PROJECT NOTIFICATION FORM

Submitted Pursuant to Article 80 of the Boston Zoning Code

40 Trinity Place

Submitted to:
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Submitted by:
Trinity Stuart LLC
40 Trinity Place
Boston, MA 02116

Prepared by:
Epsilon Associates, Inc.
3 Clock Tower Place, Suite 250
Maynard, MA 01754

In Association with:
The Architectural Team
Stonehill & Taylor Architects, P.C.
Goulston & Storrs
Dalton & Finegold, LLP
Howard/Stein-Hudson Associates, Inc.
Suffolk Construction
C3 – Commercial Construction Consulting, Inc.
The Strategy Group
Solomon McCown & Company
McNamara/Salvia, Inc.
Haley & Aldrich, Inc.

October 29, 2012

Epsilon ASSOCIATES INC.

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October 29, 2012

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Chapter 1.0

General Information

1.0 GENERAL INFORMATION

1.1 Introduction

Trinity Stuart LLC (the Proponent), proposes the redevelopment of the site at 40 Trinity Place located in the Back Bay neighborhood of Boston, along with air rights over a portion of the adjacent property at 426 Stuart Street that currently houses the University Club of Boston (collectively, the Project site). The development includes the demolition of the existing Boston Common Hotel and Conference Center, formerly known as the John Hancock Hotel and Conference Center, and the construction of an approximately 33-story mixed use building including hotel, residential, and restaurant uses, potential future expansion space for the University Club, and above-grade accessory parking (collectively, the Project). The total Project will contain approximately 379,370 square feet (sf) of gross floor area (as described in more detail in Section 1.5.5). The Project will provide new tax revenue, construction and permanent jobs, linkage payments and affordable housing, and will also help transform the streetscape of a lifeless block along Stuart Street in the heart of the otherwise lively Back Bay with an activated ground floor and a 24-hour mix of uses.

Trinity Stuart is comprised of Jordan Warshaw, Gary Saunders, and Jeffrey Saunders. Together their families have generations of roots in Boston as local developers and owner-operators of real estate including the Copley Square Hotel and Park Plaza Hotel. They have proven themselves as owners, investors and managers of real estate development projects throughout Boston which have created hundreds of permanent jobs, thousands of construction jobs, generated millions of dollars in property, hotel and meal tax revenues and energized Boston. Their long term ownership of many of these properties is indicative of their commitment to Boston. This Project Notification Form (PNF) is being submitted to the Boston Redevelopment Authority (BRA) to initiate review of the Project under Article 80B, Large Project Review, of the Boston Zoning Code.

1.2 Project Identification and Team

Project Name:	40 Trinity Place
Location:	The intersection of Trinity Place and Stuart Street in the Back Bay neighborhood of Boston
Proponent:	Trinity Stuart LLC 40 Trinity Place Boston, MA 02116 (617) 851-9995 Jordan Warshaw Gary Saunders Jeffrey Saunders

Executive Architect:	The Architectural Team 50 Commandant's Way at Admiral's Hill Chelsea, MA 02150 (617) 889-4402 Michael Liu Gary Kane Michael Doherty
Hotel Architect:	Stonehill & Taylor Architects, P.C. 31 West 27th Street, Fifth Floor New York, NY 10001 (212) 226-8898 Paul Taylor Christina Zimmer
Legal Counsel:	Goulston & Storrs 400 Atlantic Avenue Boston, MA 02110 (617) 574-6597 Matthew J. Kiefer Christian G. Regnier Dalton & Finegold, LLP 34 Essex Street Andover, MA 01810 (978) 470-8400 Kenneth MacKenzie
Permitting Consultant:	Epsilon Associates, Inc. 3 Clock Tower Place, Suite 250 Maynard, MA 01754 (978) 897-7100 Cindy Schlessinger Geoff Starsiak
Transportation Consultant and Civil Engineer:	Howard/Stein-Hudson Associates, Inc. 38 Chauncy Street, 9th Floor Boston, MA 02111 (617) 482-7080 Guy Busa Joe SanClemente Richard Latini

Construction Manager:	Suffolk Construction 65 Allerton Street Boston, MA 02119 (617) 571-4520 John Fish Angus Leary Scott Menard
Construction Consultant:	C3 – Commercial Construction Consulting, Inc. 313 Congress Street Boston, MA 02210 (617) 330-9390 James Kirby Jay Murray
Community Relations:	The Strategy Group 40 Court Street, 11th Floor Boston, MA 02108 (617) 263-3333 Susan Tracy David Newman
Public Relations:	Solomon McCown & Company 177 Milk Street Boston, MA 02109 617-695-9555 Helene Solomon Edward Cafasso Christine Comey Allyson Quinby
Structural Engineer:	McNamara/Salvia, Inc. 160 Federal Street, 5th Floor Boston, MA 02110 (617) 737-0040 Joseph Salvia

Geotechnical Engineer:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Boston, MA 02129 (617) 886-7400 Mark Haley Marya Gorczyca Mike Atwood

1.3 Project Summary

1.3.1 Project Site

The Project site, at the southeast corner of the intersection of Stuart Street and Trinity Place, in the Back Bay neighborhood of Boston, comprises land at 40 Trinity Place, currently including the Boston Common Hotel and Conference Center, and air rights over a portion of the adjacent University Club parcel at 426 Stuart Street (see Figures 1-1 and 1-2). The University Club has agreed to convey these air rights to the Proponent. As such, the Project's lot area for purposes of calculating floor area ratio (FAR) has been treated as the combined lot area of 40 Trinity Place (13,361 sf) and 426 Stuart Street (11,237 sf). The FAR calculation includes (a) the Project, (b) the existing University Club, and (c) potential future gross floor area on the 426 Stuart Street parcel.

1.3.2 Proposed Development

The Project includes the construction of a new, mixed-use structure at the corner of Trinity Place and Stuart Street. A portion of the Project will cantilever over the existing University Club parcel. The existing four-story University Club building may be renovated and expanded by the Club in the near future, but that project is not included as part of this PNF. The Project only includes the University Club space within the proposed building, as described below.

The Project includes demolition of the existing building and construction of a new 33-story, approximately 400 foot tall, mixed-use building totaling approximately 379,370 sf, with approximately 142 residential units, an approximately 220-room hotel with accessory conference center space, and two restaurants. A shared health/fitness center will be provided for residents and hotel guests. Residential parking for approximately 100 vehicles will be provided above grade on levels 4 and 5 and will be accessed via vehicle elevators.

The Project will also include approximately 10,000 new square feet to be occupied by the adjacent University Club. The University Club's space within the Project will be connected internally to the University Club's building at 426 Stuart Street for the sole use of the Club's members.

Section 2.2 includes additional information about the Project's program.

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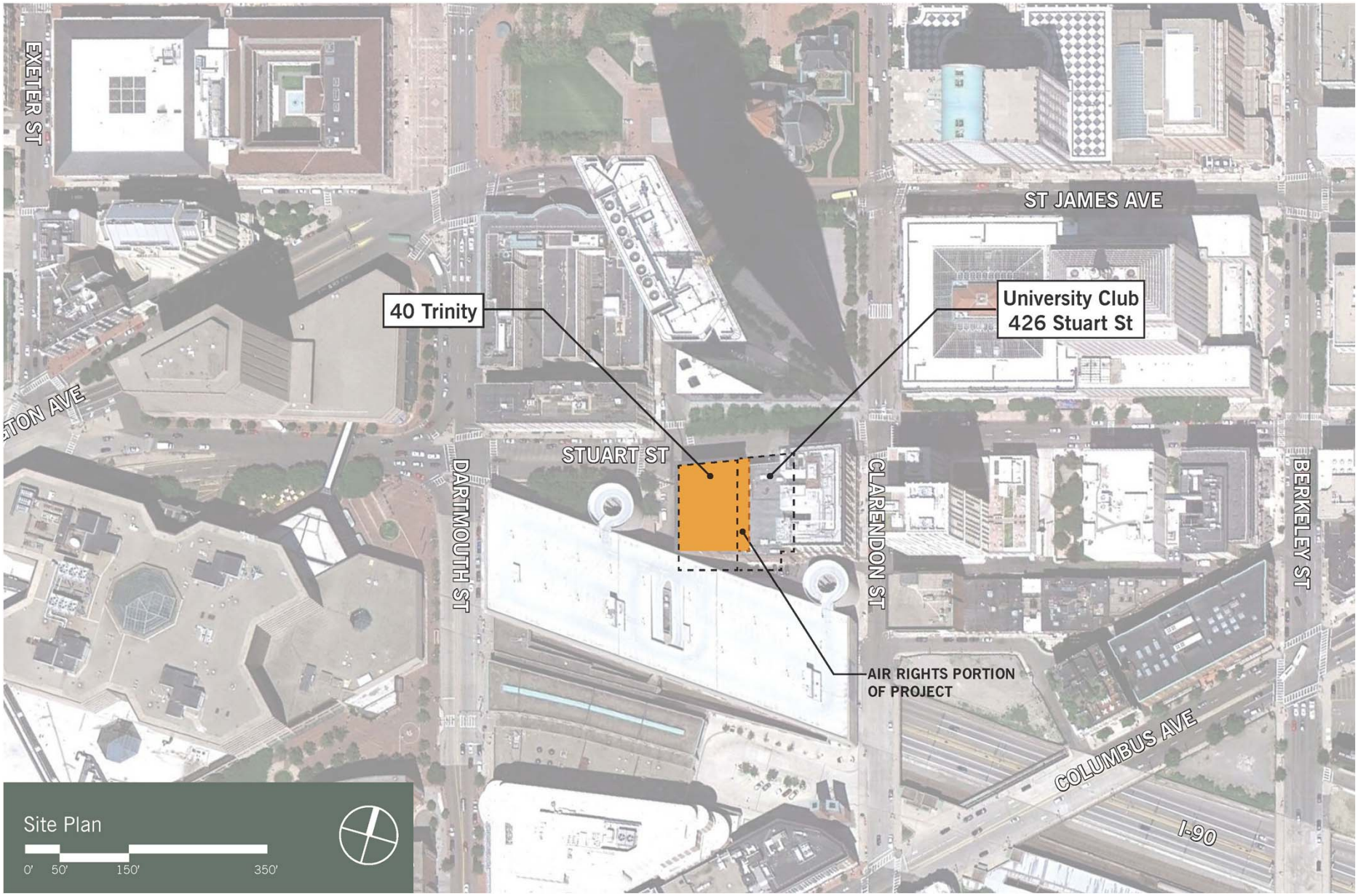
40 Trinity Place Boston, Massachusetts

Epsilon ASSOCIATES INC.

Figure 1-1
Aerial Locus



40 Trinity Place Boston, Massachusetts

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Figure 1-2

Site Plan

1.4 Public Benefits

The Project has been designed to be consistent with the main goals outlined in the recently completed Stuart Street Planning Study. As such and as described below, the Project will generate many public benefits for the surrounding neighborhoods and the City of Boston as a whole, both during construction and on an ongoing basis upon its completion.

Smart Growth/Transit-Oriented Development

The Project is consistent with smart-growth and transit-oriented development principles. In addition to building on previously developed land, the Project is located adjacent to the Back Bay Commuter Rail, Amtrak and Orange Line Station, and therefore concentrates new commercial and residential uses in close proximity to major regional rapid transit, commuter rail, and bus lines that provide easy access to the Project site from other neighborhoods of the City of Boston, Logan International Airport, the surrounding suburbs and the northeast corridor served by Amtrak. The addition of hotel and residential uses to a predominately commercial area, and in particular to a block with minimal activity after work hours, will also have the benefit of supporting a more vibrant 24-hour area for people to live, work, and play.

Affordable Housing

The Project will comply with the Mayor's Inclusionary Development Policy by providing on-site affordable units and/or a monetary contribution to an affordable housing fund.

Linkage

The Project will generate Housing and Jobs Linkage contributions, as required by the Boston Zoning Code (the "Code").

Improved Street and Pedestrian Environment

The current building presents a heavy masonry first floor with minimal building-street interaction and a separation of the uses within the building from the public realm. The new building will feature a transparent first floor wrapping Stuart Street and Trinity Place, bringing 24-hour energy and an improved streetscape that will strengthen the pedestrian environment on this currently lifeless block of the otherwise lively Back Bay area for residents, workers and visitors alike.

Sustainable Design/Green Building

The Proponent is committed to building a LEED certifiable project at a minimum of the Silver level, incorporating a number of sustainable design features into the Project to preserve and protect the local environment. As design advances, the Proponent will study the feasibility of achieving certifiable status at the Gold Level.

Increased Employment

The Project will create approximately 700 construction jobs as well as approximately 338 permanent jobs.

New Property Tax and Hotel Tax Revenue

Annually for the City of Boston, at stabilization the Project will generate approximately $1,050,000 in annual property taxes for the hotel and restaurant spaces, approximately $1,200,000 in property tax revenues for residential uses, approximately $1,080,000 in hotel occupancy tax revenues, and approximately $130,000 in meals tax revenues.

Annually for the state, at stabilization the Project will generate approximately $1,026,000 in hotel occupancy tax revenues, approximately $495,000 in Convention Center Fund tax revenues, and approximately $570,000 in state meals tax revenues.

1.5 Consistency with Zoning

1.5.1 Large Project Review

Because the Project involves new construction in excess of 50,000 sf of Gross Floor Area, the Project is subject to Large Project Review under Article 80B of the Code. Under the Mayor's Executive Order dated October 10, 2000, and amended on April 3, 2001, regarding mitigation for development projects, the Mayor is expected to appoint an Impact Advisory Group to advise the BRA on mitigation measures for the Project. The Project will also be subject to: Boston Civic Design Commission review; the green building requirements of Article 37 of the Code; and Development Impact Project Exactions under Section 80B-7 of the Code.

1.5.2 Zoning District

The Project site is located within: (i) Subdistrict K of the Downtown Interim Planning Overlay District (IPOD), governed by Article 27D of the Code; (ii) a Business 8 (B-8) District; (iii) the Restricted Parking Overlay District, governed by Section 3-1A(c) of the Code; and (iv) the Groundwater Conservation Overlay District, governed by Article 32 of the Code. Zoning relief will be required in connection with the Project, as summarized below. The Project will also require an Interim Planning Permit pursuant to the Downtown IPOD.

