Project Notification Form- Parsons Crossing

425 Washington St.
Brighton, MA

November 12, 2013

SUBMITTED TO:
Boston Redevelopment Authority

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1.0 EXECUTIVE SUMMARY

1.1 Introduction

This Project Notification Form ("PNF") is being submitted in accordance with Article 80 of the Boston Zoning Code ("the Code") by Kandu Development, LLC (the "Proponent") for Parsons Crossing, a proposed mixed-use project at 425 Washington Street at the intersection of Washington and North Parsons Streets in the Allston-Brighton neighborhood of Boston (the "project site"). The project site incorporates two parcels of land with a total lot size of 47,116 SF, consisting of the Washington Street parcel containing 29,263 SF, and the {Parsons Street Lot C containing 17,853 SF.

The proposed new complex, encompassing four linked buildings, will accommodate 60 residential units, approximately 15,200 gross square feet of ground floor retail uses including a bank and a urban grocery store at the street level; a small modern management office; a period renovation of an existing house and a total of 139 parking spaces of which 44 spaces will be in a surface lot in the courtyard of the buildings with 95 spaces located in a one-level, below-grade garage ("proposed project").

The proposed project will replace a marginal and aging commercial use, and will return a greatly desired urban market to an under-served neighborhood and add housing in a high demand livable community. It will also provide a convenient, affordable housing alternative for the neighborhood, serving existing residents and those wishing to return to the City of Boston. The site is conveniently located close to the Massachusetts Turnpike and Storrow Drive as well as two MBTA bus lines for easy access to downtown Boston, Watertown and Cambridge.

The Proponent commenced "Large Project Review" under Article 80 of the Boston Zoning Code with the filing to the BRA on March 12, 2013 of a Letter of Intent to file a Project Notification Form (see **Appendix A**). The Proponent has also initiated outreach to City agencies including the Boston Redevelopment Authority, the Boston Transportation Department, and the Mayor's Office of Neighborhood Services as well as with the Brighton/Allston Improvement Association, neighborhood representatives and interested parties over the past year with respect to the Project. During the summer 2013, the Proponent presented early design sketches for the proposed project at a regularly scheduled meeting of the Brighton-Allston Improvement Association. The Proponent also met separately with elected officials representing the area as well as with a representative of the Allston Civic Association.

This expanded Project Notification Form ("PNF") presents details about the proposed project, and provides an overview of the urban design, environmental protection, historic resources, infrastructure, transportation and other components of the proposed project in order to inform City agencies and neighborhood residents of the Project, potential impacts, and mitigation to address impacts. It is anticipated that with the detailed studies and analyses of each of these subjects presented herein, a Draft Project Impact Report ("DPIR") will not be required.

1.2 Proposed Project

1.2.1 Project Site and Context

The proposed project incorporates two parcels with a total lot size of 47,116 SF, consisting of the Washington Street parcel containing 29,263 SF, and the Parsons Street Lot C containing 17,853 SF (see **Figure 1-1. Project Locus and Figure 1-2. Project Aerial**). These parcels are in two different zoning sub-districts within the Allston Brighton Neighborhood District. The Washington Street Parcel is in a Neighborhood Shopping sub-district (NS-1) and the Parsons Street Lot C is in the 1-F 5000 sub-district.

The proposed project will replace a marginal and aging commercial use, and will return a greatly desired urban market to an under-served neighborhood. It will also provide a convenient, affordable housing alternative for the neighborhood, serving existing residents and those wishing to move back into the City of Boston. The site is also conveniently located close to the Massachusetts Turnpike and Storrow Drive as well as two MBTA bus lines for easy access to downtown Boston, Watertown and Cambridge. (See **Figure 1-3. Existing Conditions Plan**).

The immediate neighborhood contains a mixture of retail and residential uses. To the north is a residential neighborhood with a mixture of single family homes, duplexes, and multi-family residential buildings. To the south and across Washington Street, there is the Post Office, a branch bank, a church and a self-serve laundry facility. To the west is a CVS pharmacy and a small restaurant, and, to the east, is a series of small local retail shops and restaurants with a mixture of offices and personal service providers on the floors above the street level shops.

The concept for the proposed project is as a mixed-use complex with neighborhood service retail at the ground level and a range of apartment types including one-, two- and three-bedroom units on the upper floors. The apartments are concentrated in mid-rise buildings allowing for substantial open space and a parking court in the center of the residential enclave. Not only will the proposed housing be close to major work centers, it is also convenient to neighborhood services such as the St. Elizabeth's Medical Center and the various stores, restaurants and businesses in Brighton Center. There are also several local establishments such as adjacent CVS pharmacy and many small businesses that will benefit by increasing the available housing at this location.

Figure 1-1. Project Locus

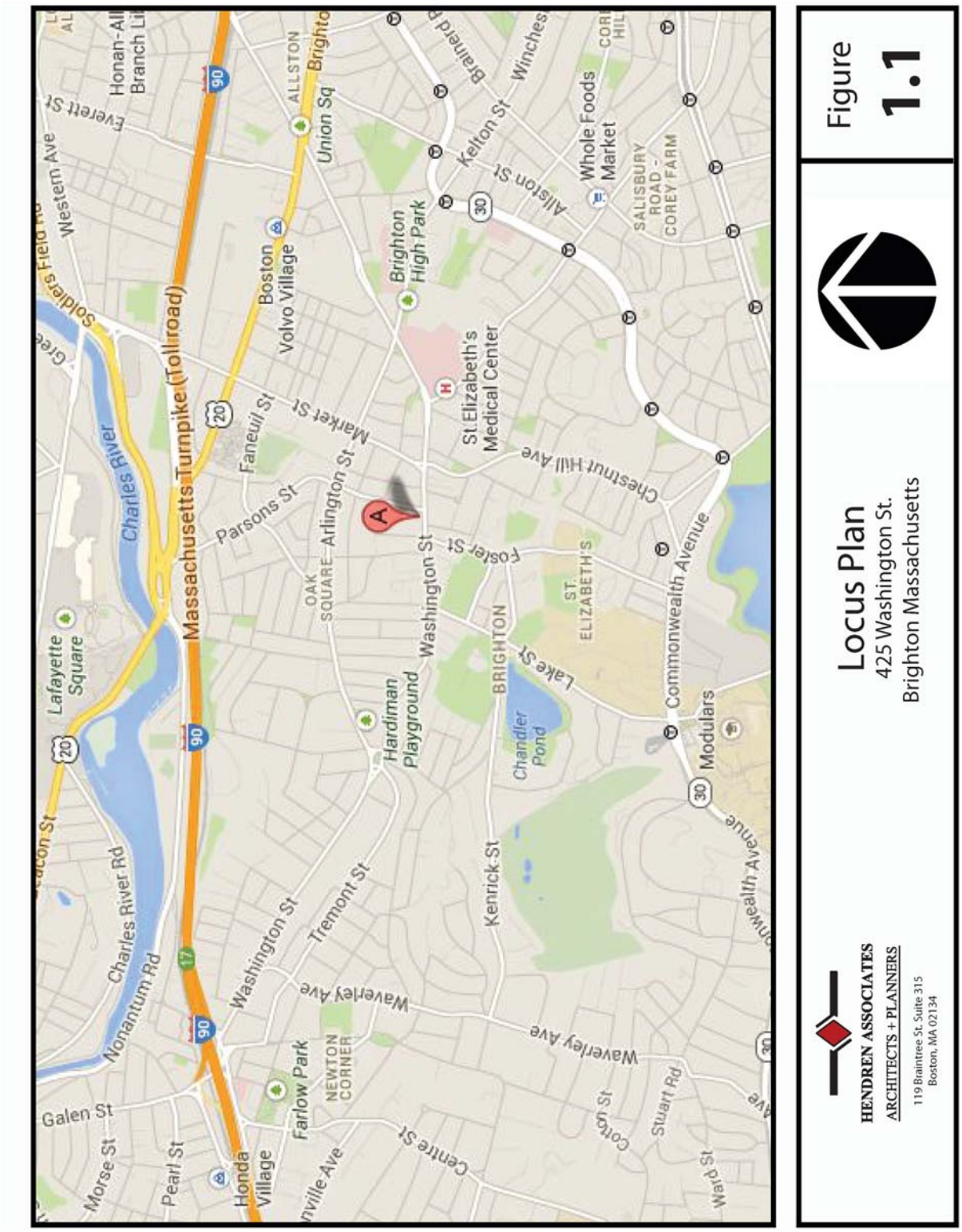


Figure 1-2. (Project Aerial).

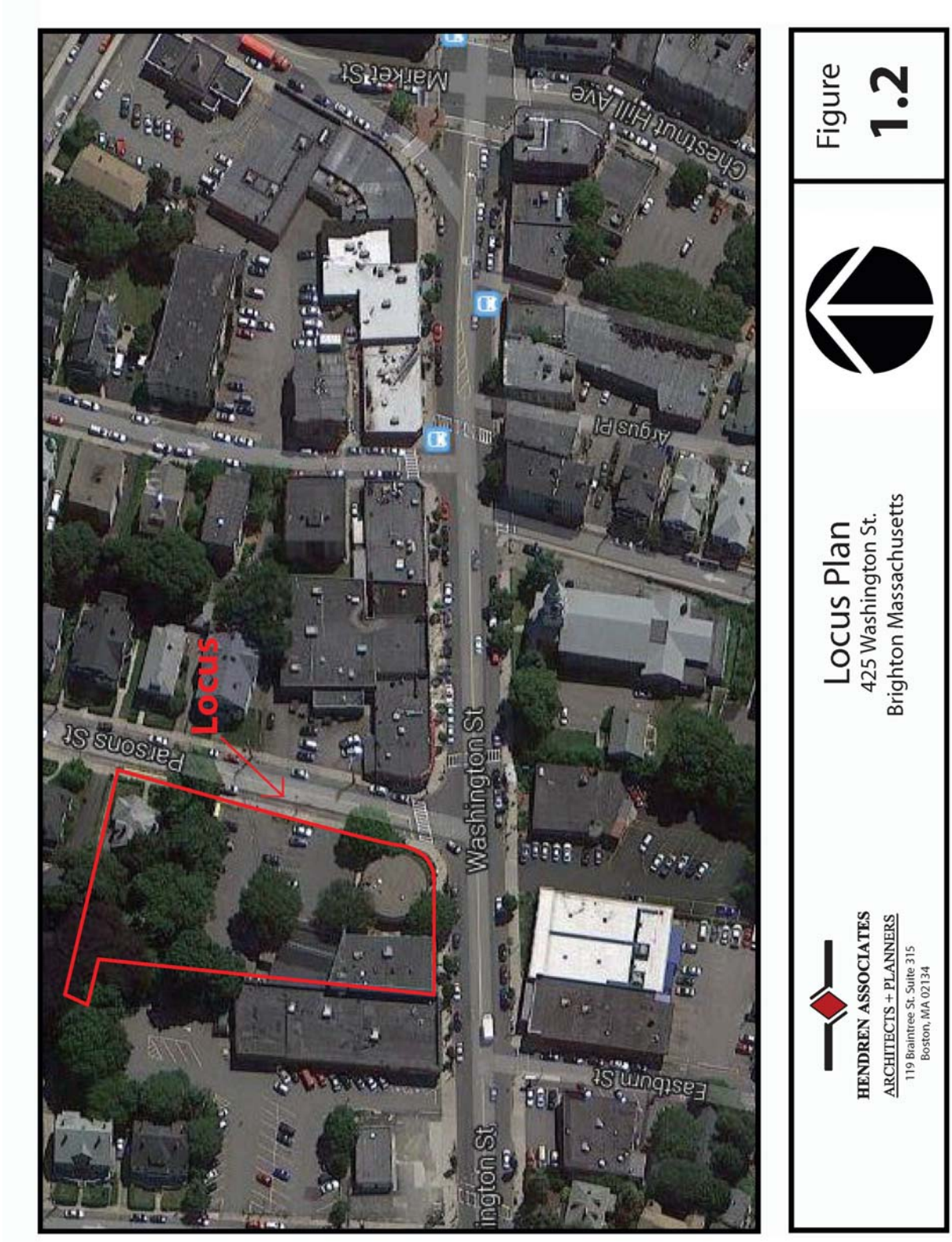
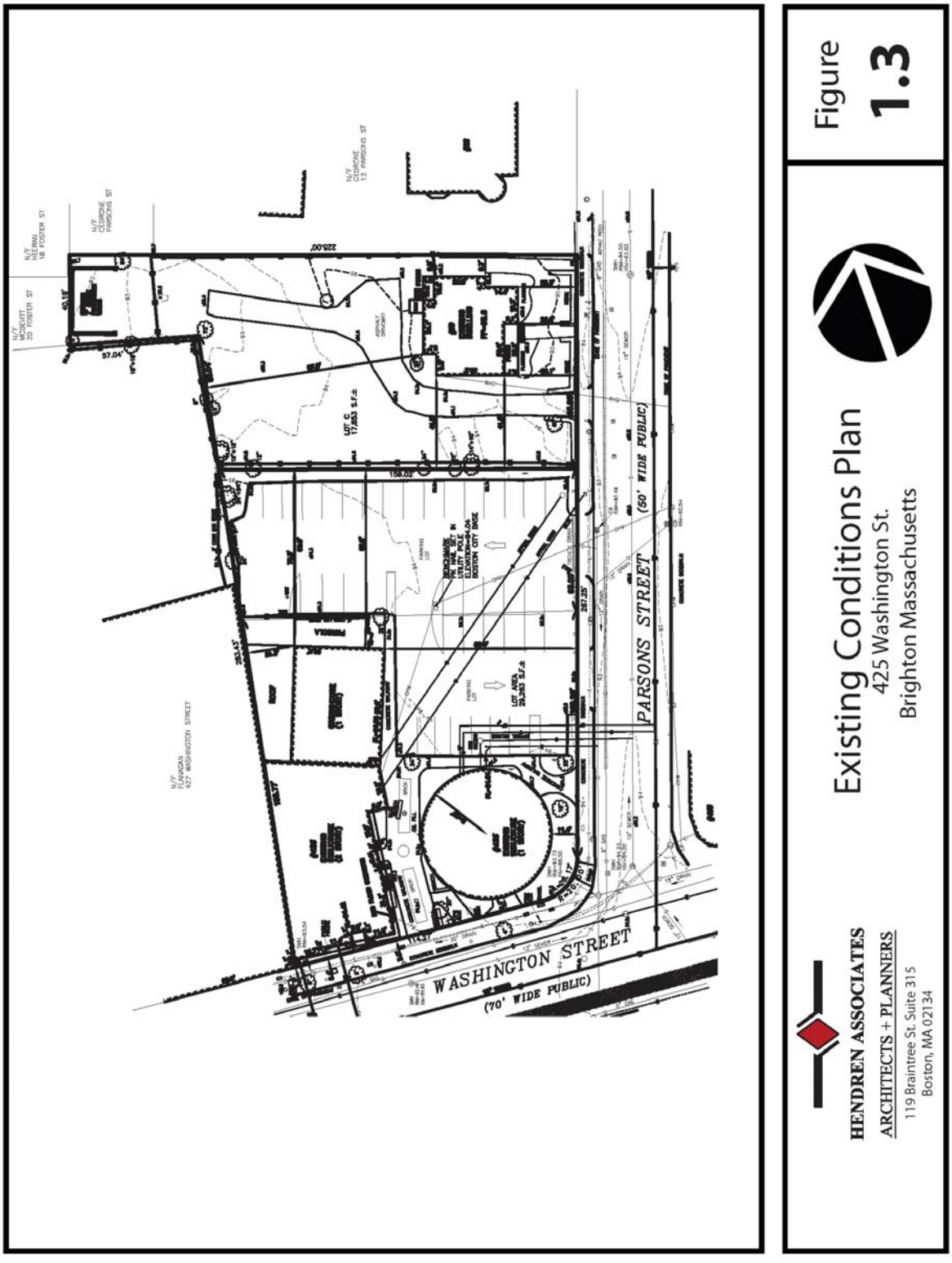


Figure 1-3. Existing Conditions Plan



1.2.2 Project Description

The proposed project consists of a mixed-use commercial and residential project in four contiguous buildings with underground and surface parking spaces. The breakdown of space includes approximately 15,200 GSF of commercial retail space and approximately 65,600 GSF of residential space or 60 apartments. The preliminary unit breakdown is for 1-three-bedroom, 26-two-bedrooms, and 33-one-bedrooms. Parking will be provided on-site with 44 on-grade parking spaces for retail uses and 95 below-grade spaces in a single-level, underground private garage for residents and visitors. Each one bedroom unit will be assigned one-space; each two bedroom unit will be assigned two spaces, and each three bedroom room will be assigned two spaces.

The proposed project fronts on two roadways: Washington and Parsons Streets. The site is regular in shape and virtually flat in topography. The site currently contains four existing buildings and a grade level parking lot for 42 cars. Fronting Washington Street is the single-story round Commerce Bank building with a basement and a two story commercial building with a flower shop and Boston College Student Services office on the street level and several small offices on the second floor. Abutting the rear of the 2-story commercial is a single-story greenhouse. On Parsons Street is a single-family residence that is to remain and be integrated into the proposed development.

The proposed development is being envisioned as a transitional building between the commercial use on Washington Street and the residential homes further down Parsons Street. For this reason, the scale, height and density of the proposed development is greater at the edge of Washington Street and reduces as the buildings step closer to the residential neighborhood. The parking is located in the center of the site or underground to screen it from the abutting homes and maintain the "walkable" nature of the community.

The proposed Washington Street Building is to be four stories with 15,190 SF of commercial space at ground level and 36 residential units above. This building has been designed with the largest scale elements and is slightly taller than the other buildings within the complex. The materials that have been selected are masonry and metal panels evoking the commercial character of Washington Street and complimenting the Post Office and bank flanking this busy thoroughfare. The commercial parking is held within a screened courtyard at grade for customer convenience but out of sight. The building is set back from the property line to allow for ample sidewalks, street trees and additional landscaping to address the pedestrian traffic. Washington Street is a major connector in Brighton, has public curbside parking on both sides of the street, two main bus lines, designated bike lanes and moderate pedestrian usage which makes it an active urban scene, which is to maintained and enhanced by this development.

The Parsons Street Building is proposed at four stories 24 apartments in a residential cluster over the parking court. This building is aligned with the existing house, which is to remain, with deep

front yards consistent with the remainder of this residential street. Although the proposed building is also four stories , the total height is four shorter than the Washington Street Building, the scale is smaller due to the materials, window patterns and mass distribution which is in keeping with the existing single-family house. This all residential building is grouped as a cluster of apartments with intimate spaces, interior light courts and the top floor is stepped to reduce the visual height and mass of the complex.

The existing house to remain is a period shingle style home with large arches at the entry porch, intricate stained glass windows and an Arts and Crafts interior highlighted with beautiful carved wood fireplace mantels and stair balustrades. Portions of the interior have been unfortunately renovated over the years, yet many of the interesting details remain and the house will receive updated kitchen and bathrooms while maintaining what remains of the original woodwork.

The last building in the complex will be a small gem in the rough. It is proposed as a 2-story glass and steel studio serving as the management office. The building will be linked to the development through the underground parking garage but be set apart at grade and secluded under the existing majestic silver elms located on the rear corner of the site.

1.2.3 Project Site Access

As discussed, the proposed project fronts on two streets; Washington and Parsons Streets. Washington Street is a two-lane primary east-west connector between Brighton and Cambridge with non-restricted free curb-side parking on each side. Parsons Street is a two-lane secondary street running north-south with non-restricted free curb-side parking on both sides and exiting onto Washington Street at a non-signalized intersection.

The project will access from Parsons Street in almost the exact same location as the existing entrance to the at-grade parking lot. The vehicular entrance will provide access to the 44 at-grade surface spaces in the middle of the complex, the commercial loading dock, trash collection and the 95 space below-level parking garage.

1.2.4 Project Data/Approximate Dimensions

Table 1-1: Project Data/Approximate Dimensions	
Lot Area (square feet):	47,116 ± SF
Total Gross Floor Area: Residential: Washington Street Parsons Street 10 Parsons Street- House 10 R Parsons- Office Commercial Total (including Common Space):	 69,407 GSF 35,649 GSF 29,913 GSF 3,845 GSF 850 GSF 15,190 GSF 85,447 GSF
Building Height:	25-48 feet
Floor Area Ratio (FAR):	1.8
Below-Grade Garage and Surface Parking Spaces: <u>Below-Grade:</u> Residential <u>Surface Retail:</u> Total Spaces:	 95 Spaces <u>44 Spaces</u> 139 Spaces

1.3 Proponent Information

The Proponent is Kandu Corporation LLC, c/o Legend Group., located in Brighton, Massachusetts. Founded in 1986 by Babak Veyssi., the firm specializes in commercial development, with prior experience in the development and construction of residential and commercial projects in Brighton, Brookline, Waltham and Weston . Mr. Veyssi has developed, constructed and manages buildings in Brighton and Brookline, MA.

Mr. Veyssi, along with his partner, John Severini, is the owner, developer and General Contractor of all of their projects. His approach to development focuses on an attention to detail, resulting in a reputation for high quality buildings that will be managed, operated, and maintained by Legend Group Corporation.

A few of Legend Group's projects are presented below:

1. *70 Clarendon, South End Boston*. Rehab of 3 unit building condos. 1995

2. *210-220 Parker Hill* 10 townhouse development, Permitting and Building 1999-2000

3. 58-62 Tower St JP, 3 townhouse development, Permitting & Building. 2002

4. 5168 Washington St, WR Art 80, 48 units two buildings (permitting). 2002-2003

5. Land development, 150 Acres, 96 lots, Narragansett, RI. Permitting & Site work, Roads. 1989-2005

6. Happy Day Preschool, West Roxbury MA. Permitting, Building as consultant for owner 6500 SF 2002

7. 5 Menlo St, Brighton MA., special permit, restoration of Historic home into 2 townhouse condos 2004

8. 11 Griggs St, Allston MA., Article 80 permitting of 96 units building on Brainerd Rd. 2004-2008

9. 9 State St Wellesley MA, construction of two luxury townhouse condos. 2005

10. 115 Union St. Brighton MA, Permitting, restoration and building of an existing home and three townhouse condominiums. 2008-2009.

11. 1-9 Henshaw St. Brighton. Brighton MA Permitting and gut rehab of existing shopping center. 2004

12. Franklin Center Commons, Franklin MA. Permitting mixed use building, 55,000 SF. Total gut rehab of 22,000 SF Residential/ Retail Building. Final stages of construction 2013.

13. 105-111 Florence St. Newton MA. Special Permit, construction of four luxury townhouse condominiums. 2010-2011

14. 104 Hull St. Newton MA. Design, special Permit, two townhouse condominiums. Under construction. 2013

15. 142 Homer St. Newton MA Restoration and construction of 8500 SF Single family residence. Under construction 2012-2013

16. 96 Linden St. Waltham MA, Design, permitting of a 14 unit Residential, construction to begin early 2014

17. Zero Lyman Rd. Brookline MA. Planning and permitting of 6700 SF single family residence, construction begins fall 2013.

Project Team and Schedule

Project Name:	**Parson's Crossing**
Location:	**423 Washington Street, Brighton, MA**
Proponent:	Kandu Corporation, LLC c/o Legend Group Corporation 425 Washington Street Brighton, MA 02135 Tel: 617-429-9920 *Babak Veyssi*
Architect:	Hendren Associates, Architects + Planners 119 Braintree Street, Suite 315 Boston, MA 02134 Tel: 617-782-6003 Fax: 617-782-6063 *Gary Hendren, Principal,* *Ari DeAngelis, Senior Associate*
Permitting Consultant:	Summit Development Advisors, LLC 119 Braintree Street Allston, MA 02134 Tel: 617-782-6003 Fax: 617-782-6063 *Gary Hendren AIA* *Summit6003@gmail.com*
Transportation Planning and Engineering Consultant:	Howard/Stein-Hudson 38 Chauncy Street Boston, MA 02111 Tel: 617-348-3350 Fax: 617-482-7080 *Michael Santos* Tel: 413-221-7839 *msantos@hshassoc.com*
Civil Engineer:	VTP Associates, Inc. 958 Watertown Street West Newton, MA 02465 Tel: 617-332-8271 Fax: 617-969-2330 *Joseph R. Porter, vtp@vtpassociate.com*

Environmental Consultant:	Tech Environmental 303 Wyman Street, Suite 295 Waltham, MA 02451 Tel: (781) 890-2220 Fax: (781) 890-9451 *Marc Wallace QEP* mwallace@techenv.com
Geotechnical Consultant:	Geotechnical Partnership, Inc. 350 Massachusetts Avenue Arlington, MA 02474 Tel: (781) 646-6982 Fax: (781) 641- 0132 *Lisa R. Casselli, PE*
Mechanical Engineer:	M.E.A. Engineering Associates, Inc. 20 Felton Street Waltham, MA 02453 Tel: (781) 894-6730 Fax: (781) 647-3542 *Alfred E. Muccini, P.E., President* *mucc96@aol.com*
Estimated Construction Commencement:	Second Quarter 2014
Estimated Completion:	Third Quarter 2015
Approximate Project Cost:	$ 14 Million
Status of Project Design:	Design Development

1.4 Public Benefits

The proposed project will create a new mixed-use project with workforce housing to serve the vast array of housing needs as well as residents within Allston-Brighton requiring access to Boston's major transportation roadways and public transportation. This development replaces underutilized commercial site uses and provides an urban market at a neighborhood scale. In addition, the Project will contribute the following benefits to the neighborhood and the City of Boston:

1. Expanding the City's tax base through the increase in property values anticipated at this location;
2. Providing approximately 100 new construction jobs in the city of Boston;
3. Providing approximately 65 new permanent jobs from the market and bank uses in the new building complex;
4. Reduce regional road traffic by bringing the market into the neighborhood;
5. Improving air quality due to the provision of trees and vegetation; and
6. Increasing residential population to support nearby neighborhood business and shops.

1.5 Compliance with Boston Zoning Code

The Project Site is located within the Allston Brighton Neighborhood District (Article 51 of the Boston Zoning Code) and within two zoning sub-districts: NS-1 (Neighborhood Shopping) and 1F-5000 (Single-Family Residential). Generally, allowed or conditional uses in the NS-1 sub-district include restaurants, general and local retail business, office and many professional and other service uses. Multi-family residential uses are conditional in the NS-1 sub-district and not allowed without zoning relief in the 1F-5000 sub-district. The proposed buildings represent a mixed-use residential/commercial complex which will require conditional use permits as well as use and dimensional variances from the Boston Zoning Board of Appeal.

1.5.1 Dimensional Requirements

Table 1-2 below summarizes the dimensional requirements in the Allston Brighton Neighborhood District, as set forth in Tables E and F of Article 51 of the Boston Zoning Code, and compares the requirements to the dimensions for the proposed project. Dimensional variances will be sought for: Maximum Floor Area Ratio, Maximum Building Height, and Minimum Rear Yard requirements.

For a project that is subject to Large Project Review, required off-street parking spaces and off-street loading facilities are expected to be determined as a part of the Large Project Review in accordance with the provisions of Article 80 of the Boston Zoning Code. Design elements of the Project will also be reviewed pursuant to Large Project Review.

Table 1-2: Zoning Dimensional Requirements			
Dimensional Element	**NS-1 Sub-district**	**1F-5000 Sub-district**	**Proposed Project[1]**
Maximum Floor Area Ratio	1.0	.5	1.8
Maximum Building Height	35 feet	35 feet	48 feet
Minimum Lot Size	None	5,000 SF	47,116.SF
Minimum Lot Width	None	50 feet	130 ft
Minimum Lot Area Per Dwelling Unit	None	5,000 SF	785 SF
Minimum Lot Area Per Dwelling Unit	None	None	---
Minimum Lot Frontage	None	50 feet	130 ft
Minimum Usable Open Space (Square Feet Per Dwelling Unit)	None	None	170 SF/DU
Minimum Front Yard	None	20 feet	2-13 feet
Minimum Side Yard	None	10 feet	10-25 feet
Minimum Rear Yard	20 feet	40 feet	5-10 feet

[1] The dimensions described in this table may change as the proposed project undergoes design review with the BRA.

1.6 List of Permits or Other Approvals Which May Be Sought

Agency Name	Required Permit or Action
State	
Massachusetts Department of Environmental Protection, Division of Air Quality Control	Notice of Commencement of Demolition and Construction; Notice of Asbestos Removal
Massachusetts Water Resources Authority	Temporary Construction De-Watering Permit
Local	
Boston Redevelopment Authority	Article 80 Large Project Review and Execution of Related Agreements; Approval Recommendation to the Zoning Board of Appeal; Possible Takings related to Vertical Discontinuances or tiebacks that may be requested of PIC
Boston Zoning Board of Appeal	Variances and Conditional Use Permits, as appropriate,
Boston Transportation Department	Transportation Access Plan Agreement; Construction Management Plan
Boston Department of Public Works/ Public Improvements Commission	Curb Cut Permit**;** Street/Sidewalk Occupancy Permit; Vertical Discontinuances; Specific Repair Plan Approval
Boston Water and Sewer Commission	Water and Sewer Connection Permits; Temporary Construction Dewatering; General Services Application; Site Plan Review
Boston Public Health Commission	Possible Asbestos Removal Notification
Boston Department of Inspectional Services	Building Permits; Certificates of Occupancy; Other Construction Related Permits

*This is a preliminary list based on project information currently available. It is possible that not all of these permits or actions will be required, or that additional permits may be needed.

1.7 Legal Information

Legal Judgments or Actions Pending Concerning the Proposed Project

The Proponent is not aware of any legal judgments in connection with this project.

History of Tax Arrears on Property Owned in Boston by the Applicant

The Proponent owns no real estate in Boston on which real estate tax payments are in arrears.

Evidence of Site Control over the Project Area

The Proponent purchased both the parcels in 2011 and has managed the existing commercial buildings which are currently fully leased and rents the existing house to residential tenants. The bank on the corner has a long-term lease with a relocation clause, has been informed of the proposed re-development and is excited to remain a part of the Brighton community in a new modern building. The bank and the urban market have mutual interests and have a cooperative arrangement which allows a direct access from the market into the bank lobby.

Nature and Extent of Any and All Public Easements

There are no public easements on either of the two parcels.

1.8 Public Review Process

Over the past several months, the Proponent has held several meetings with the BRA to review proposed project designs and uses. The proposed project was presented initially at a meeting of the Brighton Allston Improvement Association ("BAIA") last year. Based on comments at that meeting, the design was modified substantially and was presented again at BAIA's regularly scheduled meeting on June 27, 2013 with great success. A meeting was held with the immediate abutters the following week to gain the support and address their concerns. The Project team has also briefed elected neighborhood representatives; Mayor's Office and held subsequent meetings with the BRA on the project over the last several months.

It is our understanding that an Impact Advisory Group ("IAG") has been established by the City of Boston for review of the impacts from this project. The project team is expected to review plans with the IAG after the filing of the PNF.

The Proponent or its representatives will attend additional meetings with the BRA and the neighborhood following this submission as part of the Article 80 Large Project Review process. The Proponent is committed to a continuing dialogue with the neighborhood, public agencies, elected officials, and other interested parties throughout the permitting and construction process.

