.1 Sewer System. Additional information regarding stormwater management is contained in the following section.

2.5.4 Water Quality and Stormwater Management

The Project will not affect the water quality of nearby water bodies. Construction activities will be controlled with appropriate Erosion and Sediment Control devices to minimize the impacts of construction on the stormwater system.

The Project will minimize the transport of the soils and sediment to the Boston Water and Sewer Commission ("BWSC") storm drain system using BWSC, Department of Environmental Protection ("DEP") and the Environmental Protection Agency ("EPA") Best Management Practices (BMPs").

The Project proposes protecting existing catch basins with filter fabric, hay bales and/or crushed stone to prevent sediment from entering the BWSC storm drain system.

Erosion and sediment controls will be inspected and maintained throughout the construction phase until all areas of disturbance have been stabilized and construction is complete.

2.5.4.1 Dewatering Permit

A Dewatering Permit application must be filed for certain discharges to the Commission's sanitary, storm drainage, or combined systems. Dewatering for this project will be conducted in accordance with the BWSC Dewatering Permit requirements.

If there is a proposal for discharge to the sanitary sewer or combined sewer, or to a drain that eventually connects to a combined sewer; an MWRA Sewer Use Discharge Permit is also required.

Construction activities that require dewatering for this project are proposed to discharge to the storm drainage system. All the storm drains in the vicinity of the project eventually discharge into the combined sewer system and therefore an MWRA Sewer Use Discharge Permit is required.

Once construction is complete, the Project will be in compliance with local and state stormwater management policies. See Section 2.5.5 below for additional information.

2.5.5 BWSC Stormwater Management Compliance

In January 2008, the DEP revised the Stormwater Management Policy. The Policy prescribes specific stormwater management standards for development projects, including urban pollutant removal criteria for projects that may impact environmental resource areas. Compliance is achieved through the implementation of Best Management Practices (BMP's) in the stormwater management design. The Policy is administered locally pursuant to M.G.L. Ch. 131, s. 40.

In 2013 BWSC adopted a stormwater management policy that employs EPA BMPs for sites exceeding one acre. This standard applies to development sites that will disturb more than one acre in the construction process. This project will comply with this policy.

A brief explanation of each Policy Standard and the system compliance is provided in Section 2.2.7 of this PNF.

2.5.6 Mitigation Measures

The peak rate of runoff will not exceed the existing rate of runoff. Several measures will be implemented to manage storm water runoff in accordance with BWSC and DEP regulations including the addition of a landscaped courtyard and a stormwater management / infiltration system.

Porous paving, green roofs and other sustainable stormwater techniques will be investigated as additional measures to mitigate the effects of stormwater runoff.

2.5.7 Coordination with BWSC

Proposed connections to the Commission's water, sanitary sewer, and storm drain system will be designed in conformance with the Commission's design standards, Sewer Use and Water Distribution System Regulations, and Requirements for Site Plans.

When planning a new construction or renovation project, the first step in the process is the preparation of a Site Plan. This document outlines the requirements necessary for preparing and submitting a Site Plan to BWSC. Once approved by BWSC, Site Plans are valid for one year.

The site plan must be signed by a Professional Engineer and Land Surveyor registered in Massachusetts. The Site Plan indicates the existing and proposed water mains, sanitary sewers, storm sewers, telephone, gas, electric, steam, and cable television. The plan will include the disconnections of the existing services, if any, as well as the proposed connections.

In addition, a Rough Construction Sign-Off document from the City of Boston's Inspectional Services Department is required prior to filing a GSA with BWSC.

Prior to connection to the BWSC utilities, the Utility Contractor will submit a General Service Application for review and approval prior to construction. An approved Site Plan must be on file with the Commission's Engineering Customer Services Department prior to submitting a GSA. The applicant or proponent does not file the GSA application. Only a bonded, licensed Drain Layer can file the GSA application.

3.5.8 Energy Needs

3.5.8.1 Heating and Cooling

The Project's heating and cooling will be provided by individual Aquatherm Systems. Domestic water heaters will produce hot water for the plumbing fixtures and for the fan

coils. This system will require locating individual heat pumps for each unit and common area HVAC equipment on the building's roof. Each apartment's domestic water heater (high efficiency, gas fired condensing type) will have an output of 200 BTUs. The total cooling load for the apartments is estimated at 75 tons and for the rental spaces at 20 tons. The estimated gas load for the building will be approximately 12,070 MBH, assuming electric dryers. These loads will be modified as the program mix for the first floor develops.

3.5.8.2 Electrical Requirements

The Project electrical load is estimated at a range of 380 KW. NSTAR (Boston Edison Company) provides electric service in the City of Boston and has an underground service conduit located in Blue Hill Avenue. It is anticipated that a NSTAR Network Transformer will required either in the sidewalk or a dedicated space with in the Project. The final service approach and transformer location will be determined during the final design and discussions with NSTAR.

3.5.8.3 Energy Conservation Measures

Energy conservation measures will include the use of condensing type water heaters to maximize free cooling in the corridors.

3.6 Sustainable Design

The Proponent's team is committed to complying with ***Article 37*** of the Boston Zoning and ***the Boston Green Building Regulations*** by incorporating environmentally sensitive, sustainable design elements into the Proposed Project. These elements will improve the quality of life for the residents of this project as well as the neighborhood, while helping to protect the global environment. Ultimately they will also reduce operating costs while increasing value for the project, improving its business viability. We are committed to identifying opportunities presented by the development by setting proactive goals and ensuring an undertaking that is LEED Silver certifiable as a minimum.

The Proponent has assembled an architectural and engineering team familiar with implementing these sustainability goals. Stull and Lee, Inc. is familiar with current sustainability practices and will be working in concert with innovative LEED accredited engineers (mechanical, electrical and plumbing engineers). In turn, the team will actively involve the selected contractor in turning this commitment into reality. The LEED Scorecard is provided herein as Table 2-16 and is supported by the sustainability narrative that describes how each LEED credit would be attained.