1.5.3 Principal Uses

All of the Project's proposed uses are allowed as-of-right in the B-8 District. These include hotel; multi-family residences; likely accessory uses such as hotel dining rooms, hotel conference center, fitness center, lounge and resident service center; and restaurant and retail uses. The portions of the Project to be used by the University Club, a private club, are also allowed as-of-right in the B-8 District.

1.5.4 Parking and Loading

Within the Restricted Parking Overlay District, parking accessory to residential and hotel use is allowed as-of-right. If the Project locates parking uses on adjacent lots or across the street as an ancillary use, this ancillary parking will require a conditional use permit. The appropriate number of required off-street parking spaces and off-street loading facilities will be determined through Large Project Review. Conformity of proposed parking to Boston Transportation Department and Stuart Street Planning Study guidelines is addressed in Chapter 3.

1.5.5 Building Dimensions

The B-8 District has minimal dimensional requirements, sets no building height limit, and has a maximum FAR of 8.0. The Downtown IPOD sets a maximum building height of 125 feet and an "enhanced" building height of 155 feet and sets a maximum FAR of 8.0 and an "enhanced" FAR of 10.0. The Project is located on the portion of Stuart Street addressed in the Stuart Street Planning Study Proposed Development Review Guidelines dated November 23, 2010 (Study) as appropriate for building heights of up to 400 feet and an FAR of up to 17.5. As addressed in Section 2.3, while the Study has not been enacted into formal zoning, the Project has been designed to meet the bulk and dimensional requirements of the Study. The Project has a preliminary height of approximately 400 feet, excluding rooftop mechanicals, and an FAR of approximately 17.5, which is in compliance with the Study. As discussed in Section 1.3.1, for the purposes of calculating FAR, the Project's lot area includes the lot area of the Project site and the lot area of the University Club property located adjacent to the Project site at 426 Stuart Street. FAR has been calculated by combining the Project's gross floor area of approximately 379,370 sf (excluding parking as described below) with the existing and potential future University Club gross floor area of 50,530 sf on the 426 Stuart Street parcel and dividing by the combined lot area of 24,598 sf, which results in an FAR of approximately 17.5. Article 2A of the Code exempts floor area required to meet off-street parking requirements from the FAR calculation. Accordingly, approximately 31,000 sf of gross floor area for off-street parking within the Project has been excluded from the above calculation of FAR. Notwithstanding conformity to the Stuart Street Planning Study guidelines, relief will be required from the building height and FAR requirements of underlying zoning and the Downtown IPOD. Based on the preliminary design, it is possible additional zoning relief may be required for such requirements as building or parapet setbacks.

1.5.6 Other Requirements

The Project will require an interim planning permit pursuant to the Downtown IPOD. The Project will also require a conditional use permit for work in the Groundwater Conservation Overlay District.

1.6 Legal Information

1.6.1 Legal Judgments Adverse to the Proposed Project

The Proponent is not aware of any legal judgments in effect or legal actions pending with respect to the Project.

1.6.2 History of Tax Arrears on Property

The Proponent does not have a history of tax arrears on property that it owns in the City of Boston.

1.6.3 Evidence of Site Control/Nature of Public Easements

The Proponent owns the property pursuant to a deed recorded on December 16, 2011 at the Suffolk County Registry of Deeds, in Book 639, Page 143 and as shown on Land Court Certificate of Title No. 78670 subject to certain easements in favor of abutters for support, maintenance and access.

1.7 Anticipated Permits and Approvals

Table 1-1 presents a preliminary list of federal, state, and local permits and approvals that may be required for the Project, based on currently available information. It is possible that only some of these permits or actions will be required, or that additional permits or actions will be required.

Table 1-1 Anticipated Permits and Approvals

Agency Name	Permit / Approval
FEDERAL	
Environmental Protection Agency	Coverage under NPDES Construction General Permit; Coverage under NPDES Remediation General Permit (as required)
Federal Aviation Administration	Determination of No Hazard to Air Navigation
STATE	
Department of Environmental Protection	Sewer Connection Permit or Self-Certification (as required); Fossil Fuel Utilization permit (as required); Notice of Demolition/Construction
Massachusetts Water Resources Authority	Temporary Construction Dewatering Permit
Massachusetts Historical Commission	Project Notification Form and Memorandum of Agreement

Table 1-1 Anticipated Permits and Approvals (Continued)

Massachusetts Department of Transportation	Access Permit/Non-Vehicular Access Permit (as required)
LOCAL	
Boston Redevelopment Authority	Article 80B Large Project Review; Cooperation Agreement; Affordable Housing Agreement
Office of Jobs and Community Service	Memorandum of Understanding; First Source Agreement
Boston Employment Commission	Boston Residents Construction Employment Plan
Boston Civic Design Commission	Design Review
Boston Landmarks Commission	Article 85 Demolition Delay Review
Boston Water and Sewer Commission	Site Plan Review; Water and Sewer Connection Permits Cross Connection Backflow Prevention Approval (as required); Temporary Construction Dewatering Permit
Public Improvement Commission	Specific Repair Plan (as required); Permit/Agreement for Temporary Earth Retention Systems, Tie-Back Systems and Temporary Support of Subsurface Construction (as required); Permit for sign, awning, hood, canopy or marquee, etc. (as required); Street Layout (as required)
Boston Transportation Department	Construction Management Plan; Transportation Access Plan Agreement
Boston Public Works Department	Curb Cut Permit(s); Street Opening Permit (as required); Street/Sidewalk Occupancy Permit (as required)
Boston Air Pollution Control Commission	Parking Freeze Permit/Exemption
Public Safety Commission Committee on Licenses	Permit to Erect and Maintain Garage; Flammable Storage License
Boston Inspectional Services Department	Demolition Permits; Building Permits; Certificate of Occupancy
Boston Zoning Board of Appeal	Zoning Relief

Chapter 2.0

Project Description

2.0 PROJECT DESCRIPTION

2.1 Existing Site

The Project site at the southeast corner of the intersection of Stuart Street and Trinity Place, in the Back Bay neighborhood of Boston, consists of approximately 13,361 sf of land at 40 Trinity Place and air rights over a portion of the approximately 11,237 sf parcel at 426 Stuart Street. The site currently includes the Boston Common Hotel and Conference Center, an approximately eight-story, 84,200 sf building operated as a 64-room hotel and conference facility with ground floor retail use. The air rights parcel includes the four-story University Club of Boston. On the other side, the University Club abuts the 13-story Boston YWCA building at the corner of Stuart Street and Clarendon Street. A service alley located between this block of Stuart Street and the 100 Clarendon Street (former John Hancock) Parking Garage to the south serves all three parcels. Section 3.1.4 provides additional details about the existing building.

Stuart Street runs between Copley Place to the west and Washington Street to the east, and contains a variety of building types that range from high-rise office and residential buildings to hotels, parking garages, restaurants and smaller scale commercial businesses. Currently, the tallest buildings located along the Stuart Street corridor range from the Boston Marriott and Westin hotels at Copley Place (toward the west) to the W Hotel Boston (toward the east) at the corner of Stuart and Tremont Streets. In between these stand the original John Hancock tower at the corner of Berkeley Street, The Clarendon condominiums and apartments at the corner of Clarendon Street, and the iconic "new" John Hancock Tower, also at the corner of Clarendon Street and just across Stuart Street from the Project site. All of these buildings vary in height and character, and contribute in their own way to the existing Back Bay skyline. An approved major new residential tower by Simon Properties at Copley Place has been approved by the City and is expected to be added to the skyline as well (see Figure 2-1).

2.2 Project Description

The Project includes the construction of approximately 220 guest rooms, conference and ballroom areas, and a pool and a fitness center totaling approximately 163,010 sf. Two restaurants and lounges totaling approximately 7,810 sf are also currently planned, as is a Loading/Trash area on the ground floor. Approximately 10,000 sf of the proposed building is for the expansion of the University Club. The residential portion of the Project, comprising approximately 142 units, will be located on upper floors of the new building. A two level above-grade garage accessed by automobile elevators will be located within the new building and will provide approximately 100 on-site parking spaces for the residential units.

Figure 2-1

View From Cambridge Looking East

The Project includes the construction of approximately 379,370 sf in a new building, plus approximately 100 above grade parking spaces that have been excluded from the calculation of FAR, as discussed in Section 1.5.5. Figures 2-2 to 2-9 at the end of this section include the ground floor plan, typical floor plans, a section, and perspectives of the Project. The Project program is provided in Table 2-1.

Table 2-1 Project Program

Project Element	Approximate Dimension
Residential	196,550 sf / 142 units
Hotel	163,010 sf / 220 keys
Restaurant	7,810 sf
Loading/Trash (First Floor)	2,000 sf
University Club Expansion	10,000 sf
Total Square Footage	**379,370 sf**
Parking	100 Spaces (31,000 sf)

2.3 Consistency with Stuart Street Planning Study

The Project is located within the Study's planning area, bounded by St. James Avenue to the north, Dartmouth Street to the west, Columbus Avenue/Cortes Streets to the south and Arlington Street to the east, representing a 12+ block area totaling more than forty acres.

The Study was a multi-year planning process initiated in 2007 involving multiple governmental and community stakeholders in an extensive and thorough community process. The Study was organized to propose new development guidelines and zoning recommendations for the Study's planning area. The Study examined potential development opportunities, identified and defined height, density and use guidelines and developed scenarios for future development. The Study included an assessment of the impacts of density and height on the surrounding neighborhoods, including the impacts on the transportation infrastructure, transit system, parking supply, and utility infrastructure (electric, water and sewer), and the environmental impacts such as wind, shadow and groundwater. Provisions for and protection of open space, pedestrian access, historically significant buildings and view corridors was also included in the Study.

As a result of the efforts of the Planning Study, in November 2010, Proposed Development Review Guidelines were issued to supplement the Downtown IPOD. While these Development Guidelines have not been formally adopted, it is understood that they will inform the review of appropriate development intensity by the BRA and others.

The Development Guidelines would establish a "base" FAR of 10 and a "base" building height of 155 feet. The Development Guidelines would also allow "tower" development in certain areas of the Study's planning area. The Project site is located in an area designated by the Study that would allow a "tower" FAR of 17.5 and a building height of up to 400 feet, provided the Project (a) undergoes Large Project Review; (b) achieves certain performance criteria related to wind, shadow, sustainability, activation of the ground floor and traffic and transportation; and (c) provides certain public benefits. The Project has been designed to meet the build and dimensional requirements of the Development Guidelines.

As described above, the Project will undergo Large Project Review. The Project's compliance with the Study's performance and public benefit criteria will be studied in the Draft PIR.

2.4 Description of Alternatives Considered/Project History

All of the design schemes considered were developed in response to the program, site constraints, view corridors to and from the building, existing street wall and character, and the other nearby tall buildings—both existing and planned. Early design schemes encompassed a variety of massing options, which included more bulky, rectilinear forms with glass corner elements to break up the visual proportions of the tower, bundled and tapered angular vertical forms expressed in glass from one side and metal from another, and large curved glassy volumes set in a rectangular massing of metal panels. Some schemes had more setbacks than others, and the various schemes also met the multi-story "base" of the building and the street level below that in differing ways.

The currently proposed building design evolved from one of the earlier schemes which featured a series of vertical extruded elements, one of which was a curved glass feature. This was eventually developed into a more balanced tower treatment of vertical quadrants, clad in glass and metal panels, and off-set to integrate with projecting balconies. This treatment creates narrower proportions within the overall massing, making the building slimmer and more elegant. At the same time, the combination of angular and curved elements respects and relates to the surrounding context and taller towers without mimicking them.

2.5 Schedule

Construction of the Project is estimated to last approximately 30 months, with initial site work expected to begin in the fall of 2013, and completion in the spring of 2016.

2.6 Community Outreach and Public Participation

The Proponent is committed to an open and inclusive public process, and as the Article 80 process progresses, the Proponent will continue to seek input from community representatives, neighbors and stakeholders, as well as public and elected officials.

In addition to regularly meeting with and working with members of the Project's Impact Advisory Group, the Proponent will offer to meet directly with local neighborhood groups, abutters, and community organizations.

In addition, the Proponent has met with or will meet with City of Boston agencies and departments, including Boston Civic Design Commission, Boston Redevelopment Authority, Boston Transportation Department, Mayor's Office of Neighborhood Services, and the Office of Jobs and Community Services.

The Proponent has also met with or will meet with elected officials, including Mayor Thomas M. Menino, State Senator Sonia Chang-Diaz, State Representatives Marty Walz and Byron Rushing, and City Councilors Bill Linehan and Michael Ross.