2.0 URBAN DESIGN COMPONENT

2.1 Introduction

Discussion of urban design elements for the proposed new building is provided in the sections below, and as illustrated on the plans, perspectives, and photographs that are included at the end of the Urban Design Component (see **Figures 2-1** through **2-16**).

As a result of meetings with the Brighton-Allston Improvement Association, the abutters, several neighborhood representatives and following preliminary design reviews by the Boston Redevelopment Authority staff, the proposed development is a synthesis of the requirements of the developer to pursue a feasible project and the City to provide an asset to the community. The site is currently occupied by an outdated collection of three buildings containing a bank, florist and small business offices. The proposal will bring a greatly desired urban market into this underserved neighborhood, provide workforce housing and patrons to the local businesses and restaurants that make Brighton a vibrant community.

2.2 Neighborhood Context

The site is located in Brighton center with convenient access to local businesses, offices and restaurants on Washington Street and a short walk to Rogers Park on Foster Street. The neighborhood includes a wide variety of businesses including CVS Pharmacy, Laundromats, and convenience stores. The Brighton Branch Post Office is directly across Washington Street.

The site is bordered to the north by residential single and two-family buildings; to the east by the convenience store and residential buildings across Parsons Street; to the south by a bank and the Post Office across Washington Street; and to the west by the CVS pharmacy. Looking west along Washington Street is a mixture of small restaurants, converted homes into office uses, an apartment building and the Laundromat; looking to the east is an historic grand white church, local business fronts and the St. Elizabeth Hospital medical Center. The neighborhood is truly a blend of uses, styles and architecture.

2.3 Building Design

2.3.1 Design Concept

The proposed re-development called “Parsons Crossing” reflects both the contemporary designs of the St. Elizabeth’s Medical Center, as well as to the older more traditional sections of Brighton. This site is a transition from the smaller scale residential neighborhood into the Washington Street commercial corridor. Our proposal is to make that transition in both scale and use a smooth process while bringing renewed vitality to the community.

The proposal is intended to bring patrons to local businesses and services in this area and provide an urban market which was last seen in this neighborhood back in the late 1960's. In context, the design of the proposed buildings are a progression of scale and use from north to south on the site in a modern style with traditional materials being blended with new technologies. The massing and spatial arrangements reflect the scale of the surroundings and also relate to the people who will live and work here on a daily basis.

The proposal is for a mixed use development. This is the new reality for urban growth and hearkens back to the origins of the great American city. With the current concerns of low-impact development and energy conscious design, this proposed live/work environment suits this location and sets a revived tone for the future of Brighton. The concept of living close to work, shopping and community life is nothing new to many neighborhoods closer to downtown and the expansion of that formula will be beneficial to the City and the environment.

2.3.2 Height and Massing

The site for Parsons Crossing has many influences to consider relative to massing and scale of the building elements. The site fronts onto two streets and sits in a transitional zone with different sets of characteristics on all four sides. The primary façade will be facing south toward Washington Street with a strong commercial character. To the north and east are a variety of small to medium sized commercial and multi-family buildings ranging from single to three stories. To the west is the CVS Pharmacy box, a small restaurant and leading to a 4 story apartment building. Washington Street is a two-lane heavily traveled connector with parking on each side. Parsons Street is a smaller connector with two lanes plus parking on each side. Buildings along Washington Street tend to align at the sidewalk, while the residential buildings on Parsons Street have small front yards.

The proposed project is comprised of four connected buildings. The tallest building has been placed on Washington Street and is proposed at four stories or 48 feet to the highest point. The frontage will have a 10 wide sidewalk with a wider entrance alcove for seasonal outside displays and incorporate plantings and street trees. The Washington Street building has a wide overhang to provide pedestrian protection from the weather and promote sidewalk activity and interaction.
The placement of the proposed buildings is intended to create a transition of scale from the north commercial uses to the south and the residential neighborhood of 2 to 3 story single and multi-family buildings. The Parsons Street building is also 4 stories but the floor to floor heights are reduced and the upper floor sets back from the edge to minimize the scale. The Parsons Street building also steps away from the sidewalk allowing for increasing front yards as the complex abuts the neighborhood. The Parsons Street façade has been further reduced in scale by the use of a variety of different materials and a small plane changes to break up the perceived length of the building. The main site entrance from Parsons Street at the separation between the buildings which further reduces the street wall effect and impact at the pedestrian level.

2.3.3 Façade Design, Fenestration, and Building Materials

While there are many external influences to direct the design of the proposed buildings, it is also important that the complex remains unified as an entity. The design of the two main buildings responds to the differing scale elements but contain a common thread through the use of materials. The design team has selected materials which relate to the human scale, are environmentally appropriate, conform to traditional standards and incorporate new technologies. The main pedestrian level elements are brick, cast stone, mullioned storefront, patterned pavers and landscaping. As the material relates more to the macro scale, panel systems are utilized to reinforce the clean planar aspects of modernity. The size and pattern of the fenestration assists in the creation of the hierarchy of base, middle and crown within each building while the consistency of the color and materials aid in the visual linkage of the buildings.

2.4 Site Design

2.4.1 Landscaped Areas and Pedestrian Circulation

This site will have pedestrian circulation around and between the buildings, used by outside patrons and residents using the courtyard parking. Sidewalks and pavement crossings have been provided to direct safe passage between the buildings. Landscaping is used to soften the edges and provide visual screens to lessen the impact of the parking areas.

2.4.2 Parking and Vehicular Circulation

Vehicular site access, surface parking and garage access/egress will be from Parsons Street. The Parsons Street entrance is in direct alignment with the underground parking garage ramps. Commercial deliveries will be limited to panel sized trucks and have access to the loading docks through this entrance with back-up maneuvering aligned with the access drive to the courtyard parking. There will parking provided for both the proposed commercial and residential uses. The commercial parking will be provided at-grade with 44 spaces provided between the buildings. The residential parking will be exclusively provided in the underground garage with a 98 spaces at a ratio of 1.7 residential units. The residential parking spaces will be secured behind swing gates to prevent unauthorized parking. The parking garage will be serviced with two elevators which are exclusively residential and will require a pass key to operate.

2.5 Sustainable Design

The Parsons Crossing Proponent will implement sustainable design and energy conservation measures as part of the Project. Early efforts have focused on the review and evaluation of the requirements of Article 37 of the Boston Zoning Code relative to the City's Green Building policies and procedures. The City seeks actively to promote opportunities for decreasing energy and water usage and costs, improving the efficiency and longevity of building systems and decreasing the burdens imposed on the city infrastructure, the environment and public health.

The Proponent is committed to following U.S. Green Building ("USGBC") Leadership in Energy and Environmental Design ("LEED") certification guidelines for the proposed building. The proposed building systems and components are being reviewed by our LEED certified architectural staff.

An attached LEED checklist (*LEED 2009 for New Construction and Major Renovation*) has been provided to identify sustainability goals for this Project. It does not reflect any of the LEED points given pursuant to Article 37 for the City's targeted mitigation areas (Boston Green Building Credits) such as transportation demand management, groundwater protection, etc. Highlights are outlined below, including details on implementation measures to the extent that they are defined at this stage of the design. Selection of specific building systems and specifications will be determined in consideration of the Project's sustainability goals and presented in the Draft Project Impact Report, if available. As goals are now being established, design solutions will be developed in an effort to achieve the pertinent LEED credits. The final design should help create a sustainable development that will serve to minimize environmental impacts, optimize interior environmental quality for the building inhabitants and enhance the surrounding community.

Article 37, Boston Zoning Code

Modern Mobility

Since the Project Site is an urban location in close proximity to public transportation including the local and regional bus, there are obvious strategies to take advantage of available transportation access. To satisfy the pre-requisites for this credit, the building management will be responsible for coordinating transportation information such as transit schedules and subway maps. Secured bicycle storage will be provided for 24 bicycles based on 15% of the total residents and 5% of the occupants for other building uses. A review of Transportation Demand Management (TDM) options for residential projects will be completed at the time of the filing of the DPIR.

Sustainable Sites

Construction Activity (Pre-requisite)
A management plan will enforce measures to protect adjacent areas from pollution.

Site Selection (Credit 1)
The Project Site has previously been completely developed and is located within an urban area. This development does not violate any of the established criteria.

Development Density (Credit 2)
The density of the Project is compatible with the surrounding sites.

Alternative Transportation (Credits 4.1, 4.2)
Public transportation access and bicycle storage are included the Boston Green Building credits.

Stormwater Design (Credits 6.1, 6.2)

The Project Site is currently 50% impervious. The Project proposes to implement a groundwater recharge system which will reduce the rate and volume of storm-water.

Heat Island Effects (Credits 7.1, 7.2)
The roof area shall utilize materials with high Solar Reflectance Index (SRI) value.

Water Efficiency

Water Efficient Landscaping (Credit 1)
Landscaping design and plantings will be selected to reduce irrigation demand by at least 50% and rainwater will be collected and stored for landscape watering.

Innovative Wastewater Technologies (Credit 2)
Reduction in potable water use is expected for building sewage conveyance by 30% through use of water conserving fixtures.

Water Use Reduction (Credits 3)
Appropriate fixtures will be selected to achieve 30% reduction over the baseline model.

Energy and Atmosphere

Fundamental Commissioning (Pre-requisite 1)
Building systems will be commissioned in accordance with USGBC requirements.

Minimum Energy Performance (Pre-requisite 2)
American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRE) Standard 90.1-2004 will set the minimum standard for the building's energy use.

Fundamental Refrigerant Management (Pre-requisite 3)
No Chlorofluorocarbon based (CFC) refrigerants will be used in the building.

Optimize Energy Performance (Credit 1)
Preliminary modeling exercises demonstrate that the building will perform at least 14% above ASRAE standard 90.1-2004.

On-site Renewable Energy (Credit 2)
The feasibility for use of a geo-thermal closed loop system will be evaluated for the heating and cooling of the residential units.

Enhanced Commissioning (Credit 3)
An independent commissioning authority will be engaged to perform design reviews and commission the building systems in accordance with USGBC requirements.

Enhanced Refrigerant Management (Credit 4)

Refrigerant and equipment selections will be evaluated to optimize the balance between ozone-depletion and global warming effects.

Measurement and Verification (Credit 5)
The appropriate use of measurement and verification equipment may be evaluated as building systems are selected.

Green Power (Credit 6)
Renewable trading certificates may be purchased from Green-e certified suppliers for building occupancy (third party verification that ensures from renewable sources).

Materials and Resources

Storage and Collection of Recyclables (Pre-requisite)
Bins will be provided in the loading area for recyclable materials.

Construction Waste Management (Credit 2)
A waste management plan will be implemented that seeks to divert 50% of waste material removed from the Project Site from landfills through recycling and salvaging.

Recycled Content (Credit 4)
Project Specifications will include and encourage provision of materials with recycled content where possible.

Regional Materials (Credits 5)
Project Specifications will include and encourage provision of materials manufactured within 500 miles of the Project Site where possible. The selected contractor will also be encouraged to provide regional materials which are extracted, harvested or recovered within 500 miles of the Project Site.

Rapidly Renewable Materials (Credit 6)
Project Specifications will include and encourage provision of rapidly renewable materials where possible.

Indoor Environmental Quality

Minimum Indoor Air Quality (IAQ) Performance (Pre-requisite)
ASHRAE Standard 62.1-2004 will set the standard for minimum indoor air quality.

Environmental Tobacco Smoke Control (Pre-requisite)
The building will be a non-smoking facility.

Outdoor Air Delivery (CO2) Monitoring (Credit 1)
A permanent carbon monoxide monitoring system will be installed at the exhaust ventilation for the common area to ensure that the ventilation systems maintain design minimum requirements.

Increased Ventilation (Credit 2)
The building will include operable windows.

Construction IAQ Management Plan- During Construction and before Occupancy (Credits 3.1, 3.2)
Management plans will be implemented pursuant to the requirements for these credits.

Low-Emitting Materials (Credits 4.1, 4.2, 4.3, 4.4)
Materials including adhesives, sealants, paint and carpet will be specified with low volatile organic compounds (VOC) content limits as prescribed by the respective applicable standards.

Thermal Comfort- Design (Credit 7.1)
The building envelope and heating, ventilation and air conditioning ("HVAC") systems will be designed to meet or exceed requirements of ASHRAE 55-204.

Daylight and Views- Daylight (Credit 8.1)
Daylight exposure and exterior views will be maximized within the limits established by the energy performance model.

Innovation and Design Process

Green Housekeeping (Credit 1.1)
The Proponent will establish a cleaning contract that requires to the extent possible Green Seal GS-37 cleaning products to be used in all public spaces and provides janitorial staff with knowledge and training in environmentally friendly housekeeping practices and products.

Building Water Management (Credit 1.2)
All plumbing fixtures will be low-flow equipped. The mechanical system proposed will be geo-thermal with a "closed-loop" which eliminates the need for a cooling tower and all the associated chemicals and water usage.

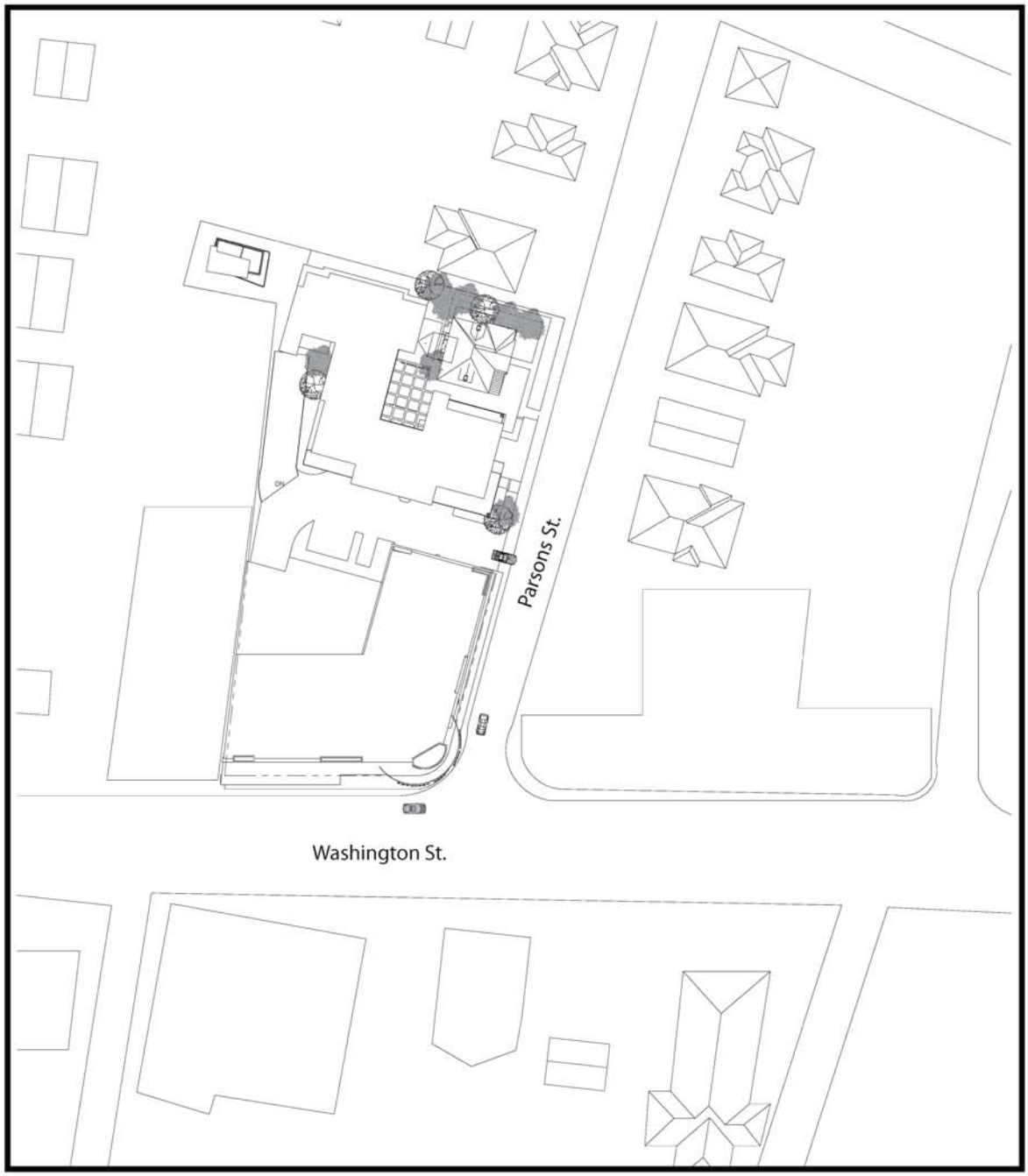
Tenant Education and Guidelines (Credit 1.3)
The Proponent intends to develop tenant guidelines, educational programs and resources for the tenants within the building.

LEED Accredited Professional (Credit 2)
The Proponent's architect, Hendren Design Associates, retains a LEED accredited professional, Carrie McMillan, on staff.

2.6 Urban Design Submission and Project Drawings

Figures 2-1 through **2-16** more fully illustrate the Urban Design narrative and include the following figures and photographs:

Figure 2-1 Site Context Plan
Figure 2-2 Washington Street Building Elevations
Figure 2-3 Parsons Street Building Elevations
Figure 2-4 10 Parsons Rear Building Elevations
Figure 2-5 Washington Street Building Floor Plans
Figure 2-6 Parsons Street Building Floor Plans
Figure 2-7 10 Parsons Rear Street Building Floor Plans
Figure 2-8 Washington Street Building Eye Level Perspective
Figure 2-9 Parsons Street Eye Level Perspective
Figure 2-10 Courtyard Street Eye Level Perspective
Figure 2-11 Landscape Layout Plan
Figure 2-12 Existing Conditions Photographs
Figure 2-13 Existing Conditions Photographs
Figure 2-14 Existing Conditions Photographs
Figure 2-15 Existing Conditions Photographs
Figure 2-16 Existing Conditions Photographs
Figure 2-17 LEED 2009 for New Construction and Major Renovation (Project Checklist)



HENDREN ASSOCIATES
ARCHITECTS + PLANNERS
119 Braintree St. Suite 315
Boston, MA 02134

Site Context Plan
425 Washington St.
Brighton Massachusetts

Figure
2.0

Building 2 South Elevation

Building 2 North Elevation

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ARCHITECTS + PLANNERS
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Boston, MA 02134

Parsons Crossing Elevations

425 Washington St.
Brighton Massachusetts

Figure **2.1**

Building 2 East Elevation

Building 2 West Elevation

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Parsons Crossing Elevations

425 Washington St.
Brighton Massachusetts

Figure **2.2**

Building 2 North Elevation

Building 2 South Elevation

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Parsons Crossing Elevations

425 Washington St.
Brighton Massachusetts

Figure **2.3**

Building 2 North Elevation

Building 2 South Elevation

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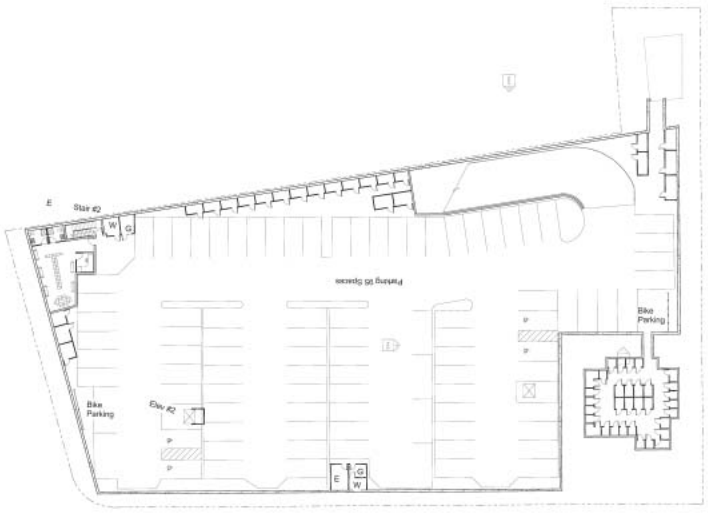
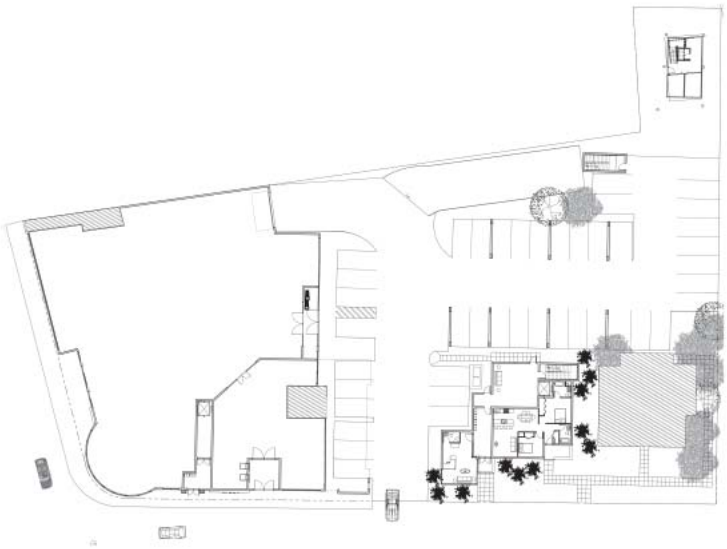
Parsons Crossing Elevations

425 Washington St.
Brighton Massachusetts

Figure **2.4**



Garage Plan



Ground Floor Plan

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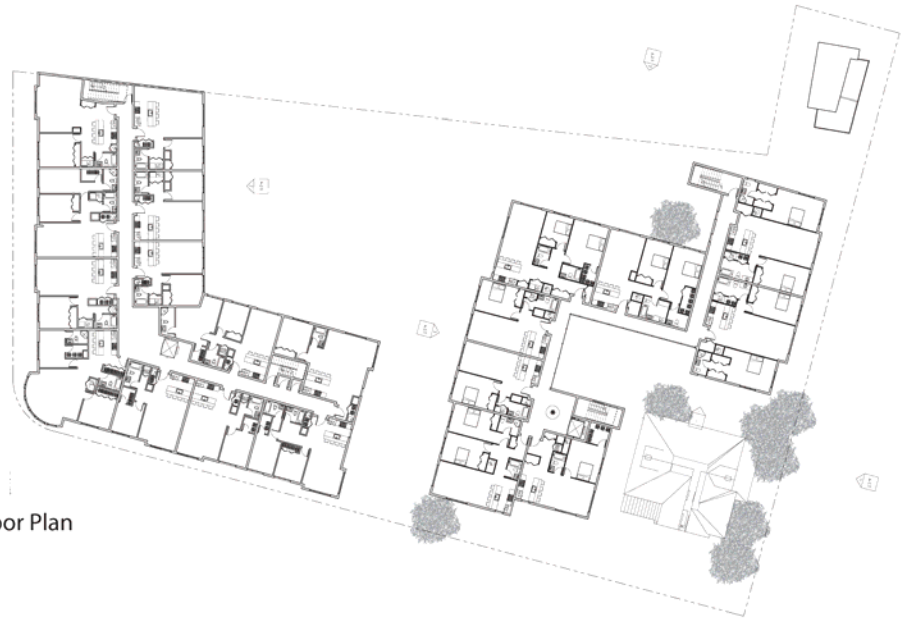
Boston, MA 02134

Parsons Crossing Floor Plans

425 Washington St.
Brighton Massachusetts

Figure **2.5**

Level 2 Floor Plan



Level 3 Floor Plan

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Boston, MA 02134

Parsons Crossing Floor Plans

425 Washington St.
Brighton Massachusetts

Figure **2.6**

Level 4 Floor Plan

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Parsons Crossing
Floor Plans
425 Washington St.
Brighton Massachusetts

Figure
2.7

HENDREN ASSOCIATES
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Boston, MA 02134

Perspective View- Eye Level
425 Washington St.
Brighton Massachusetts

Figure
2.8

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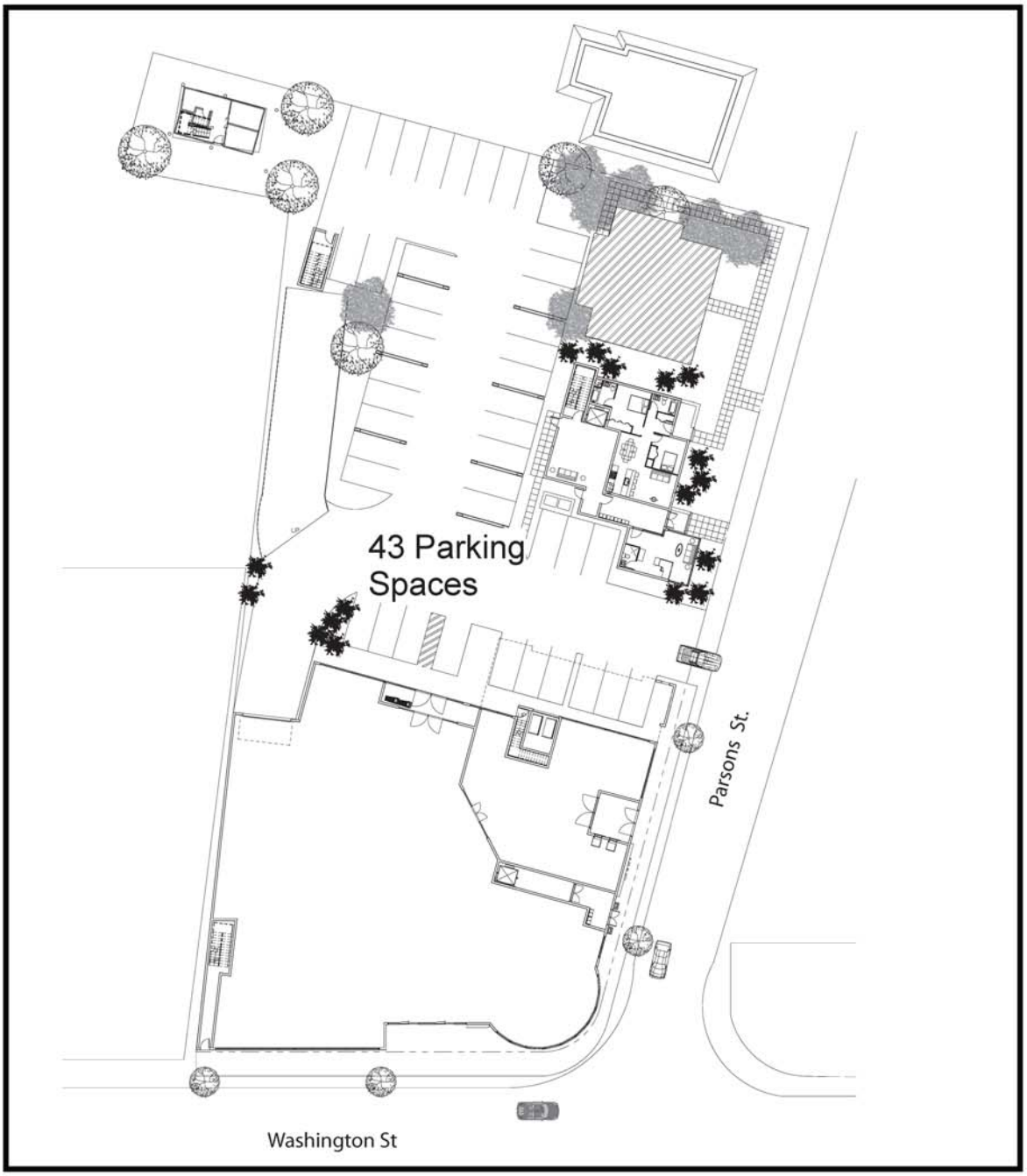
Perspective View- Eye Level
425 Washington St.
Brighton Massachusetts

Figure
2.9



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Landscape Layout Plan
425 Washington St.
Brighton Massachusetts

Figure
2.10

EXISTING BUILDING (ON SITE)

EXISTING BUILDING (ON SITE)

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Boston, MA 02134

Existing Conditions Photographs

425 Washington St.
Brighton Massachusetts

Figure **2.11**

EXISTING BUILDING (ON SITE)

EXISTING BUILDING (ON SITE)

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Boston, MA 02134

Existing Conditions Photographs

425 Washington St.
Brighton Massachusetts

Figure
2.12

EXISTING BUILDING (LEFT)

EXISTING BUILDING (RIGHT)

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ARCHITECTS + PLANNERS
119 Braintree St. Suite 315
Boston, MA 02134

Existing Conditions Photographs
425 Washington St.
Brighton Massachusetts

Figure **2.13**

3.0 ENVIRONMENTAL PROTECTION COMPONENT

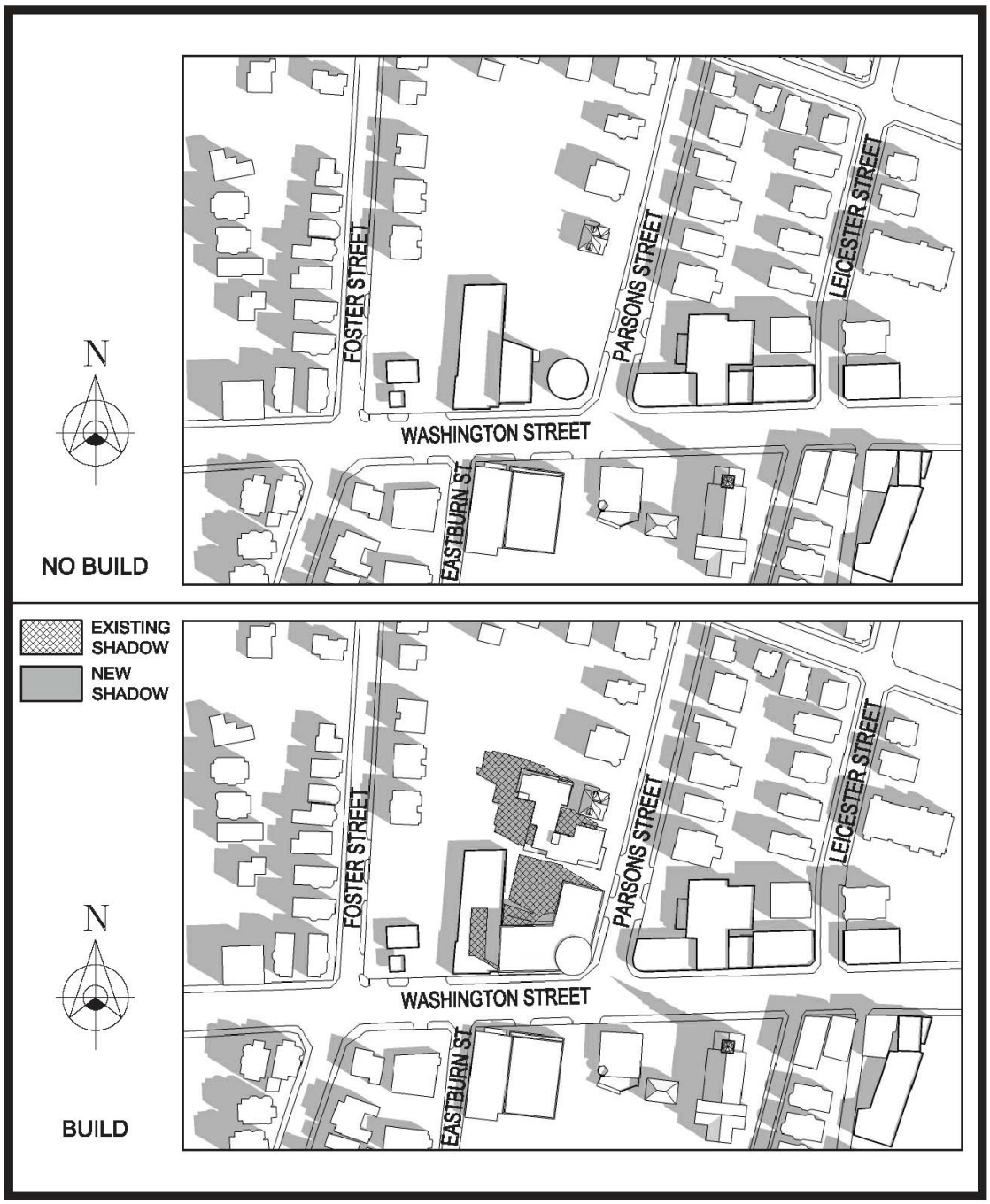
3.1 Wind

As proposed building heights will be less than 50 feet and not in alignment with the diverse size and low height buildings across Washington Street, it is not expected that pedestrian level winds will be impacted by the project. It is also anticipated that a qualitative pedestrian-level wind ("PLW") assessment will be not be required as there are no anticipated impacts from the proposed building complex on PLWs in the proposed project's vicinity.