The Project Team includes LEED Accredited Professionals Margaret Weed, RA and Deborah Rivers, AIA who is a U.S. Green Building Council member.

The following sections outline the team's approach to individual LEED Credits:

3.6.1 City of Boston Article 37

The Project will include the following Prerequisite Boston Green Building Credits:

Boston Public Health Development Prerequisite Credits:

Prerequisite Diesel Retrofit of Construction Vehicles
Retrofit of all diesel construction vehicles from the United States Environmental Protection Agency approved retrofit technologies, or a contribution of a comparable amount to the Air Pollution Control Commission Abatement Fund

Prerequisite Outdoor Construction Management Plan
An outdoor construction management plan including provisions for wheel washing, site vacuuming, truck covers and anti-idling signage.

Prerequisite Integrated Pest Management Plan
The Project will include Item No. 3 and 4 listed below, of the Boston Credits.

Boston Credits:

A. Modern Grid Credit; Not applicable for this Project.
B. Historic Preservation Credit; Not applicable for this Project.
C. Groundwater Recharge Credit; Yes
   1. The Project will capture rainwater including landscape irrigation.
D. Modern Mobility Credit Yes

Prerequisites:

1. Designate an on-site transportation coordinator in the management office.
2. Post information about public transportation and car-sharing options.
3. Provide transit, bike and pedestrian access information on building website.
4. Provide on-site, external bicycle racks for visitors and covered secure bicycle storage for the building occupants. 15% residential and 5% other uses.
5. Comply with Boston Transportation Department district parking ratios.
6. Join a Transportation Management Association (for mixed-use projects).

For Residential Projects:

1. Provide preferred parking spaces for a car-sharing service capable of serving 1% of building occupants.
2. Residential parking spaces required by zoning may only be purchased and used by building tenants/unit owners.
3. On-site electric charging plug-in stations for plug-ins capable of serving 1% of the building occupants.

2.6.2 Sustainability Narrative

As noted above, the Project is expected to achieve enough credits to be LEED Silver certifiable. Recognizing that the Project is still in Schematic Design, there are aspects of the sustainability initiative that cannot be definitively answered at this point. The following narrative details elements of the Project's design, construction, and operation that are known and will allow us to achieve the targeted LEED points.

2.6.2.1 Location and Transportation

LEED for Neighborhood Development Location (8 points): The Project is located in a certified LEED for neighborhood development location.

Sensitive Land Protection (1 point): The Project is located on land that had been previously developed.

High Priority Site (2 points): The reintegration of a vacant site into the urban fabric reinforces the design goals of LEED, as does the reclamation of the site for housing. Additionally, reclamation of the site for housing and community uses marshals the economic and social engine of urban redevelopment to transform this part of the urban fabric into an essential part of the neighborhood.

Surrounding Density and Diverse Uses (5 points): The Project's entrance is located within ½ mile of eight or more diverse uses, including schools, retail, restaurant, and community organizations. Surrounding density also exceeds 7 units/acre.

Access to Quality Transit (5 points): This is further strengthened by the siting of the building along a major commuter bus line.

Reduced Parking Footprint (1 point): The parking is designed to meet the minimum parking requirements of the Roxbury Neighborhood Zoning District

Bicycle Facilities (1 point): The site will accommodate bicycle storage areas as required by the Boston Transportation Department.

Green Vehicles (1 point): To further enhance alternative transportation, the parking will designate preferred parking status for hybrid fuel vehicles.

2.6.2.2 Sustainable Sites

Construction Activity Pollution Prevention (Prerequisite): A construction activity pollution prevention plan will be developed and implemented during the construction phase.

Site Assessment (1 point): *to be completed*

Open Space (1 point): The site will maximize usable open space for the residents, and maximize plant coverings.

Rainwater Management (3 points): The Project will improve stormwater management by introducing a recharge system.

Heat Island Reduction (2 points): The Project will reduce the heat island effect by replacing selected asphalt areas with planting and by using light and high-reflectant colored roofing,

Light Pollution Reduction (1 point): The Project will reduce light pollution by introducing low cut off lights. This lighting will also redirect light to increase safety of the site and abutting public areas while enhancing architecture, landscape and streetscape.

2.6.2.3 Water Efficiency

Outdoor Water Use Reduction (Prerequisite): Indigenous landscape materials will be used that are tolerant of local environmental condition enhancing sustainability and conserving of natural resources.

Indoor Water Use Reduction (Prerequisite): The team will design the HVAC and plumbing systems to reduce water consumption by at least 20% from the baseline.

Building-Level Water Metering (Prerequisite): *to be completed*

Additional Outdoor Water Use Reduction (2 points): Roof rain water will be collected into underground cisterns and reused for 100% of the landscape irrigation requirements.

Additional Indoor Water Use Reduction (4 points): The Project will implement technologies such as 0.8 gallons/flush toilets and reduced flow faucets at sinks and lavatories.

Water Metering (1 point): The Project will implement individual water meters.

2.6.3.4 Energy and Atmosphere

Fundamental Commissioning (Prerequisite): The Project's mechanical and electrical systems will be commissioned in accordance with the Massachusetts Stretch Energy Code.

Minimum Energy Performance (Prerequisite): Energy efficiency is a key part of the overall design strategy. With rapidly increasing energy costs, attention to energy use will provide economic as well as environmental benefits to the Project and support the affordability goals. The team will use an integrated design approach, with life cycle costing of various system options, in order to ensure that this Project meets the goals of LEED in this category in a cost effective manner.

Building Level Energy Metering (Prerequisite): Measurement and verification of energy usage will be provided by the utilization of individual utility metering at each unit. Heating, electricity and hot water will be individually metered to encourage resident participation in energy savings.

Fundamental Refrigerant Management (Prerequisite): The Project will not use CFC based refrigerants.

Enhanced Commissioning (1 point): Systems will be fully commissioned by a third party commissioning agent.