40 Trinity Place Boston, Massachusetts

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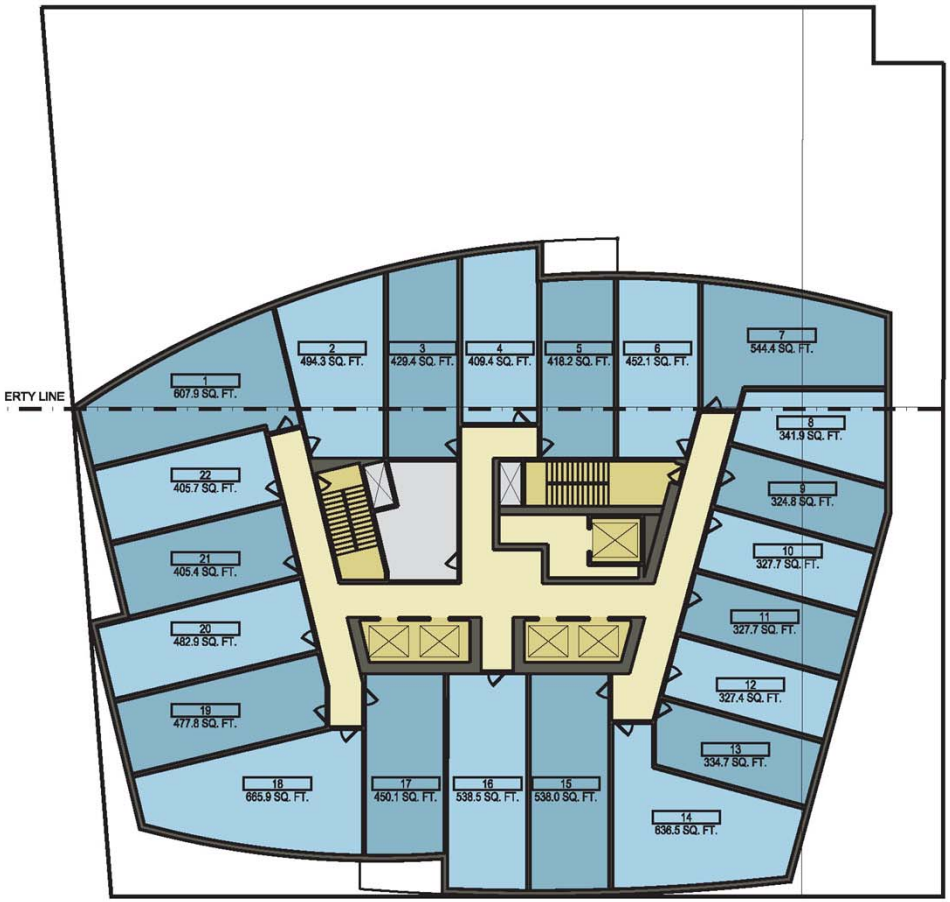
Figure 2-2

Ground Floor Plan



Typical Hotel Floor Plan

Typical Condo Floor Plan

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Figure 2-3

Typical Floor Plans

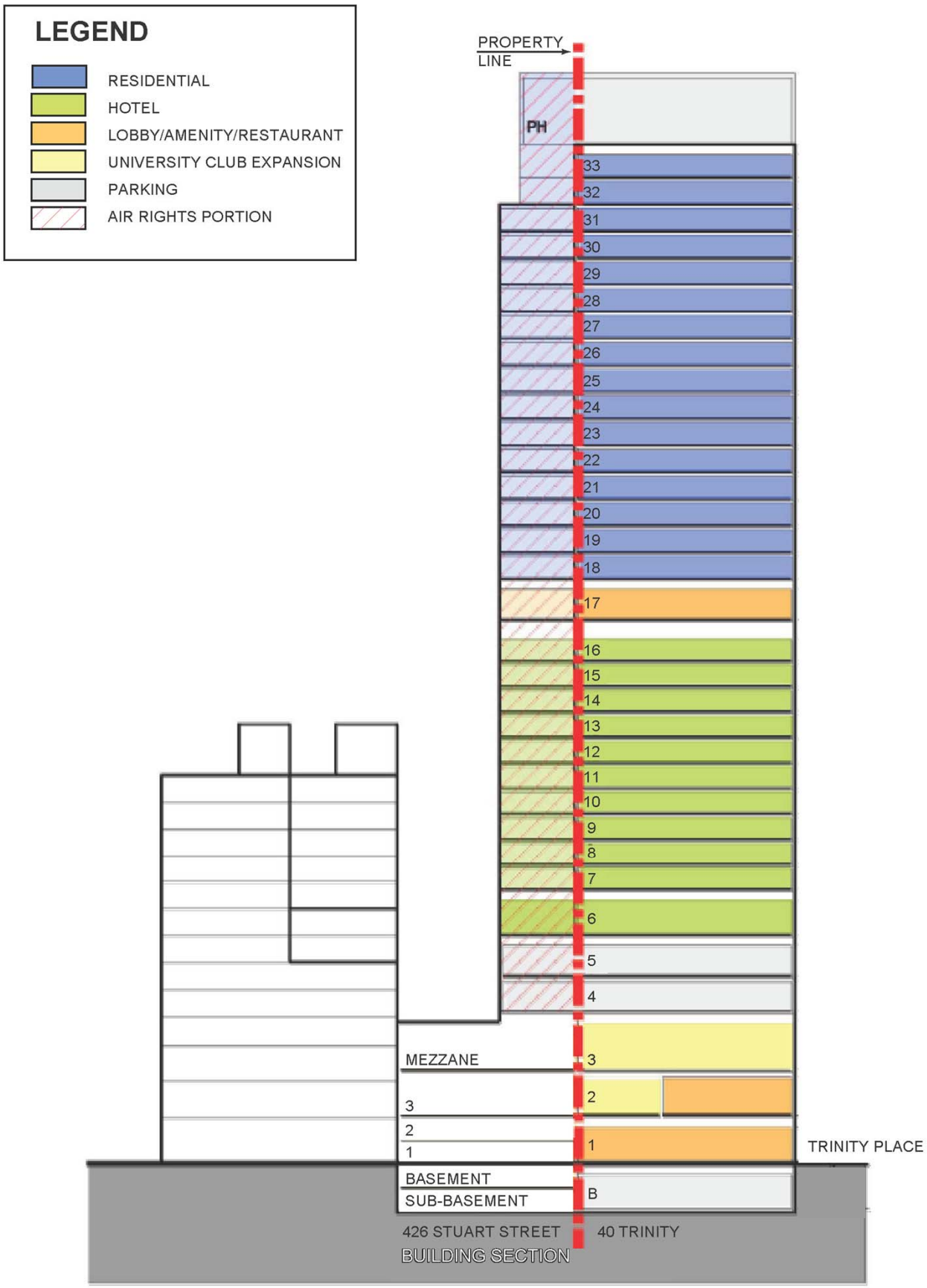

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Figure 2-4
Section

40 Trinity Place Boston, Massachusetts

Figure 2-5

View From Stuart Street Looking East

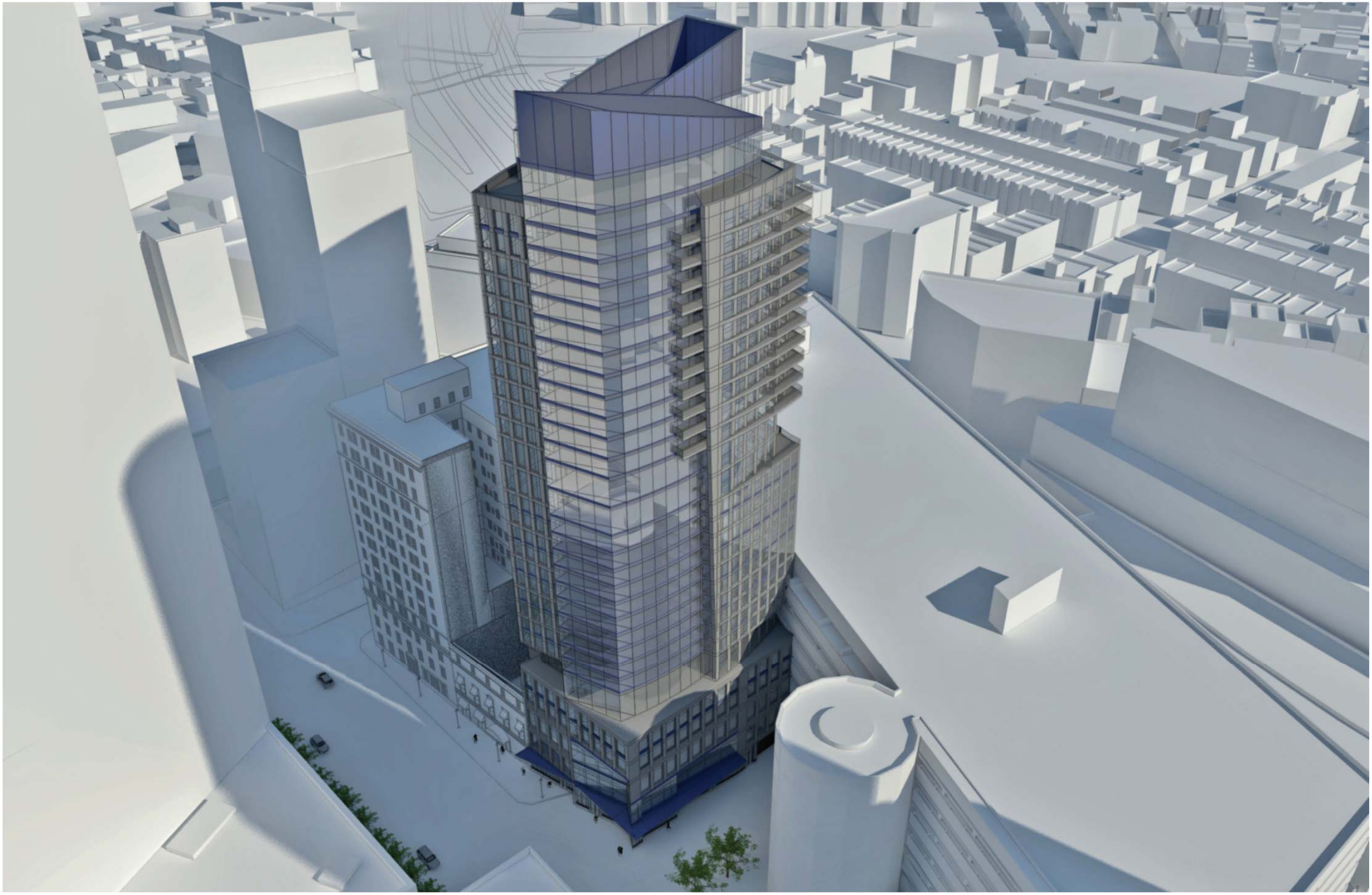

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Figure 2-6

Aerial Perspective

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Figure 2-7

View From Copley Square

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Figure 2-8

View From Southwest Corridor

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Figure 2-9

View From Stuart Street Looking West

Chapter 3.0

Assessment of Development Review Components

3.0 ASSESSMENT OF DEVELOPMENT REVIEW COMPONENTS

Article 80 of the Code specifies that the BRA may require in its Scoping Determination that the applicant conduct studies to determine the direct or indirect impact to the environment reasonably attributable to a proposed project. The development review components include transportation, environmental protection, urban design, historic resources, and infrastructure systems. Where potential for direct or indirect impacts exist, design measures may be required to mitigate the impacts, to the extent economically feasible. The areas for which studies and mitigation may be required are addressed below.

3.1 Transportation

3.1.1 Introduction

This section presents a summary of the Project's transportation issues including site access, parking, loading and building servicing, public transportation, trip generation, and Transportation Demand Management (TDM) measures. Further analysis of transportation aspects of the Project will be included in a Draft Project Impact Report, which will be developed in cooperation with the BRA and the Boston Transportation Department (BTD).

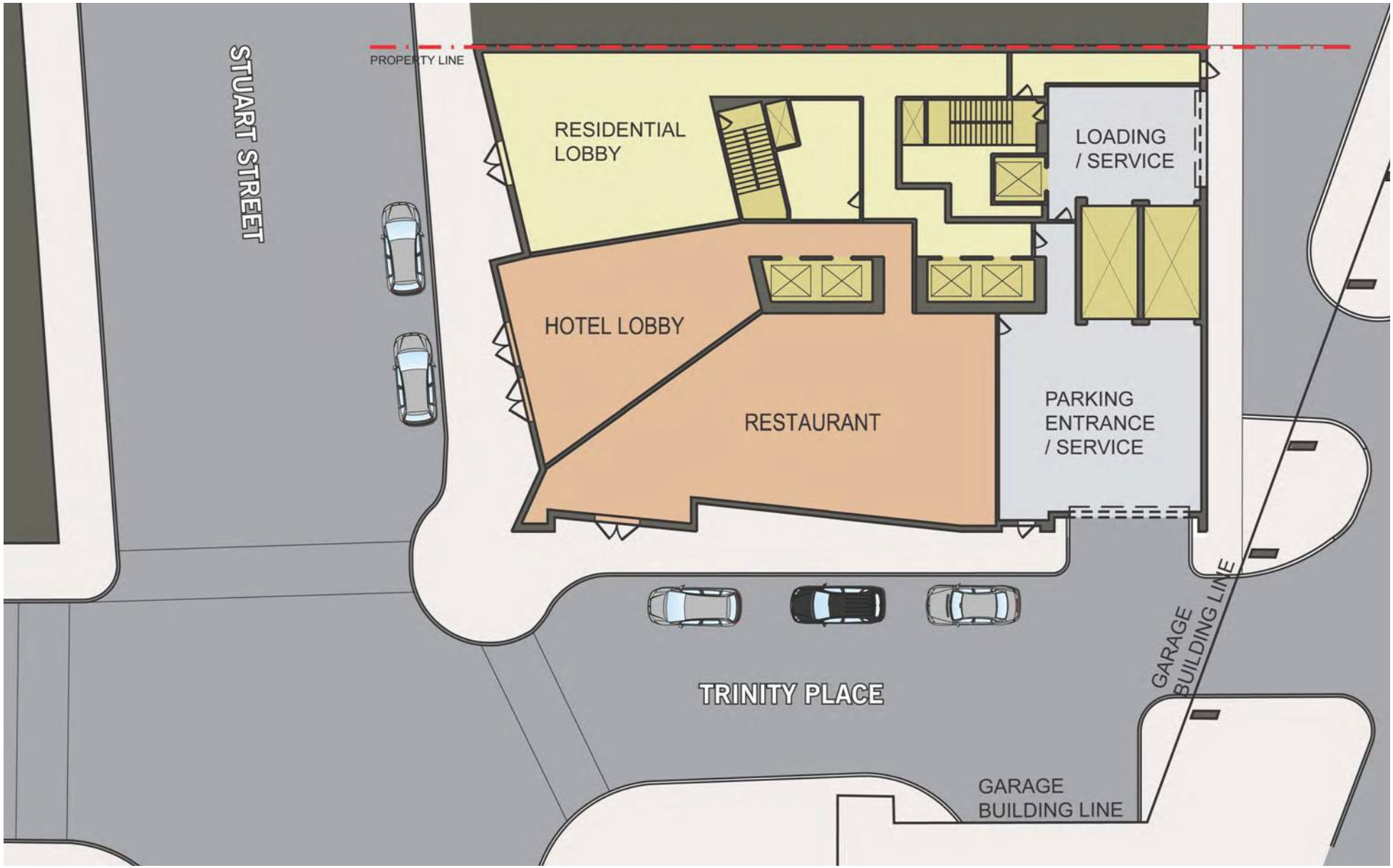
3.1.2 Project Description

As described in Chapter 2, the Project site is located on the corner of Stuart Street and Trinity Place, in the Back Bay neighborhood of Boston, and abuts the 100 Clarendon Street Garage to the south and 426 Stuart Street (University Club of Boston) to the east. Currently, the Boston Common Hotel and Conference Center occupies the site, with the main entrance on Trinity Place. A Dunkin Donuts shop is located on the street level with a doorway onto Stuart Street. Additional ground floor retail space along Stuart Street is currently vacant.