3.2 Shadow

The proposed four building complex will cast some new shadow on portions of the rear parking of the CVS during the morning hours and into the rear yard of the adjacent house and onto Parsons Street in the late afternoons. However, the new buildings will have no impact on Washington Street as this is to the south of the proposed project.

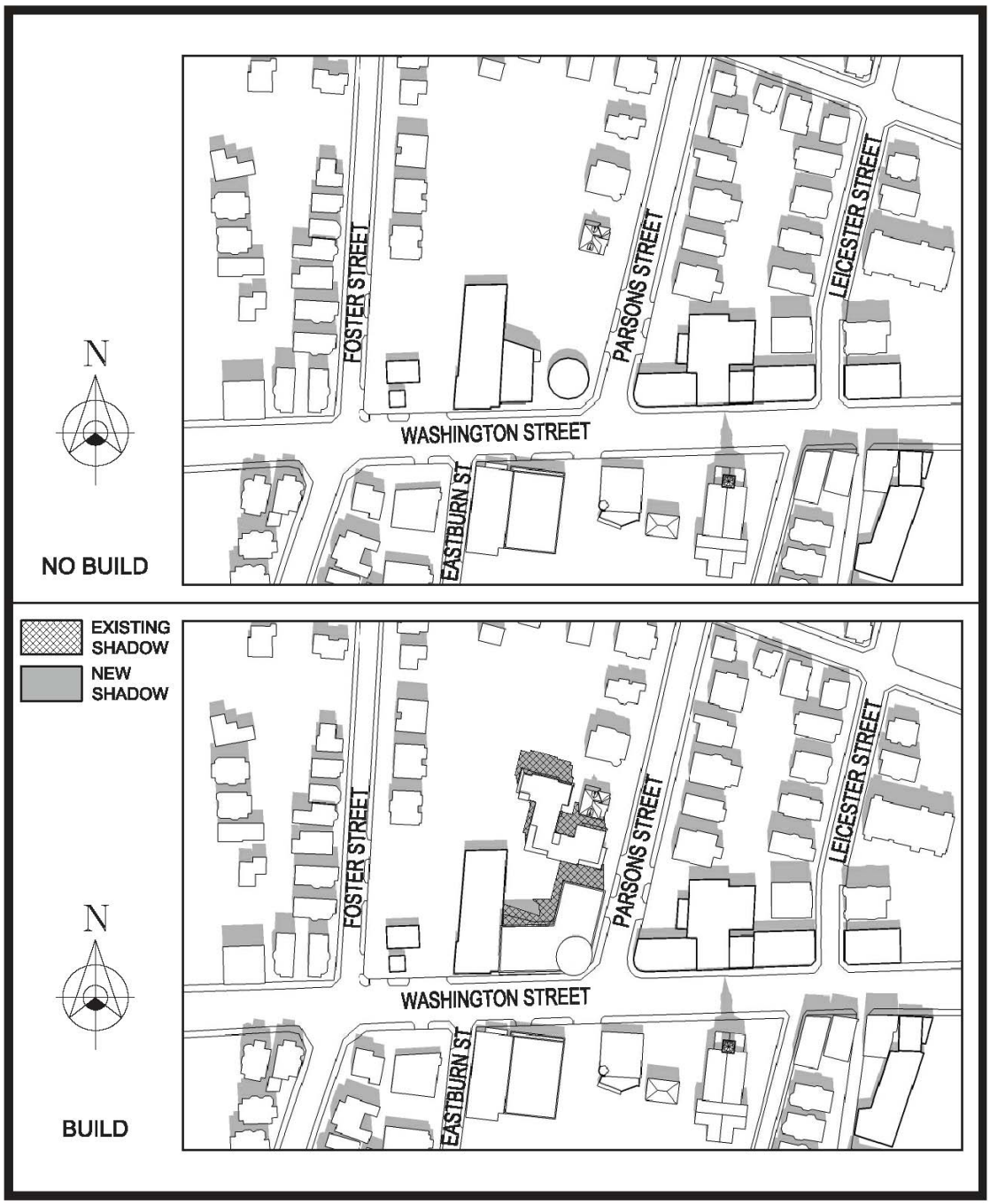
A shadow study describing, and graphically depicting, anticipated new shadow impacts from the Project compared to shadows from the existing buildings are included in this study to present existing and build condition shadow impacts for the proposed project for the hours 9:00 a.m., 12:00 noon, and 3:00 p.m. for the vernal equinox (March 21), summer solstice (June 21), autumnal equinox (September 21), and winter solstice (December 21). In addition, shadows will be depicted for 6:00 p.m. during June and September.



HENDREN DESIGN ASSOCIATES
119 BRAINTREE STREET, SUITE 316
BOSTON, MA 02134

Shadow Study March 21 9:00 AM
425 Washington Street
Brighton, Massachusetts

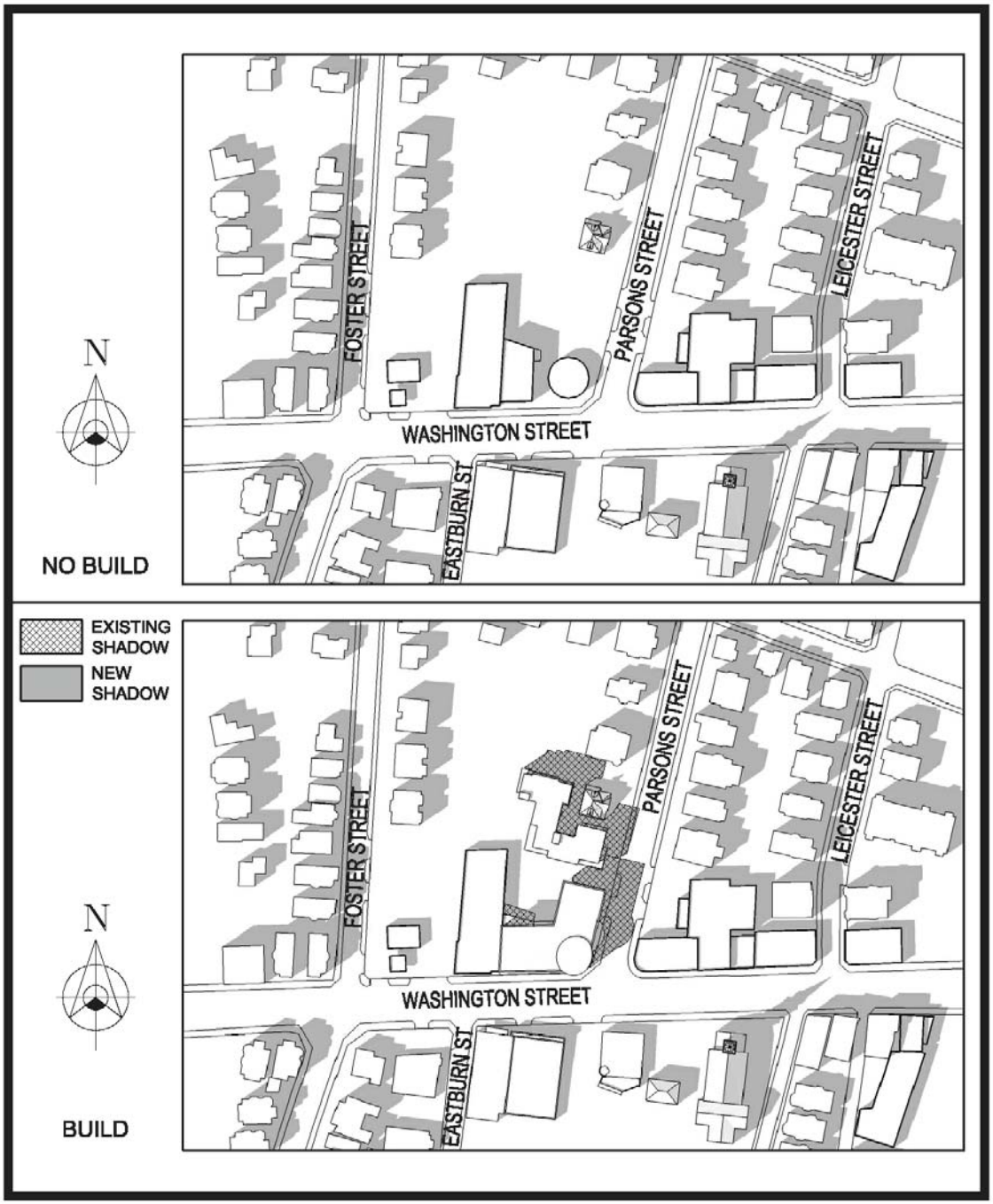
Figure
3.2-1



HENDREN DESIGN ASSOCIATES
119 BRAINTREE STREET, SUITE 316
BOSTON, MA 02134

Shadow Study March 21 12:00 PM
425 Washington Street
Brighton, Massachusetts

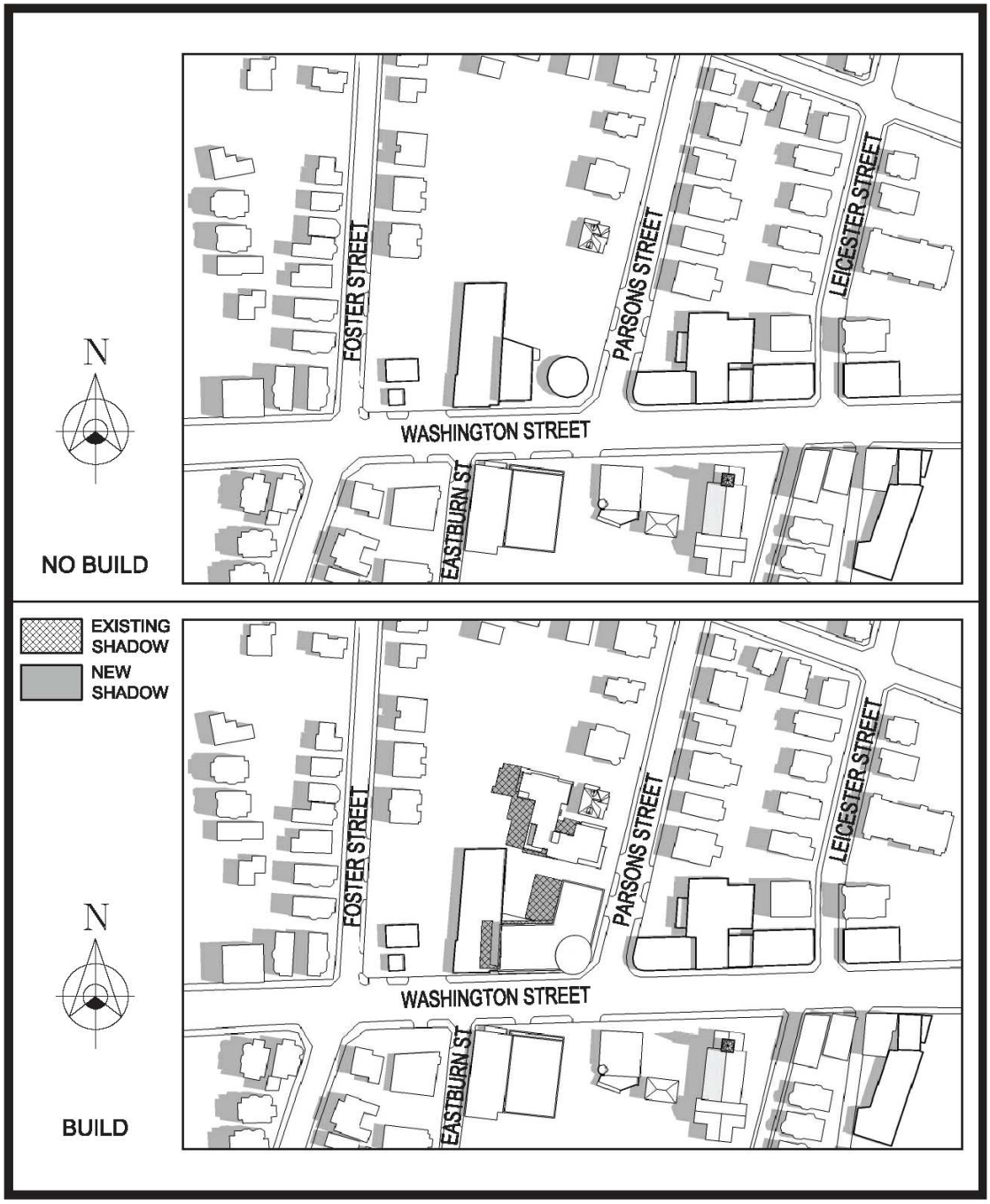
Figure
3.2-2



HINDRIEN DESIGN ASSOCIATES
119 BRAINTREE STREET, SUITE 316
BOSTON, MA 02134

Shadow Study March 21 3:00 PM
425 Washington Street
Brighton, Massachusetts

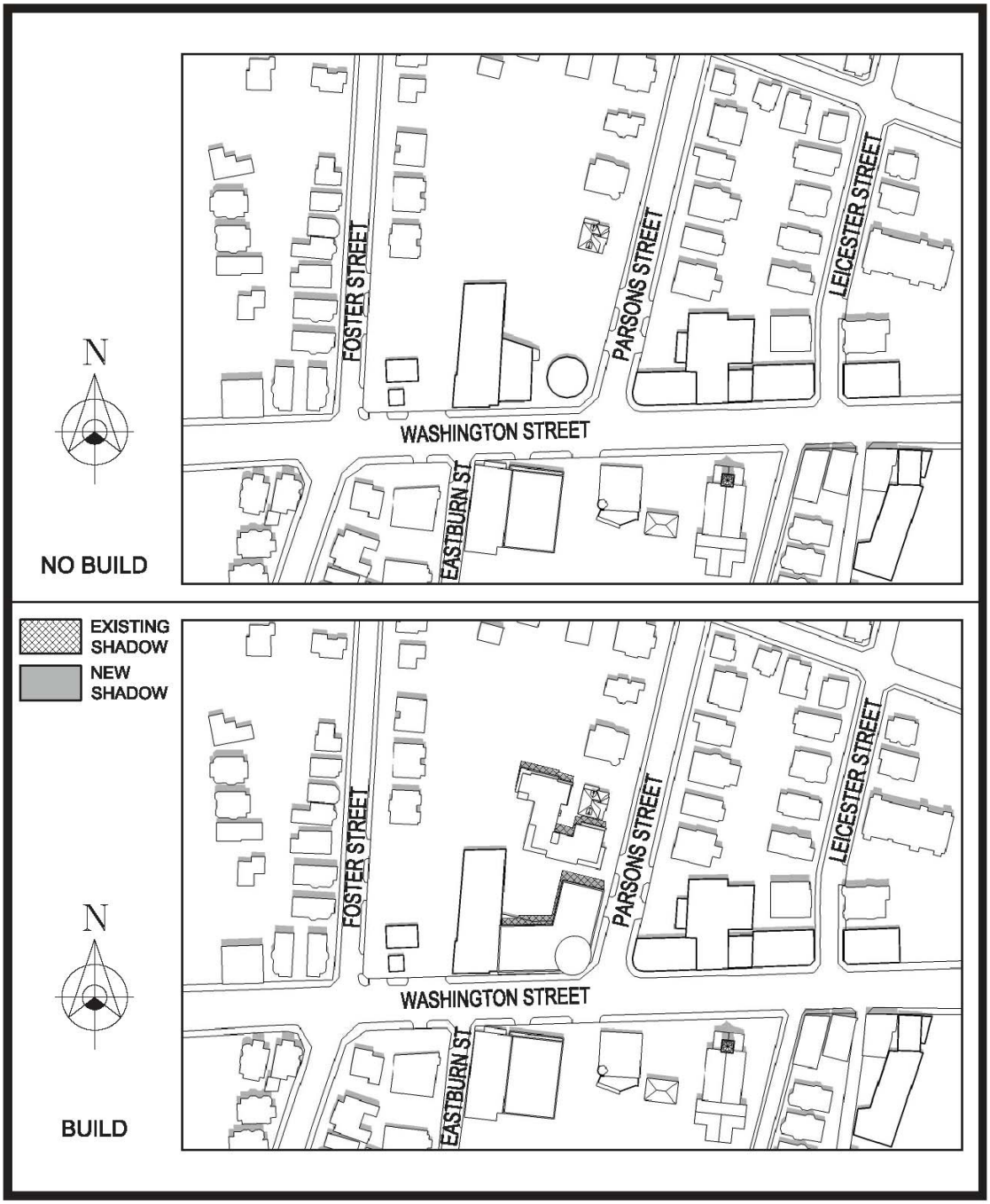
Figure
3.2-3



HENDREN DESIGN ASSOCIATES
119 BRAINTREE STREET, SUITE 316
BOSTON, MA 02134

Shadow Study June 21 9:00 AM
425 Washington Street
Brighton, Massachusetts

Figure
3.2-4



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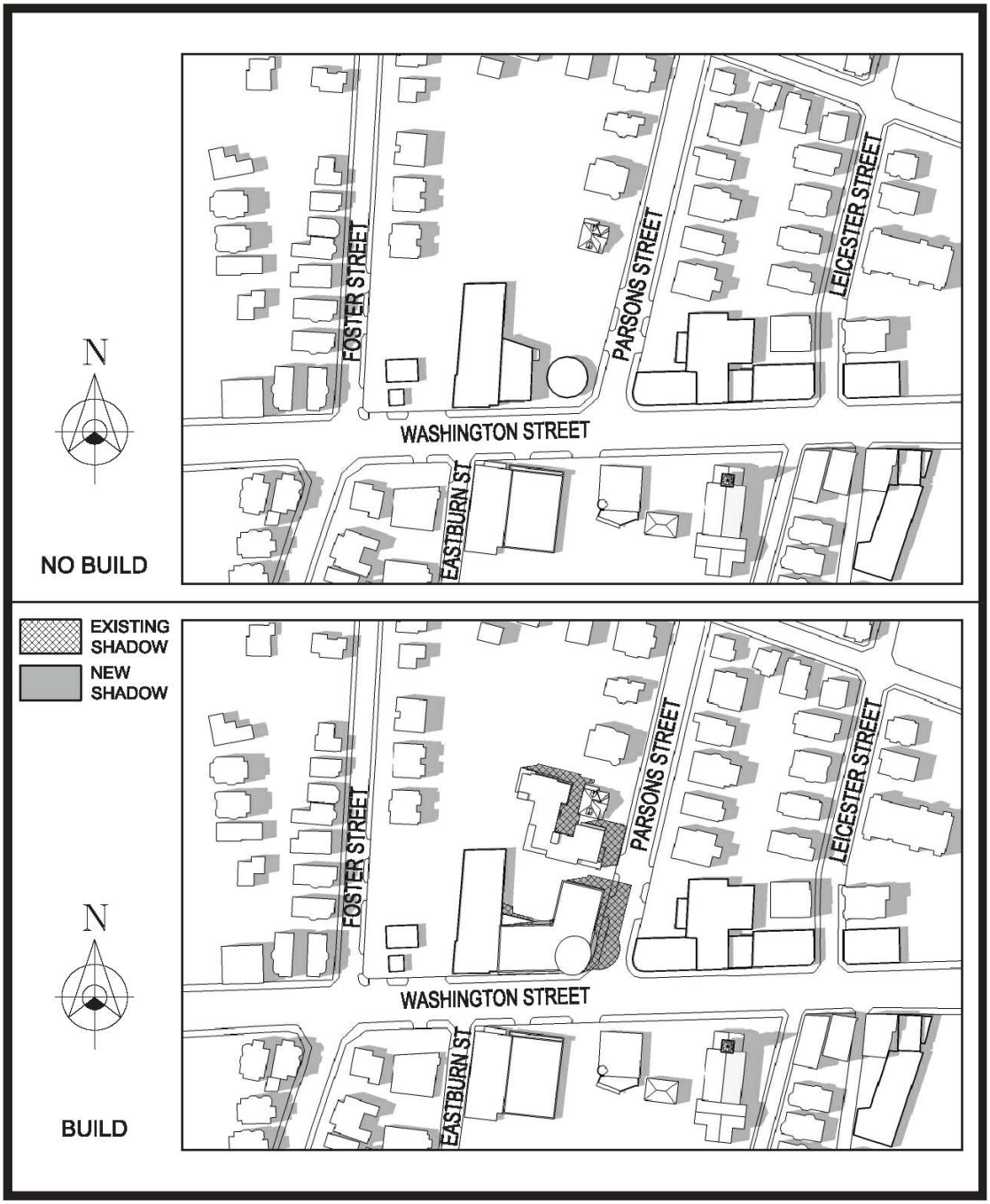
119 BRAINTREE STREET, SUITE 316
BOSTON, MA 02134