Optimize Energy Performance (1 point): The Project is expected to utilize vertical fan-coils to heat and cool apartments. Fan-coils would be connected to individual gas-fired water heaters. The water heater, a dual function appliance, would provide hot water for space heating as well as hot water for domestic use. The Proponent will also pursue third party funding through local utility providers to support energy efficiency and renewable energy strategies.

Renewable Energy Production (3 points): The Project's design will include infrastructure (including roof locations), conduit, and meter space to enable the incorporation of solar panels at a later date.

Demand Response (2 points): No demand response system is currently available at the location but the system will be designed to incorporate demand response at a later date.

2.6.3.5 Materials and Resources

Storage and Collection of Recyclables (Prerequisite): The Project will provide facilities to enable the collection and storage of recyclable materials for both residential and retail spaces.

Construction & Demo Waste Management Planning (Prerequisite): The Project will implement a construction waste management plan identifying at least five material streams for diversion from landfill and incineration facilities. It is estimated 75% of the overall project construction waste can be diverted.

Life Cycle Impact Reduction (2 points): The team will strive to select products and materials for which life-cycle information is available and that have environmentally, economically and socially preferable life-cycle impacts as well as proven track records on similar projects.

Building Product Disclosures and Optimization (6 points): The Project will utilize products with a publicly available life cycle assessment and environmental product declarations.

Construction Waste Management (2 points): *to be completed*

2.6.3.6 Indoor Environmental Quality

Minimum Interior Air Quality Performance (Prerequisite): Mechanically ventilated spaces will meet the minimum requirements of ASHRAE Standard 62.1-2010, Sections 4-7, Ventilation for Acceptable Indoor Air Quality. Mechanical equipment will be designed with closed combustion technology.

Environmental Tobacco Smoke Control (Prerequisite): This will be a non-smoking building and comply with the Environmental Tobacco Smoke Control requirements.

Low Emitting Materials (3 points): This Project will utilize low-emitting materials to reduce the concentrations of chemical contaminants that can damage air quality, human health, productivity and the environment. This will be achieved through compliance with the threshold levels of emissions as defined by the US Green Building Council in the LEED Reference Guide.

Construction Indoor Air Quality Management (1 point): The Project will develop an indoor air quality management plan during the construction phase.

Indoor Air Quality Assessment (2 points): Indoor Chemical and Pollutant Sources will be controlled by the utilization of separate exhausts for janitors' closets, walk off mats at entries, and garage separation and exhaust. A passive soil gas ventilation system will be installed with the ability to be converted to active if necessary.

Thermal Comfort (1 point): The mechanical design will comply with the ASHRAE 55 standards thereby meeting the LEED Thermal Comfort requirements.

Interior Lighting (2 points): Perimeter systems will be controllable through the use of operable windows and small lighting zones. The non-perimeter systems will be controllable by the incorporation of local controls and zones.

Daylight (3 points): The building design will provide daylight to seventy-five percent of the space in the building.

Quality Views (1 point): Seventy-five percent of the spaces designed for human occupancy (again excluding enclosed parking) will enjoy views to the outdoors.

Acoustic Performance (1 point): This building will be designed to exceed minimum code requirements STC and ICC ratings for acoustical performance.

2.6.3.7 Innovation and Design Process (1 point)

There are several ways in which the team plans to initiate innovation in the design process:

- The incorporation of environmental education into the process of the building construction and operation,
- The setting of a goal program in concert with the contractor for exemplary performance in handling construction waste,
- The use of energy star compliant appliances,
- A gearless traction elevator that uses substantially less energy that the traditional hoist elevator,
- Superior air sealant detailing coupled with mid-project blower door testing for quality control of the air sealing and
- Through the continued involvement of LEED accredited professionals.

2.6.3.8 Regional Priorities

The Project is also expected to obtain credit for meeting New England Regional Priorities under the USGBC Green Building Code.

Table 2-16 LEED Checklist

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

Project Name: The Clarion
Date: Aug 13th 2014

Y	?	N			
			Credit	Integrative Process	1

24	0	0	**Location and Transportation**		16
8			Credit	LEED for Neighborhood Development Location	16
1			Credit	Sensitive Land Protection	1
2			Credit	High Priority Site	2
5			Credit	Surrounding Density and Diverse Uses	5
5			Credit	Access to Quality Transit	5
1			Credit	Bicycle Facilities	1
1			Credit	Reduced Parking Footprint	1
1			Credit	Green Vehicles	1

7	1	0	**Sustainable Sites**		10
Y			Prereq	Construction Activity Pollution Prevention	Required
1			Credit	Site Assessment	1
		0	Credit	Site Development - Protect or Restore Habitat	2
		1	Credit	Open Space	1
3			Credit	Rainwater Management	3
2			Credit	Heat Island Reduction	2
1			Credit	Light Pollution Reduction	1

7	0	0	**Water Efficiency**		11
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
2			Credit	Outdoor Water Use Reduction	2
4			Credit	Indoor Water Use Reduction	6
	0		Credit	Cooling Tower Water Use	2
1			Credit	Water Metering	1

1	6	0	**Energy and Atmosphere**		33
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
1			Credit	Enhanced Commissioning	6
	1		Credit	Optimize Energy Performance	18
	0		Credit	Advanced Energy Metering	1
	2		Credit	Demand Response	2
	3		Credit	Renewable Energy Production	3
	0		Credit	Enhanced Refrigerant Management	1
	0		Credit	Green Power and Carbon Offsets	2

2	8	0	**Materials and Resources**		13
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
		2	Credit	Building Life-Cycle Impact Reduction	5
		2	Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
		2	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
		2	Credit	Building Product Disclosure and Optimization - Material Ingredients	2
		2	Credit	Construction and Demolition Waste Management	2

12	4	0	**Indoor Environmental Quality**		16
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
		2	Credit	Enhanced Indoor Air Quality Strategies	2
		3	Credit	Low-Emitting Materials	3
		1	Credit	Construction Indoor Air Quality Management Plan	1
		2	Credit	Indoor Air Quality Assessment	2
1			Credit	Thermal Comfort	1
		2	Credit	Interior Lighting	2
		3	Credit	Daylight	3
1			Credit	Quality Views	1
1			Credit	Acoustic Performance	1