The Project includes demolition of the existing building and construction of a new 33-story mixed-use building totaling approximately 379,370 sf, with approximately 142 residential units, an approximately 220-room hotel with accessory conference center space, and two restaurants. A shared health/fitness center will be provided for residents and hotel guests. Residential parking for approximately 100 vehicles will be provided on levels 4 and 5 and will be accessed via vehicle elevators. The Project will also include approximately 10,000 sf of space to be occupied by the adjacent University Club.

3.1.3 Site Access

As shown in the preliminary site plan in Figure 3-1, vehicular access to and egress from the Project's residential parking garage will be provided on Trinity Place. Loading and building servicing will be from the rear of the site.



40 Trinity Place Boston, Massachusetts

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Figure 3-1
Preliminary Site Plan

The Project will have separate lobbies for residential and hotel activities. The hotel lobby will be located on Trinity Place and doorways to the residential lobby and restaurant will be located on Stuart Street. The Proponent will work with the City of Boston to designate the curb use along Trinity Place for hotel pick-up/drop-off and valet uses, and to designate the curb along Stuart Street for restaurant valet activity.

3.1.4 Parking

The existing site has a small number of parking spaces along the rear of the site. On-street curbside regulations adjacent to the Project site include a mix of metered parking, commercial loading, and evening valet spaces.

Approximately 11,375 off-street parking spaces are provided in garages and lots within a quarter-mile radius of the Project site. Of these, approximately 6,700 are for private use and approximately 4,700 spaces are available for public use. These parking facilities and their capacities are identified in Table 3-1 and shown in Figure 3-2.

The Project will include approximately 100 on-site parking spaces for building residents. The current plan is to locate these spaces above ground on Level 4 and Level 5, with access via vehicle elevators. No commercial public parking will be provided on-site. Valet service will be available to hotel guests and restaurant patrons utilizing adjacent public parking facilities nearby.

With 100 planned residential parking spaces, the resulting parking ratio is approximately 0.70 spaces per unit. BTD has set parking space goals and guidelines throughout the City to establish the amount of parking supply provided with new developments. Because BTD's maximum parking ratio guidelines for residential use in the downtown area is between 0.5–1.0 spaces per unit, the resulting ratio of 0.70 space per unit is appropriate for this Project. The BTD guidelines do not distinguish between condominiums and apartments, although they do allow for lower ratios for such residential uses as elderly, lodging, transitional, and group housing. Not including parking at the Project for the hotel, restaurant or University Club uses is appropriate and adequate given the extensive number of publicly available parking spaces within close proximity to the Project. In addition, the Project's planned valet operation will provide adequate service to those travelling directly to the site.

3.1.5 Bicycle Accommodations

BTD has established guidelines that buildings with more than nine residential units must provide secure and protected bicycle parking/storage at the rate of one bicycle space for every residential unit. Accordingly, the Project will provide secure on-site bicycle storage for approximately 142 bicycles. The Proponent will also provide approximately 12 public outdoor bicycle spaces. Subject to necessary approvals, public bicycle racks will be

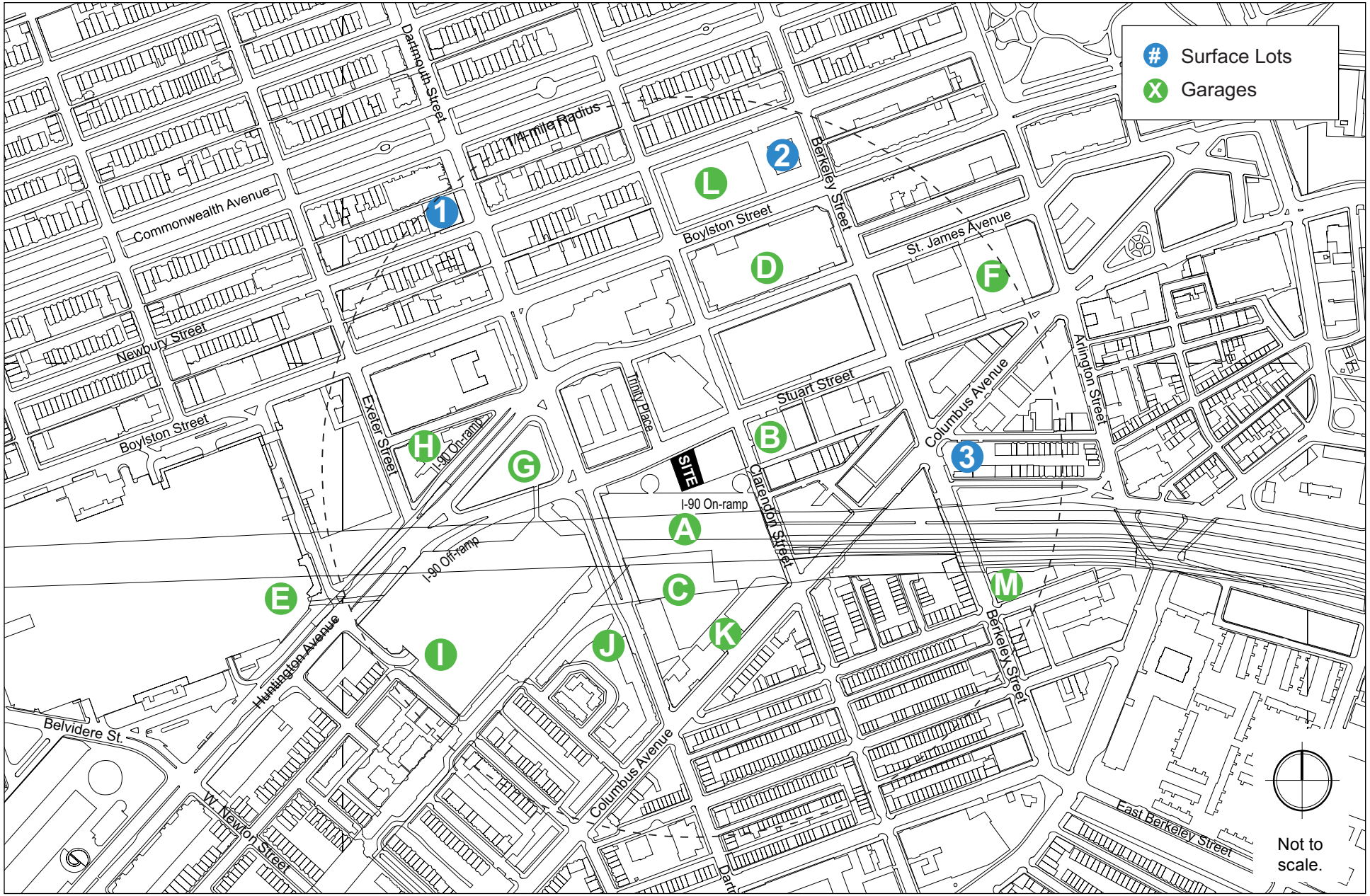

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Figure 3-2
Existing Off-street Parking

provided on the sidewalks near each public building entrance for use by visitors. Bicycle racks, signs, and parking areas will conform to BTD standards and be sited in safe, secure locations. These bicycle accommodations also meet the proposed guidelines from the Study.

3.1.6 Public Transportation

The Project site is well-served by public transportation. Located almost adjacent to the site is Back Bay Station, a major rail transportation hub, and approximately one block away is Copley Square, which is served by light rail and multiple local and express buses. Massachusetts Bay Transportation Authority (MBTA) public transportation within a five-minute walk (approximately a quarter of a mile) of the Project site is shown in Figure 3-3 and summarized in Table 3-2.

Table 3-1 Off-street Parking within a Quarter-mile of the Site

Map No.	Facility/Address	Capacity (spaces)	
		Private	Public
	Lots		
1	Dartmouth Street Lot *78-284 Dartmouth Street*	0	71
2	Restoration Hardware *60 Newbury Street*	64	0
3	Payette Lot *40 Isabella Street*	0	52
	Subtotal	**64**	**123**
	Garages		
A	The 100 Clarendon Street Garage *100 Clarendon Street*	1,437	576
B	The Clarendon *400-406 Stuart Street*	300	93
C	131 Dartmouth Street Garage *131 Dartmouth Street*	630	100
D	Back Bay Garage (NE Life Building) *500 Boylston Street*	375	625
E	Prudential Center *800 Boylston Street*	2,067	1,854
F	10 St. James *10 St. James Avenue*	230	170
G	Westin Hotel Garage *10 Huntington Avenue*	275	0
H	Trinity Place Garage 15-41 Huntington Avenue	160	0

Table 3-1 Off-street Parking within a Quarter-mile of the Site (Continued)

Map No.	Facility/Address	Capacity (spaces)	
		Private	Public
I	Copley Place Garage *110 Huntington Avenue*	572	860
J	Tent City Garage *128 Dartmouth Street*	422	276
K	Bryant Back Bay *303 Columbus Avenue*	50	0
L	The Newb'ry *501 Boylston Street*	80	0
M	Greater Boston Community Development *95 Berkeley Street*	36	**0**
Subtotal		**6,634**	**4,554**
Total Off-street Parking Spaces		**6,698**	**4,677**

Table 3-2 MBTA Transit Service in the Study Area

Transit Service	Description	Peak-hour Headway (in minutes) [1)]
	Rapid Transit Routes	
Orange Line	Forest Hills–Oak Grove	5
Green Line	Lechmere–Boston College, Cleveland Circle, Riverside, or Heath Street	6-7
	Local Bus Routes	
9	City Point–Copley Square via Broadway Station	5-9
10	City Point–Copley Square via Andrew Station and B.U. Medical Center	20–24
39	Forest Hills Station–Back Bay Station via Huntington Avenue	6
55	Jersey and Queensberry Streets–Copley Square or Park and Tremont streets via Ipswich Street	16–30
	Express Bus Routes	
502	Watertown Yard–Copley Square via Newton Corner and Masspike	6–12
503	Brighton Center–Copley Square via Oak Square and Masspike	15-20
504	Watertown/Newton Corner–Downtown via Masspike	8–13

Table 3-2 MBTA Transit Service in the Study Area (Continued)

Transit Service	Description	Peak-hour Headway (in minutes) [1]
Commuter Rail Routes [2]		
Framingham/Worcester–South Station		12–40
Needham–South Station		28–45
Franklin–South Station		16–39
Providence/Stoughton–South Station		12–41

1) Headway is the time between trains or buses, as applicable.
2) Commuter rail routes have irregular headways; customers typically plan trips according to schedule rather than utilizing walk-up service.

3.1.7 Transportation Impact Overview

3.1.7.1 Existing Site Land Uses

The existing site is currently occupied by the Boston Common Hotel and Conference Center with primary pedestrian access from Trinity Place. A street level Dunkin Donuts currently occupies the site's Stuart Street frontage.

Trip generation estimates for the existing land uses are based on rates derived from ITE's *Trip Generation* (8th edition, 2009) fitted curve equations and average trip rates for the following land use codes (LUC):

Land Use Code 310 — Hotel. This land use code is defined as a place of lodging that provides sleeping accommodations and supporting facilities such as restaurants, cocktail lounges, meeting and banquet rooms, limited recreational facilities (e.g., pool, fitness room), and/or other retail services or shops.

Land Use Code 936 — Coffee/Doughnut Shop without Drive-Through Window. This land use includes single-tenant coffee and donut restaurants without drive-through windows. Freshly brewed coffee and a variety of coffee-related accessories are the primary retail products sold at these sites. Limited indoor seating is generally provided for patrons; table service is not provided. In an urban environment, particularly one with a high concentration of office use as the Back Bay, this land use exhibits a high pass-by capture rate. Pass-by trips are those already in the transportation network and not specifically destined to the particular land use. For the Stuart Street Dunkin' Donuts location, a capture rate of 90% was assumed.