Shadow Study June 21 12:00 PM
425 Washington Street
Brighton, Massachusetts

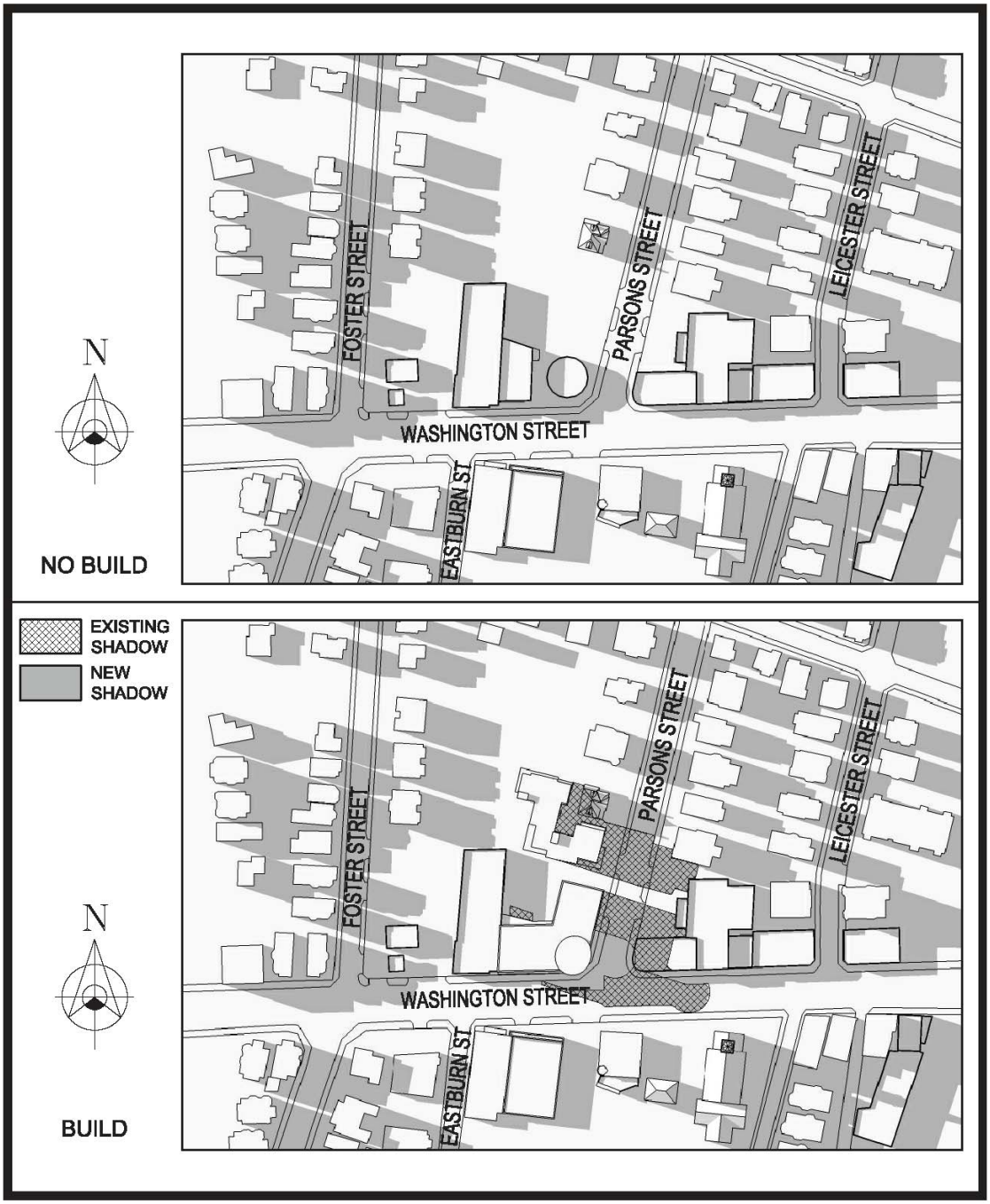
Figure 3.2-5



HENDREN DESIGN ASSOCIATES
119 BRAINTREE STREET, SUITE 316
BOSTON, MA 02134

Shadow Study June 21 3:00 PM
425 Washington Street
Brighton, Massachusetts

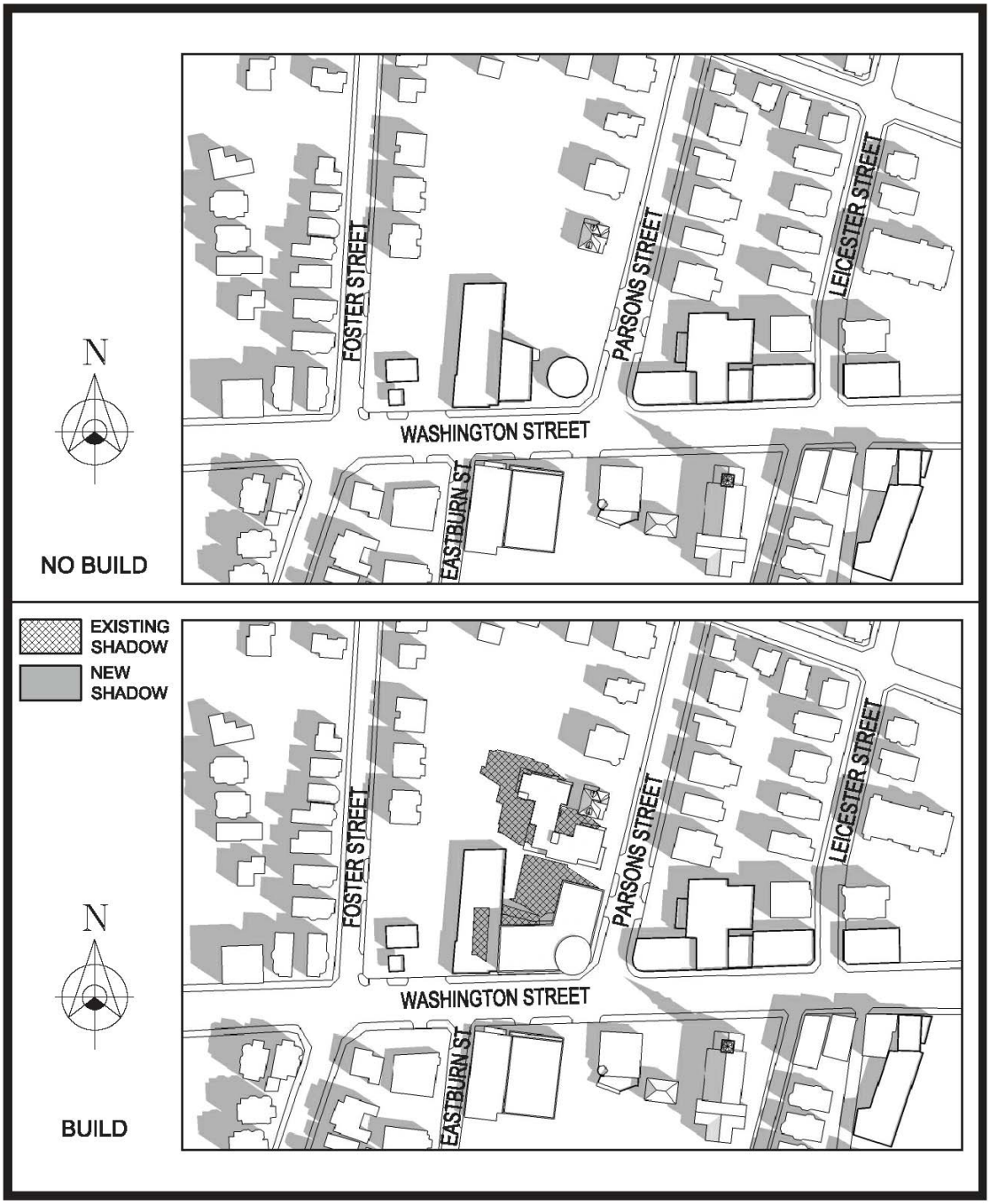
Figure
3.2-6



HENDREN DESIGN ASSOCIATES
119 BRAINTREE STREET, SUITE 316
BOSTON, MA 02134

Shadow Study June 21 6:00 PM
425 Washington Street
Brighton, Massachusetts

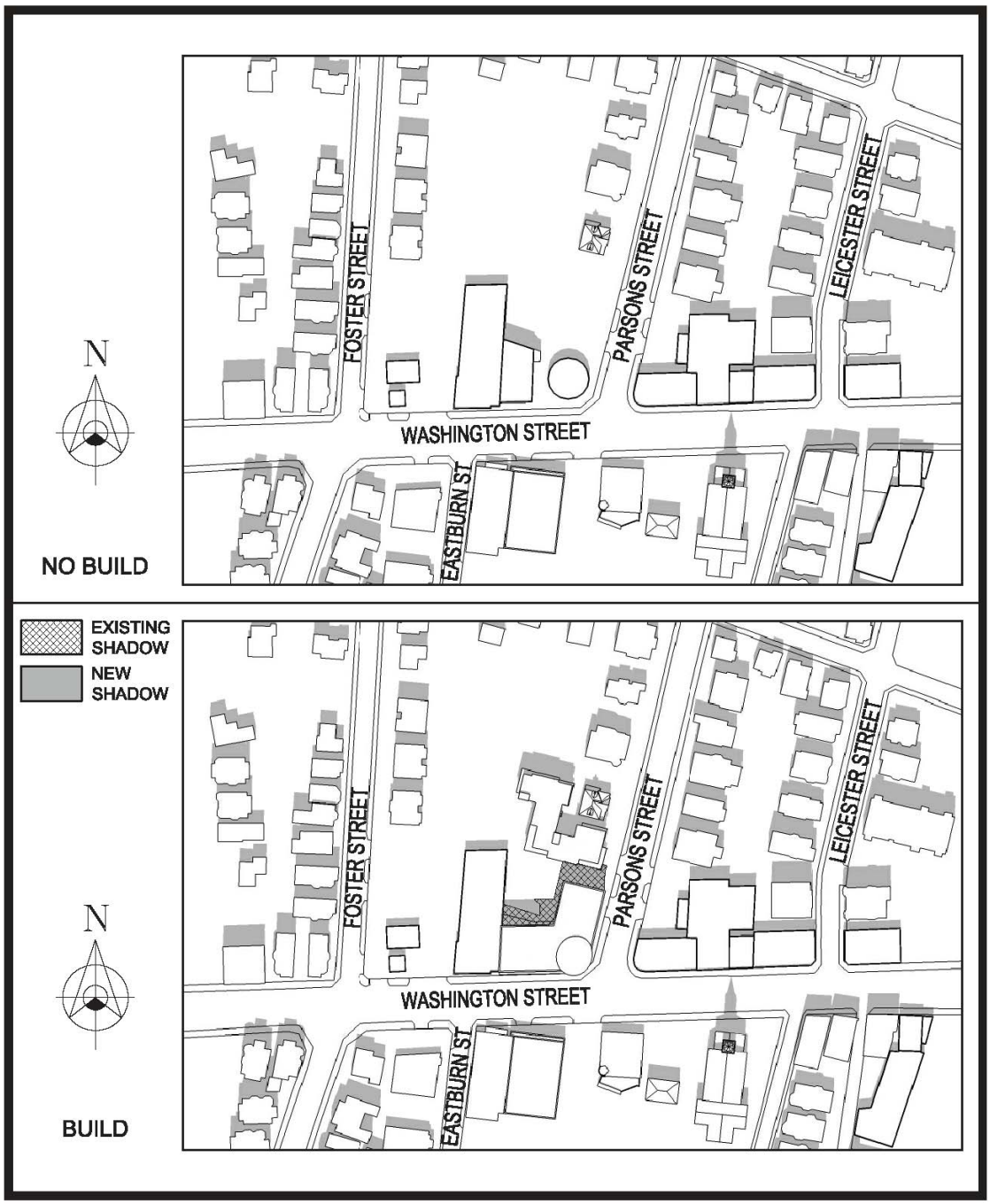
Figure
3.2-7



HENDREN DESIGN ASSOCIATES
119 BRAINTREE STREET, SUITE 316
BOSTON, MA 02134

Shadow Study September 21 9:00 AM
425 Washington Street
Brighton, Massachusetts

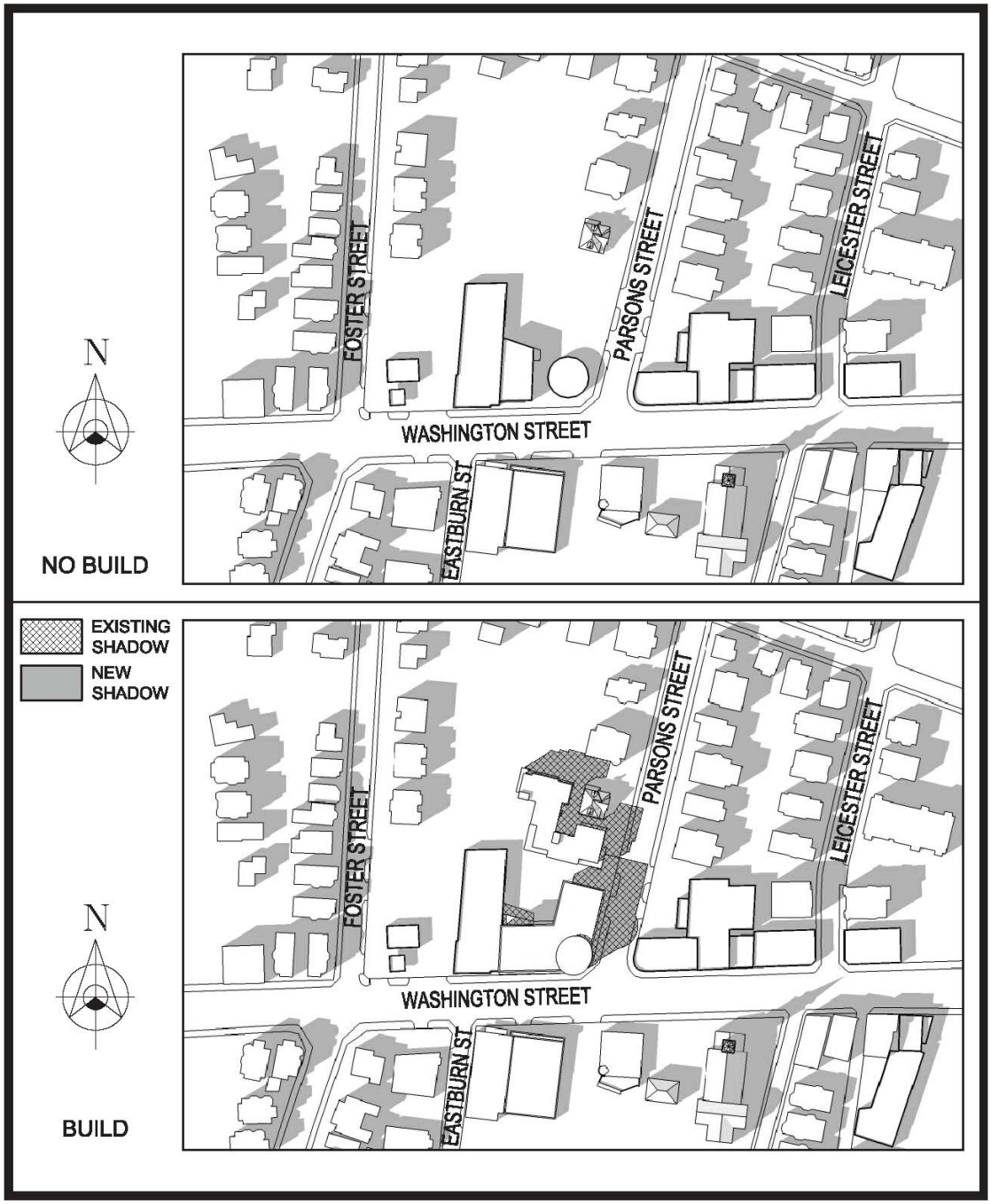
Figure
3.2-8



HENDREN DESIGN ASSOCIATES
119 BRAINTREE STREET, SUITE 316
BOSTON, MA 02134

Shadow Study September 21 12:00 PM
425 Washington Street
Brighton, Massachusetts

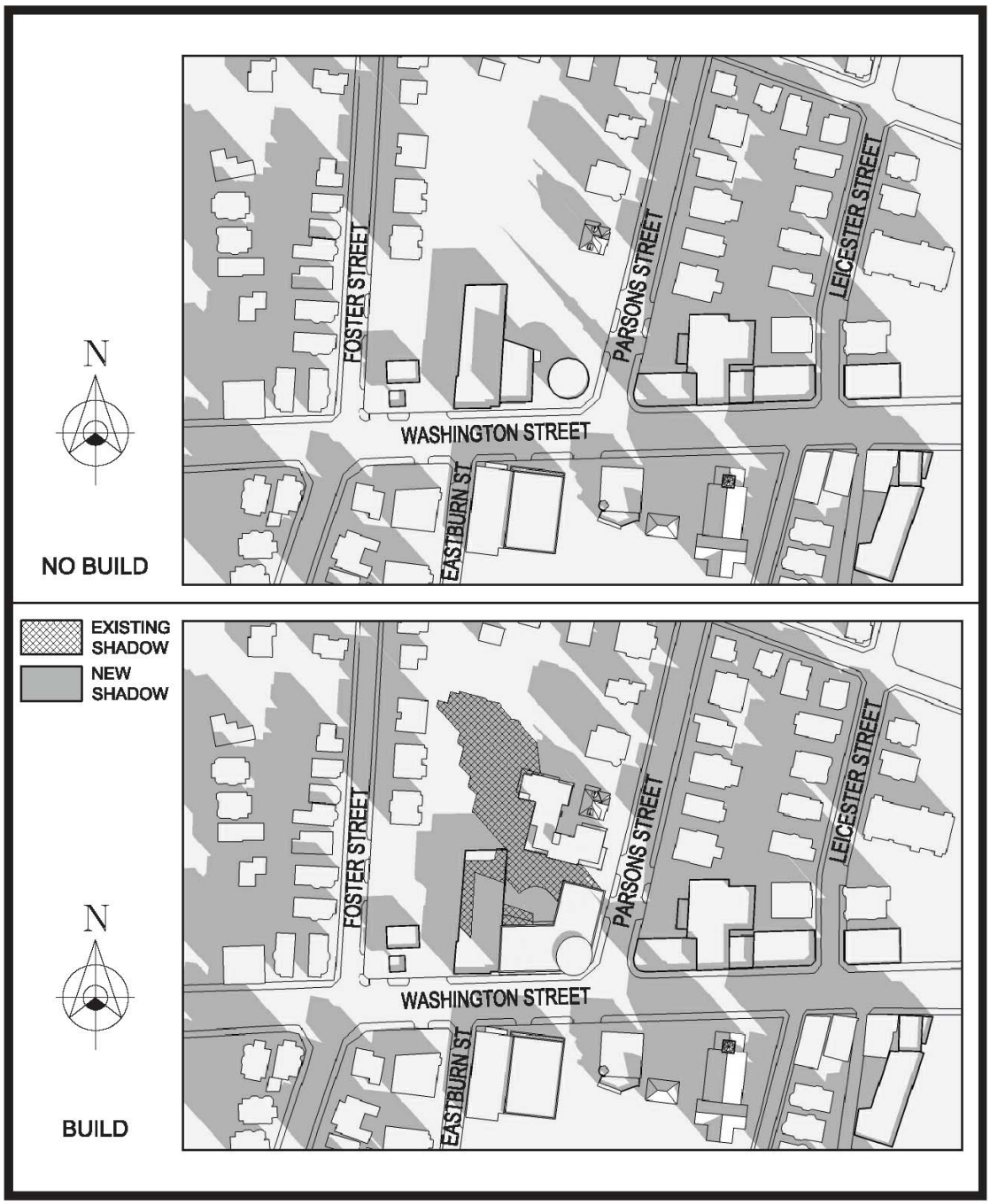
Figure
3.2-9



HENDREN DESIGN ASSOCIATES
119 BRAINTREE STREET, SUITE 316
BOSTON, MA 02134

Shadow Study September 21 3:00 PM
425 Washington Street
Brighton, Massachusetts

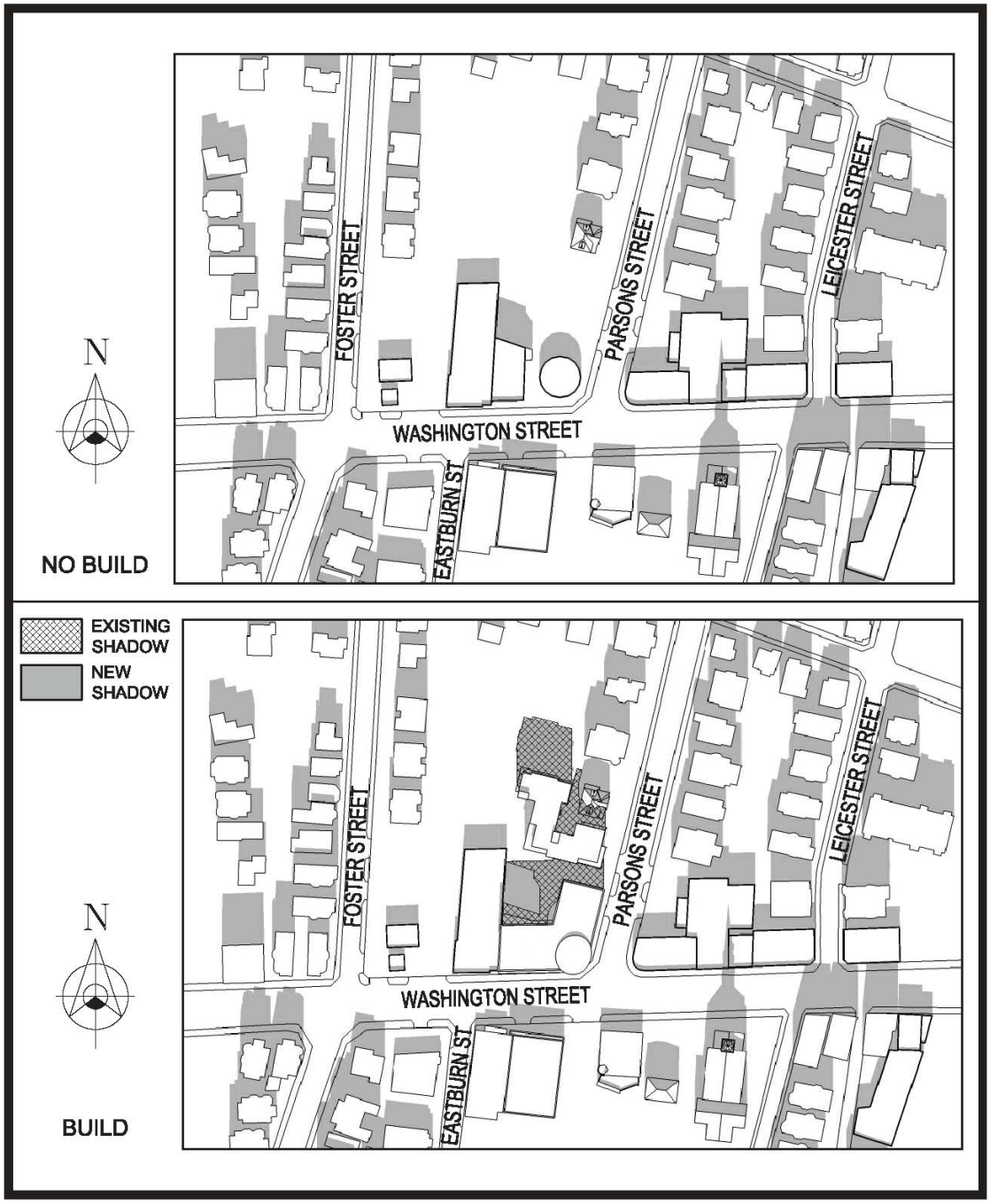
Figure
3.2-10



HENDREN DESIGN ASSOCIATES
119 BRAINTREE STREET, SUITE 316
BOSTON, MA 02134

Shadow Study December 21 9:00 AM
425 Washington Street
Brighton, Massachusetts

Figure
3.2-11



HENDREN DESIGN ASSOCIATES
119 BRAINTREE STREET, SUITE 316
BOSTON, MA 02134

Shadow Study December 21 12:00 PM
425 Washington Street
Brighton, Massachusetts

Figure
3.2-12

3.3 Daylight

While the proposed building heights exceed the 35 feet under existing zoning, any reduction of daylight will be confined to areas within the parking lot at the center of the buildings. In addition, heights proposed along the periphery and adjacent to abutting residences will be no greater than 40 feet, and therefore daylight reduction is expected to be minimal.

3.4 Solar Glare

Solar glare impacts are not expected. The proposed building complex is expected to have both solid and glass areas incorporated into the building facades. The glass used is also expected to reduce the intensity of reflected light.

3.5 Air Quality

The proposed project will include mechanically ventilated (below-grade) parking areas which will be evaluated. The air quality impact analysis will also evaluate the proposed project's fuel combustion equipment. It is not expect that there will be adverse air quality impacts from the operation of the Project's fuel combustion equipment.

The BRA requires a microscale air quality analysis for any intersection in the Project study area where the level of service ("LOS") is expected to deteriorate to D and the proposed project causes a 10% increase in traffic or where the level of service is E or F and the project contributes to a reduction in LOS. For such intersections, a microscale air quality analysis will be required for the DPIR to examine the CO concentrations at sensitive receptors near the intersection. Based on that the worst-case traffic generated by the Project, we do not expect that the proposed project will cause or contribute to any violations of the NAAQS for CO, and will not significantly affect air quality.

3.6 Noise Impacts

The Proponent is committed to implementing the sound level mitigation measures (e.g., specification of low-noise mechanical equipment and silencers, acoustical shielding, operational restrictions for the refrigeration condensers, as necessary, to comply with the applicable sound level limits as defined in this report. The proposed project is not expected to create a noise nuisance condition and will be designed to fully comply with the most stringent sound level limits set by the Massachusetts DEP Noise Policy and City of Boston Noise Regulations. It is also expected that a noise study will be completed for the DPIR to determine whether the operation of the proposed Project will comply with the City of Boston Noise Regulations and the Massachusetts Department of Environmental Protection (DEP) Noise Policy.

3.7 Flood Hazard Zones/Wetlands

There is no portion of the Project Site within the 100-year flood elevation as indicated on the Flood Insurance Rate Maps, nor are there any wetland resource areas regulated by the Massachusetts Wetlands Protection Act on or within 100 feet of the Project Site.

3.8 Water Quality/Stormwater Management

The Project is not expected to affect the water quality of nearby water bodies. The existing and proposed buildings cover the entire site; therefore the only stormwater runoff will be from the buildings' roofs. A portion of the roof water will be directed into storage tanks for landscape watering with over-flow directed into drainage structures below the building which will leach the water into the ground and be consistent with the water recharge when compared to the existing conditions. Stormwater runoff from roofs is considered "clean" with no sediments or pollutants, therefore treatment is not typically required. In addition, some of the stormwater on the roofs could be collected by any planted areas that are incorporated into the Project design.

All necessary dewatering, which is not expected, will be conducted in accordance with a Massachusetts Water Resource Authority ("MWRA") and Boston Water and Sewer Commission ("BWSC") discharge permits. The effects of the construction dewatering should be limited even though there will be substantial excavation needed as the depth of excavation is well above the water table. The Project will also comply with required local and state stormwater management regulations.

Boston Water & Sewer Commission

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. The Proponent will submit a General Service Application and a Site Plan for review and approval prior to construction. The Site Plan will indicate the existing and proposed water mains, sanitary sewers, storm sewers, telephone, gas, electric, steam, and cable television.

3.9 Geotechnical/Groundwater Impacts

This expanded PNF will address below-grade construction activities anticipated for the Project. It will present existing soil and groundwater conditions, anticipated foundation construction methods, and excavation work anticipated for the Project based on available subsurface information and a preliminary foundation design study. A program of soil borings will be completed to further define the subsurface conditions at the Project Site.

Based upon available information, the subsurface conditions across the project site are anticipated to include a 1 to 3-foot thickness of existing fill, consisting of loose brown sand with some silt and gravel

overlying a natural deposit of gravel and loose boulders. Groundwater is anticipated at depths ranging from approximately 18 to 20 feet below the existing ground surface.

Probable Project Impact and Mitigation Measures

Provisions will be incorporated into the design and construction procedures to limit potential adverse impacts to adjacent structures and utilities. Specific mitigation measures are as follows:

- A pre-construction survey will be conducted of abutting and adjacent structures to document existing conditions.
- The design team will conduct studies, prepare designs and specifications, and review contractor's submittals for conformance to the Project contract documents with specific attention to protection of nearby structures and facilities. The contractor will be required to modify construction methods and take all necessary steps during the work to protect nearby buildings and other facilities.
- Minimizing impacts from construction vibrations due to excavation is an important consideration in the design and construction of the proposed building. First, thresholds for vibration levels will be incorporated into the Contract Documents for construction. These thresholds will be based upon industry-recognized standards which have been developed for the protection of the specific types of structures present in the surrounding neighborhood. If vibration thresholds are exceeded, the Contractor will be required to modify his operations to result in lower construction-related vibrations.
- The design team will provide on-site monitoring of the contractor's excavations and foundation construction activities during the below–grade portion of the work. This will enable observation of the contractor's compliance with the construction specifications and to facilitate adjustments to procedures based on observed performance.

3.10 Solid and Hazardous Materials

3.10.1 Operational Solid Waste

The Proponent will implement measures to handle the anticipated generation, storage, and disposal of solid waste generated by the Project. Operational measures will be been considered that will be employed to promote waste reduction and recycling. The Project will accommodate recycling measures meeting or exceeding the City's recycling guidelines. In addition, the disposal and construction contracts will include specific language to ensure the contractor's compliance with City and State regulations. Demolition and construction debris will be recycled to the maximum extent possible.

It is estimated that approximately 172.5 tons of solid waste may be generated by uses within the four new buildings. This estimate is based on the assumption that each residential bedroom will generate approximately 1.5 tons apartment square feet per year, and the retail/commercial uses

being considered may generate up to 5.5 tons per year of waste for each 1,000 square feet of space.

The building's interior design will encourage the recycling of solid waste by providing storage areas for recyclable materials in appropriate areas. As typically requested by the Boston Environment Department, the building will provide the appropriate spaces required to institute a recycling program that meets or exceeds the City's recycling guidelines, and that provides recycling areas for waste paper and newspaper, metal, glass, and plastics (#1 through #7, co-mingled). These areas will be located on the ground floor level in the trash room.

3.10.2 Construction Period Waste

Solid waste generated during construction will consist of largely of demolition debris, and limited excavated materials. Excavated soil and debris to be taken off-site will be characterized, as necessary, prior to removal, and if necessary delivered to an appropriate disposal facility in accordance with regulatory requirements.

The disposal and construction contracts will include specific language to ensure the contractor's compliance with City and State regulations. Demolition and construction debris will be recycled to the maximum extent possible. Normal construction debris will be disposed of into dumpsters that will be located within the Project Site and legally emptied at an approved receiving facility. Containment of construction materials and miscellaneous trash will be controlled by proper on-site supervision, and storage of construction debris on-site will be kept to a minimum.

The Proponent's contractor will be instructed to take an active role in ensuring that waste removal and disposal during construction and operation will be in conformance with the City and DEP's Regulations for Solid Waste.

3.10.3 Hazardous Materials

The existing building sites have always been commercial uses on the Washington Street parcel and residential on Lot C on Parsons Street. The existing buildings on Washington Street are one and two stories, conventional construction with basements and have housed bank, retail and office uses. Preliminary site assessments and borings conducted in the existing parking lot have not found any reportable levels of contamination.

3.11 Construction Impacts

Construction methodologies that ensure public safety throughout the project site will be employed. Construction management and scheduling will aim to minimize impacts on the surrounding environment. This will include plans for construction worker commuting and parking, routing plans for trucking and deliveries, and control of dust generation.

Erosion and sediment control measures will be implemented during construction to minimize the transport of site soils to off-site areas and Boston Water and Sewer Commission ("BWSC") storm drain systems. During construction, existing catchbasins will be protected from sediments with filter fabric or hay bales filters.

A Construction Management Plan ("CMP") will be submitted to the Boston Transportation Department ("BTD") for approval prior to the start of construction. The CMP will address transportation, parking, truck routes, truck scheduling, construction worker scheduling, and staging issues for the Project. The CMP will establish the guidelines for the duration of the Project and will include specific mitigation measures and staging plans to minimize impacts to the abutters. The Project contractor will be bound by the CMP.

Construction Activity Schedule

The construction period for the Project is expected to last approximately 12-15 months. Typical construction hours will be from 7:00 a.m. to 6:00 p.m., Monday through Friday, as stipulated by the City of Boston Noise and Work Ordinances.

If work is proposed outside established hours, the Boston Air Pollution Control Commission ("APCC") will be notified at the time a permit is sought from the Commissioner of the Inspectional Services Department.

Table 3-1 below outlines the preliminary construction schedule for the Project.

Table 3-1: Proposed Preliminary Construction Schedule

Construction Activity	Anticipated Duration
Building Demolition and Salvage Operations	1 -2 months
Excavation, Earth Support and Utilities	1 -2 months
Foundation Installation	1 month
Steel Erection and Concrete Deck Installation	3 months
Façade Construction	4 months
Interior Work and Finishes	4 months

3.11.1 Construction Air Quality

The generation of dust is likely from construction activities. The following measures will be employed to reduce potential generation of dust and airborne particles:

1. Wetting agents will be used regularly to control and suppress dust that may come from the construction materials and from demolition;
2. Trucks for transportation of construction debris will be fully covered;

3. Storage of construction debris on site will be kept to a minimum;
4. Actual construction practices will be monitored to ensure those unnecessary transfers and mechanical disturbances of loose materials are minimized and to ensure that any emissions of dust are negligible; and
5. A wheel wash area will be established to minimize dust and mud accumulations in city streets, or periodic street sweeping may be utilized to maintain an acceptable street/sidewalk condition.

3.11.2 Construction Noise

Every reasonable effort will be made to minimize the noise impact of construction activities. Mitigation measures will include:

1. Instituting a pro-active program to ensure compliance with the city of Boston noise limitation policy;
2. Using appropriate mufflers on all equipment and performing ongoing maintenance of intake and exhaust mufflers;
3. Maintaining muffling enclosures on continuously operating equipment, such as air compressors and welding generators;
4. Replacing specific construction operations and techniques by less noisy ones where feasible (e.g. electric instead of diesel powered equipment and hydraulic tools instead of pneumatic tools);
5. Selecting equipment operations to keep average levels low, to synchronize noisiest operations with times of highest ambient levels, and to maintain relatively uniform noise levels;
6. Turn off idle equipment;
7. Locating noisy equipment at locations that protect sensitive locations by shielding or distance.

3.11.3 Rodent Control

The City of Boston enforces the requirements established under Massachusetts State Sanitary Code, Chapter 11, 105 CMR 410.550. This policy requires an established rodent control program be implemented prior to issuance of any demolition or building permits. During construction, service visits will be made by a certified rodent control firm to monitor and maintain the rodent control program.

4.0 HISTORIC RESOURCES COMPONENT

4.1 Introduction

This section of the PNF identifies and describes historic resources in the vicinity of the Project Site and evaluates the impacts of the Project on these resources. The Project Site does not contain structures which are listed on the National or State Register of Historic Places, as Boston Landmarks, or which are included in the Massachusetts Historical Commission ("MHC") Inventory of Historic and Archaeological Assets of the Commonwealth.

There are four buildings and a paved surface parking area on the 47,116 SF Project Site. These consist of the single-story 1960's Commerce Bank; the two-story retail office building, circa 1970; the "greenhouse", a single story addition to the commercial building and the shingle-style house at 10 Parsons Street. The commercial buildings have no significant historic or architectural features and the house will remain intact as part of the proposed redevelopment.

The Proponent will undergo Article 85 Demolition Delay review, if required, to demolish these two buildings to allow the proposed project to proceed.

Overall, the proposed Parsons Street Crossing project is designed to be compatible with the surrounding neighborhood containing residential, commercial, and office uses in closest proximity to the Project Site. The concept for the proposed project is as a mixed-use complex with neighborhood service retail at the ground level and a range of apartment types including one-, two-bedroom units on the upper floors. The apartments are concentrated in mid-rise buildings allowing for open space and a landscaped perimeter of the residential enclave. While the proposed heights of the building complex vary and are intended to transition down to the adjacent residential and commercial structures along Washington and Parsons Streets, the overall height is compatible with the general scale of Washington Street.

If a state permit is required for the Project, a Massachusetts Historical Commission Project Notification Form may be filed 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).

4.2 Site Surroundings

The Parsons Street Crossing parcels extend from Washington Street approximately 275 feet north along Parsons Street and approximately 134 feet to the east and abutting the side wall of the CVS pharmacy building. The Project Site incorporates the existing house on Parsons Street and the existing parking lot.

The immediate neighborhood contains a mixture of retail, residential and office uses. To the north is a residential neighborhood of single and multi-family homes with yards and accessory buildings. To the

south and across Washington Street are a bank and the Brighton Branch Post Office. To the west is the CVS Pharmacy building containing approximately 8,000 SF, and, to the east, as discussed, are the commercial district of Brighton and the expanded St. Elizabeth's Medical Center.

The proposed project replaces a marginal and aging commercial use, and will continue the revitalization of Allston-Brighton that has been underway with the introduction of new mixed-use buildings on Market Street, new restaurants on Washington Street and the expansion of the St. Elizabeth's Medical Center. It will also provide a convenient, affordable housing alternative for the neighborhood, serving existing residents as well as the new employees of the medical center. The site is conveniently located close to the Massachusetts Turnpike and Storrow Drive as well as two MBTA bus lines for easy access to downtown Boston.

4.3 Site History and Existing Buildings

There are four buildings and a paved surface parking area on the 47,116 SF Project Site. These consist of the single-story 1960's Commerce Bank; the two-story retail office building, circa 1970; the "greenhouse", a single story addition to the commercial building and the shingle-style house at 10 Parsons Street. The commercial buildings have no significant historic or architectural features and the house will remain intact as part of the proposed redevelopment.