1	0	0	**Innovation**		6
		0	Credit	Innovation	5
1			Credit	LEED Accredited Professional	1

0	4	0	**Regional Priority**		4
	1		Credit	Regional Priority: Specific Credit	1
	1		Credit	Regional Priority: Specific Credit	1
	1		Credit	Regional Priority: Specific Credit	1
	1		Credit	Regional Priority: Specific Credit	1

54	23	0	**TOTALS**	Possible Points:	110

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

3.0 COORDINATION WITH OTHER GOVERNMENTAL AGENCIES

3.1 Massachusetts Environmental Policy Act

The Project does not meet the thresholds for review under the Massachusetts Environmental Policy Act (MEPA) so an Environmental Notification Form (ENF) will not be filed.

3.2 Massachusetts Historical Commission

Since the Project does not require state permits so review by the Massachusetts Historical Commission (MHC) in accordance with M.G.L., Chapter 9, Sec. 26-27c, as amended by Chapter 254 of the Acts of 1988 (950 CMR 71.00) is not required.

3.3 Boston Landmarks Commission

The Project site does not contain any designated historic structures, is not in a Historic District nor is it in close proximity to designated historic properties. Therefore, review by the Boston Landmarks Commission is not required.

3.4 Architectural Access Board Requirements

The Project will comply with the requirements of the Architectural Access Board and the standards of the Americans with Disabilities Act.

3.5 Boston Civic Design Commission

Article 28 of the Boston Zoning Code stipulates that projects over 100,000 square feet shall be subject to review by the Boston Civic Design Commission. Preliminary determination by the BRA is that this project does not meet that threshold and therefore BCDC review is not required.

3.6 Other Permits and Approvals

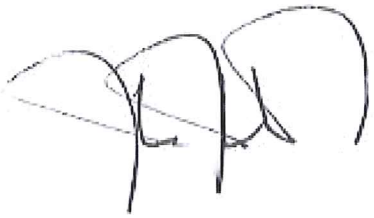
Section 1.5 of this PNF lists agencies from which permits and approvals for the Project will be sought.

3.7 Community Outreach

The Proponent is committed to effective community outreach and will engage the community to ensure public input on the Project.

4.0 PROJECT'S CERTIFICATION

This form has been circulated to the Boston Redevelopment Authority as required by the Boston Zoning Code, Article 80.



Signature of Proponent's Representative
Eliza Datta,
The Community Builders, Inc.

March 6, 2015
Date

Signature of Preparer
Thomas Maistros, Jr., AIA
Stull and Lee, Inc.

March 6, 2015
Date

Climate Change Preparedness and Resiliency Checklist for New Construction

In November 2013, in conformance with the Mayor's 2011 Climate Action Leadership Committee's recommendations, the Boston Redevelopment Authority adopted policy for all development projects subject to Boston Zoning Article 80 Small and Large Project Review, including all Institutional Master Plan modifications and updates, are to complete the following checklist and provide any necessary responses regarding project resiliency, preparedness, and to mitigate any identified adverse impacts that might arise under future climate conditions.

For more information about the City of Boston's climate policies and practices, and the 2011 update of the climate action plan, *A Climate of Progress*, please see the City's climate action web pages at http://www.cityofboston.gov/climate

In advance we thank you for your time and assistance in advancing best practices in Boston.

Climate Change Analysis and Information Sources:

1. Northeast Climate Impacts Assessment (www.climatechoices.org/ne/)
2. USGCRP 2009 (http://www.globalchange.gov/publications/reports/scientific-assessments/us-impacts/)
3. Army Corps of Engineers guidance on sea level rise (http://planning.usace.army.mil/toolbox/library/ECs/EC11652212Nov2011.pdf)
4. Proceeding of the National Academy of Science, "Global sea level rise linked to global temperature", Vermeer and Rahmstorf, 2009 (http://www.pnas.org/content/early/2009/12/04/0907765106.full.pdf)
5. "Hotspot of accelerated sea-level rise on the Atlantic coast of North America", Asbury H. Sallenger Jr*, Kara S. Doran and Peter A. Howd, 2012 (http://www.bostonredevelopmentauthority.org/planning/Hotspot of Accelerated Sea-level Rise 2012.pdf)
6. "Building Resilience in Boston": Best Practices for Climate Change Adaptation and Resilience for Existing Buildings, Linnean Solutions, The Built Environment Coalition, The Resilient Design Institute, 2103 (http://www.greenribboncommission.org/downloads/Building_Resilience_in_Boston_SML.pdf)

Checklist

Please respond to all of the checklist questions to the fullest extent possible. For projects that respond "Yes" to any of the D.1 – Sea-Level Rise and Storms, Location Description and Classification questions, please respond to all of the remaining Section D questions.

Checklist responses are due at the time of initial project filing or Notice of Project Change and final filings just prior seeking Final BRA Approval. A PDF of your response to the Checklist should be submitted to the Boston Redevelopment Authority via your project manager.

Please Note: When initiating a new project, please visit the BRA web site for the most current Climate Change Preparedness & Resiliency Checklist.

A.1 - Project Information

Project Name:	The Clarion
Project Address Primary:	311 Blue Hill Ave
Project Address Additional:	
Project Contact (name / Title / Company / email / phone):	Noah Sawyer, Senior Project Manager, The Community Builders, Nsawyer@tcbinc.org, 857-221-8668

A.2 - Team Description

Owner / Developer:	The Community Builders, Inc.
Architect:	Stull and Lee, Inc.
Engineer (building systems):	Wozny Barbar & Associates
Sustainability / LEED:	Stull and Lee, Inc.
Permitting:	Stull and Lee, Inc.
Construction Management:	The Community Builders, Inc.
Climate Change Expert:	The Community Builders, Inc.

A.3 - Project Permitting and Phase

At what phase is the project – most recent completed submission at the time of this response?