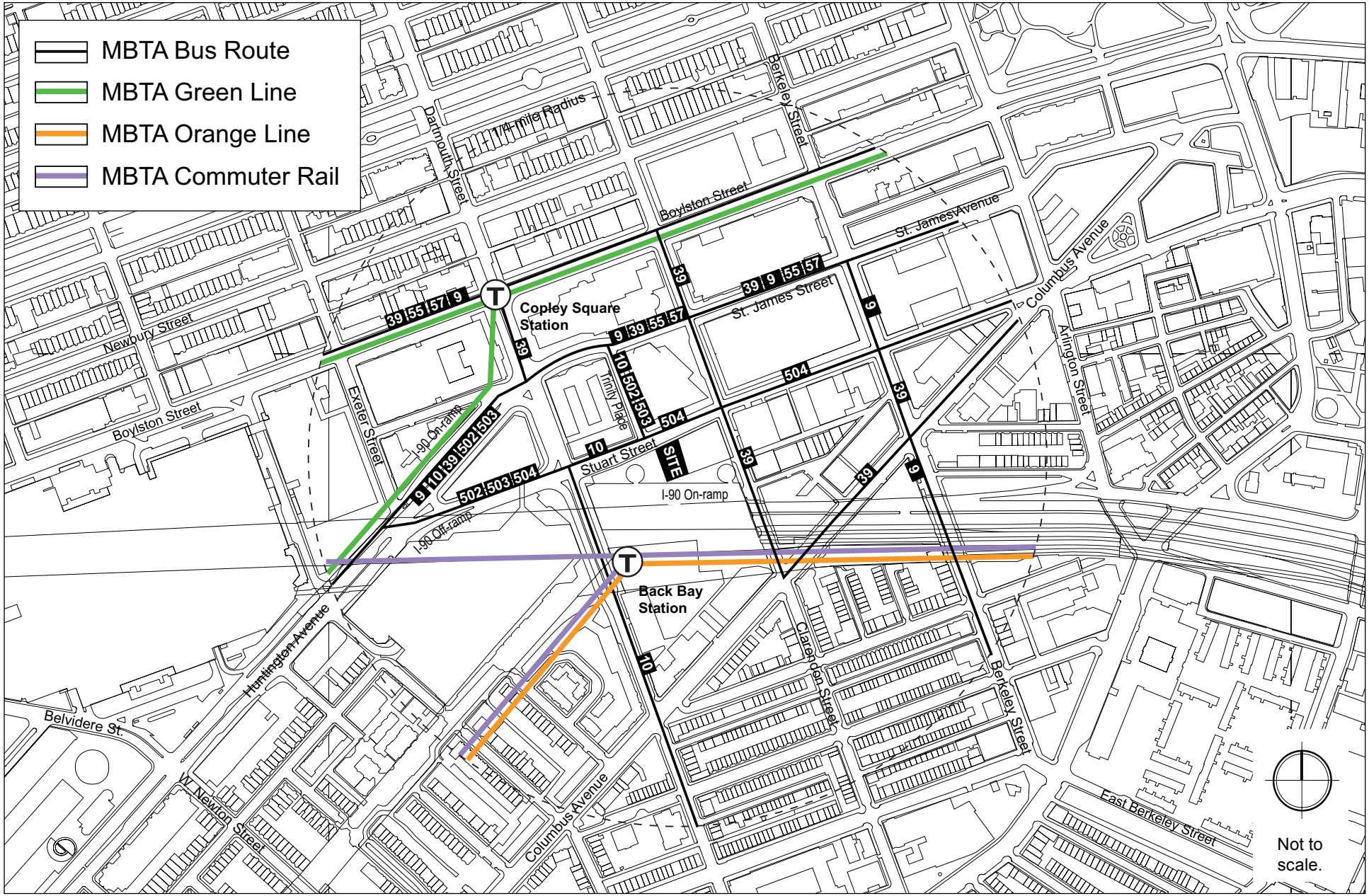

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Figure 3-3
Public Transportation in the Study Area

Conference Center. Because ITE does not have a specific LUC for conference center, trip generation for this land use was based on knowledge of the capacity and operational characteristics of this specific facility.

3.1.7.2 Future Proposed New Land Uses

Trip generation estimates for the Project's new land uses are also based on rates derived from ITE's *Trip Generation* (8th edition, 2009) fitted curve equations and average trip rates. Trips associated with the new land uses on the site are based on the following land use codes (LUC):

Land Use Code 310 — Hotel. This land use code is defined as a place of lodging that provides sleeping accommodations and supporting facilities such as restaurants, cocktail lounges, meeting and banquet rooms or convention centers, limited recreational facilities (e.g., pool, fitness room), and/or other retail services or shops. Calculation of the number of trips uses ITE's fitted equation per room.

Land Use Code 230 — Residential High-rise Condominium. This land use code refers to units with single-family ownership that have at least one other single-family-owned unit within the same building structure. Calculation of the number of vehicle trips uses ITE's fitted equation per dwelling unit.

LUC 831 - Quality Restaurant. This land use consists of eating establishments of high quality, with average turnover rates of at least one hour or longer. Generally, quality restaurants do not serve breakfast, some do not serve lunch, and all serve dinner. Calculations of the number of trips use ITE's average rate per 1,000 sf.

Land Use Code 492 — Health Club. This land use consists of privately owned facilities that primarily focus on individual fitness or training. These facilities are membership clubs that may allow access to the public for a fee. This land use code was used to estimate the new trips associated with the University Club space within the Project. Calculations for the number of trips use a combination of ITE's average rate and fitted equation per 1,000 sf.

3.1.7.3 Travel Mode Split

The BTD publishes vehicle, transit, and travel mode shares specific to each area of Boston. The Project site is located within BTD Area 2. As is standard practice, these specific neighborhood mode shares are used to estimate the number of new vehicle trips, transit trips, and walk/bicycle trips generated by the Project. The mode share assumptions for the current Dunkin' Donuts on-site, however, were assumed to be much less auto and transit centric than that provided by BTD for retail uses, because this particular use in an urban setting generally exhibits very high pass-by capture traits for customers. Customers are not expected to take transit or drive for the sole purpose of patronizing this coffee/doughnut shop, although some customers will walk to the shop as a specific destination and not as a

pass-by trip. Most employees would be expected to use transit or walk, although some may drive if their shifts begin/end when transit is not available. BTD's travel mode share data for Area 2 and those adjusted for coffee/doughnut shop use are shown in Table 3-3.

3.1.7.4 Trip Generation

The ITE rates produce vehicle trip estimates, which are converted to person trips based on vehicle occupancy rates (VOR). Using appropriate mode split information for this specific study area, the total person trips are then allocated to vehicle, transit, and walk trips.

Existing Trip Generation

Based on the land use trip rates and mode share assumptions, the existing trips generated by the site have been calculated and are shown in Table 3-4. The existing site is estimated to generate approximately 666 vehicle trips over the course of the day, including 66 entering and 12 exiting vehicle trips during the a.m. peak hour and 13 entering and 64 exiting vehicle trips during the p.m. peak hour. These vehicle trips are distributed throughout the local area roadway network because only a small amount of parking is currently provided on-site. As can be seen from Table 3-4, a significant portion of the existing use trip generation is attributable to the independent conference center.

Future Trip Generation and Net New Vehicle Trips

Table 3-5 shows the projected trip generation by land use and travel mode share for the proposed Project, which does not include an independent conference center or donut shop.

To estimate the net new vehicle trips for the Project, trips for the existing uses (Table 3-4) were subtracted from the Project trips (Table 3-5), resulting in the trips shown in Table 3-6.

As shown, the estimated new daily vehicle trips to and from the site will increase by 132 trips in and 132 trips out, respectively. In the a.m. peak hour, entering vehicle trips will decrease by 50 and exiting trips will increase by 15, for a net change of 35 fewer vehicle trips. In the p.m. peak hour, entering trips will increase by 27 new vehicle trips in and exiting trips will decrease by 37, for a net change of 10 fewer vehicle trips. Based on the ITE LUCs for the existing hotel and donut shop and empirical data for the existing independent conference center operation, the proposed mix of land uses in the Project is anticipated to generate fewer peak-hour vehicle trips than the existing conference center, donut shop and hotel. It should be noted that the pass-by trip capture rate and mode share assumptions used for the existing on-site coffee shop significantly weights estimated trips to/from the site to walk share from vehicle and transit shares. Using the standard ITE rates without a pass-by capture and using the BTD mode share for retail for the area, would make the coffee shop the dominant vehicle trip generator at the site and is uncharacteristic of an urban coffee shop. Without these capture rate and mode share adjustments, the overall net vehicle trips to/from the site would decrease significantly.

Table 3-3 Mode Split Assumptions

Time Period	Direction	Walk Share	Transit Share	Auto Share	Local Vehicle Occupancy Rate
Daily					
Hotel	In	57%	19%	24%	1.1
	Out	57%	19%	24%	1.1
Residential	In	57%	19%	24%	1.1
	Out	57%	19%	24%	1.1
Restaurant	In	55%	16%	29%	2.2
	Out	55%	16%	29%	2.2
Coffee/donut shop[1]	In	80%	15%	5%	1.1
	Out	80%	15%	5%	1.1
University Club Space	In	55%	16%	29%	2.2
	Out	55%	16%	29%	2.2
a.m. Peak Hour					
Hotel	In	59%	22%	19%	1.1
	Out	34%	15%	21%	1.1
Residential	In	59%	22%	19%	1.1
	Out	34%	15%	21%	1.1
Restaurant	In	57%	19%	24%	2.2
	Out	61%	13%	26%	2.2
Coffee/donut shop[1]	In	100%	0%	0%	na
	Out	100%	0%	0%	na
University Club Space	In	57%	19%	24%	2.2
	Out	61%	13%	26%	2.2
p.m. Peak Hour					
Hotel	In	64%	15%	21%	1.1
	Out	59%	22%	19%	1.1
Residential	In	64%	15%	21%	1.1
	Out	59%	22%	19%	1.1
Restaurant	In	61%	13%	26%	2.2
	Out	57%	19%	24%	2.2
Coffee/donut shop[1]	In	100%	0%	0%	na
	Out	100%	0%	0%	na
University Club Space	In	61%	13%	26%	2.2
	Out	57%	19%	24%	2.2

[1] Coffee/donut shop has been adjusted from BTD mode share guidelines based on engineering judgment.

Table 3-4 Existing Land Uses - Trip Generation

Land Use	Direction	Walk/Bike Trips	Transit Trips	Vehicle Trips
Daily				
Hotel	In	171	57	69
	Out	171	57	69
Office	In	15	20	25
	Out	15	20	25
Coffee/Donut Shop	In	129	19	6
	Out	129	19	6
Conference Center	In	140	186	233
	Out	140	186	233
Total Daily	**In**	**455**	**282**	**333**
	Out	**455**	**282**	**333**
a.m. Peak Hour				
Hotel	In	14	5	4
	Out	12	3	4
Office	In	4	6	5
	Out	1	1	1
Coffee/Donut Shop	In	12	0	0
	Out	11	0	0
Conference Center	In	42	65	57
	Out	5	5	7
Total a.m. Peak Hour	**In**	**72**	**76**	**66**
	Out	**29**	**9**	**12**
p.m. Peak Hour				
Hotel	In	16	4	5
	Out	11	4	3
Office	In	1	1	1
	Out	3	5	4
Coffee/Donut Shop	In	5	0	0
	Out	5	0	0
Conference Center	In	5	5	7
	Out	42	65	57
Total p.m. Peak Hour	**In**	**27**	**10**	**13**
	Out	**61**	**74**	**64**

Table 3-5 Proposed - Project Trip Generation

Land Use	Direction	Walk/Bike Trips	Transit Trips	Vehicle Trips
Daily				
Hotel	In	563	188	216
	Out	563	188	216
Residential	In	259	86	99
	Out	259	86	99
Restaurant	In	425	124	102
	Out	425	124	102
University Club Space	In	199	58	48
	Out	199	58	48
Total	**In**	**1,446**	**456**	**465**
	Out	**1,446**	**456**	**465**
a.m. Peak Hour				
Hotel	In	40	15	12
	Out	35	8	11
Residential	In	8	3	2
	Out	43	10	13
Restaurant	In	5	2	1
	Out	3	1	1
University Club Space	In	8	3	1
	Out	10	2	2
Total	**In**	**61**	**23**	**16**
	Out	**91**	**21**	**27**
p.m. Peak Hour				
Hotel	In	55	13	16
	Out	37	14	11
Residential	In	36	9	11
	Out	16	6	5
Restaurant	In	38	8	7
	Out	37	12	7
University Club Space	In	28	6	6
	Out	20	7	4
Total	**In**	**157**	**36**	**40**
	Out	**110**	**39**	**27**

Table 3-6 Net New Project Vehicle Trip Generation

Time Period	Direction	Existing	Future	Net New
Daily	In	333	465	132
	Out	333	465	132
	Total	666	930	268
a.m. Peak Hour	In	66	16	-50
	Out	12	27	15
	Total	78	43	-35
p.m. Peak Hour	In	13	40	27
	Out	64	27	-37
	Total	77	67	-10

3.1.7.5 Trip Distribution

Activity related to the new land uses (residential, hotel, restaurant and University Club) generally occurs throughout the day, without a heavy concentration of trips during peak commuter travel periods. While peak-hour vehicle trips associated with the Project may be lower overall, traffic immediately in and around the site is expected to increase with the addition of on-site parking and curbside hotel/restaurant activity. Currently, most vehicle trips are distributed throughout the local roadway network to area parking garages because there is limited parking available on-site. Figure 3-4 presents the expected vehicle trip distribution to and from the site.

Although the net changes in traffic volumes associated with the Project are not expected to cause any adverse traffic impacts, a full evaluation of traffic impacts to locations adjacent to the Project will be included in the Draft Project Impact Report (Draft PIR).

3.1.7.6 Service and Loading

Service and loading docks will be located along the rear alley at the back of the site. Delivery vehicles will access the loading area from Clarendon Street via the Mass Pike west access roadway (located under the adjacent John Hancock Parking Garage at 100 Clarendon Street Garage) and will exit to Trinity Place.

3.1.7.7 Proposed Traffic Impact Study Area

Although the redevelopment of the site is expected to reduce overall vehicular traffic to the general area, the addition of a parking garage to the site and active hotel curbside pick-up/drop-off and valet activity will redistribute these trips more locally to the site. Detailed analysis of intersection operations and development of appropriate mitigation measures, if any, will be addressed by the Proponent in the follow-on traffic study in the DPIR. Any impacts that require mitigation will be carefully coordinated with BTD.