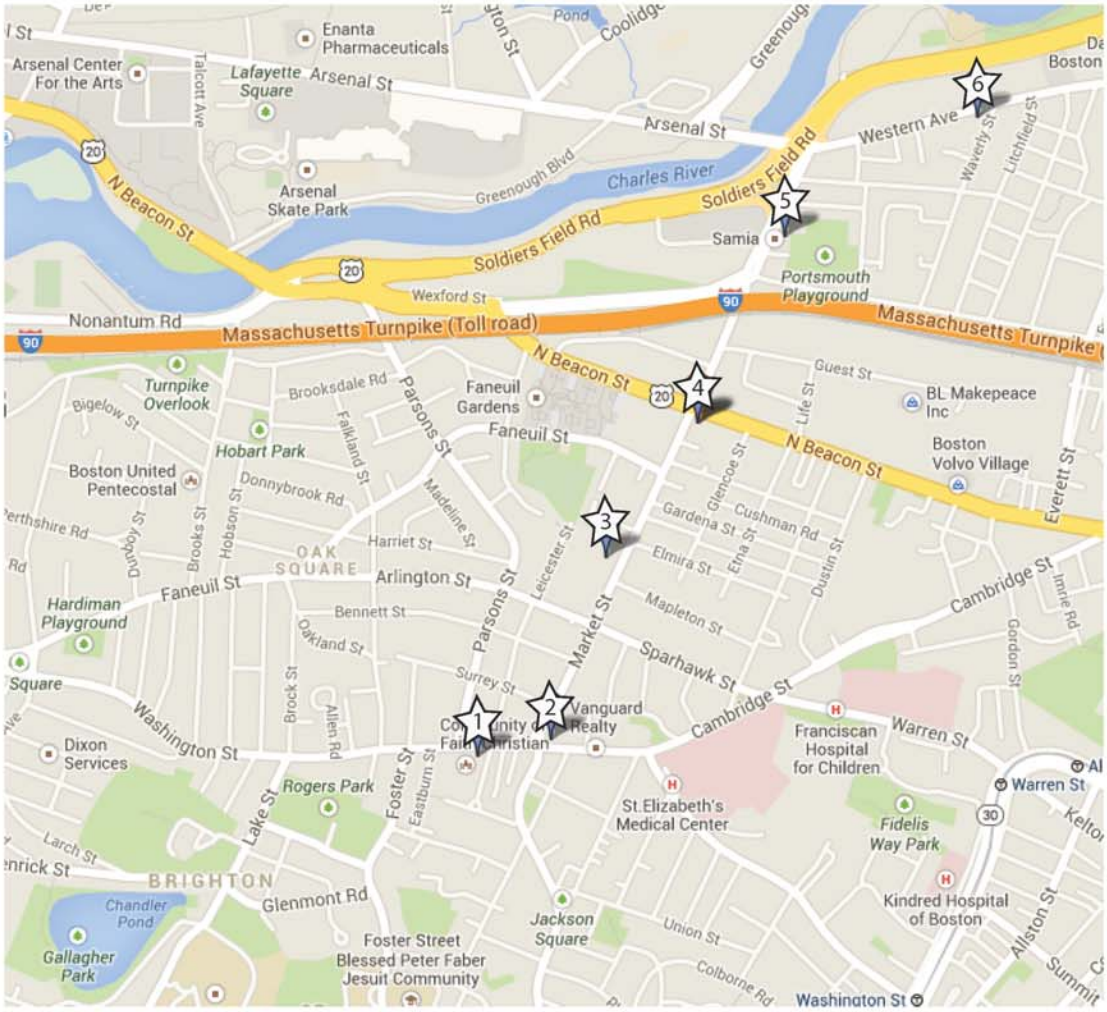
Historic Structures and Districts

According to Massachusetts Historical Commission files, the building or properties at 423-425 Washington Street are not listed in the National or State Register of Historic Places, the Inventory of Historical and Archaeological Assets of the Commonwealth, nor are the buildings considered to be a Boston Landmark. According to MassGIS and a review of local historic properties, the nearest historical district on the National/State Register is the Charles River Reservation Parkways and the nearest building listed is Engine House #34 at 444 Western Avenue.

The listed historic resources on the National and State Registers of Historic Places identified within an approximately ¼ mile radius of the Project Site are shown in **Figure 4-1. Historic Resources**. The closest historic structure is approximately 1,300 feet to the south, which is the A.W. Bennett House at 291 Market Street, over a block south of the Project Site. The Charles River Reservation Parkways, which were designated on January 18, 2006, are approximately 1,750 feet the northwest.

Properties listed in MHC's Inventory of Historic and Archaeological Assets of the Commonwealth Inventory that are nearest to the Project Site include 58 Birmingham Parkway (BOS 8108); 61 Dustin Street (BOS 8135); and a sign at 214 North Beacon Street (BOS 9621).

Figure 4-1 Historic Resources



1. Brighton Evangelical Congregational Church
   404 Washington St
2. Washington Imperial Building
   363-365 Washington St
3. A.W. Bennett House
   291 market St
4. Historic Sign
   214 North Beacon St
5. Archeological Asset of Commonwealth
   58 Birmingham Parkway
6. Engine House #35
   444 Western Ave

HENDREN ASSOCIATES
ARCHITECTS + PLANNERS
119 Braintree St. Suite 315
Boston, MA 02134

Historic Resources

425 Washington St.
Brighton Massachusetts

Figure
4-1

Potential Impacts to Historic Resources

The project design and construction will not affect historic resources as the closest historic resources are separated from the Project Site by other properties, streets, and the Massachusetts Turnpike. The closest historic structure is the A.W. Bennett House at 291 Market Street. The others are greater than ¼ of a mile from the project site.

4.4 Archaeological Resources

According to the USGS archaeological map on file at the Massachusetts Historical Commission, there are no known or designated archaeological properties on the project site. The closest reported archaeological sites are approximately ¾ to one mile northwest of the property on the other side of the Charles River. These sites are designated as 19-MD-176 and 19-MD-75 which are in proximity to, and associated with, the Watertown Arsenal site, where large numbers of artifacts were reportedly recovered during construction.

The area-specific conditions that characterize the project site include industrial buildings and parking lots. Because of previous site development, it is unlikely there is the potential for the presence of archeological resources that might be disturbed by the Project.

5.0 TRANSPORTATION

5.1 Introduction

Howard/Stein-Hudson Associates, Inc. (HSH) has conducted an evaluation of the transportation impacts of the proposed Parsons Crossing mixed-use development containing residential and retail uses to be located at 425 Washington Street in Brighton (the "Project" and/or the "Site"). This transportation study adheres to the Boston Transportation Department (BTD) *Transportation Access Plan Guidelines* and Article 80 development review process. This study includes an evaluation of existing conditions, future conditions both with and without the Project, projected parking demand, loading operations, transit services, and pedestrian activity.

5.1.1 Project Description

The Project Site is located at 425 Washington Street in Brighton and is bounded by Parsons Street to the east, retail uses to the west, residential uses to the north, and Washington Street to the south. Existing uses on the Project Site include a bank, ground-floor retail space, a flower shop, office space, and a single-family home. An existing surface parking lot is also located on the Project Site with approximately 30 parking spaces, including six Zipcar spaces. The existing parking lot is accessed by two curb cuts along Parsons Street. The Project is a proposed mixed-use redevelopment of the Site consisting of the construction of two 4-story buildings containing 60 residential units, 11,820 square feet (sf) of ground floor retail space, and 2,550 sf of space for the relocation of the existing bank use. The single-family home will remain as part of the Project. A total of 139 parking spaces will be provided on-site. A below-grade, restricted access parking garage will provide 95 parking spaces for the residential uses and a total of 44 parking spaces will be located in a surface parking lot and will serve the bank and retail uses on the Site. Secure storage for 60 bicycles will also be provided. The six Zipcar spaces will be retained on Site in the surface parking lot.

5.1.2 Study Area

The study area consists of the following two intersections, also shown on **Figure 5.1**:

- Washington Street/Parsons Street; and
- Parsons Street/Surrey Street.

5.1.3 Study Methodology

This transportation study and supporting analyses were conducted in accordance with BTD guidelines and is described below.

The existing conditions analysis includes an inventory of the existing (2013) transportation conditions such as traffic characteristics, parking and curb usage, transit, pedestrian circulation, bicycle facilities, loading, and site conditions. Existing counts for vehicles, bicycles, and pedestrians were collected in September 2013 at the study area intersections. The traffic counts form the basis for the traffic analysis conducted as part of this evaluation.

The future transportation conditions analysis evaluates potential transportation impacts associated with the Project. Long-term impacts are evaluated for the year 2018, based on a five-year horizon from the existing year (2013). Expected roadway, parking, transit, pedestrian, bicycle accommodation, and loading capabilities and deficiencies are identified. This section includes the following scenarios:

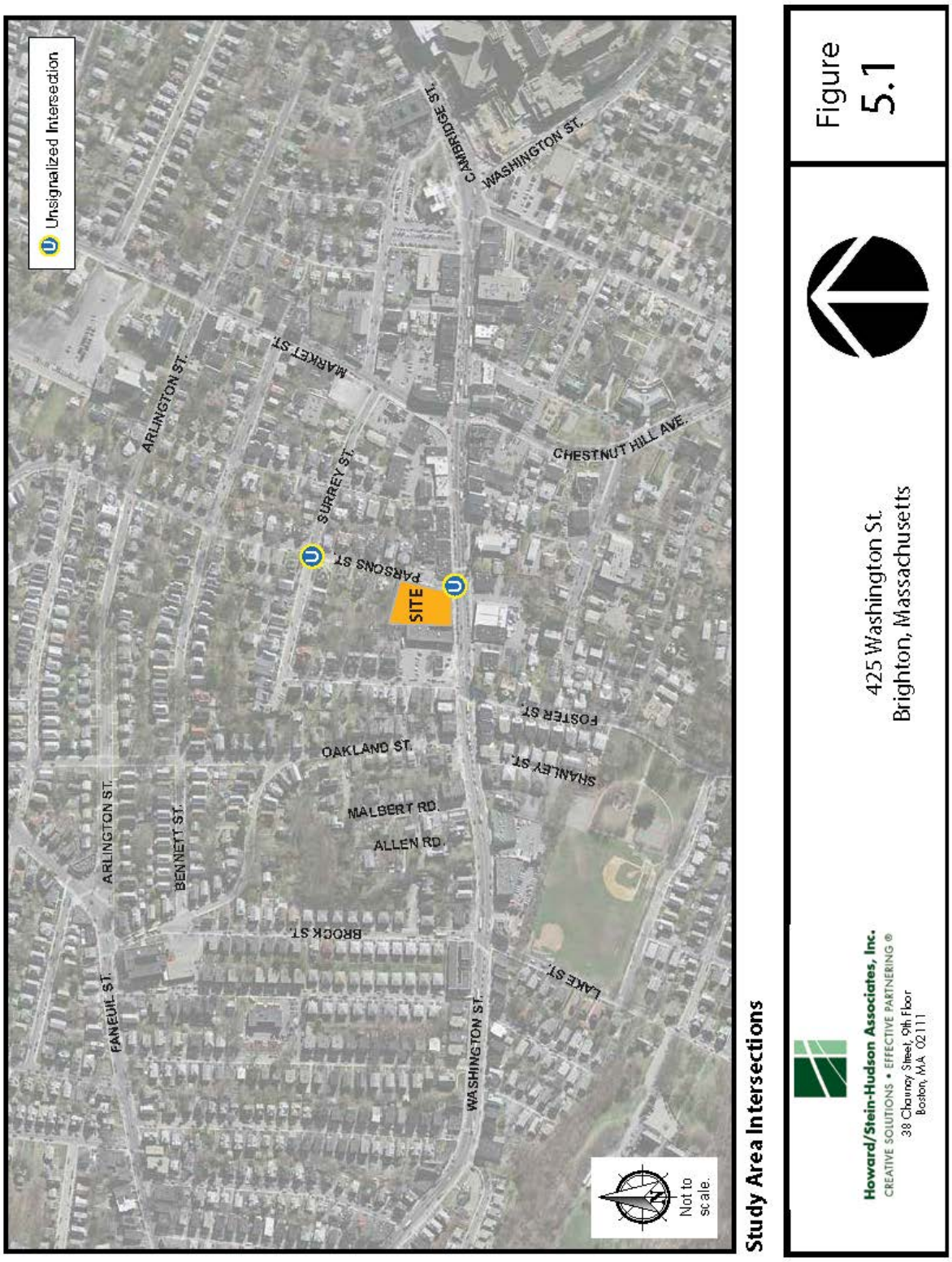
The 2018 No-Build conditions scenario includes both general background traffic growth and traffic growth associated with specific developments and transportation improvements that are planned in the vicinity of the Project Site.

The 2018 Build conditions scenario includes Project-generated traffic volume estimates added to the traffic volumes developed as part of the 2018 No-Build conditions scenario.

The final part of the transportation study identifies measures to mitigate Project-related impacts and to address any traffic, pedestrian, bicycle, transit, safety, or construction related issues that are necessary to accommodate the Project.

An evaluation of short-term traffic impacts associated with construction activities is also provided.

Figure 5.1 Study Area Intersections



5.2 Existing Conditions

5.2.1 Existing Roadway Conditions

The study area includes the following roadways, which are categorized according to the Massachusetts Department of Transportation Office of Transportation Planning functional classifications:

Parsons Street

- Adjacent to the east side of the Project Site;
- Classified as an urban collector;
- Runs in a north-south direction between Leo M. Birmingham Parkway to the north and Washington Street to the south.
- Parsons Street is a two-way roadway with parking along both sides and consists of a single travel lane in each direction.
- Sidewalks are provided along both sides of Parsons Street.

Washington Street

- Adjacent to the south side of the Project Site;
- Classified as an urban principal arterial roadway;
- Runs in an east-west direction between the Newton city line to the west and the Brookline town line to the east.
- Washington Street is a two-way roadway with parking along both sides of the roadway in the vicinity of the Project.
- Bicycle lanes are provided in both directions along Washington Street.
- Sidewalks are provided along both sides of Washington Street.

5.2.2 Existing Intersection Conditions

Existing conditions at each of the study area intersections are described below.

Washington Street/Parsons Street

- Is a three-legged, unsignalized intersection under BTD jurisdiction.
- Washington Street eastbound and westbound both consist of single travel lanes with bicycle lanes separated by a double-yellow centerline.
- Parsons Street northbound and southbound consist of single travel lanes separated by a double-yellow centerline.
- A crosswalk with handicap-accessible ramps is provided across Parsons Street and across Washington Street, east of Parsons Street.

Parsons Street/Surrey Street

- Is a four-legged, unsignalized intersection under BTD jurisdiction.
- Surrey Street is one-way in the westbound direction and operates under stop control. Surrey Street consists of a single travel lane with parking allowed on both sides.
- Parsons Street northbound and southbound consists of one travel lane in each direction, with parking provided on both sides.
- Crosswalks are not provided at the intersection.

5.2.3 Existing Traffic Conditions

Traffic movement data was collected at the study area intersections in September 2013. Manual turning movement counts (TMCs) and vehicle classification counts were conducted during the weekday a.m. and p.m. peak periods (7:00-9:00 a.m. and 4:00-6:00 p.m., respectively) for the following two intersections:

- Washington Street/Parsons Street
- Parsons Street/Surrey Street

The vehicle classification counts included car, truck, pedestrian, and bicycle movements. Based on the TMCs, the peak hours of vehicular traffic throughout the study area are 7:30-8:30 a.m. and 4:30-5:30 p.m. The detailed traffic counts are provided in the Appendix.

Seasonal Adjustment

In order to account for seasonal variation in traffic volumes throughout the year, data provided by the Massachusetts Department of Transportation (MassDOT) were reviewed. Typically, nearby continuous traffic count stations are used to determine monthly fluctuations in traffic volumes. The most recent (2011) MassDOT Weekday Seasonal Factors were used to determine the need for seasonal adjustments to the September 2013 TMCs. The 2011 seasonal adjustment factor for September for roadways similar to the study area is 0.93, which indicates that average month traffic volumes are approximately 93 percent of typical September traffic volumes. The September counts were not adjusted to reflect average month conditions. The 2013 Existing weekday a.m. and p.m. peak hour traffic volumes are shown in **Figure 5.2** and **Figure 5.3**, respectively.

Figure 5.2 Existing Conditions (2013) Turning Movement Volumes, a.m. Peak Hour (7:30 – 8:30 a.m.)

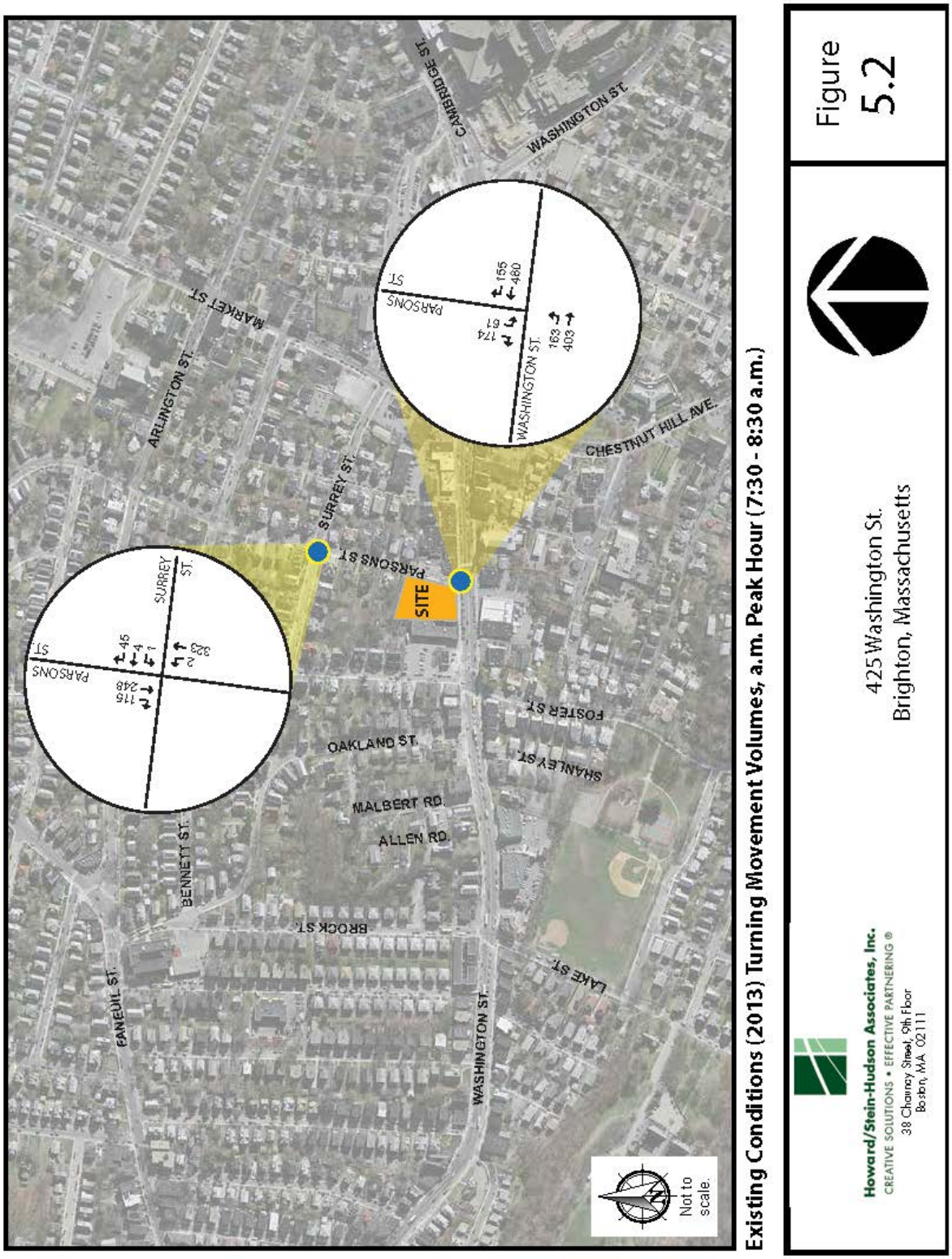
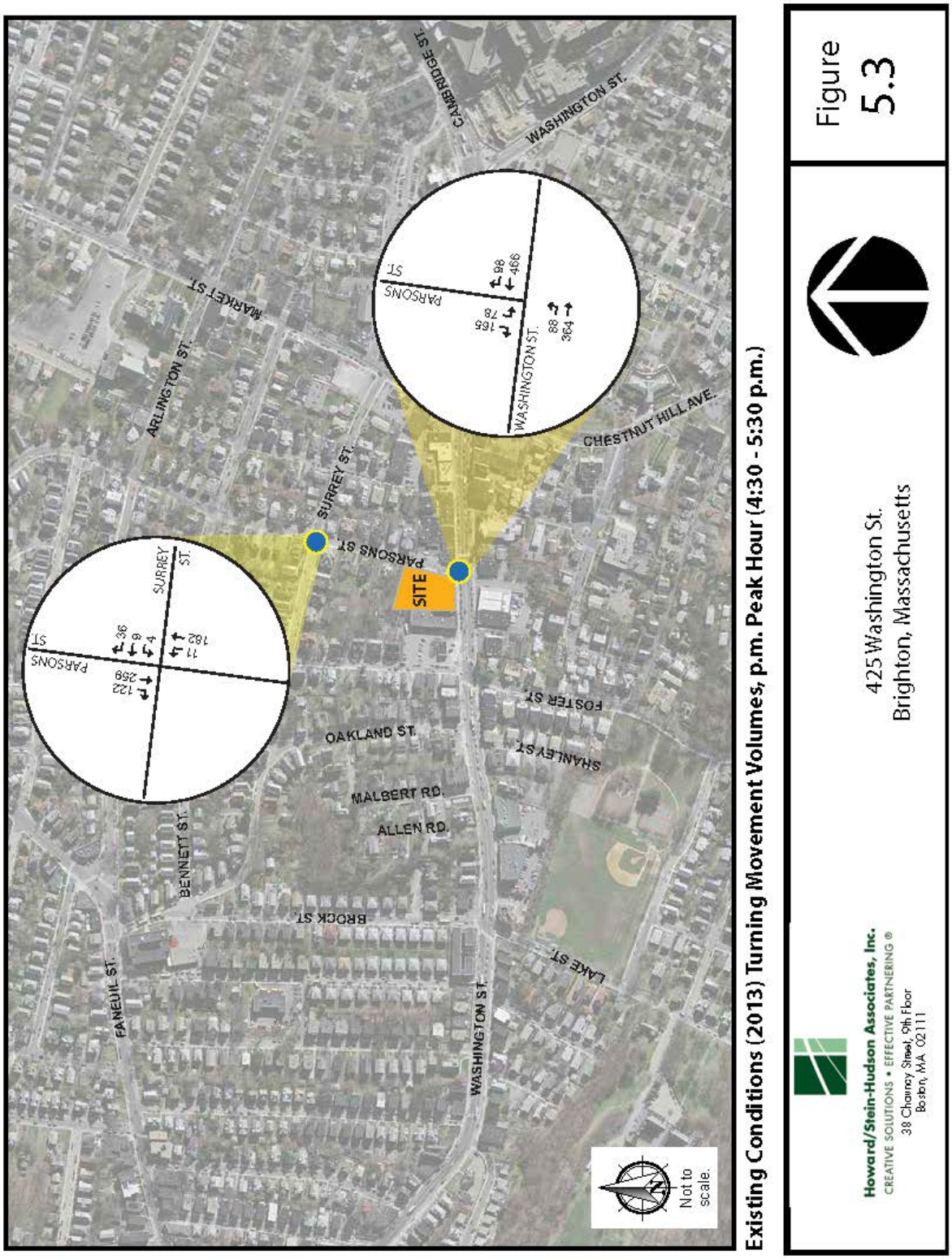


Figure 5.3 Existing Conditions (2013) Turning Movement Volumes, p.m. Peak Hour (4:30 – 5:30 p.m.)



5.2.4

Existing Traffic Operations

The criterion for evaluating traffic operations is level of service (LOS), which is determined by assessing average delay incurred by vehicles at intersections and along intersection approaches. Trafficware's Synchro (version 6) 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).

The volume-to-capacity (v/c) ratio is a measure of congestion at an intersection approach. A v/c ratio of one or greater indicates that the traffic volume on the intersection approach exceeds capacity.

The 95th percentile queue length, measured in feet, represents the farthest extent of the vehicle queue (to the last stopped vehicle) upstream from the stop line during 5 percent of all signal cycles. The 95th percentile queue will not be seen during each cycle. The queue would be this long only 5 percent of the time and would typically not occur during off-peak hours.

Field observations were performed by HSH to collect intersection geometry such as number of turning lanes, lane length, and lane width.

LOS designations are based on average delay per vehicle for all vehicles entering an intersection. **Table 5-1** displays the intersection level of service criteria. 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 3-1 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 5-2 presents the 2013 Existing conditions operational analysis for the study area intersections during the a.m. and p.m. peak hours, respectively. The detailed analysis sheets are provided in the Appendix.

As shown in **Table 5-2**, the Parsons Street approach to Washington Street currently operates at LOS F, with long queues during both the a.m. and p.m. peak hours. This type of operation is not uncommon for unsignalized side streets that intersect major arterial roadways such as Washington Street during the peak hours of traffic. The HCM analysis for unsignalized intersections also assumes more conservative parameters than what is typically experienced in an urban environment, such as the critical gap[1]. The actual queues and delays are typically lower than the values from the HCM analysis.

The intersection of Parsons Street at Surrey Street operates at acceptable levels of service (LOS B or better) for all approaches during both the a.m. and p.m. peak hours.

[1] The critical gap is the minimum length of time interval in the major street traffic stream that allows intersection entry for one minor street vehicle.

Table 3-2 EXISTING CONDITIONS (2013) CAPACITY ANALYSIS SUMMARY

Intersection	LOS	Delay (seconds)	V/C Ratio	95th Percentile Queue Length (ft)
a.m. peak hour				
Washington Street/Parsons Street	—	—	—	—
Washington EB left/thru	A	5.3	0.22	21
Washington WB thru/right	A	0.2	0.39	0
Parsons SB left/right	F	>50.0	>1.00	434
Parsons Street/Surrey Street	—	—	—	—
Surrey WB left/thru/right	B	12.0	0.14	12
Parsons NB left/thru	A	0.1	0.00	0
Parsons SB thru/right	A	0.0	0.25	0
p.m. peak hour				
Washington Street/Parsons Street	—	—	—	—
Washington EB left/thru	A	4.0	0.15	13
Washington WB thru/right	A	0.0	0.38	0
Parsons SB left/right	F	>50.0	>1.00	542
Parsons Street/Surrey Street	—	—	—	—
Surrey WB left/thru/right	B	12.5	0.12	10
Parsons NB left/thru	A	0.6	0.01	1
Parsons SB thru/right	A	0.0	0.33	0

5.2.5 Existing Parking and Curb Usage

On-street parking in the study area generally consists of unrestricted and two-hour parking along Washington Street and unrestricted parking along Parsons Street. The on-street parking regulations are shown in **Figure 5.4**.

5.2.6 Existing Public Transportation

The Project Site is served by several MBTA bus routes. MBTA bus routes 57, 65, 501, and 503 run along Washington Street adjacent to the Project Site and MBTA bus route 86 runs along Market Street/Chestnut Hill Avenue just east of the Project Site. Several bus stops are located within walking distance of the Project Site on Washington Street and Market Street. The MBTA public transportation services are shown in **Figure 5.5** and summarized in **Table 5-3**.

Table 3-3 MBTA TRANSIT SERVICE IN THE STUDY AREA

Transit Service	Description	Peak-hour Headway (in minutes) [1]
Local Bus Routes		
57	Watertown Yard – Kenmore Sta. via Newton Corner and Brighton Center	~10
65	Brighton Center – Kenmore Sta. via Washington St.	~11-15
86	Sullivan Sq. Sta. – Reservoir (Cleveland Circle) via Harvard/Johnson Gate	~8-15
Express Bus Routes		
501	Brighton Center – Downtown via Oak Sq. & Mass. Turnpike	~6
503	Brighton Center – Copley Sq. via Oak Sq. & Mass. Turnpike	~15-20

1 Headway is the scheduled time between trains or buses, as applicable. Source: MBTA.com, September 2013.

Figure 5.4 On-street Parking in the Study Area

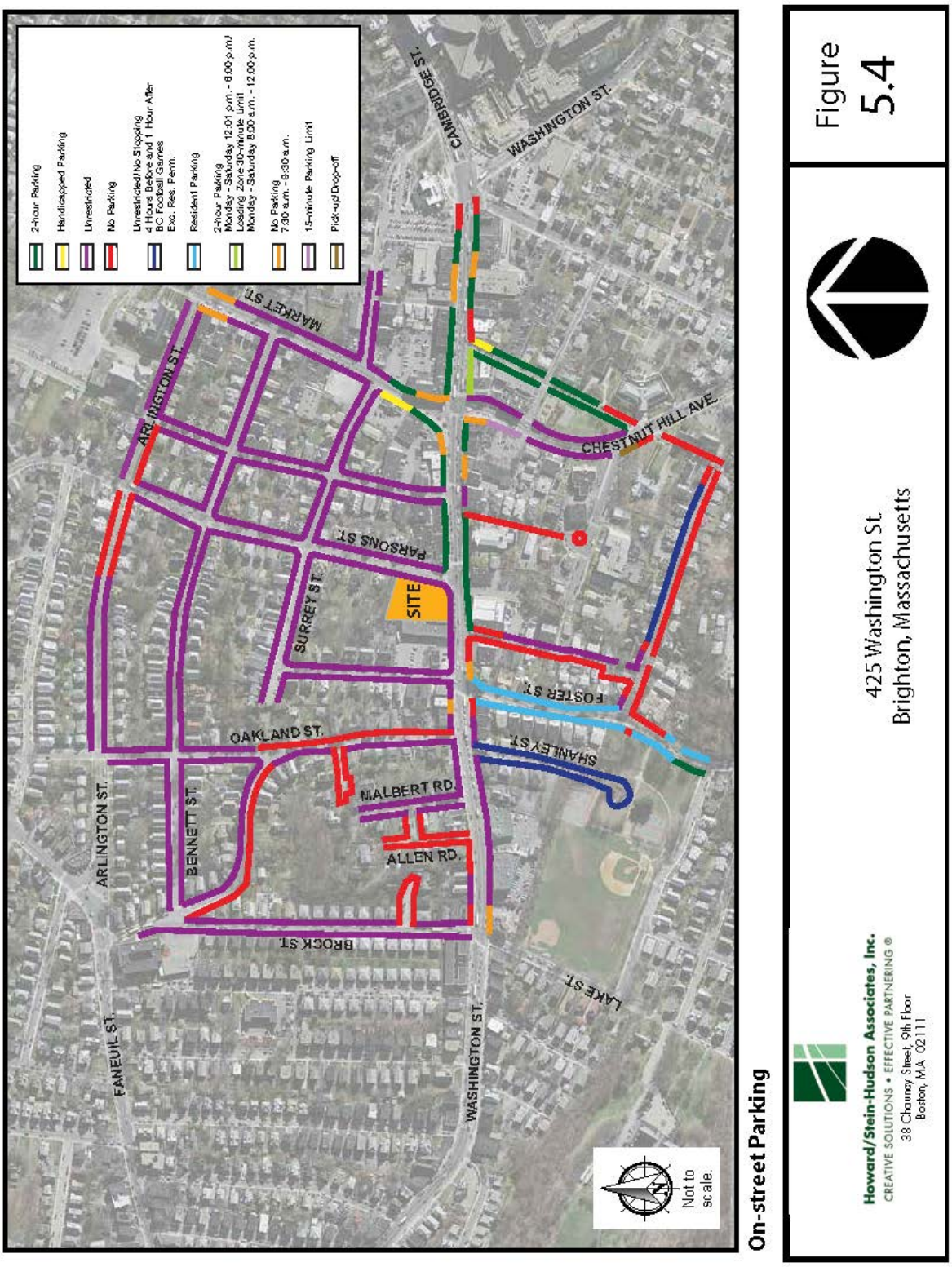
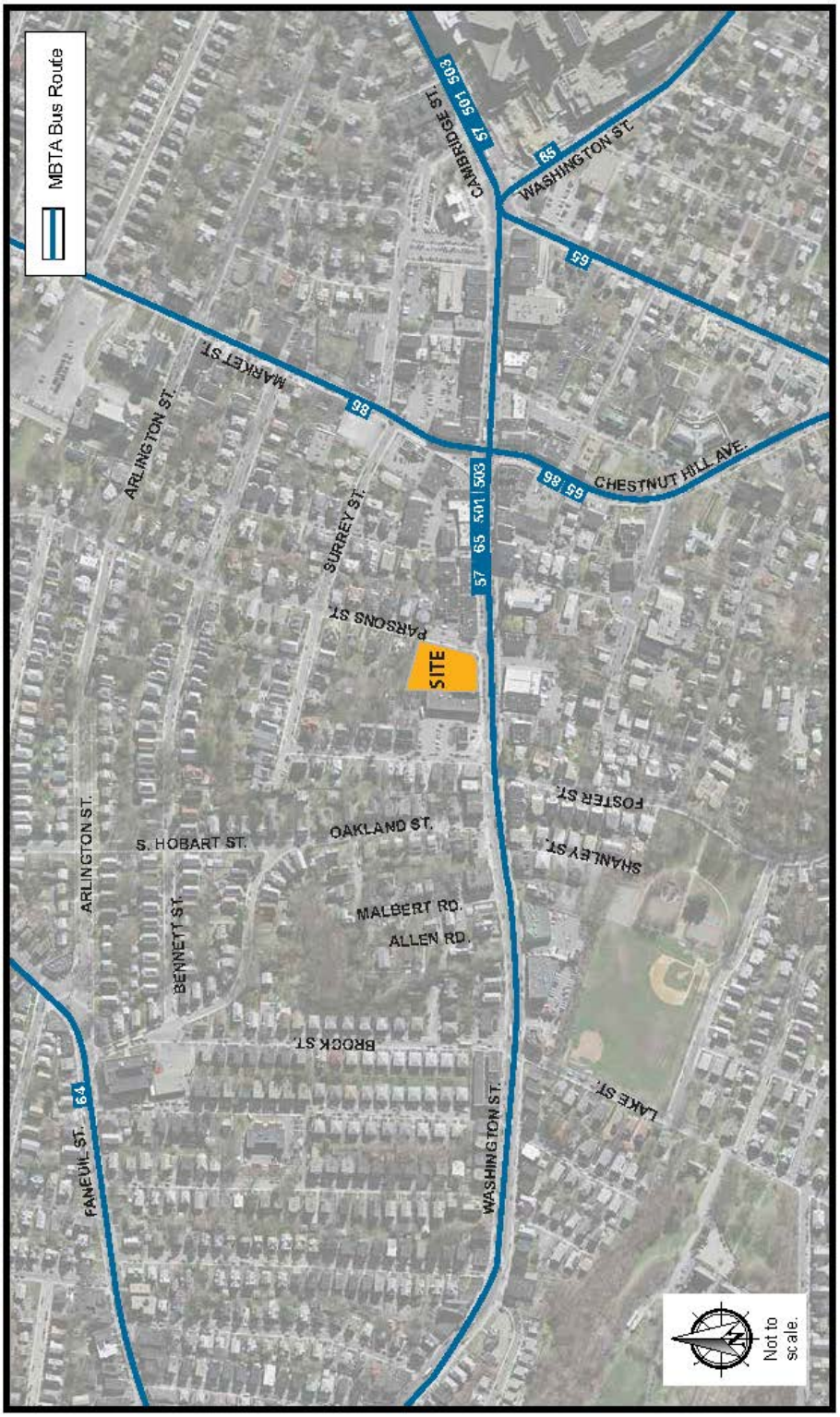


Figure 5.5 Public Transportation in the Study Area



5.2.7

Existing Pedestrian Conditions

The Project Site is located at the intersection of Washington Street and Parsons Street. The sidewalks in the study area are generally in good condition and supply more than adequate capacity. Sidewalks are located along both sides of Washington Street, providing pedestrian access throughout Brighton between Oak Square and Brighton Center. Sidewalks are also located along both sides of Parsons Street, providing pedestrian access between the residential and commercial areas of Brighton. The sidewalks along Washington Street are approximately 12-feet in width and the sidewalks along Parsons Street are approximately 8-feet in width in the vicinity of the study area. Marked crosswalks are also provided at the intersection of Washington Street and Parsons Street. Crosswalks are not provided at the intersection of Parsons Street and Surrey Street.