PNF / Expanded PNF Submission	Draft / Final Project Impact Report Submission	BRA Board Approved	Notice of Project Change
Planned Development Area	BRA Final Design Approved	Under Construction	Construction just completed:

A.4 - Building Classification and Description

List the principal Building Uses:	40 units of residential housing, 5,000 s.f. of retail
List the First Floor Uses:	*5,000 s.f. of retail space*

What is the principal Construction Type – select most appropriate type?

Wood Frame	Masonry	***Steel Frame***	Concrete

Describe the building?

Site Area:	*43,985 SF*	Building Area:	*SF*
Building Height:	*Ft.*	Number of Stories:	*4 Flrs.*
First Floor Elevation (reference Boston City Base):	*78 ft Elev.*	Are there below grade spaces/levels, if yes how many:	*No / Number of Levels*

A.5 - Green Building

Which LEED Rating System(s) and version has or will your project use (by area for multiple rating systems)?

Select by Primary Use:	**New Construction**	Core & Shell	Healthcare	Schools
	Retail	Homes Midrise	Homes	Other
Select LEED Outcome:	Certified	**Silver**	Gold	Platinum

Will the project be USGBC Registered and / or USGBC Certified?

Registered:	*Yes / **No***	Certified:	*Yes / **No***

A.6 - Building Energy

What are the base and peak operating energy loads for the building?

Electric:	*380 (kW)*	Heating:	*12.07(MMBtu/hr)*
What is the planned building Energy Use Intensity:	*9 kWh/SF/Yr*	Cooling:	*105(Tons/hr)*

What are the peak energy demands of your critical systems in the event of a service interruption?

Electric:	*N/A*	Heating:	*0(MMBtu/hr)*
		Cooling:	*0(Tons/hr)*

What is nature and source of your back-up / emergency generators?

Electrical Generation:	*None (kW)*		Fuel Source:	
System Type and Number of Units:	Combustion Engine	Gas Turbine	Combine Heat and Power	*(Units)*

B - Extreme Weather and Heat Events

Climate change will result in more extreme weather events including higher year round average temperatures, higher peak temperatures, and more periods of extended peak temperatures. The section explores how a project responds to higher temperatures and heat waves.

B.1 - Analysis

What is the full expected life of the project?

Select most appropriate:	10 Years	25 Years	**50 Years**	75 Years

What is the full expected operational life of key building systems (e.g. heating, cooling, ventilation)?

Select most appropriate:	10 Years	**25 Years**	50 Years	75 Years

What time span of future Climate Conditions was considered?

Select most appropriate:	10 Years	**25 Years**	50 Years	75 Years

Analysis Conditions - What range of temperatures will be used for project planning – Low/High?

7F/87F Deg.

What Extreme Heat Event characteristics will be used for project planning – Peak High, Duration, and Frequency?

N/A Deg.	N/A Days	N/A Events / yr.

What Drought characteristics will be used for project planning – Duration and Frequency?

N/A Days	N/A Events / yr.

What Extreme Rain Event characteristics will be used for project planning – Seasonal Rain Fall, Peak Rain Fall, and Frequency of Events per year?

N/A Inches / yr.	N/A Inches	N/A Events / yr.

What Extreme Wind Storm Event characteristics will be used for project planning – Peak Wind Speed, Duration of Storm Event, and Frequency of Events per year?

N/A Peak Wind	N/A Hours	N/A Events / yr.

B.2 - Mitigation Strategies

What will be the overall energy performance, based on use, of the project and how will performance be determined?

Building energy use below code:	At least 20%
How is performance determined:	ASHRAE Energy Modeling

What specific measures will the project employ to reduce building energy consumption?

Select all appropriate:	High performance building envelop	High performance lighting & controls	Building day lighting	EnergyStar equip. / appliances
	High performance HVAC equipment	Energy recovery ventilation	No active cooling	No active heating
Describe any added measures:				

What are the insulation (R) values for building envelop elements?

Roof:	R = 38	Walls / Curtain Wall Assembly:	R = 20
Foundation:	R = 10	Basement / Slab:	R =19
Windows:	R = / U =	Doors:	R = / U =

What specific measures will the project employ to reduce building energy demands on the utilities and infrastructure?

On-site clean energy / CHP system(s)	Building-wide power dimming	Thermal energy storage systems	Ground source heat pump
On-site Solar PV	On-site Solar Thermal	Wind power	None
Describe any added measures:			

Will the project employ Distributed Energy / Smart Grid Infrastructure and /or Systems?

Select all appropriate:	Connected to local distributed electrical	Building will be Smart Grid ready	Connected to distributed steam, hot, chilled water	Distributed thermal energy ready

Will the building remain operable without utility power for an extended period?

	Yes / No	If yes, for how long:	*Days*
If Yes, is building "Islandable?			
If Yes, describe strategies:			

Describe any non-mechanical strategies that will support building functionality and use during an extended interruption(s) of utility services and infrastructure:

Select all appropriate:	Solar oriented – longer south walls	Prevailing winds oriented	External shading devices	Tuned glazing,
	Building cool zones	**Operable windows**	**Natural ventilation**	**Building shading**
	Potable water for drinking / food preparation	Potable water for sinks / sanitary systems	Waste water storage capacity	High Performance Building Envelop
Describe any added measures:				

What measures will the project employ to reduce urban heat-island effect?

Select all appropriate:	High reflective paving materials	**Shade trees & shrubs**	**High reflective roof materials**	Vegetated roofs
Describe other strategies:				

What measures will the project employ to accommodate rain events and more rain fall?

Select all appropriate:	**On-site retention systems & ponds**	Infiltration galleries & areas	vegetated water capture systems	Vegetated roofs
Describe other strategies:				

What measures will the project employ to accommodate extreme storm events and high winds?