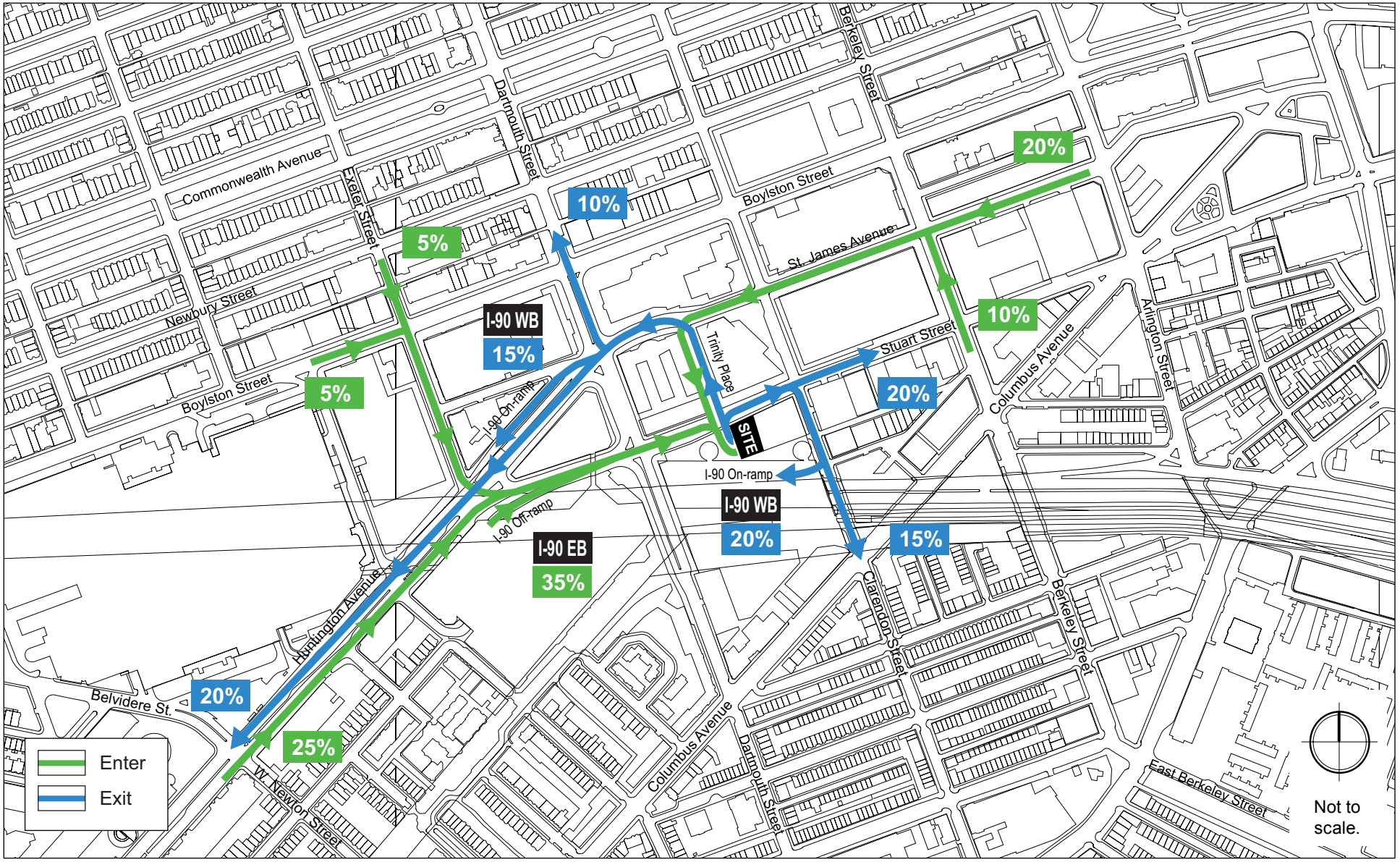

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Figure 3-4
Vehicle Trip Distribution

To help evaluate both existing and future conditions, the study team proposes to study the following four intersections, as shown in Figure 3-5:

- St. James Avenue/Trinity Place;
- St. James Avenue/Clarendon Street;
- Stuart Street/Trinity Place; and
- Stuart Street/Clarendon Street.

Traffic and pedestrian counts will be conducted at the above listed study area intersections during the weekday morning (7:00–9:00 a.m.) and evening (4:00–6:00 p.m.) peak periods. These traffic counts will serve as a base scenario for the traffic analysis to be presented in the subsequent analysis.

Howard/Stein-Hudson Associates, the Project transportation consultants, will coordinate with the BRA and BTD to identify an appropriate study area, build year, growth rate, and any area development projects.

3.1.8 Transportation Demand Management

The Proponent is committed to implementing Transportation Demand Management (TDM) measures to minimize automobile usage and Project related traffic impacts. The TDM program supports the City's efforts and those outlined in the Stuart Street Planning Study to reduce dependency on the automobile by encouraging travelers to use alternatives to driving alone, especially during peak time periods.

The Proponent is prepared to take advantage of good transit access in marketing the site to future condominium buyers, hotel operators, and restaurant tenants by working with them to implement the following demand management measures to encourage the use of public transportation, ridesharing, bicycling, and walking.

The TDM program may include an on-site transportation coordinator, transit pass subsidies for employees, secure bicycle parking areas, and distribution of transit maps and schedules to residents, guests, and employees. TDM measures may include the following:

- Orientation Packets: The Proponent will provide orientation packets to new residents containing information on the available transportation choices, including transit routes and schedules.
- Shared Car Service: The Proponent will work with a car-sharing service provider to determine the appropriateness of parking spaces for car-share programs within the parking garage, given the anticipated vehicle elevator access, or whether adding to existing car-share parking in nearby garages is a better alternative.

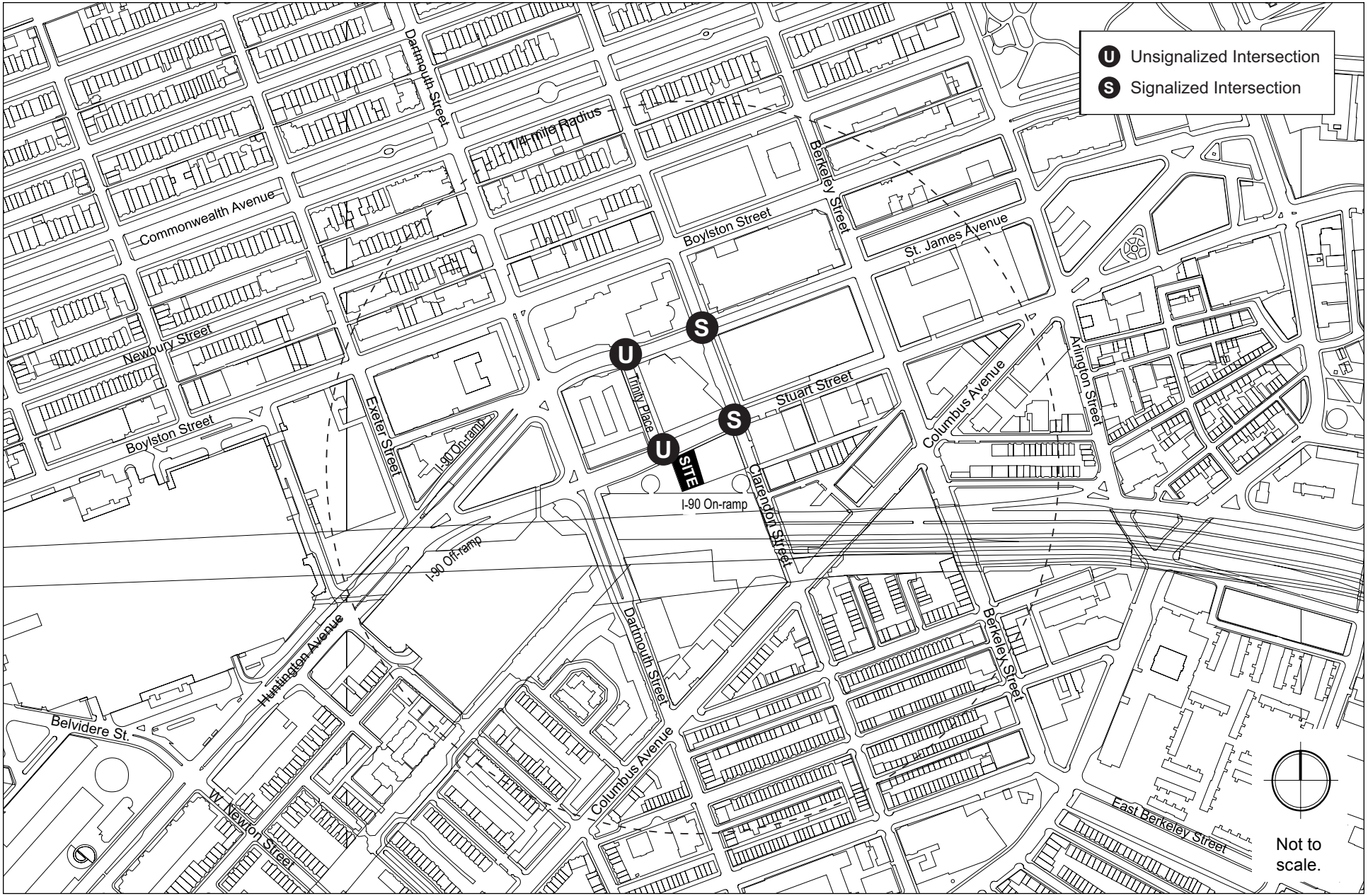

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Figure 3-5
Study Area Intersections

- Electric Vehicle Charging: The Proponent will include the infrastructure necessary to allow for electric vehicle charging stations in the parking garage.

- 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. For building employees who bike to work, shower facilities will be available on site.

- Hotel Guests: The hotel operator will be encouraged to supply hotel guests with loaner umbrellas and WalkBoston's walking map of downtown Boston.

- Transportation Coordinator: The Proponent will designate a transportation coordinator to manage loading and service activities and provide alternative transportation materials to residents and building tenants.

3.1.9 Transportation Access Plan Agreement

A Transportation Access Plan Agreement (TAPA) will be entered into between the Proponent and BTD. The TAPA will codify the specific measures and agreements between the Proponent and the City of Boston concerning traffic mitigation.

3.1.10 Construction Management Plan

The Proponent will 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.

3.1.11 Public Improvement Commission

Certain streetscape improvements surrounding the site on Trinity Place and Stuart Street may require Public Improvement Commission (PIC) review and approval. As standard practice, the Proponent will work with the City in continuing to develop and obtain approval of these improvements.

3.2 Environmental Protection

3.2.1 Wind

The Project will have a height of approximately 400 feet. Buildings of similar and greater height are located in and have been approved for the immediate Project vicinity. The Proponent will conduct a quantitative wind analysis, including a wind tunnel test, as required by the BRA for buildings over 150 feet. Results of the wind analysis will be included in the Draft PIR, including compliance with the Stuart Street Planning Study Proposed Redevelopment Review Guidelines.

3.2.2 Shadow

The site is located in a densely built urban area and the proposed Project will be surrounded by and adjacent to structures of similar and greater height and massing. New shadow on Copley Square created by the Project will occur during very limited time periods of the year, and, the Project has been designed to meet the shadow requirements of the Study. Most new shadow will occur in the immediately surrounding area, including Stuart Street and its sidewalks. The Proponent will conduct a shadow study for the Project and report the results in the Draft PIR, including degree of compliance with the Study in regard to shadow on Copley Square Park.

3.2.3 Daylight

The purpose of a daylight analysis is to estimate the extent to which a proposed project affects the amount of daylight reaching public streets in the immediate vicinity of a project site. The daylight obstruction related to the Project is anticipated to be similar to daylight obstruction on streets in the surrounding area. The extent of daylight obstruction resulting from the Project and measures to mitigate adverse impacts will be studied in the Draft PIR.

3.2.4 Solar Glare

It is not anticipated that the Project will include the use of reflective glass or other reflective materials on the building facades that would result in adverse impacts from reflected solar glare from the Project.

3.2.5 Air Quality

Potential long-term air quality impacts will be limited to emissions from Project-related mechanical equipment and pollutant emissions from vehicular traffic generated by the development of the Project. If changes in traffic operations are substantial, the potential air quality impacts will be modeled for both existing and future conditions in the Draft PIR to demonstrate conformance with the National Ambient Air Quality Standards (NAAQS).

Construction period air quality impacts and mitigation are discussed below in Section 3.2.11.1.

3.2.6 Stormwater/Water Quality

The proposed Project will not result in substantial changes in drainage patterns or water quality as the existing site is fully developed and consists of impervious areas. Impacts to water quality should be improved with the appropriate use of catch basins and oil/sand separators under the proposed Project. In addition, as described below, the Project is expected to improve groundwater recharge through the capture and infiltration of stormwater.

3.2.7 Flood Hazard Zones/Wetlands

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the site located in the City of Boston - Community Panel Number 25025C 0077 G indicates the FEMA Flood Zone Designations for the site area. The map shows that the Project is outside of the 500-year flood zone.

The site is developed and does not contain wetlands.

3.2.8 Geotechnical/Groundwater

Subsurface Conditions

Available subsurface data and geologic information was reviewed at and around the site to understand existing subsurface soil and groundwater conditions. In general, subsurface conditions anticipated in order of increasing depth below current street and surface grades surrounding the site are comprised of approximately 20 to 25 feet of miscellaneous fill, over up to 10 to 15 feet of relatively soft organic silt and peat. Naturally deposited silty clay is present approximately 30 to 40 feet below grade. The clay unit is comparatively thick (up to 80 to 90 feet) and is underlain by relatively thin (5 to 10 foot thickness) glacial till deposits. Bedrock is anticipated to be encountered at approximately 130 to 140 feet below the ground surface.

Groundwater levels in the project area measured during the past approximately six years from observation wells and as published by the Boston Groundwater Trust (BGwT) range from approximately Elevation 2.5 to Elevation 5.5 Boston City Base (BCB) datum. The data show that water levels have historically been "depressed" below normal levels in this area, which is generally considered to be the tops of most of the wood pile foundations in the area (Elevation 5 BCB).

Existing Site and Building Conditions

Site grades are relatively level around the property at about Elevation 17 BCB. With the exception of an approximately 20-foot wide paved passageway along the south side of the site, the Project site is currently occupied by an eight story building Constructed around the mid-to-late 1920s, the brick and stone clad concrete building is supported on concrete caisson foundations bearing on the upper portion of the clay.

Foundation Construction Methodology

Column loads for the Project are expected to require new deep foundations that extend to top of bedrock. The type of foundations being considered at this time are drilled-in small diameter grouted piles that are reinforced with an outer steel casing and inner core steel.

The new foundations would be installed from within the footprint of the existing building's lowest basement level. The foundations will be designed after the subsurface exploration program is completed and the structural loads are known.