To estimate the amount of pedestrian activity within the study area, pedestrian counts were conducted concurrent with the vehicular TMCs at the study area intersections. The existing pedestrian volumes within the study area are presented in **Figure 5.6**. As shown in **Figure 5.6**, pedestrian volumes are heaviest along Washington Street.

5.2.8 Existing Bicycle Facilities

In recent years, bicycle use has increased dramatically throughout the City of Boston. Bicycle lanes are provided along both sides of Washington Street in the vicinity of the Project Site. The following roadways within the study area are designated bicycle routes on the City of Boston's "Bike Routes of Boston" map:

- **Washington Street** is designated as an advanced route suitable for riders with on-road experience.
- **Parsons Street** is designated as an advanced route suitable for riders with on-road experience.

Bicycle counts were conducted concurrent with the vehicular TMCs and are presented in **Figure 5.7**. As shown in **Figure 5.7**, bicycle volumes are generally light around the adjacent Project Site.

Hubway is a bicycle sharing system in the Boston area, which was launched in 2011 and consists of over 100 stations and 1,000 bicycles. Currently, there are no Hubway stations located in Brighton Center. The two nearest Hubway stations are located at the New Balance facility on Guest Street, approximately a half-mile north of the Site and at Union Square in Allston, approximately one mile east of the Site.

Figure 5.6 Existing Conditions (2013) Pedestrian Volumes, a.m. and p.m. Peak Hours

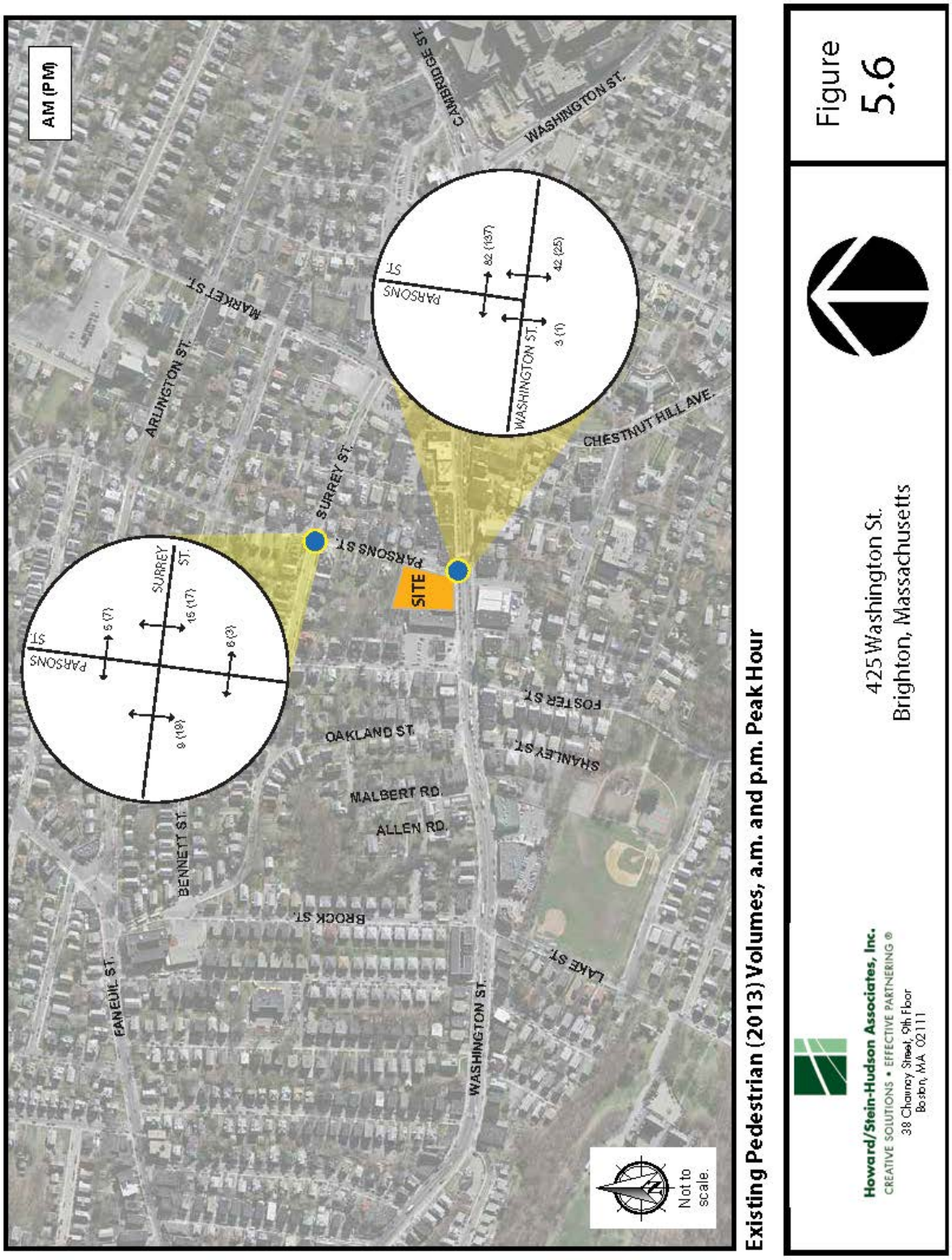
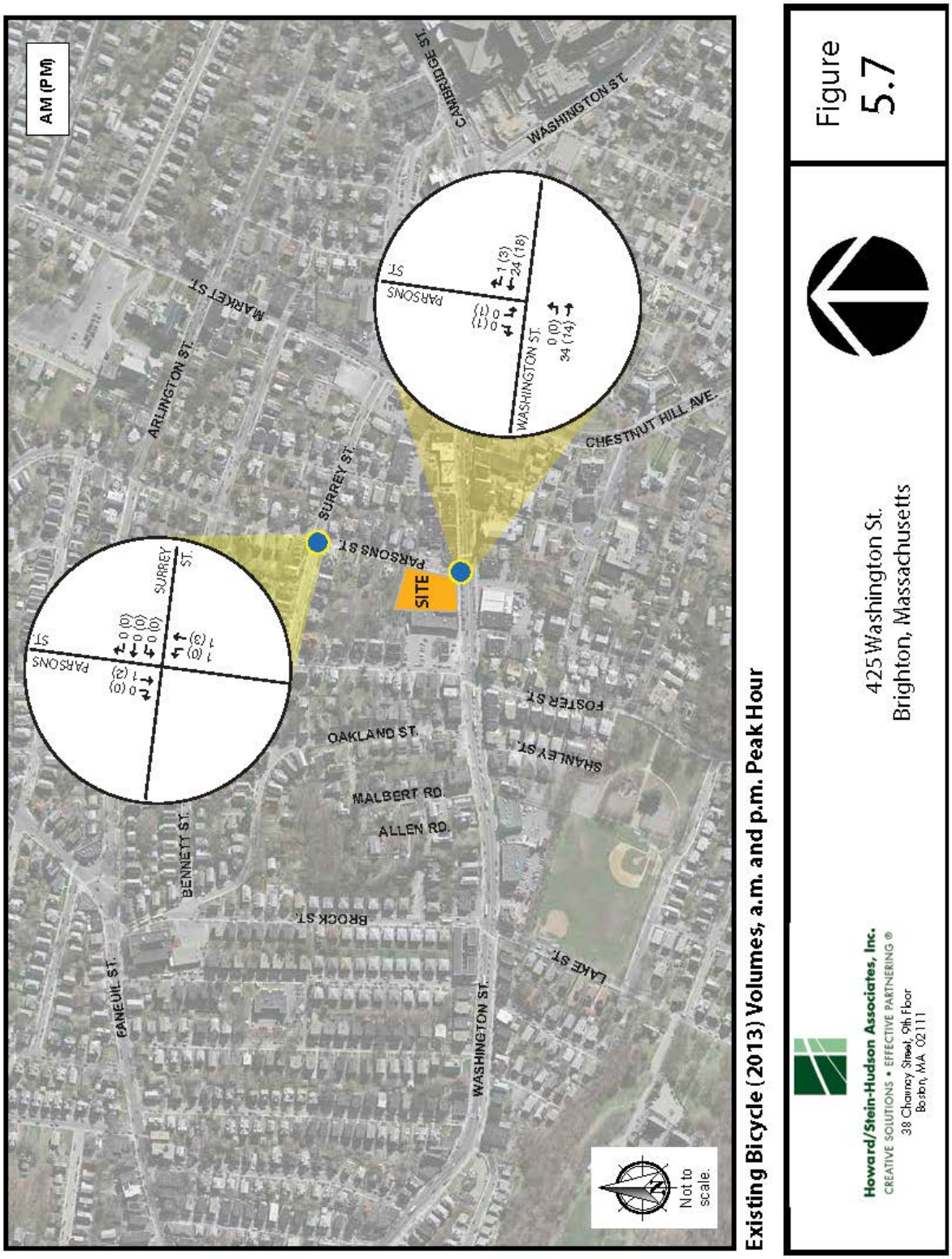


Figure 5.7 Existing Conditions (2013) Bicycle Volumes, a.m. and p.m. Peak Hours



5.2.9

Car and Bicycle Sharing Services

Car sharing, predominantly served by Zipcar in the Boston area, provides easy access to short term vehicular transportation. Vehicles are rented on an hourly or daily, and all vehicle costs (gas, maintenance, insurance, and parking) are included in the rental fee. Vehicles are checked out for a specific time period and returned to their designated location.

There are two car sharing locations within a quarter-mile of the Project Site, including the six spaces located at the Project Site:

- Parsons Street/Washington Street (6 vehicles)
- Dighton Street (2 vehicles)

The nearby Zipcar locations are shown in **Figure 5.8**. The six Zipcar spaces that are currently located on the Site will remain as part of the Project.

5.2.10 Existing Trip Generation

The Project Site currently contains a 2,500 sf bank, 2,800 sf of ground-floor retail space, a 1,600 sf flower shop, 2,800 sf of second floor office space, and a single family home. In order to account for the effect of these uses on the trip generating characteristics of the Project, the existing vehicular trips were estimated using data published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Manual*[2] were used. ITE provides data to estimate the total number of unadjusted vehicular trips associated with a development. In an urban setting well-served by transit, adjustments are necessary to account for other travel mode shares such as walking, bicycling, and transit. The following ITE land use codes (LUCs) were used to estimate the trip generation characteristics of the existing uses on the Site:

LUC 710 – General Office Building. The general office building land use was used for the office space associated with the existing Site uses. The general office building land use encompasses a wide variety of office-related uses and was selected as the most appropriate LUC to develop the trip generation characteristics for the existing office space on the Project Site. Trip generation estimates are based on average vehicular rates per 1,000 sf of gross floor area.

LUC 820 – Shopping Center. The shopping center land use was used for both the retail and flower shop components of the existing Site uses.

LUC 911 – Walk-in Bank. The walk-in bank land use was used for the existing bank that is located on the Project Site.

[2] *Trip Generation Manual*, 9th Edition; Institute of Transportation Engineers; Washington, D.C.; 2012.

The single-family home was not accounted for in the estimates due to its minimal trip generating characteristics and because it will not be modified or redeveloped as part of the Project.

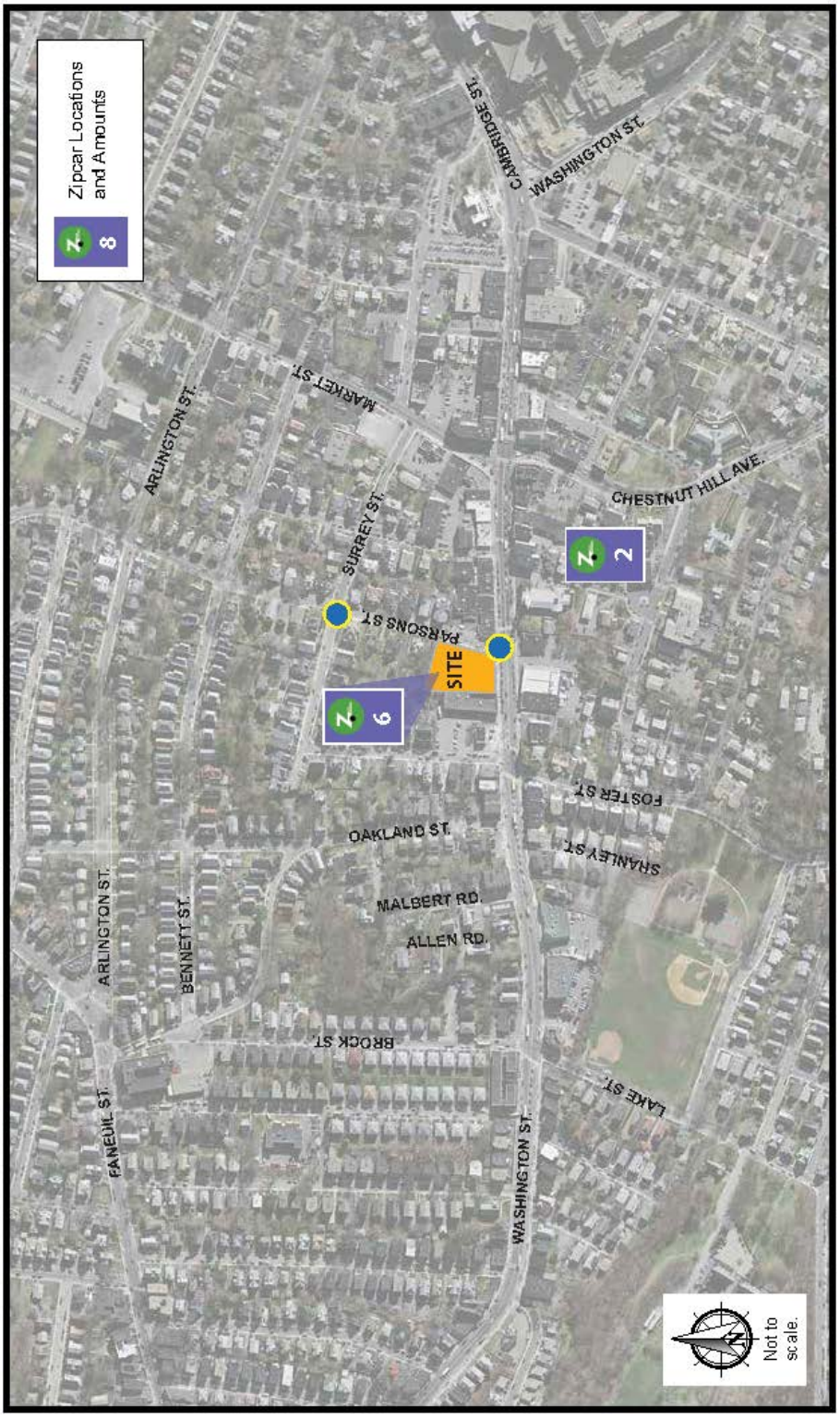
To develop the adjusted vehicular trips generated by the existing uses on the Site, mode share data provided by BTD was used. The mode share data is used to develop the number of walk/bicycle, transit, and automobile trips and is presented in the *Future Conditions* section of this document (section 5.3.2).

Based on the land use trip rates and travel mode share assumptions published by BTD, the existing trips are shown in **Table 5-4**.

Table 3-4 TRIP GENERATION – EXISTING LAND USES

Land Use		Walk/Bicycle Trips	Transit Trips	Vehicle Trips
Daily				
Bank *2,500 sf*	In Out	49 49	8 8	60 60
General Office *2,800 sf*	In Out	3 3	2 2	12 12
Retail (ground floor retail and flower shop) *4,400 sf*	In Out	50 50	8 8	61 61
Total	In Out	102 102	18 18	133 133
a.m. Peak Hour				
Bank *2,500 sf*	In Out	6 3	1 1	5 4
General Office *2,800 sf*	In Out	1 0	0 0	3 0
Retail (ground floor retail and flower shop) *4,400 sf*	In Out	2 1	0 0	1 1
Total	In Out	9 4	1 1	9 5
p.m. Peak Hour				
Bank *2,500 sf*	In Out	7 12	2 2	8 10
General Office *2,800 sf*	In Out	0 1	0 0	1 2
Retail (ground floor retail and flower shop) *4,400 sf*	In Out	4 6	1 1	5 4
Total	In Out	11 19	3 3	14 16

Figure 5.8 Shared Vehicle Locations



5.3

Future Conditions

For transportation impact analyses, it is standard practice to evaluate two future conditions: No-Build conditions (without the proposed project) and Build conditions (with the proposed project). In accordance with BTD guidelines, these conditions are projected to a future date five years from the Existing conditions year. For this evaluation of this Project, 2018 was selected as the horizon year for the future conditions analyses.

This section presents a description of the 2018 future conditions scenarios and includes an evaluation of the transportation facilities under the No-Build and Build conditions.

5.3.1 No Build Conditions

The No-Build conditions reflect a future scenario that incorporates any anticipated traffic volume changes independent of the Project and any planned infrastructure improvements that will affect travel patterns throughout the study area. Infrastructure improvements include roadway, public transportation, pedestrian and bicycle improvements. Traffic volume changes are based on two factors: an annual growth rate and growth associated with specific developments near the Project.

Background Traffic Growth

The methodology to account for future traffic growth, independent of the Project, consists of two parts. The part methodology accounts for general background traffic growth that may be affected by changes in demographics, automobile usage, and automobile ownership. Based on a review of recent traffic studies conducted for nearby projects and to account for any additional unforeseen traffic growth, a half-percent per year annual traffic growth rate was used to develop the future conditions traffic volumes.

The second part identifies any specific planned developments that are expected to affect traffic patterns throughout the study area within the future analysis time horizon. The following projects are located in the vicinity of the study area:

- **Washington Victory Apartments** – This development includes the construction of 24 new residential units and will remodel an existing funeral home into 4 additional units. This project is located southwest of the Project Site along Shanley Street.
- **375 Market Street** – This development includes the construction of 39 new residential units. This project is located northeast of the Project Site along Market Street.
- **Hult Lake Street Addition** – This development includes the additional construction of 20,000 sf for a business school at the Cenacle Retreat Center. This project is southwest of the Project site along Lake Street.
- **St. Elizabeth's Institutional Master Plan (IMP) & Connell Emergency Department (ED) Urgent Care Building** – This development includes the construction of a 25,000 sf one-story

addition to the existing ED/Urgent Care building in addition to a 4-year IMP renewal. This project is east of the Project Site along Washington Street.

- **New Brighton Landing** – This development includes the construction of a 250,000 sf new World Headquarters for New Balance, a 350,000 sf sports complex, a 140,000 sf boutique hotel, three office buildings totaling 650,000 sf, and 65,000 sf of mixed-use retail and residential space. This project is located north of the Project Site along Guest Street.

Traffic volumes associated with these projects will be minimal at the study area intersections and were assumed to be accounted for in the general background growth rate.

The half-percent per year annual growth rate was applied to the 2013 existing conditions traffic volumes to develop the 2018 No-Build conditions traffic volumes. The 2018 No-Build a.m. and p.m. peak hour traffic volumes are shown on **Figure 5.9** and **Figure 5.10**, respectively.

Figure 5.9 No-Build Conditions (2018) Turning Movement Volumes, a.m. Peak Hour

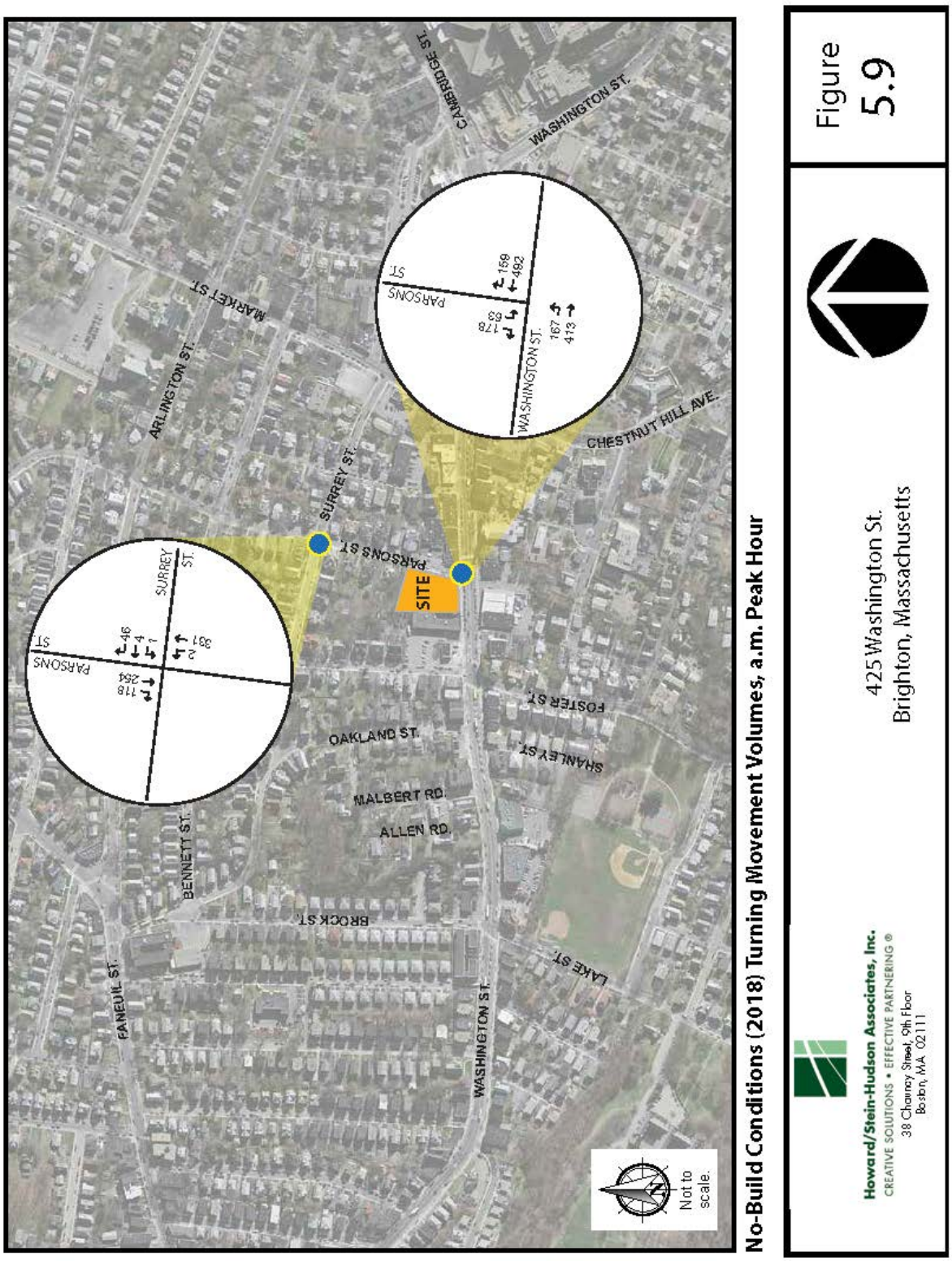
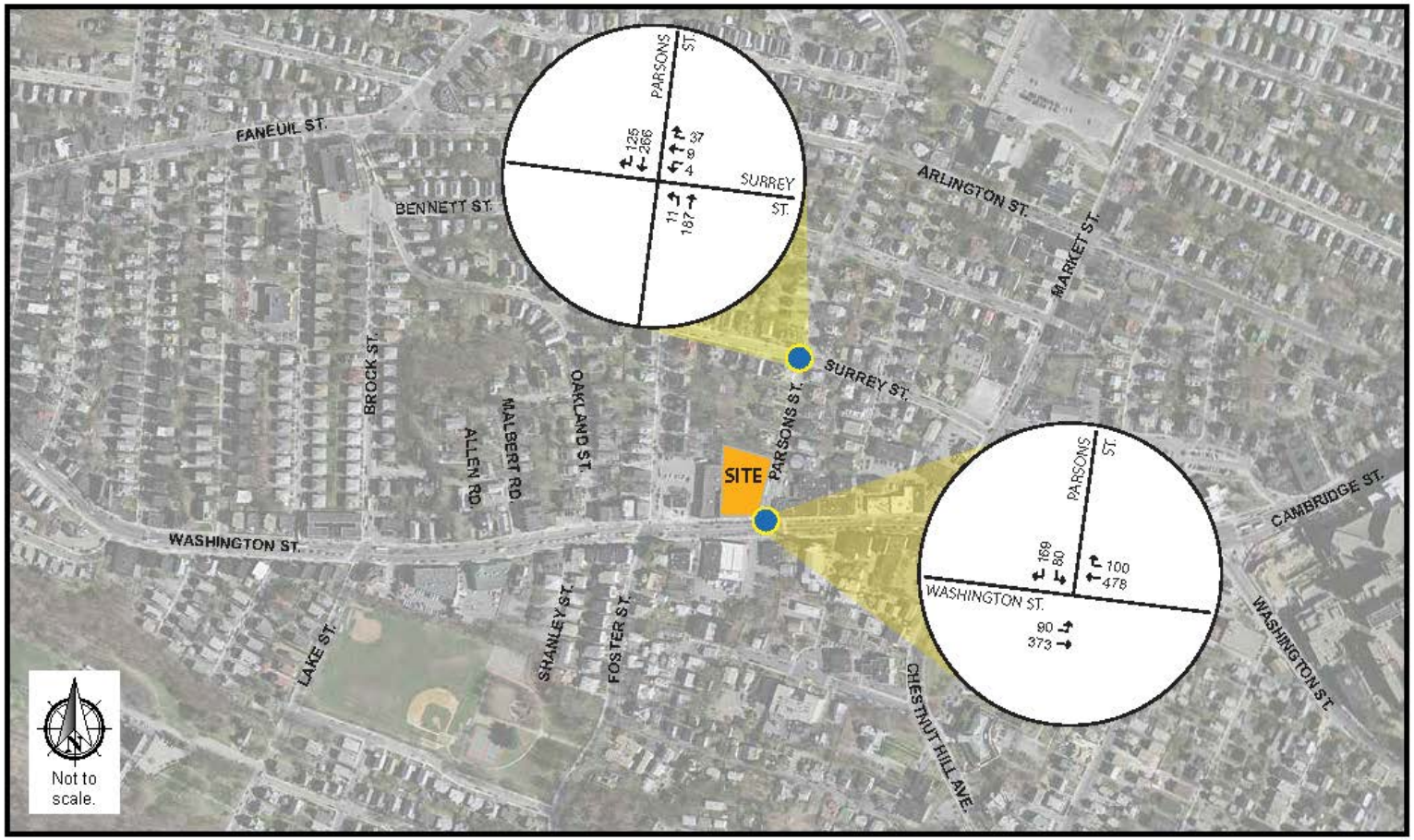


Figure 5.10 No-Build Conditions (2018) Turning Movement Volumes, p.m. Peak Hour



No-Build Conditions (2018) Turning Movement Volumes, p.m. Peak Hour

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Brighton, Massachusetts

Figure
5.10

Proposed Infrastructure Improvements

A review of planned improvements to roadway, transit, bicycle, and pedestrian facilities was conducted to determine if there are any nearby projects in the vicinity of the study area. Based on this review, no projects were identified within the study area.

No-Build Conditions Traffic Operations

The 2018 No-Build conditions scenario analysis uses the same methodology as the 2013 existing conditions scenario analysis. **Table 5-5** presents the 2018 No-Build conditions operations analysis for the a.m. and p.m. peak hours. The detailed analysis sheets are provided in the Appendix.