Select all appropriate:	Hardened building structure & elements	**Buried utilities & hardened infrastructure**	Hazard removal & protective landscapes	Soft & permeable surfaces (water infiltration)
Describe other strategies:				

C - Sea-Level Rise and Storms

Rising Sea-Levels and more frequent Extreme Storms increase the probability of coastal and river flooding and enlarging the extent of the 100 Year Flood Plain. This section explores if a project is or might be subject to Sea-Level Rise and Storm impacts.

C.1 - Location Description and Classification:

Do you believe the building to susceptible to flooding now or during the full expected life of the building?

	*Yes / **No***

Describe site conditions?

Site Elevation – Low/High Points:	*Boston City Base Elev.(78-88 Ft.)*

Building Proximity to Water:	>500 Ft.

Is the site or building located in any of the following?

Coastal Zone:	Yes / No	Velocity Zone:	Yes / No
Flood Zone:	Yes / No	Area Prone to Flooding:	Yes / No

Will the 2013 Preliminary FEMA Flood Insurance Rate Maps or future floodplain delineation updates due to Climate Change result in a change of the classification of the site or building location?

2013 FEMA Prelim. FIRMs:	Yes / No	Future floodplain delineation updates:	Yes / No

What is the project or building proximity to nearest Coastal, Velocity or Flood Zone or Area Prone to Flooding?

>500 Ft.

If you answered YES to any of the above Location Description and Classification questions, please complete the following questions. ***Otherwise you have completed the questionnaire; thank you!***

C - Sea-Level Rise and Storms

This section explores how a project responds to Sea-Level Rise and / or increase in storm frequency or severity.

C.2 - Analysis

How were impacts from higher sea levels and more frequent and extreme storm events analyzed:

Sea Level Rise:	Ft.	Frequency of storms:	per year

C.3 - Building Flood Proofing

Describe any strategies to limit storm and flood damage and to maintain functionality during an extended periods of disruption.

What will be the Building Flood Proof Elevation and First Floor Elevation:

Flood Proof Elevation:	Boston City Base Elev.(Ft.)	First Floor Elevation:	Boston City Base Elev. (Ft.)

Will the project employ temporary measures to prevent building flooding (e.g. barricades, flood gates):

	Yes / No	If Yes, to what elevation	Boston City Base Elev. (Ft.)
If Yes, describe:			

What measures will be taken to ensure the integrity of critical building systems during a flood or severe storm event:

Systems located above 1st Floor.	Water tight utility conduits	Waste water back flow prevention	Storm water back flow prevention

Were the differing effects of fresh water and salt water flooding considered:

Yes / No

Will the project site / building(s) be accessible during periods of inundation or limited access to transportation:

Yes / No		If yes, to what height above 100 Year Floodplain:	Boston City Base Elev. (Ft.)

Will the project employ hard and / or soft landscape elements as velocity barriers to reduce wind or wave impacts?

	Yes / No
If Yes, describe:	

Will the building remain occupiable without utility power during an extended period of inundation:

	Yes / No	If Yes, for how long:	days

Describe any additional strategies to addressing sea level rise and or sever storm impacts:

C.4 - Building Resilience and Adaptability

Describe any strategies that would support rapid recovery after a weather event and accommodate future building changes that respond to climate change:

Will the building be able to withstand severe storm impacts and endure temporary inundation?

Select appropriate:	Yes / No	Hardened / Resilient Ground Floor Construction	Temporary shutters and or barricades	Resilient site design, materials and construction

Can the site and building be reasonably modified to increase Building Flood Proof Elevation?

Select appropriate:	Yes / No	Surrounding site elevation can be raised	Building ground floor can be raised	Construction been engineered
Describe additional strategies:				

Has the building been planned and designed to accommodate future resiliency enhancements?

Select appropriate:	Yes / No	Solar PV	Solar Thermal	Clean Energy / CHP System(s)
		Potable water storage	Wastewater storage	Back up energy systems & fuel
Describe any specific or additional strategies:				

Thank you for completing the Boston Climate Change Resilience and Preparedness Checklist!

For questions or comments about this checklist or Climate Change Resiliency and Preparedness best practices, please contact: John.Dalzell.BRA@cityofboston.gov

Accessibility Checklist

(To be added to the BRA Development Review Guidelines)

In 2009, a nine-member Advisory Board was appointed to the Commission for Persons with Disabilities in an effort to reduce architectural, procedural, attitudinal, and communication barriers affecting persons with disabilities in the City of Boston. These efforts were instituted to work toward creating universal access in the built environment.

In line with these priorities, the Accessibility Checklist aims to support the inclusion of people with disabilities. In order to complete the Checklist, you must provide specific detail, including descriptions, diagrams and data, of the universal access elements that will ensure all individuals have an equal experience that includes full participation in the built environment throughout the proposed buildings and open space.

In conformance with this directive, all development projects subject to Boston Zoning Article 80 Small and Large Project Review, including all Institutional Master Plan modifications and updates, are to complete the following checklist and provide any necessary responses regarding the following:

- improvements for pedestrian and vehicular circulation and access;
- encourage new buildings and public spaces to be designed to enhance and preserve Boston's system of parks, squares, walkways, and active shopping streets;
- ensure that persons with disabilities have full access to buildings open to the public;
- afford such persons the educational, employment, and recreational opportunities available to all citizens; and
- preserve and increase the supply of living space accessible to persons with disabilities.

We would like to thank you in advance for your time and effort in advancing best practices and progressive approaches to expand accessibility throughout Boston's built environment.