Groundwater Impacts

The Project is located in the Groundwater Conservation Overlay District (GCOD) and, as described further in Section 3.5.4.3, will be designed and constructed to comply with requirements of Article 32 of the Code. The current building has one below grade level at approximately Elevation 8 (9 ft below existing exterior grades) with a sub-basement level estimated to be at approximately Elevation 0 BCB (17 feet below existing exterior ground surface) within the northern (Stuart Street) side of the building. The lowest floor level for the Project is planned to be at approximately 10 feet below the ground floor level, which is approximately 1.5 feet to 4.5 feet above measured groundwater levels for the area.

During construction, the new foundations will be installed using wet rotary drilling methods that introduce water into the ground rather than remove water, and excavations for new pile caps and grade beams are typically expected to be above groundwater levels. Some local dewatering may be required during the construction to manage and remove surface water (precipitation) runoff into the open/uncovered below grade building footprint. To the extent possible, the Project will attempt to recharge/infiltrate that water into the ground outside the building footprint.

3.2.9 Solid and Hazardous Wastes

3.2.9.1 Existing Hazardous Waste Conditions

An evaluation of the property to evaluate environmental conditions associated with site history, existing observable conditions, current site uses, and current and former uses of adjoining properties was conducted in September 2011 as part of a Phase I Environmental Site Assessment (Phase I ESA) using methods consistent with ASTM E1527-05. The Site Assessment did not identify conditions indicating a release or threat of release of Oil and/ or Hazardous Materials to soil or groundwater at the site. The site is not subject to the Massachusetts Contingency plan (MCP), Chapter 21E.

Characterization of the soil and groundwater at the site has not been conducted to date. If required, management of soil and groundwater will be in accordance with applicable local, state, and federal laws and regulations.

An Asbestos and Hazardous Material Evaluation was conducted in 2008, and additional asbestos investigations were conducted in 2011. Several types of common asbestos containing (ACM) and hazardous materials were identified to be present in various building materials. Prior to conducting demolition activities, Massachusetts-licensed abatement contractors will be retained to remove the ACM and other materials.

3.2.9.2 Operational Solid and Hazardous Wastes

The Project will generate solid waste typical of other residential/mixed-use projects. Solid waste generated by the Project will be approximately 530 tons per year, based on the number of bedrooms and hotel rooms proposed at a generation rate of four pounds (lbs) per bedroom per day and commercial and restaurant space proposed at a generation rate of 5.5 tons per 1,000 square feet per year. Other than typical wastes generated by residential use (e.g., paint, detergents, etc.), no hazardous wastes are anticipated to be generated by the Project.

The Proponent's waste diversion program will focus on diverting as many materials from landfills as possible. Single stream recycling will be in place throughout the hotel as well as being available to all condominium residents. Attractive, in-room recycling bins will be provided in each guest room and all public areas of the building.

In addition, kitchen, food preparation, and employee cafeteria areas will have composting stations to divert food waste away from landfills and back into the earth as soil amendments, similar to what the Proponent has done elsewhere. Waste from oil used in cooking will be picked up and refined for reuse as fuel.

There will be regular, coordinated collection days for larger items such as furniture. Used bedding and clothing will be offered to local shelters and consignment shops. Electronic recycling days will be arranged quarterly to ensure that old computers, televisions, projectors, stereos or other electronic equipment are disposed of properly and not disposed of in landfills.

The Proponent has a history of working closely with waste removal companies to ensure construction and renovation materials are dealt with efficiently and properly. Examples include recycling old carpet and padding for the production of new carpet padding, recycling 60 tons of material during a hotel façade renovation, and sending appropriate materials to a waste-to-energy plant.

Careful attention will be paid to materials purchased by the hotel and brought into the building to reduce the amount of material consumed by the hotel's operation. Extensive efforts to re-use and recycle will be implemented for the Project. Other properties, currently owned by the Proponent, are able to reduce between 20-40% of all waste materials, and have aggressive goals to divert up to 80% of their waste away from landfills.

3.2.10 Noise

During operation, neither the Project's mechanical equipment nor traffic noise associated with the Project are expected to result in a perceptible change in noise levels. These impacts, and the Project's compliance with the City of Boston Noise Ordinance, will be studied in the Draft PIR.

Construction period noise impacts and mitigation are discussed below in Section 3.2.11.2.

3.2.11 Construction Impacts

The proximity of city streets and abutting commercial properties to the site will require careful scheduling of material removal and delivery. Planning with the City and neighborhood will be essential to the successful development of the Project.

As discussed above, a CMP will be submitted to the BTD for review and approval prior to issuance of a building permit. The CMP will define truck routes which will help in minimizing the impact of trucks on local streets. A police detail will be provided to maintain access to adjacent properties and to direct pedestrian and vehicle flow, if required.

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

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

3.2.11.1 Construction Air Quality

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

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

3.2.11.2 Construction Noise

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

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

3.2.11.3 Construction Waste Management

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

3.2.12 Rodent Control

A rodent extermination certificate will be filed with the building permit application to the City. Rodent inspection monitoring and treatment will be carried out before, during, and at the completion of all construction work for the proposed Project, in compliance with the City's requirements. Rodent extermination prior to work commencement will consist of treatment of areas throughout the site.

3.2.13 Wildlife Habitat

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

3.2.14 Sustainable Design

The Project is anticipated to be certifiable at a minimum of the Silver level under the U.S. Green Council's (USGBC) Leadership in Energy and Environmental Design (LEED) rating system. As the Project's design is advanced, the Proponent will study the feasibility of achieving certifiable status at a LEED gold level. The building will employ energy-efficient and water-conservation features for mechanical, electrical, architectural, and structural systems, assemblies, and materials where possible. Mechanical and HVAC systems will be installed to the current industry standards and full cooperation with the local utility providers will be maintained during design and construction. In addition, the Proponent plans to incorporate carbon offset programs into the Project as well as provide the infrastructure necessary to allow for electric vehicle charging stations in the parking garage. The preliminary credits targeted are outlined below, including pre-requisite credits under the various categories as outlined also in the LEED checklists provided in Appendix A. The assessment of achievable credits will be on-going as the design progresses.

Sustainable Sites (SS)

SS Prerequisite 1 - Construction Activity Pollution Prevention

This is "Standard Operating Procedure" for Suffolk Construction. An erosion and sedimentation control (ESC) plan has been drafted. Suffolk will ensure that all of the subcontractors adhere to the plan. Photographs and documentation will be collected as the Project progresses to ensure that all of the LEED requirements are met.

SS Credit 1 – Site Selection

The Project site is currently completely developed and is located in an urban area. This development does not violate any of the established criteria.

SS Credit 2 – Development Density/Community Connectivity

The ten basic services within ½ mile from the Project site include but are not limited to: bank, school, restaurant, community center, post office, library, place of worship, laundry, park, and pharmacy.

SS Credit 3 – Brownfield Redevelopment

An asbestos plan will be developed by a qualified environmental professional and documented according to EPA and state regulations. There will be asbestos abatement involved with this project. Suffolk will collect and submit all documentation regarding such work and regulatory compliance.

SS Credit 4.1 – Alternate Transportation, Public Transportation

The Project site is located directly adjacent to MBTA commuter rail stop (Back Bay Station) as well as the Back Bay MBTA Orange Line station. The Copley Square Green Line station and several bus stops are also in the immediate area.

SS Credit 4.2 – Alternate Transportation - Bicycle Storage/Changing Room

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. For building employees who bike to work, shower facilities will be available on site.

SS Credit 4.3 – Alternate Transportation – Low Emitting and Fuel Efficient Vehicles

The Project will provide preferred parking for LE/FE vehicles equaling 5% of the total parking spaces. This will either be done by strategically locating the spots near the elevator or by allowing designated spots at a discounted rate for a minimum of two years.

SS Credit 7.2 – Heat Island Effect - Roof

The Project will be using a white roof, Sarnafil G410 EnergySmart roof membrane for the roof areas that are not green roofs or otherwise covered. The SRI rating for this roof is 104.

Water Efficiency (WE)

WE Prerequisite 1 and Credit 3 – Water Use Reduction

The Proponent has committed to low flow water closets (1.28 gpf), low flow or waterless urinals (0.5 gpf or less), lavatories (1.0 gpm), and low flow shower heads (1.5 gpm). The Proponent anticipates a water savings greater than 33%.

Energy and Atmosphere (EA)

EA Prerequisite 1 – Fundamental Building Systems Commissioning

The Proponent has committed to perform the fundamental commissioning. The basis of design has been reviewed and the appropriate reports will be completed.

EA Prerequisite 2 – Minimum Energy Performance

The Project design will incorporate a highly efficient mechanical system design to comply with the Stretch Code provisions of the Massachusetts Building Code and at the same time will incorporate LEED principles.

EA Prerequisite 3 – CFC Reduction in HVAC & R Equipment

The design team for the Project will select HVAC equipment with refrigerants that meet the LEED prerequisite thresholds regarding refrigerant types.

EA Credit 1 – Optimize Energy Performance

The Project design will incorporate a highly efficient mechanical system design to comply with the Stretch Code provisions of the Massachusetts Building Code and at the same time will incorporate LEED principles.

EA Credit 3 – Enhanced Commissioning

The Proponent will perform the enhanced commissioning. The basis of design has been reviewed and the appropriate reports will be completed.

EA Credit 4 – Enhanced Refrigerant Management

The design team for the Project will select HVAC equipment with refrigerants that meet the LEED prerequisite thresholds regarding refrigerant types.

EA Credit 5 – Measurement and Verification

The Proponent has agreed to share energy consumption quantities.

EA Credit 6 – Green Power

The client anticipates purchasing 75% of the building's electricity from renewable sources for at least a two year contract.

Materials and Resources (MR)

MR Prerequisite 1 – Storage and Collection of Recyclables

The Project design team will dedicate a storage and collection room within the building. The room will be adequately sized based on the building square footage and usage and be readily accessible.

MR Credit 2 – Construction Waste Management

The general contractor has agreed to provide a construction waste management plan that will ensure that 75% of all waste and debris is directed to be recycled.

MR Credit 4 – Recycled Content

The Project architect will specify enough products with high recycled content to obtain the 10% threshold. The goal is to drive towards greater than 20% of the materials to contain the appropriate amount of recycled material.

MR Credit 5 – Regional Materials

The general contractor has generated a matrix of materials based on cost to determine which materials will allow the team to purchase and achieve this credit (10% based on cost of material). The goal is greater than 10%.

Indoor Environmental Air Quality (EQ)

EQ Prerequisite 1 – Minimum IAQ Performance

The HVAC design will meet ASHRAE 62.1-2007.

EQ Prerequisite 2 – Environmental Tobacco Smoke

The Project will be a no smoking facility.

EQ Credit 1 – Outdoor Air Delivery Monitoring

Demand control ventilation will be incorporated in the HVAC design. CO_2 sensors will be installed to monitor the outdoor air quality where required throughout the building.

EQ Credit 3.1 – Construction Indoor Air Quality (IAQ) Effectiveness During Construction

Suffolk Construction has agreed to develop and implement an IAQ management plan for the construction phases of the Project. This will include the proper storage of absorptive materials to prevent moisture damage. Air handlers used during construction will have Minimum Efficiency Reporting Value (MERV) 8 filtration media that will be replaced before occupancy. The Sheet Metal and Air Condition Contractors' National Association (SMACNA) sheet metal guides concerning IAQ will be strictly adhered to.

EQ Credit 4 – Low Emitting Materials

The Project architect will specify all adhesives, sealants, paints, coatings, flooring systems, and composite wood in such a manner that the LEED requirements are met with regard to off-gassing, volatile organic compounds (VOC) contents, formaldehydes, etc.

EQ Credit 5 – Indoor Chemical and Pollutant Source Control

The following design elements are being incorporated to address this credit: 1) all trash/recycle rooms are anticipated to have exhaust. 2) All equipment supplying outdoor air will have MERV 13 filtration. 3) Walk-off mats will be installed at entry ways.

EQ Credit 6.1 – Controllability of Systems – Lighting Control

Due to the nature of the occupancy type, there will be lighting controls for each residential bedroom as well as multiple lighting controls on all multipurpose rooms.

EQ Credit 7.1 – Thermal Comfort - Design

The HVAC design will meet ASHRAE 55-2004. This is a standard practice for this type of building.

EQ Credit 8.2 – Daylight and Views – Views of 90% of Spaces

The inherent geometry of the building (narrow) allows for a majority of spaces to have a direct connection to the outdoors.

Innovation and Design Process (ID)

1. Construction Waste Management – Exemplary Performance (Innovation Credit 1.1)

As stated above, the Construction Manager will implement a waste management plan that will seek to divert at least 75% of construction and demolition waste material removed from the site from landfills through recycling and salvaging. This credit may be pursued aggressively in an opportunity to gain an exemplary performance credit of 95% construction waste recycling.

2. Green Housekeeping (Innovation Credit 1.2)

The building owner intends on implementing a green housekeeping policy wherein all cleaners used in common areas shall comply with the Green Seal standard GS-37.

3. Alternate transportation exemplary performance (Innovation Credit 1.2)

The Project site is located adjacent to, and in the vicinity of, transit services with the required number of trips to achieve this credit.

4. LEED Accredited Professional

The Project team includes at least one LEED Accredited Professional.

Regional Priority Credits

Regional Priority Credits (RPC) are established LEED credits designated by the USGBC to have priority for a particular area of the country. When a project team achieves one of the designated RPCs, an additional credit is awarded to the Project. RPCs applicable to the Boston area include: SSc3, SSc6.1, SSc7.1, SSc7.2, EAc2 and MRc1.1. This Project anticipates two RPCs for the Project: SSc7.2-Heat Island Effect, Roof and SSc3-Brownfield Redevelopment.

3.3 Urban Design

The proposed Project was developed to respond in varying ways to both the sharp angularity of the neighboring Hancock Tower, the rectilinear, box-like form of the nearby The Clarendon, and the fluid curvature of the approved Simon Tower at Copley Place without attempting to mimic any of those buildings.