Table 3-5 NO-BUILD CONDITIONS (2018) CAPACITY ANALYSIS SUMMARY

Intersection	LOS	Delay (seconds)	V/C Ratio	95th Percentile Queue Length (ft)
a.m. peak hour				
Washington Street/Parsons Street	—	—	—	—
Washington EB left/thru/	A	5.5	0.23	22
Washington WB thru/right	A	0.2	0.40	0
Parsons SB left/right	F	>50.0	>1.00	479
Parsons Street/Surrey Street	—	—	—	—
Surrey WB left/thru/right	B	12.1	0.14	12
Parsons NB left/thru	A	0.1	0.00	0
Parsons SB thru/right	A	0.0	0.25	0
p.m. peak hour				
Washington Street/Parsons Street	—	—	—	—
Washington EB left/thru/	A	4.1	0.16	14
Washington WB thru/right	A	0.0	0.39	2
Parsons SB left/right	F	>50.0	>1.00	586
Parsons Street/Surrey Street	—	—	—	—
Surrey WB left/thru/right	B	12.6	0.12	10
Parsons NB left/thru	A	0.6	0.01	1
Parsons SB thru/right	A	0.0	0.33	0

As shown in **Table 5-4**, the study area intersections will continue to operate at the same levels of service as they do under the 2013 Existing conditions. The Parsons Street southbound approach will continue to experience delay and queuing during the peak hours.

5.3.2 Build Conditions

As previously summarized, the Project will consist of 60 residential units, 11,820 sf of ground floor retail space, and 2,550 sf of space for the relocation of the existing bank use on the Project Site. A total of 139 parking spaces will be provided on-Site. A below-grade, restricted access parking garage will provide 95 parking spaces for the residential uses on the Site and 44 parking spaces will be located in a surface parking lot that will serve the bank and retail uses on the Project Site. Secure storage for approximately 60 bicycles will also be provided on the Site.

Site Access and Circulation

As shown in the Project Site plan in **Figure 5.11**, access will be provided by a single driveway located along Parsons Street. The driveway will be located in the approximate location of the existing northerly curb cut that currently serves the Site. The existing southerly curb cut will be closed as part of the Project. Parking for the residential component of the Project will be provided in an underground, restricted access garage. Access to the garage will be provided by a ramp along the westerly interior edge of the Project Site. Parking for the commercial components of the Project will be provided in the surface parking lot.

Loading and service, including trash, recycling, and deliveries will occur on-site within the surface parking lot. A loading dock is provided for the commercial uses on the Project Site and will accommodate an SU-36 sized truck.

Pedestrian access to the retail portion of the Project will be provided along Washington Street and from the surface parking lot in the rear of the building. Pedestrian access to the bank will be provided along Parsons Street and through the interior of the retail space. The northerly residential building will have pedestrian access off of Parsons Street and the surface parking lot. The southerly building will provide pedestrian access for the residents off of Washington Street and the surface parking lot.

Trip Generation

Trip generation is a complex, multi-step process that produces an estimate of vehicle trips, transit trips, walk trips, and bicycle trips associated with a proposed development and a specific land use program. A project's location and proximity to different travel modes determines how people will travel to and from the Project Site.

To estimate the number of trips expected to be generated by the Project, data published by ITE in the *Trip Generation Manual* were used. ITE provides data to estimate the total number of unadjusted vehicular trips associated with the Project. In an urban setting well-served by transit,

adjustments are necessary to account for other travel mode shares such as walking, bicycling, and transit.

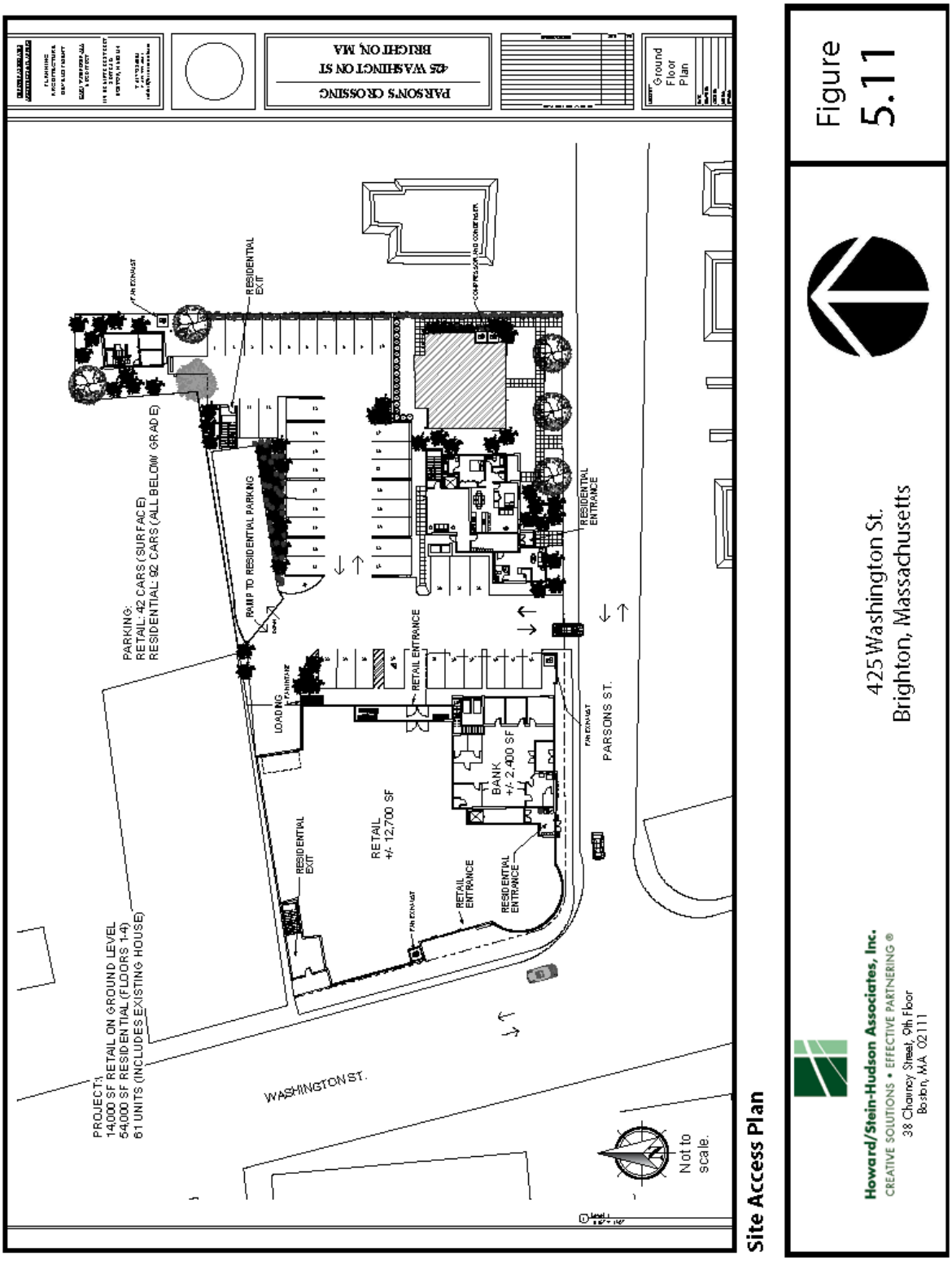
To estimate the unadjusted number of vehicular trips for the Project, the following ITE land use codes (LUCs) were used:

LUC 220 – Apartment. The apartment land use is defined as rental dwellings located within the same building with at least three other dwelling units. Trip generation estimates are based on average vehicle rates per unit.

LUC 820 – Shopping Center. The shopping center land use is defined as an integrated group of commercial establishments that is planned, developed, owned and managed as one unit. Trip generation estimates are based on average vehicular rates per 1,000 sf of gross leasable area.

LUC 911 – Walk-in Bank. The walk-in bank land use is defined as a free-standing bank building without a drive-through window. Trip generation estimates are based on average vehicular rates per 1,000 sf of gross floor area.

Figure 5.11 Project Site Plan



Mode Share

The BTD publishes vehicle, transit, and walking/bicycling mode split rates for different areas of Boston. The Project Site is located within BTD's designated Area 10. The unadjusted vehicular trips were converted to person trips by using vehicle occupancy rates published by the Federal Highway Administration (FHWA)[3]. The BTD's travel mode share data for Area 10 are shown in **Table 5-6**.

Table 3-6 TRAVEL MODE SHARES

Land Use	Direction	Walk/ Bicycle Share	Transit Share	Auto Share	Local Vehicle Occupancy Rate
Daily					
Apartment	In	22%	19%	59%	1.13
	Out	22%	19%	59%	1.13
Shopping Center	In	24%	14%	62%	1.78
	Out	24%	14%	62%	1.78
Walk-in Bank	In	30%	5%	65%	1.78
	Out	30%	5%	65%	1.78
a.m. Peak Hour					
Apartment	In	30%	19%	51%	1.13
	Out	20%	30%	50%	1.13
Shopping Center	In	29%	9%	62%	1.78
	Out	20%	28%	52%	1.78
Walk-in Bank	In	40%	5%	55%	1.78
	Out	29%	10%	61%	1.78
p.m. Peak Hour					
Apartment	In	20%	30%	50%	1.13
	Out	30%	19%	51%	1.13
Shopping Center	In	20%	28%	52%	1.78
	Out	29%	9%	62%	1.78
Walk-in Bank	In	29%	10%	61%	1.78
	Out	40%	5%	55%	1.78

[3] *Summary of Travel Trends: 2009 National Household Survey*; FHWA; Washington, D.C.; June 2011.

Trip Generation

The mode share percentages shown in Table 5-6 were applied to the number of person trips to develop walk/bicycle, transit, and vehicle trip generation estimates. The trip generation for the Project by mode is shown in **Table 5-7**. The detailed trip generation information is provided in the Appendix.

Table 3-7 PROJECT TRIP GENERATION

Land Use		Walk/Bicycle Trips	Transit Trips	Vehicle Trips
Daily				
Bank	In	50	8	61
2,550 sf	Out	50	8	61
Retail	In	108	63	156
11,820 sf	Out	108	63	156
Apartments	In	50	43	118
60 units	Out	50	43	118
Total	In	208	114	335
	Out	208	114	335
a.m. Peak Hour				
Bank	In	6	1	5
2,550 sf	Out	3	1	4
Retail	In	3	1	4
11,820 sf	Out	1	2	2
Apartments	In	2	1	3
60 units	Out	6	8	12
Total	In	11	3	12
	Out	10	11	18
p.m. Peak Hour				
Bank	In	7	3	9
2,550 sf	Out	12	2	10
Retail	In	7	10	11
11,820 sf	Out	12	4	14
Apartments	In	5	8	12
60 units	Out	4	3	6
Total	In	19	21	32
	Out	28	9	30

Vehicle Trip Generation

To develop the overall vehicular trip generation characteristics for the Project, the trips from the existing uses were subtracted from the trip generation estimates presented in Table 5-7. **Table 5-8** presents the overall vehicular trip generation for the Project.

Table 3-8 PROJECT VEHICLE TRIP GENERATION

Time Period	Direction	Apartments [1]	Retail [2]	Bank [3]	Existing Uses	Net Total
Daily	In	118	156	61	133	202
	Out	118	156	61	133	202
	Total	**236**	**312**	**122**	**266**	**404**
a.m. Peak Hour	In	3	4	5	9	3
	Out	12	2	4	5	13
	Total	**15**	**6**	**9**	**14**	**16**
p.m. Peak Hour	In	12	11	9	14	18
	Out	6	14	10	16	14
	Total	**18**	**25**	**19**	**30**	**32**

1 Based on ITE LUC 220 – Apartments for 60 units.
2 Based on ITE LUC 820 – Shopping Center for 11,820 sf.
3 Based on ITE LUC 911 – Walk-in Bank for 2,550 sf.

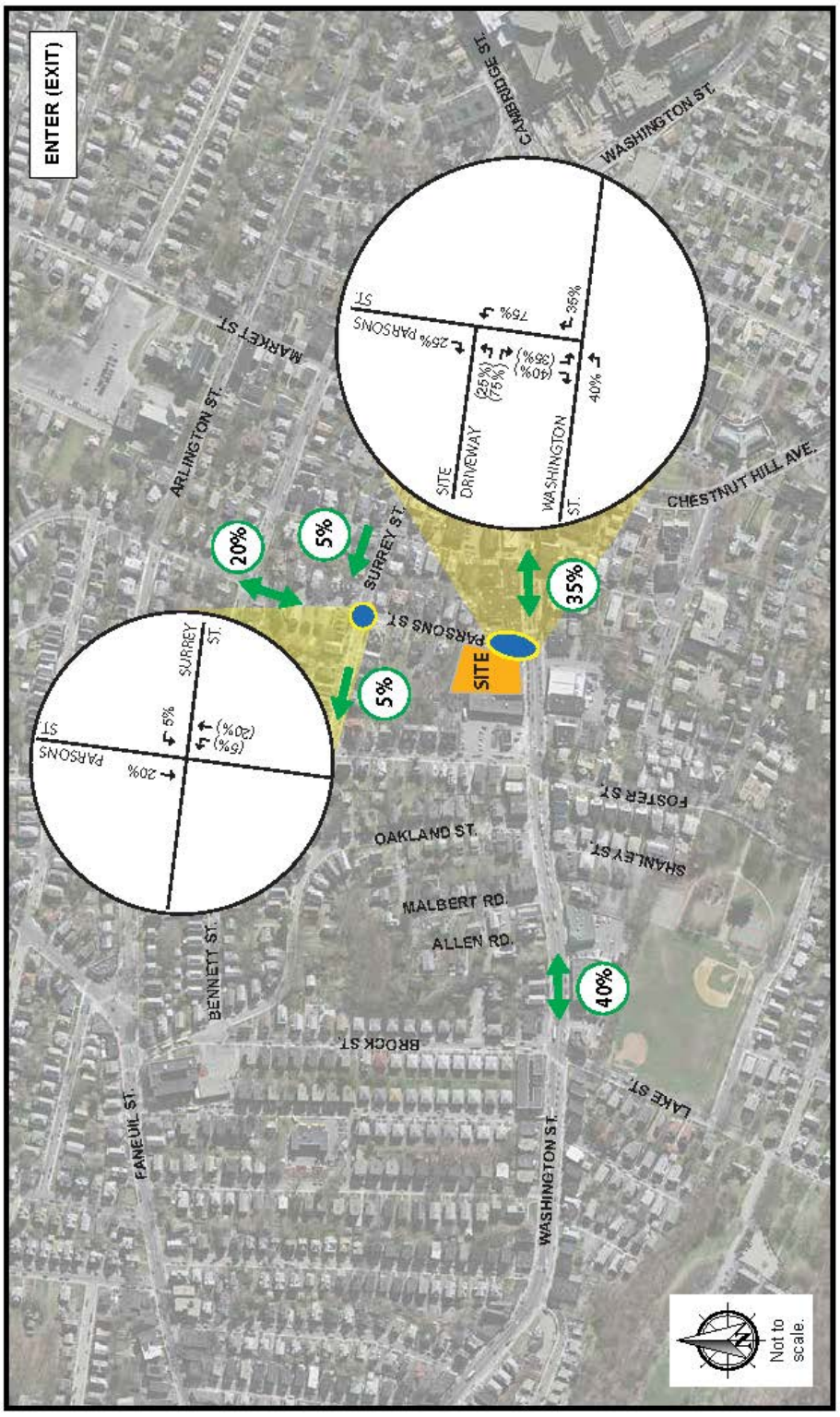
As shown in **Table 5-8**, the Project is expected to generate approximately 404 new daily vehicle trips (202 entering and 202 exiting), with 30 new vehicle trips (12 entering and 18 exiting) during the a.m. peak hour and 62 new vehicle trips (32 entering and 30 exiting) during the p.m. peak hour.

Trip Distribution

The trip distribution identifies the various travel paths for vehicles arriving and leaving the Project Site. Trip distribution patterns for the Project were generally based on existing traffic patterns along Washington Street and Parsons Street and refined based on BTD's origin-destination data for Area 10. The trip distribution patterns for the Project are illustrated in **Figure 5.12** for the entering and exiting trips.

The Project-generated net new vehicle trips were assigned to the study area roadway network based on the trip distribution patterns shown in **Figure 5.12** and are shown in **Figure 5.13** and **Figure 5.14** for the a.m. and p.m. peak hours, respectively. The Project-generated trips were added to the 2018 No-Build conditions traffic volumes to develop the 2018 Build conditions peak hour traffic volume networks and are shown in **Figure 5.15** and **Figure 5.16** for the a.m. and p.m. peak hours, respectively.

Figure 5.12 Trip Distribution



Trip Distribution

Figure 5.12

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Figure 5.13 Project Generated Trips, a.m. Peak Hour

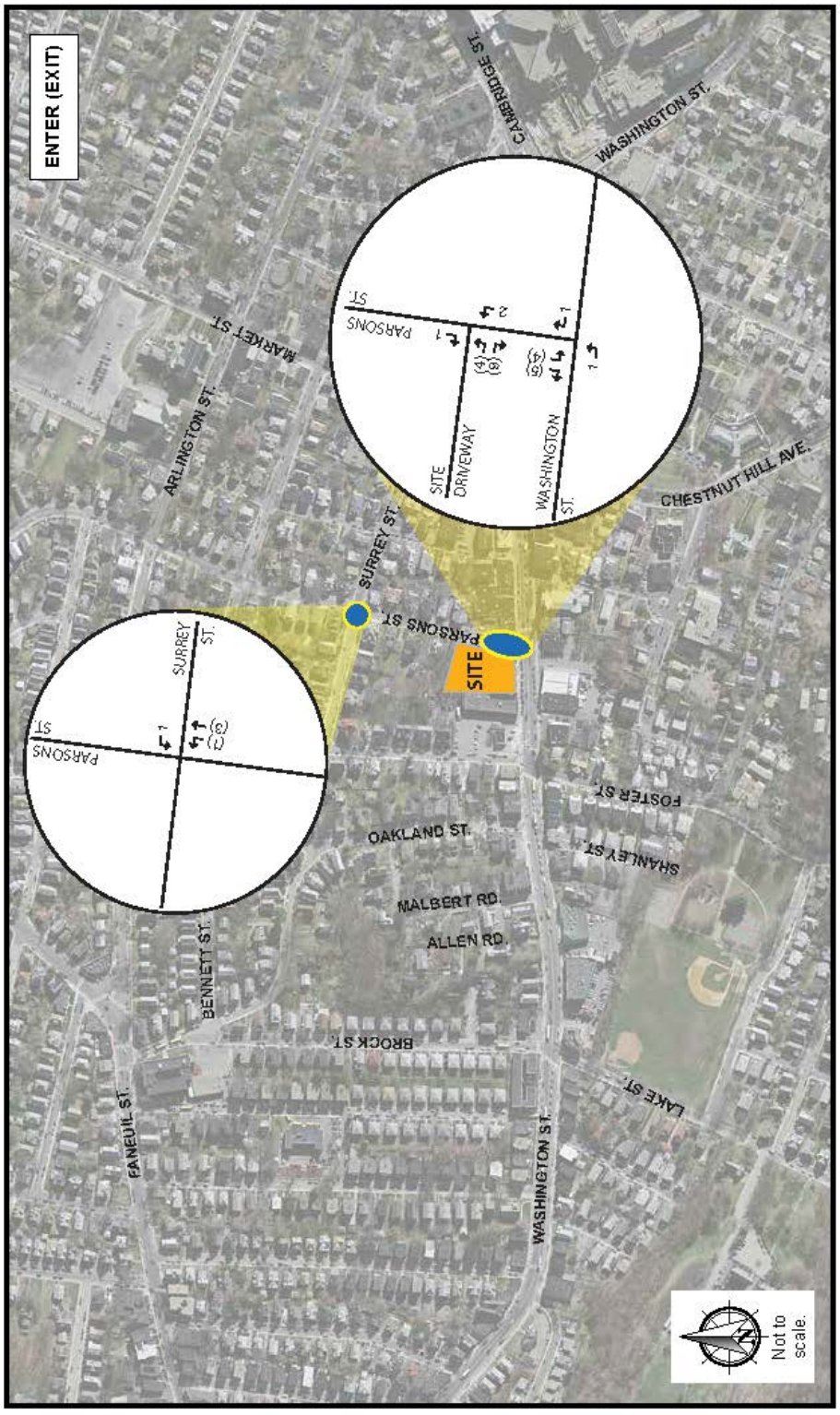

Figure 5.14 Project Generated Trips, p.m. Peak Hour

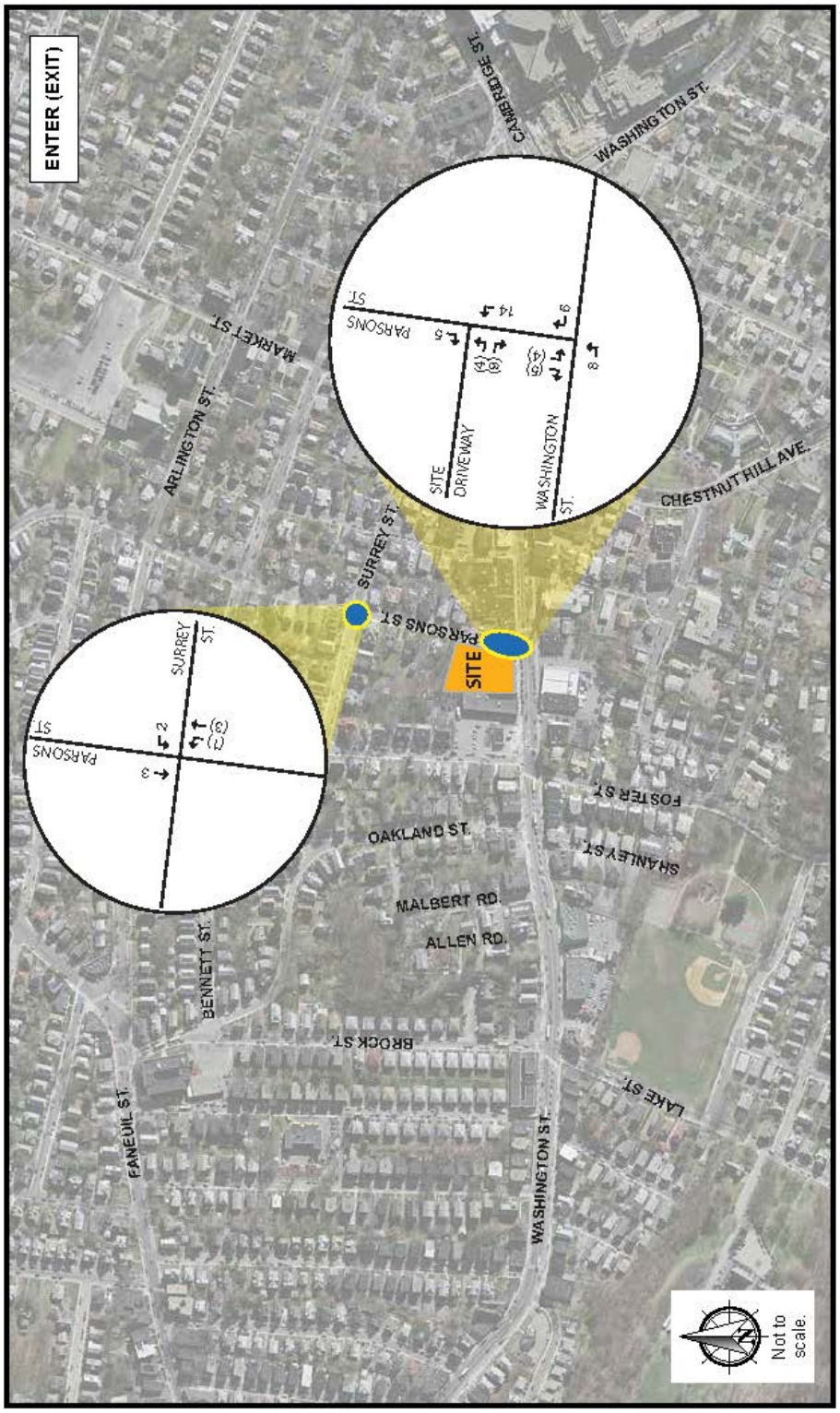

Figure 5.14

425 Washington St.
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Figure 5.15 Build Conditions (2018) Turning Movement Volumes, a.m. Peak Hour

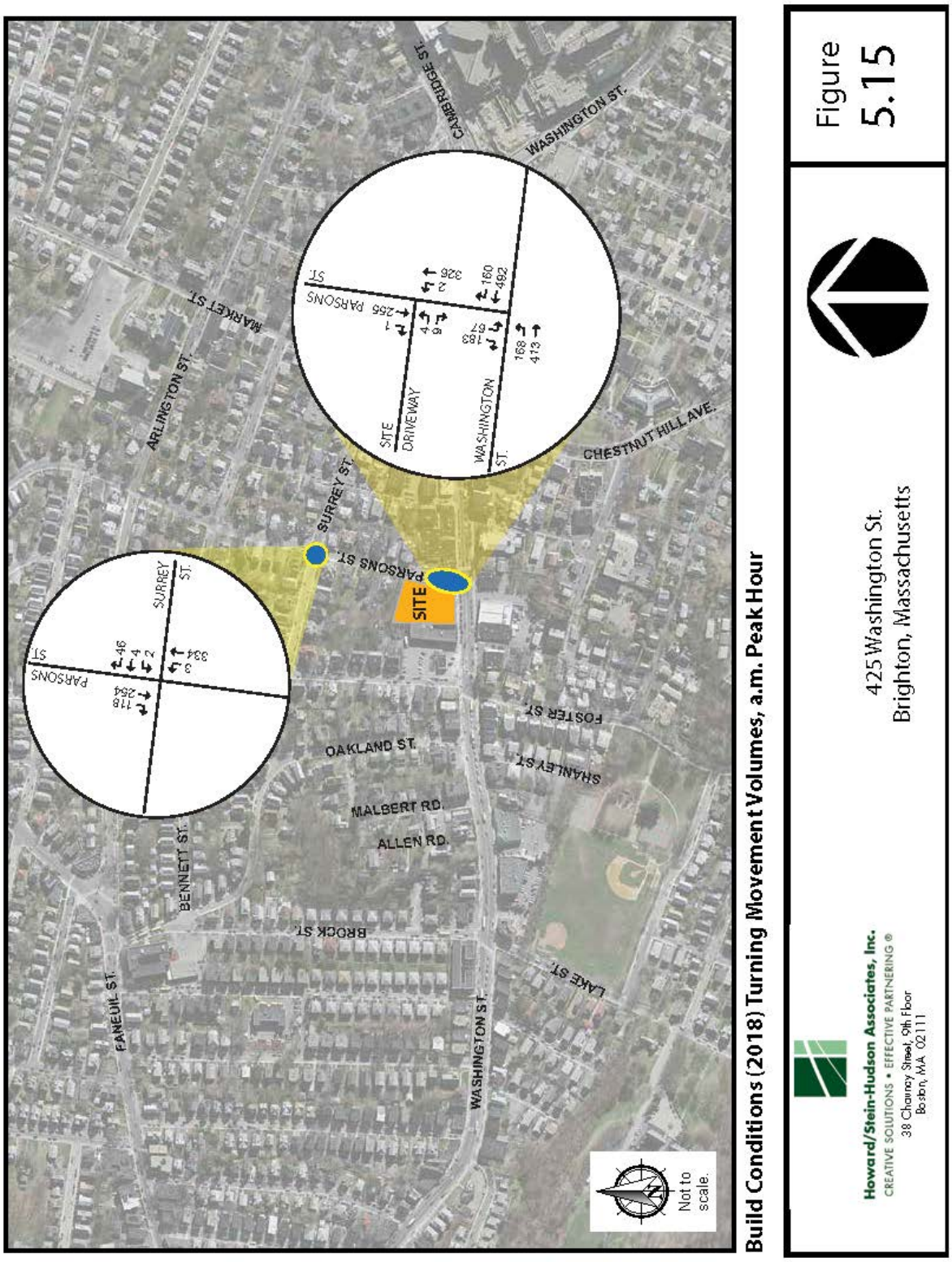
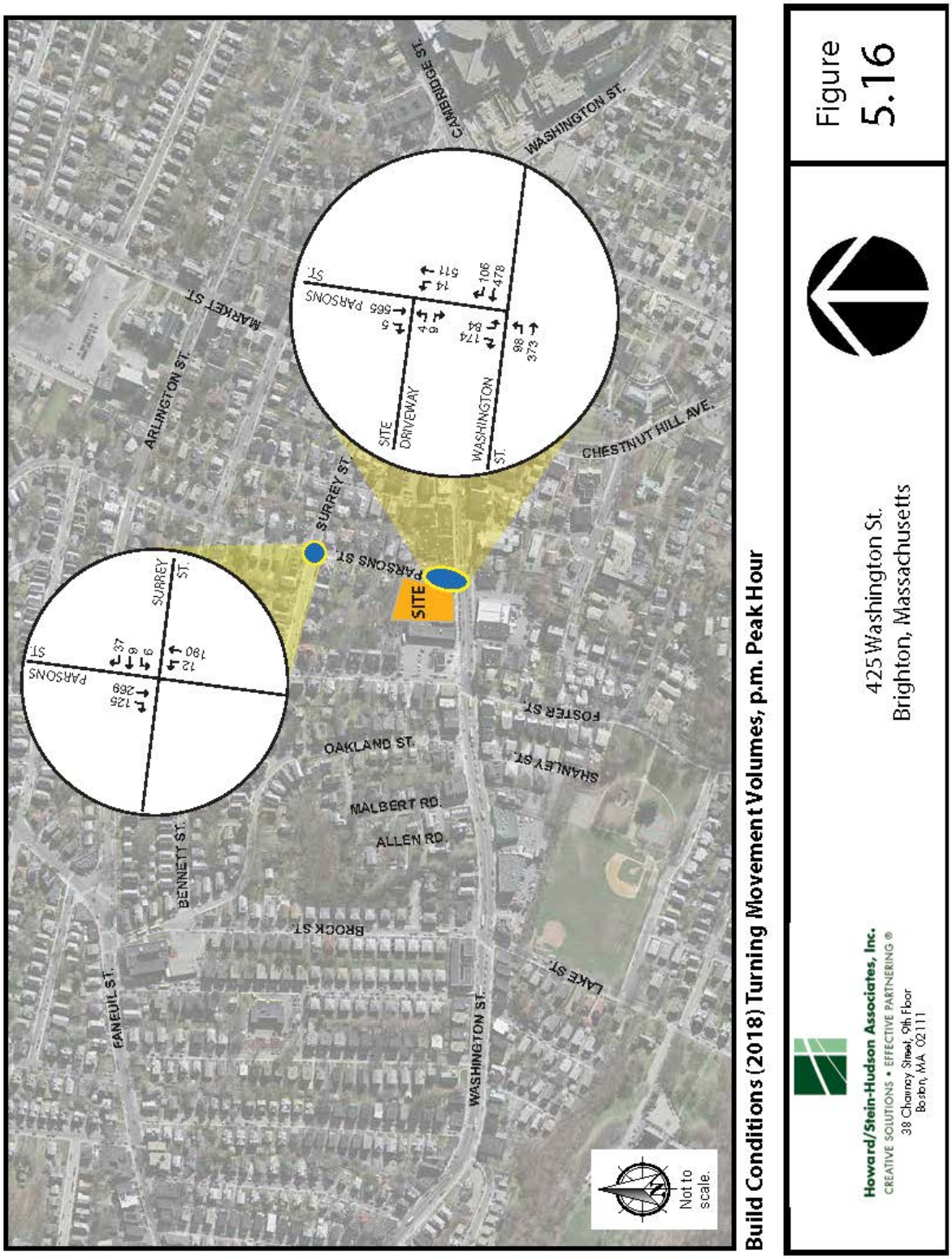


Figure 5.16 Build Conditions (2018) Turning Movement Volumes, p.m. Peak Hour



Build Conditions Traffic Operations

The 2018 Build conditions scenario analyses use the same methodology as the 2013 Existing and 2018 No-Build conditions scenario analyses. The results of the 2018 Build condition traffic analysis at study area intersections are presented in **Table 5-9**. The detailed analysis sheets are provided in the Appendix.