Accessibility Analysis Information Sources:

1. Americans with Disabilities Act – 2010 ADA Standards for Accessible Design
    a. http://www.ada.gov/2010ADAstandards_index.htm
2. Massachusetts Architectural Access Board 521 CMR
    a. http://www.mass.gov/eopss/consumer-prot-and-bus-lic/license-type/aab/aab-rules-and-regulations-pdf.html
3. Boston Complete Street Guidelines
    a. http://bostoncompletestreets.org/
4. City of Boston Mayors Commission for Persons with Disabilities Advisory Board
    a. http://www.cityofboston.gov/Disability
5. City of Boston – Public Works Sidewalk Reconstruction Policy
    a. http://www.cityofboston.gov/images_documents/sidewalk%20policy%200114_tcm3-41668.pdf
6. Massachusetts Office On Disability Accessible Parking Requirements

Article 80 | ACCESSIBILTY CHECKLIST

Project Information

Project Name:	The Clarion
Project Address Primary:	311 Blue Hill Ave
Project Address Additional:	Roxbury, MA
Project Contact (name / Title / Company / email / phone):	Noah Sawyer, Senior Project Manager, The Community Builders, nsawyer@tcbinc.org

Team Description

Owner / Developer:	The Community Builders, Inc.
Architect:	Stull and Lee, Inc.
Engineer (building systems):	Wozny/Barbar & Associates, Inc.
Sustainability / LEED:	n/a
Permitting:	Stull and Lee, Inc.
Construction Management:	The Community Builders, Inc.

Project Permitting and Phase

At what phase is the project – at time of this questionnaire?

PNF / Expanded PNF Submitted	Draft / Final Project Impact Report Submitted	BRA Board Approved
BRA Design Approved	Under Construction	Construction just completed:

Building Classification and Description

What are the principal Building Uses - select all appropriate uses?

Residential – One	Residential -	Institutional	Education

Article 80 | ACCESSIBILTY CHECKLIST

	to Three Unit	Multi-unit, Four +		
	Commercial	Office	Retail	Assembly
	Laboratory / Medical	Manufacturing / Industrial	Mercantile	Storage, Utility and Other
First Floor Uses (List)	*Entry to Housing Units on floors above; management offices; retails & utility rooms*			

What is the Construction Type – select most appropriate type?

Wood Frame 2 Family Townhouse	Masonry	Steel Frame 4 Story Mixed Use	Concrete

Describe the buildings?

4 Story Mixed Use Building

Site Area:	*44, 047 GSF*	Building Area:	*54,336 GSF*
Building Height:	*43 Ft.*	Number of Stories:	*4 Floors*
First Floor Elevation:	*+/- 78'-6" Elev.*	Are there below grade spaces:	*No*

2 Family Town House

Site Area:	*44, 047 GSF*	Building Area:	*3,635 GSF*
Building Height:	*39 Ft.*	Number of Stories:	*2 ½ Stories 3 Flrs.*
First Floor Elevation:	*+/- 85' Elev.*	Are there below grade spaces:	*Yes but not habitable*

Assessment of Existing Infrastructure for Accessibility:

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

Provide a description of the development neighborhood and identifying characteristics.	The site is on a commercial corridor running through a residential neighborhood of single and multifamily housing. Adjacent properties include a gas station and bus stop on the east side of Blue Hill Ave; a Boston Public school on the North side of Quincy Street, a public park with a basketball court on the South side of Quincy Street just West of the Project site and retail stores on Blue Hill Ave. The existing Project site is currently vacant. The grade is relatively flat, with a steep grade

	increase at the rear of the site.
List the surrounding ADA compliant MBTA transit lines and the proximity to the development site: Commuter rail, subway, bus, etc.	MBTA route 45 stops in front of the property site. The route connects to Ruggles and Roxbury Crossing Stations. A quarter mile from the site, MBTA Routes 14, 19, 23 and 28 connect to Roslindale, Heath Street Station, Fields Corner, Ashmont, and Mattapan Stations. All routes are served by kneeling buses with lifts or ramps.
List the surrounding institutions: hospitals, public housing and elderly and disabled housing developments, educational facilities, etc.	The Rev. Dr. Michael E. Haynes Early Education Center is across the street from the development site. Boston Latin Academy is 0.4 miles from the project site, and the Trotter Elementary School is 0.5 miles from the site. Quincy Commons, an affordable senior housing, is across the street from the site, and there are multiple affordable housing developments within 0.5 miles. Upharms Corner health center is 0.8 miles from the site.
Is the proposed development on a priority accessible route to a key public use facility? List the surrounding: government buildings, libraries, community centers and recreational facilities and other related facilities.	The property is adjacent to the Quincy Street playlot, as well as the Haynes Early Learning Center. The Grove Hall branch of the Boston Public Library is 0.5 miles south of the site.

Surrounding Site Conditions – Existing:

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

Are there sidewalks and pedestrian ramps existing at the development site?	Yes
If yes above, list the existing sidewalk and pedestrian ramp materials and physical condition at the development site.	The adjacent sidewalks include curb cuts and yellow traction pads after recent upgrades.
Are the sidewalks and pedestrian ramps existing-to-remain? If yes, have the sidewalks and pedestrian ramps been verified as compliant? If yes, please provide surveyors report.	Existing ramps will remain; the ramps are the result of recent upgrades, and meet current accessibility standards.
Is the development site within a historic district? If yes, please identify.	No

Surrounding Site Conditions – Proposed

This section identifies the proposed condition of the walkways and pedestrian ramps in and around the development site. The width of the sidewalk contributes to the degree of comfort and enjoyment of 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. Typically, a five foot wide Pedestrian Zone supports two people walking side by side or two wheelchairs passing each other. An eight foot wide Pedestrian Zone allows two pairs of people to comfortable pass each other, and a ten foot or wider Pedestrian Zone can support high volumes of pedestrians.

Are the proposed sidewalks consistent with the Boston Complete Street Guidelines? See: www.bostoncompletestreets.org	Yes
If yes above, choose which Street Type was applied: Downtown Commercial, Downtown Mixed-use, Neighborhood Main, Connector, Residential, Industrial, Shared Street, Parkway, and Boulevard.	Neighborhood Main
What is the total width of the proposed sidewalk? List the widths of the proposed zones: Frontage, Pedestrian and Furnishing Zone.	Proposed: 15'-6" wide side walk along Blue Hill Ave 14'-0" wide side walk along Holborn Street 8'-0" wide side walk along Quincy Street
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?	Specific materials for each zone have not yet been selected. All materials will meet all MA codes and comply with ADA.
If the pedestrian right-of-way is on private property, will the proponent seek a pedestrian easement with the City of Boston Public Improvement Commission?	No pedestrian right-of-way on private property
Will sidewalk cafes or other furnishings be programmed for the pedestrian right-of-way?	There are no furnishings planned for the pedestrian right of way.
If yes above, what are the proposed dimensions of the sidewalk café or furnishings and what will the right-of-way clearance be?	To Be Designed by a future Landscape Architect. All clearances will meet all MA codes and comply with ADA.

Proposed 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 Handicap Parking Regulations.

What is the total number of parking spaces provided at the development site parking lot or garage?	33 spaces
What is the total number of accessible spaces provided at the development site?	3 spaces (10%)
Will any on street accessible parking spaces be required? If yes, has the proponent contacted the Commission for Persons with Disabilities and City of Boston Transportation Department regarding this need?	No.
Where is accessible visitor parking located?	Accessible visitor parking will be included in the rear parking lot.
Has a drop-off area been identified? If yes, will it be accessible?	Yes. It will be accessible.
Include a diagram of the accessible routes to and from the accessible parking lot/garage and drop-off areas to the development entry locations. Please include route distances.	Final designs are in process.

Circulation and Accessible Routes:

The primary objective in designing smooth and continuous paths of travel is to accommodate persons of all abilities that allow for universal access to entryways, common spaces and the visit-ability* of neighbors.

**Visit-ability – Neighbors ability to access and visit with neighbors without architectural barrier limitations*

Provide a diagram of the accessible route connections through the site.	To Be Designed
Describe accessibility at each entryway: Flush Condition, Stairs, Ramp and Elevator.	Exterior building entries to be flush with grade, corridors lead to elevators and unit entries will be flush with corridor floor.
Are the accessible entrance and the standard entrance integrated?	All entrances will be accessible.
If no above, what is the reason?	
Will there be a roof deck or outdoor courtyard space? **If yes,** include diagram of the accessible route.	There is no roof deck planned for this project. An outdoor park is planned at grade and will meet all MA codes when the design is final.
Has an accessible routes way-finding and signage package been developed? **If yes,** please describe.	To Be Designed

Accessible Units: (If applicable)

In order to facilitate access to housing opportunities this section addresses the number of accessible units that are proposed for the development site that remove barriers to housing choice.

What is the total number of proposed units for the development?	40 Units
How many units are for sale; how many are for rent? What is the market value vs. affordable breakdown?	All units will be rentable. 27 will be affordable and 13 market rate
How many accessible units are being proposed?	3 – 1 bedroom units and 3 – 2 bedroom units

Please provide plan and diagram of the accessible units.	See unit plans attached.
How many accessible units will also be affordable? If none, please describe reason.	At least five of the six accessible units will be restricted as affordable.
Do standard units have architectural barriers that would prevent entry or use of common space for persons with mobility impairments? Example: stairs at entry or step to balcony. If yes, please provide reason.	No
Has the proponent reviewed or presented the proposed plan to the City of Boston Mayor's Commission for Persons with Disabilities Advisory Board?	The project has not yet been presented to the Mayor's Commission
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 yet

Thank you for completing the Accessibility Checklist!

For questions or comments about this checklist or accessibility practices, please contact:

kathryn.quigley@boston.gov | Mayors Commission for Persons with Disabilities

APPENDIX C

Disclosure Statement Concerning Beneficial Interests as

Required by Article 80, Section 80B-8, of the Boston Zoning Code

(1) Name of Project: The Clarion

(2) Location: 311 Blue Hill Avenue, Dorchester

(3) Applicant: The Community Builders, Inc.

(4) I hereby state, under the penalties of perjury, that the true names and addresses of the Persons who have a Beneficial Interest (including the amount of their Beneficial Interest accurate to within one-tenth of one percent if such interest exceeds one percent) in the above-listed property are listed below in compliance with the provisions of Article 80, Section 80B-8, of the Boston Zoning Code.

NAMEAND RESIDNENCE OF EACH PERSON WITH SAID BENEFICIAL INTEREST (continue on separate sheet if necessary):

	Percentage Interest
NAME: The Community Builders, Inc.	100%
ADDRESS: 95 Berkeley St, Suite 500, Boston, MA 02116	
NAME:	
ADDRESS:	
NAME:	
ADDRESS:	
NAME:	
ADDRESS:	
NAME:	
ADDRESS:	
NAME:	
ADDRESS:	

ARTICLE 80 – DEVELOPMENT REVIEW AND APPROVAL 101

APPENDIX C (continued)

(5) The undersigned also acknowledges and states that except as stated below, none of the above-listed individuals is an official elected to public office in the Commonwealth of Massachusetts, nor is and employee of the State Department of Capital Planning and Operations.

(6) I hereby state, under the penalties of perjury, that the names and addresses of all firms and professional corporations employing attorneys, real estate brokers, architects, engineers, planners, or surveyors, and all other agents who have ac ted on behalf of any of the forgoing with respect to the application of Zoning Relief on the above-listed property are listed below in compliance with the provisions of Article 80, Section 80B-8, of the Boston Zoning Code.

NAMES AND ADDRESSES OF ALL FIRMS AND PROFESSIONAL CORPORATIONS, AND AGENTS WHO HAVE ACTED ON SAID APPLICATION (continue on separate sheet if necessary):

NAME: Stull and Lee, Architects

ADDRESS: 103 Terrace St, Boston, MA 02120

NAME: The Community Builders, Inc.

ADDRESS: 95 Berkeley St, Suite 500, Boston, MA 02116

NAME: Design Engineering Innovation

ADDRESS: 14 Spring Street, Waltham, MA 02151

NAME: Goldstein- Milano, LLC

ADDRESS: 125 Main Street #2, Reading, MA 01867

NAME:

ADDRESS:

NAME:

ADDRESS:

SIGNED under the penalties of perjury.

Signature: Eliza Datta

Name Printed: Eliza Datta, Vice President

Date: 3/6/15