Table 3-9 BUILD CONDITIONS (2018), CAPACITY ANALYSIS SUMMARY

Intersection	LOS	Delay (seconds)	V/C Ratio	95th Percentile Queue Length (ft)
a.m. peak hour				
Washington Street/Parsons Street	—	—	—	—
Washington EB left/thru	A	5.5	0.23	22
Washington WB thru/right	A	0.0	0.40	0
Parsons SB left/right	F	>50.0	>1.00	519
Parsons Street/Surrey Street	—	—	—	—
Surrey WB left/thru/right	B	12.5	0.16	14
Parsons NB left/thru	A	0.2	0.01	0
Parsons SB thru/right	A	0.0	0.25	0
Parsons Street/Site Driveway	—	—	—	—
Site Driveway EB left/right	B	10.9	0.02	2
Parsons NB left/thru	A	0.1	0.00	0
Parsons SB thru/right	A	0.0	0.17	0
p.m. peak hour				
Washington Street/Parsons Street	—	—	—	—
Washington EB left/thru	A	4.4	0.17	15
Washington WB thru/right	A	0.0	0.39	2
Parsons SB left/right	F	>50.0	>1.00	644
Parsons Street/Surrey Street	—	—	—	—
Surrey WB left/thru/right	B	12.9	0.13	11
Parsons NB left/thru	A	0.7	0.01	1
Parsons SB thru/right	A	0.0	0.34	0
Parsons Street/Site Driveway	—	—	—	—
Site Driveway EB left/right	C	16.8	0.04	9
Parsons NB left/thru	A	0.5	0.02	3
Parsons SB thru/right	A	0.0	0.39	0

As shown in **Table 5-9**, the study area intersections will continue to operate at the same LOS as the No-Build conditions during both the a.m. and p.m. peak hours. The Project will have minimal impact on operations at the study area intersections. The Project was shown to add approximately 2 vehicles to the 95th percentile queue along the Parsons Street approach to Washington Street during the a.m. peak hour and approximately 3 vehicles to the 95th percentile queue along the Parsons Street approach to Washington Street during the p.m. peak hour.

The site driveway is expected to operate at acceptable levels of service (LOS C or better) during the peak hours.

Parking

This section presents the Project's parking supply and an evaluation of the Project's parking demand. The Project will provide a total of 139 parking spaces on the Site. Parking for the residential component of the Project will be located in an underground private garage with 95 parking spaces for a parking ratio of 1.58 parking spaces per unit. The parking guidelines for the Allston/Brighton section of Boston identify a parking ration between 1.0 and 1.5 as a goal. The proposed parking ratio will ensure that residents of the Project and their guests will not park on the residential streets in the vicinity of the Site.

Parking for the commercial component of the Site will be provided by a surface lot containing 44 parking spaces. Of these 44 spaces, 38 will be used for the commercial uses and the remaining six spaces will be Zipcar spaces. An overall parking ratio of 2.64 spaces per 1,000 sf of commercial space is provided on the Site. The proposed parking supply will ensure that patrons of the bank and retail component will not park on the residential streets in the vicinity of the Site and along the congested Washington Street corridor.

Public Transportation

Based on the transit mode shares presented earlier, the future transit trips associated with the Project were estimated and are summarized in **Table 5-10**.

Table 3-10 PROJECT TRANSIT TRIPS

Time Period	Direction	Apartment	Retail	Bank	Existing Uses	Total
Daily	In	43	63	8	18	96
	Out	43	63	8	18	96
	Total	**86**	**126**	**16**	**36**	**192**
a.m. Peak Hour	In	1	1	1	1	2
	Out	8	2	1	1	10
	Total	**9**	**3**	**2**	**2**	**12**
p.m. Peak Hour	In	8	10	3	3	18
	Out	3	4	2	3	6
	Total	**11**	**14**	**5**	**6**	**24**

As shown in **Table 5-10**, the Project will generate an estimated 192 new transit trips on a daily basis. Approximately 12 new transit trips (2 alighting and 10 boarding) will occur during the a.m. peak hour and 24 new trips (18 alighting and 6 boarding) will occur during the p.m. peak hour.

The transit trips will be accommodated by the MBTA bus routes that run along Washington Street and Market Street including the 57 bus that provides service to Watertown Square and Kenmore Square and the 501 and 503 buses that provide express service to Downtown Boston and Copley Square.

Pedestrians

Based on the walk mode shares presented earlier, the future walk trips were estimated and are summarized in **Table 5-11**.

Table 3-11 PROJECT PEDESTRIAN TRIPS

Time Period	Direction	Apartments	Retail	Bank	Existing Uses	Total
Daily	In	50	108	50	102	106
	Out	50	108	50	102	106
	Total	**100**	**216**	**100**	**204**	**212**
a.m. Peak Hour	In	2	3	6	9	2
	Out	6	1	3	4	6
	Total	**8**	**4**	**9**	**13**	**8**
p.m. Peak Hour	In	5	7	7	11	8
	Out	4	12	12	19	9
	Total	**9**	**19**	**19**	**30**	**17**

Over the course of a day, the Project will generate an estimated 212 new pedestrian trips and an additional 192 new transit trips that will require a walk to or from the Site. This results in an additional 404 new pedestrian trips per day. Approximately 8 new pedestrian trips will occur during the a.m. peak hour and 17 new pedestrian trips will occur during the p.m. peak hour in addition to the transit trips that will also require a walk from the Site. The existing facilities surrounding the Site have adequate capacity to accommodate the pedestrian trips generated by the Project.

Bicycle Accommodations

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 60 covered and secure

bicycle storage spaces on-site. Additional storage will be provided by outdoor bicycle racks accessible to visitors to the site in accordance with BTD guidelines.

All bicycle racks, signs, and parking areas will conform to BTD guidelines and will be located in safe, secure locations. The Proponent will work with BTD to identify the most appropriate quantity and location for bicycle racks on the Project Site as part of the Transportation Access Plan Agreement (TAPA) process.

Build Conditions Loading and Service Activity

Loading and service operations will occur on the Project site and will be accessed from the Parsons Street driveway. All trash truck activity will also take place on the Project Site. Residential move-in/move-out will be coordinated through the property manager and will generally occur on the surface lot during off-peak hours.

A summary of anticipated loading/service activity by land use is presented in **Table 5-12**; the sources of the assumptions are presented below. Delivery trip estimates were based on data provided in the Truck Trip Generation Rates by Land Use in the Central Artery/Tunnel Project Study Area report[4]. Deliveries to the Project Site will be mostly limited to SU-36 trucks and smaller delivery vehicles.

Residential. Residential units primarily generate delivery trips related to small packages and prepared food. Based on the CTPS report, residential uses generate approximately 0.01 light truck trips per 1,000 sf of gross floor area and 0.001 medium/heavy truck trips per 1,000 sf of gross floor area.

Retail. Retail depend on more frequent deliveries from smaller trucks. Based on the CTPS report, retail uses generate approximately 0.15 light truck trips per 1,000 sf of floor area and 0.15 medium/heavy truck trips per 1,000 sf of gross floor area.

[4] *Truck Trip Generation Rates by Land Use in the Central Artery/Tunnel Project Study Area*; Central Transportation Planning Staff; September 1993.

Table 3-12 DELIVERY ACTIVITY BY LAND USE

Land Use	Number of Deliveries			General Delivery Times
	SU-30 or smaller	*Larger than SU-30*	*Total*	
Retail	3	3	6	10% before 7:00 a.m. 70% between 7:00 a.m. and 1:00 p.m. 20% after 1:00 p.m.
Residential	1	0	1	
Total	4	3	7	

The Project is expected to generate approximately 7 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. For this area, trash truck trips generally occur between 5:00 a.m. and 7:00 a.m. and do not coincide with the regular delivery activities. The low number of anticipated deliveries will have minimal impact on the vehicular operations along Washington Street and Parsons Street and will be served on-site.

5.4 Transportation Mitigation Measures

While the traffic impacts associated with the new trips are minimal, the Proponent will continue to work with the City of Boston to create a Project that efficiently serves vehicle trips, improves the pedestrian environment, and encourages transit and bicycle use.

The traffic operations analysis indicated that the Parsons Street approach to Washington Street currently operates poorly. To help address the operations at this intersection, the Proponent is proposing to restripe the Parsons Street approach to consist of exclusive left-turn and right-turn lanes. This will require the removal of on-street parking along Parsons Street, adjacent to the Site between the Site driveway and Washington Street, which can currently accommodate 2 to 3 parked vehicles. By providing separate turning lanes for vehicles along Parsons Street, queuing along Parsons Street will be significantly reduced from Existing conditions. The delay experienced for the right-turning vehicles will also be reduced. **Table 5-12** summarizes the intersection operations with the proposed improvements at the Washington Street/Parsons Street intersection.

Table 3-13 BUILD WITH MITIGATION CONDITIONS (2018) CAPACITY ANALYSIS SUMMARY

	2018 Build Conditions			2018 Build with Mitigation Conditions		
Intersection	**LOS**	**Delay (seconds)**	**95th Percentile Queue Length (ft)**	**LOS**	**Delay (seconds)**	**95th Percentile Queue Length (ft)**
a.m. peak hour						
Washington Street/Parsons Street						
Washington EB left/thru	A	5.5	22	A	5.6	22
Washington WB thru/right	A	0.0	0	A	0.0	0
Parsons SB left/right	F	>50.0	519	--	--	--
Parsons SB left	--	--	--	F	>50.0	157
Parsons SB right	--	--	--	C	23.6	79
p.m. peak hour						
Washington Street/Parsons Street						
Washington EB left/thru	A	4.4	15	A	4.5	16
Washington WB thru/right	A	0.0	2	A	0.0	0
Parsons SB left/right	F	>50.0	644	--	--	--
Parsons SB left	--	--	--	F	>50.0	202
Parsons SB right	--	--	--	D	31.5	111

The Proponent is responsible for preparation of the Transportation Access Plan Agreement (TAPA), a formal legal agreement between the Proponent and the BTD. The TAPA formalizes 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 Proponent will work closely with BTD to determine the level of transportation mitigation that will be necessary to accommodate the Project. The improvements identified above will be included and refined through the TAPA process. Any additional transportation improvements to be undertaken as part of this Project will be defined and documented in the TAPA.

The Proponent will also produce a Construction Management Plan (CMP) for review and approval by BTD. The CMP will detail the schedule, staging, parking, delivery, and other associated impacts of the construction of the Project.

5.5 Transportation Demand Management

The Proponent is committed to implementing Transportation Demand Management (TDM) measures to minimize automobile usage and Project related traffic impacts. TDM will be facilitated by the nature of the Project (which does not generate significant peak hour trips) and its proximity to numerous 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 good transit access in marketing the site to future residents by working with them to implement the following demand management 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 and tenants containing information on available transportation choices, including transit routes/schedules and nearby Zipcar locations. On-site management will work with residents and tenants as they move in to help facilitate transportation for new arrivals.
- **Bicycle Accommodation**: The Proponent will provide bicycle storage in secure, sheltered areas for residents. Secure bicycle storage will also be made available to employees to encourage bicycling as an alternative mode of transportation. Subject to necessary approvals, public use bicycle racks for visitors will be placed near building entrances.
- **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.
- **Project Web Site**: The web site will include transportation-related information for residents, workers, and visitors.
- **Zipcar**: The six Zipcar spaces that currently exist on the Site will be maintained.
- **Electric Charging Stations**: The Proponent will provide a total of two electric charging stations on the Site.

5.6 Evaluation of Short-term Construction Impacts

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 a Construction Management Plan (CMP) to be filed with BTD in accordance with the City's transportation maintenance plan requirements. 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 have 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.

6.0 INFRASTRUCTURE SYSTEMS COMPONENT

6.1 Introduction

The Proponent will initiate contact with those responsible for the area's utility systems, including the Boston Water and Sewer Commission ("BWSC") to understand and evaluate each system and design the Project to prevent disruption of utility services. A Boston Water and Sewer Commission Site Plan and General Service Application is required for the proposed new water, sewer and drain connections. In addition, a Pollution Prevention Plan will be submitted specifying best management measures for protecting the BWSC drainage system during construction. A Drainage Discharge permit will also be required prior to discharge of any construction dewatering.

Updated design information on the proposed utility connections, as appropriate, will be provided to the BRA and permitting agencies. Sewer, water, storm drainage, and electric utilities are discussed below.

6.2 Sanitary Sewer System

6.2.1 Existing Sewer System

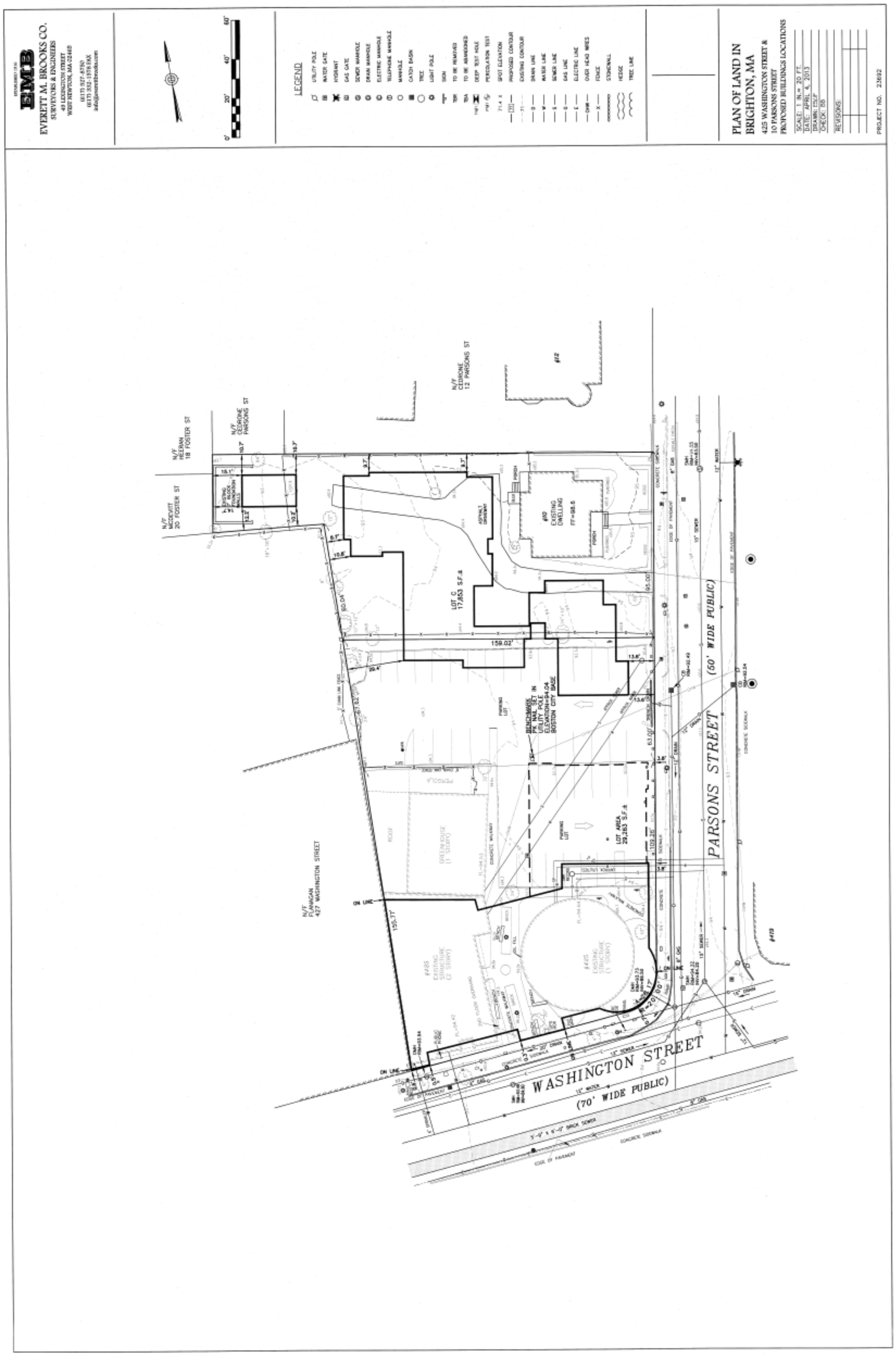
BWSC owns, operates, and maintains the sewer system in the vicinity of the Project Site. There are existing separated sanitary sewers in each of the streets surrounding the site including an existing 12-inch sanitary sewer in Washington Street, a 15-inch sanitary sewer in Parsons Street. **Figure 6-1. Existing Sanitary Sewer System** shows sanitary sewer system in the project area.

6.2.2 Project-Generated Sewage Flow

The Project's sanitary sewage system will connect to the existing BWSC sanitary sewage system servicing this part of the City. The Proposed Project is estimated to generate approximately 10,430 gallons per day (gpd) based on sewage generation rates provided in 310 CMR 15.203 (Title V) of 50 gallons per day (gpd) per 1,000 square feet for retail space and 110 gallons per day for each bedroom. The Proponent's civil engineer, VTP Associates, Inc. will adjust and provide updated sewage flows to the BWSC when more exact residential and commercial uses are determined and the General Services Application is submitted for the Project.

The Project does not propose industrial uses and flows are expected to be under the 50,000 gpd that would require filing with the Massachusetts Department of Environmental Protection for a Sewer Connection Permit or Compliance Certificate, respectively.

Figure 6-1. Existing Sanitary Sewer System


EVERETT M. BROOKS CO.
SURVEYORS & ENGINEERS
LEGEND
PLAN OF LAND IN
BRIGHTON, MA
425 WASHINGTON STREET &
10 PARSONS STREET
PROPOSED BUILDINGS LOCATIONS
PARSONS STREET
(60' WIDE PUBLIC)
WASHINGTON STREET
(70' WIDE PUBLIC)

6.2.3 Sanitary Sewage Connection

It is expected that the sanitary services for the four buildings could connect to one or more of the three existing street connections as discussed in the above section. The capacity and the projected flows anticipated for potential connections will be reviewed with the BWSC.

The Proponent will submit a Site Plan to the BWSC for review and approval.

6.2.4 Sewer System Mitigation

To help conserve water and reduce the amount of wastewater generated by the Project, the Proponent will investigate the use of water conservation devices such as low-flow toilets and flow-restricting faucets.

6.3 Water System

6.3.1 Existing Water Service

Water mains owned by the BWSC and fed by the MWRA transmission system are available in each of the three streets surrounding the Project Site. These include 12-inch domestic service lines in Washington and Parsons Streets. Existing site uses appear to be connected to the existing 12-inch line in Washington Street.

There is one fire hydrant adjacent to the Project Site on Washington Street and one fire hydrant directly across North Beacon Street. The Proponent will determine if these locations are sufficient for fire protection needs with the BWSC and Fire Department during the detailed project design phase.

6.3.2 Anticipated Water Consumption

Water consumption is based on sewage generation with an added factor for system losses plus requirements for the Project's cooling system. Based on the projected sewage generation of 10,430 gpd, it is estimated that the Proposed Project will require approximately 12,300 gpd of water. Since the heating and cooling systems for the building have not yet been designed, the water usage estimates may be adjusted during the design phase of the Project.

The project's civil engineer, VTP Associates, Inc., will adjust and provide updated water consumption estimates to the BWSC when the residential and commercial uses are finalized and the General Services Application is submitted for the Project.

6.3.3 Proposed Water Service

It is anticipated that the domestic water and fire service could be provided from the existing 12-inch water main in Parsons Street. It is anticipated that a 4-inch domestic service and a 6-inch fire protection service will connect to one or more of these southern low mains.

Figure 6-2. Existing Water Distribution System shows the existing water distribution system in the project area.

Flow tests will be performed for final design of the proposed building fire suppression system during the detailed design phase.

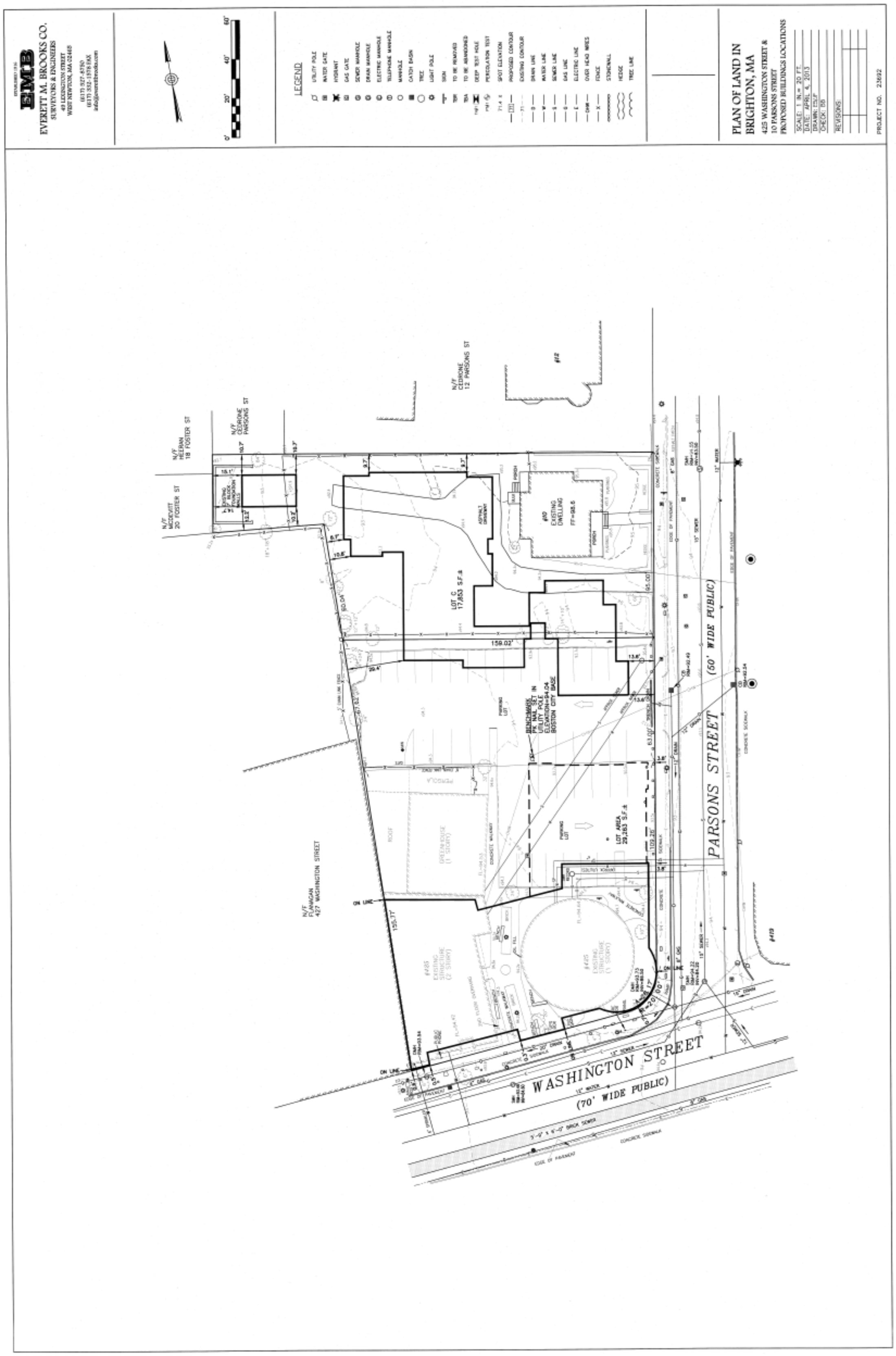
Water service to the building will be metered in accordance with the Commission's Site Plan Requirements. The Proponent will provide for the connection of the meter to the Commission's automatic meter reading system. The property owner will provide a meter transmission unit ("MTU"), approved by the Commission and mounted near the meter, a telephone line and jack near the meter, and an outside meter reading device. Water supply systems servicing the proposed project will be gated so as to minimize public hazard or inconvenience in the event of a water main break.

A backflow preventer will be installed on the fire protection service. Fire protection connections for the proposed project will need approval by the Fire Chief. The Proponent will also submit a Site Plan to the BWSC for review and approval. In addition, a hydrant permit will be obtained if hydrant use is anticipated during the construction phase of the proposed project. The Proponent will also provide the Commission with the breakdown of water usage during the design development phase.

6.3.4 Water Supply System Mitigation

The State Building Code requires the use of water-conserving fixtures. Water conservation measures such as low-flow toilets and restricted flow faucets will help reduce the domestic water demand on the existing distribution system. The Proponent will investigate the installation of sensor-operated sinks with water conserving aerators and sensor operated toilets in all public restrooms. All landscape irrigation at grade and on the green roof will be from rainwater capture and storage.

Figure 6-2 Existing Water Distribution System


EVERETT M. BROOKS CO.
SURVEYORS & ENGINEERS
LEGEND
PLAN OF LAND IN
BRIGHTON, MA
WASHINGTON STREET
(70' WIDE PUBLIC)
PARSONS STREET
(60' WIDE PUBLIC)

6.4

Storm Drainage System

6.4.1 Existing Storm Drainage System

The existing site consists primarily of impervious areas associated with the existing building roofs and parking area (both paved and unpaved). The existing buildings and parking area cover approximately 70 percent of the site. Based on these conditions, the existing site provides limited stormwater recharge.

There are storm drains in each of the streets abutting the Project Site. These include a 12-inch line in Parsons Street, and a combination sewer / storm brick culvert 5'-9" x 6'-0" in Washington Street. There are also catch basins on each street connecting to the city's main stormwater collector system. (See **Figure 6-1** which includes the existing stormwater system in the project area**)**.

6.4.2 Proposed Storm Drainage

The Project Site consists substantially of impervious surfaces. As the buildings and parking area will increase in the proposed condition vs. the existing, there will be an increase in the impervious area and the existing drainage pattern will be altered. The roof and parking runoff will be collected and infiltrated into the ground in the landscaped areas with over-flows to the storm drainage system.

The stormwater management system will be designed in accordance with BWSC's design standards and BWSC Requirements for Site Plans. A Site Plan will be submitted for BWSC approval and a General Service Application will be completed prior to any on-site drain work.

6.4.3 Water Quality

No negative water quality impacts are expected as a result of the proposed project. Since the building and impervious is not substantially different from the existing site, it is proposed that only roof runoff will be collected and recharged in the landscaped areas.

It is the intention of the DEP to apply the Stormwater Management Standards during Project review under the Wetlands Protection Act (MGL Ch. 31, s. 40). Since this Project does not require review under the Wetlands Protections Act, the Standards are not specifically addressed in this document.

6.4.4 Mitigation Measures

The Project will control sediment during construction through the use of hay bales, silt fence and catch basin filters.

A Stormwater Management Report will be submitted to the BWSC with the Site Plan submittal. The report will compare existing and proposed hydrological conditions and describe the best

management practices utilized by the Project. The report will also indicate the storage or treatment of contaminated soils, if any. The Site Plan will also more specifically address the sediment and pollutant control measures and recommended maintenance proposed by the Project.

The Proponent will also submit a dewatering plan and Drainage Discharge Permit Application if dewatering drainage is required.

6.5 Heating and Cooling Systems

The heating, ventilation and air-condition ("HVAC") equipment for the proposed building is being designed as gas-fired individual split HVAC systems for the residential apartments and gas-fired roof-top HVAC systems with economizers for the commercial spaces.

6.6 Electrical Systems

NSTAR provides electric service in the City of Boston. There are transformer vaults at the corner of Washington and Parsons Streets to provide service to the site. The electrical, space heating and energy systems for the proposed project have not yet been designed. Electrical power supply design will be coordinated with NSTAR as the project design progresses.

Energy-saving measures will be incorporated into the building design and construction. The Proponent will investigate the installation of energy efficient lighting, heating and cooling systems in the design for the building.

6.7 Street Lighting

Existing street light conduits and streetlights are owned, operated and maintained by the Boston Public Works Department, Street Lighting Division. The project engineer will coordinate any modifications to the existing system with the Boston Public Works Department.

6.8 Telephone Systems

Verizon provides telephone service in the project area on Washington and Parsons Streets with existing service into all existing site buildings. Verizon can provide service for the project address as needed. New underground telephone service connections will be determined at the time of the DPIR submission.

6.9 Cable Systems

COMCAST provides cable service in the Project area. It is anticipated that cable service to the project site will be from Parsons Street.

6.10 Gas Systems

Keyspan provides natural gas service in the Project area. There is an existing 8-inch cast iron low pressure gas main in Parsons Street. The gas demand will be determined during the design phase of the Project.

6.11 Utility Protection During Construction

During construction, infrastructure will be protected using sheeting and shoring, temporary relocations, and construction staging, as required. The Contractor will be required to coordinate all protection measures, temporary supports, and temporary shutdowns of all utilities with the appropriate utility owners and/or agencies. The contractor will also be required to provide adequate notification to the utility owner prior to any work commencing on their utility. Also, in the event a utility cannot be maintained in service during switch over to a temporary or permanent system, the contractor will be required to coordinate the shutdown with the utility owners and project abutters to minimize impacts and inconveniences accordingly.

7.0 COORDINATION WITH GOVERNMENT AGENCIES

7.1 Architectural Access Board Requirements

This Project will comply with the requirements of the Architectural Access Board. The Project will also be designed to comply with the Standards of the Americans with Disabilities Act.

7.2 Massachusetts Environmental Policy Act

Based on information currently available, development of the Project will not result in a state permit/state agency action and meet a review threshold that would require MEPA review by the MEPA Office of the Executive Office of Energy and Environmental Affairs.

7.3 Boston Civic Design Commission

The Project does not exceed the 100,000 square feet size threshold requirement for projects subject to review by the Boston Civic Design Commission.

8.0 PROJECT CERTIFICATION

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

_____ _____

Signature of Proponent Date

Babak Veyssi
Kandu Corporation, LLC
c/o Legend Group
425 Washington Street
Brighton, MA 02135

_____ _____

Signature of Preparer Date

Gary Hendren AIA
Summit Development Advisors, LLC
119 Braintree Street, Suite 315
Allston, MA 02134

APPENDIX A – LETTER OF INTENT TO FILE PNF AND PUBLIC NOTICE OF AVAILABILITY OF THE PNF