The new tower rises from a six-story base/plinth that reinforces the existing street wall and follows the Stuart Street grid. The solidity of the base is carved away at the Trinity Place corner to allow the tower's shape to read through and create a focal point where the Stuart Street grid shifts. The form and transparency of the base at the corner will add vitality and visual interest to the pedestrian realm, connect the activity within the building and the activity on the street, and serve as the main entrance to the public portions of the building.

The six-story base of the building will reinforce the urban quality of the street and contain the hotel and residential entrances, two restaurants and lounge, the conference and ballroom facilities and a portion of the University Club of Boston. The upper portion of the base will contain the two level parking garage, while the ground floor will include the parking entry, drop-off and loading and trash areas.

As the tower rises above the lower portion of the block, its curved forms register in the city skyline as the long axis rotates slightly to reduce shadow impact on Copley Square and create better sightlines from the hotel and residential floors. The tower will be clad in a combination of glass curtainwall and metal or precast concrete panels with large punched windows. The two different cladding systems are off-set from each other and balconies are seamlessly inserted where they come together on the upper floors. A distinctive double-slope profile is created at the top of the building where the opposing sides of the tower come together at the mechanical penthouse and rooftop equipment enclosure.

Design Considerations

The elements that have been considered during the design process include:

- Proposed Program: mixed use combining hotel and residential occupancies, and including related uses such as restaurants, conference and ballroom spaces, pool and fitness center and residential parking;

- Overall site dimensions, orientation and relationship to Stuart Street grid, existing block and adjacent University Club of Boston;
- Minimizing potential shadows cast on Copley Square;
- Visual relationship of the proposed building to other nearby existing and proposed high-rise developments;
- Responding to the "high spine" building urban design concept for this area of Boston; and
- Substantial conformance with FAR, height, building form and shadow performance criteria as recommended in the Study.

3.4 Historic and Archaeological Resources

This section identifies historic resources within and in the vicinity of the Project site. A review of the State and National Registers of Historic Places and the survey files of the Massachusetts Historical Commission (MHC) and Boston Landmarks Commission (BLC), as well as a field review of the areas in the vicinity of the Project, were undertaken to identify historic resources.

3.4.1 Historic Resources within the Project Site

The Project site includes a portion of a building housing both the Boston Common Hotel and Conference Center at 40 Trinity Place, and the University Club at 426 Stuart Street. The combined building is included in the Inventory of Historic and Archaeological Assets of the Commonwealth (Inventory) (MHC No. 2395). The Georgian Revival building, designed by the Boston architecture partnership of Archibald G. Monks & Granville Johnson, has a brick and limestone eight-story main block with a three-story wing fronting Stuart Street. The three-story wing still houses the University Club, is under separate ownership, and will not be demolished as part of the Project. The Proponent will coordinate with MHC and BLC regarding the demolition of the 40 Stuart Street portion of the building as described further in Chapter 4.

Constructed in 1925, the building was originally built as the Club House for the University Club of Boston at 420-432 Stuart Street. The taller, Club House portion of the building, was sold to the Chandler School for Women in 1962 and then again to the John Hancock Mutual Life Insurance Company in 1971, which opened the John Hancock Institute in the building in 1972 to house and train new John Hancock insurance agents. The facility closed for nine months in 1986 for renovations, after which the John Hancock Conference Center was open to the public for meeting space and guest rooms.

The Project site is located at the southwest corner of the Park Square-Stuart Street historic area, which area was determined eligible for listing in the National Register, although it failed to achieve listing. (see further description below).

3.4.2 Historic Resources in the Vicinity of the Project Site

The Project site is in close proximity to properties individually listed in the State and National Registers of Historic Places, including the Young Women's Christian Association (YWCA) building at 140 Clarendon Street, which is located to the east of the Project site. Also located near the Project site are the Back Bay Historic District and Architectural District to the north and South End District and Landmark District to the south. These and other State and National Register historic resources in the vicinity are described below.

Table 3-7 lists State and National Register-listed properties and historic districts located within a quarter mile radius of the Project site. The individually listed properties are assigned numbers, which correspond to Figure 3-6. Figure 3-6 also identifies the locations of the State and National Register-listed historic districts within a quarter mile of the Project site.

The **Park Square – Stuart Street Historic Area** has been determined eligible for listing in the National Register by the MHC, although it failed to achieve listing. Roughly bounded by Trinity Place, St. James Avenue, Clarendon, Boylston, and Stuart streets, Columbus Avenue, and Park Plaza, and including the Project site, the Park Square – Stuart Street Historic Area is significant as an early twentieth-century extension of Boston's downtown business district with numerous high-rise structures constructed on the site of the former sixteen-acre Boston & Providence Railroad yard. The area is included in the Inventory of Historic and Archaeological Assets of the Commonwealth.

Table 3-7 Historic Resources in the Vicinity of the 40 Trinity Place Project Area

No.	Historic Resource	Address	Designation
1	New Old South Church	645 Boylston St.	NR, NRDIS, NHL, LHD
2	Boston Public Library	700 Boylston St.	NR, NRDIS, NHL, LL
3	Trinity Church	206 Clarendon St.	NR, NRDIS, NHL
4	Trinity Rectory	Clarendon St. and Newbury St.	NR, NRDIS, LHD
5	Street Clock	439 Boylston St.	NRDIS, LHD, LL
6	Berkeley Building	416-426 Boylston St.	NRDIS, LL
7	YWCA	140 Clarendon St.	NR
8	Youth's Companion Building	140-144 Berkeley St and 195-215 Columbus Ave.	NR
9	Armory of the First Corps of Cadets	97-105 Arlington St. and 130 Columbus Ave.	NR, LL

Table 3-7 Historic Resources in the Vicinity of the 40 Trinity Place Project Area (Continued)

No.	Historic Resource	Address	Designation
A	Back Bay Architectural District		LHD
B	Back Bay Historic District		NRDIS
C	Park Square-Stuart Street Historic District		NRDIS Eligible
D	Bay Village Historic District		LHD
E	South End District/ South End Landmark District		NRDIS, LHD
F	St. Botolph Street Area Architectural Conservation District		NRDOE, LHD

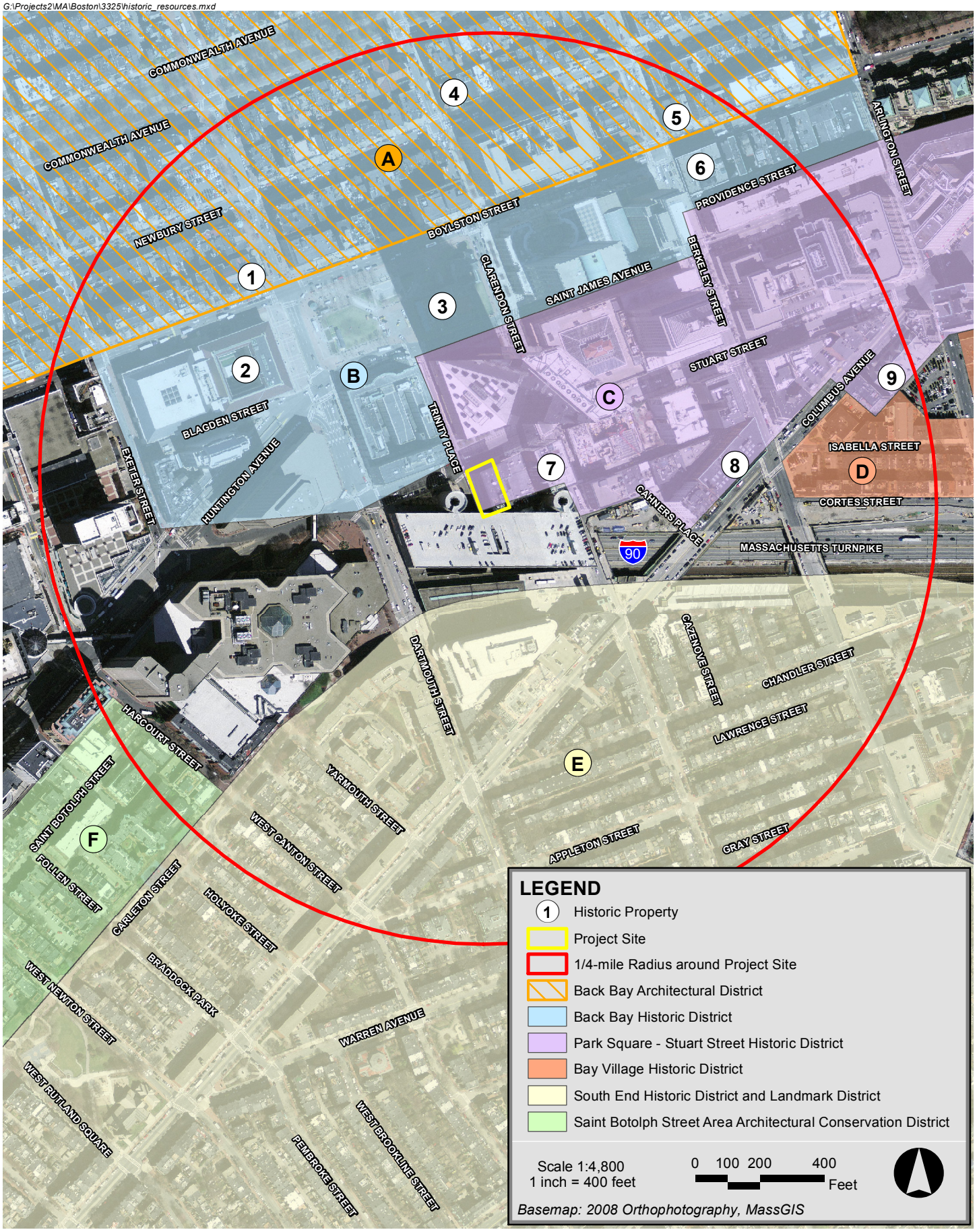
Designation Legend

NR	Individually listed on the National Register of Historic Places
NRDIS	National Register of Historic Places historic district
NRDOE	Determined eligible for inclusion in the National Register of Historic Places
NHL	National Historic Landmark
LHD	Local Historic District
LL	Local Landmark

The Project site is located north of the **South End District and Landmark District**. The South End of Boston was developed predominately between 1848 and 1930. Washington Street, which runs the length of the South End, was the original connector though the marshland between the City of Boston and the mainland area of Roxbury. The City of Boston eventually filled the marshland, and in 1848 began to auction off parcels to speculative developers. As a result of this initiative, the South End of Boston became one of the most fashionable residential neighborhoods in Boston in the nineteenth century. Despite the change in use and alterations to many of the buildings, the South End is the largest remaining urban Victorian residential neighborhood in the United States.

The Project site is located to the south of the **Back Bay Historic District and Architectural District,** which is bounded by Arlington Street to the east and Massachusetts Avenue to the west. Beginning in 1857 at Arlington Street, the area of land known as the Back Bay was created by filling in vast spans of tidal flats. By the late 1880s the marshy flats that once separated Boston and the neighboring town of Brookline had been completely filled in. The result was the creation of over four hundred and fifty acres of dry, developable land.

The Back Bay Historic District is listed in the National Register. The Back Bay Architectural District, a local historic district, has similar boundaries as the National Register district, but does not include the south side of Boylston Street.



40 Trinity Place Boston, Massachusetts

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Figure 3-6
Historic Resources

Trinity Church in Copley Square is considered the greatest single piece of architecture designed by the acclaimed architect H.H. Richardson. The main body of the Richardson Romanesque church was constructed between 1872 and 1877. The porches were completed by Richardson's successor, Hugh Shepley between 1894 and 1897. Since the original Copley Square site was small, triangular, and isolated by surrounding streets, Richardson designed the church with a compact Greek cross plan and a large central tower. Romanesque features on the exterior are highlighted by the use of polychromatic stonework, while the interior space is illuminated with murals by John La Farge and Augustus Saint-Gaudens. The **Trinity Rectory** at the corner of Newbury and Clarendon streets, designed by H. H. Richardson and constructed in 1880, was built to serve as the residence of the pastor. The red brick and brownstone building is of a similar, though more modest expression of Richardson Romanesque design.

The **YWCA** at 140 Clarendon Street was completed in 1927 to the designs of Boston architects Shepard & Stearns. The Classical Revival style building, constructed of brick with limestone trim, housed a mix of residential, educational, recreational, and administrative spaces, including the first swimming pool and first public baths for women in Boston.

3.4.3 Archaeological Resources on the Project Site

There are no known archaeological resources listed in the State and National Registers of Historic Places or included in the Inventory of Historic and Archaeological Assets of the Commonwealth within the Project site. Prior to the construction of 40 Trinity Place, the Project site was filled land with a depth of 20-25 feet; therefore, it is unlikely that the proposed Project will affect previously unidentified archaeological resources.

3.5 Infrastructure Systems

3.5.1 Introduction

The existing infrastructure surrounding the site of 40 Trinity Place appears of adequate capacity to service the needs of the Project. The following sections describe the existing sanitary sewer, water, and storm drain systems surrounding the site and explain how these systems will service the development. The analysis also discusses any anticipated Project-related impacts on the utilities and identifies mitigation measures to address these potential impacts.

The Project is moving into the Design Development phase where a detailed infrastructure analysis will be performed. The Project's team will coordinate with the appropriate utilities to address the capacity of the area utilities to provide services for the new building. A Boston Water and Sewer Commission (BWSC) Site Plan and General Service Application is required for the proposed new water, sanitary sewer, and storm drain connections.

A Drainage Discharge Permit Application will be submitted to the BWSC for any required construction dewatering. The appropriate approvals from the Massachusetts Department of Environmental Protection (MassDEP) and the U.S. Environmental Protection Agency (EPA) will also be sought.

3.5.2 Wastewater

3.5.2.1 Existing Sanitary Sewer System

The sanitary sewer system in the vicinity of the Project site is owned, operated, and maintained by BWSC (see Figure 3-7). There is an existing 18-inch by 36-inch sanitary sewer culvert located in Stuart Street to the north of the Project site. There is an existing 18-inch by 33-inch sanitary sewer culvert located in Trinity Place to the west of the Project site. Both lines eventually discharge into a 12-inch sanitary sewer pipe in Trinity Place near the northwest corner of the Project site.

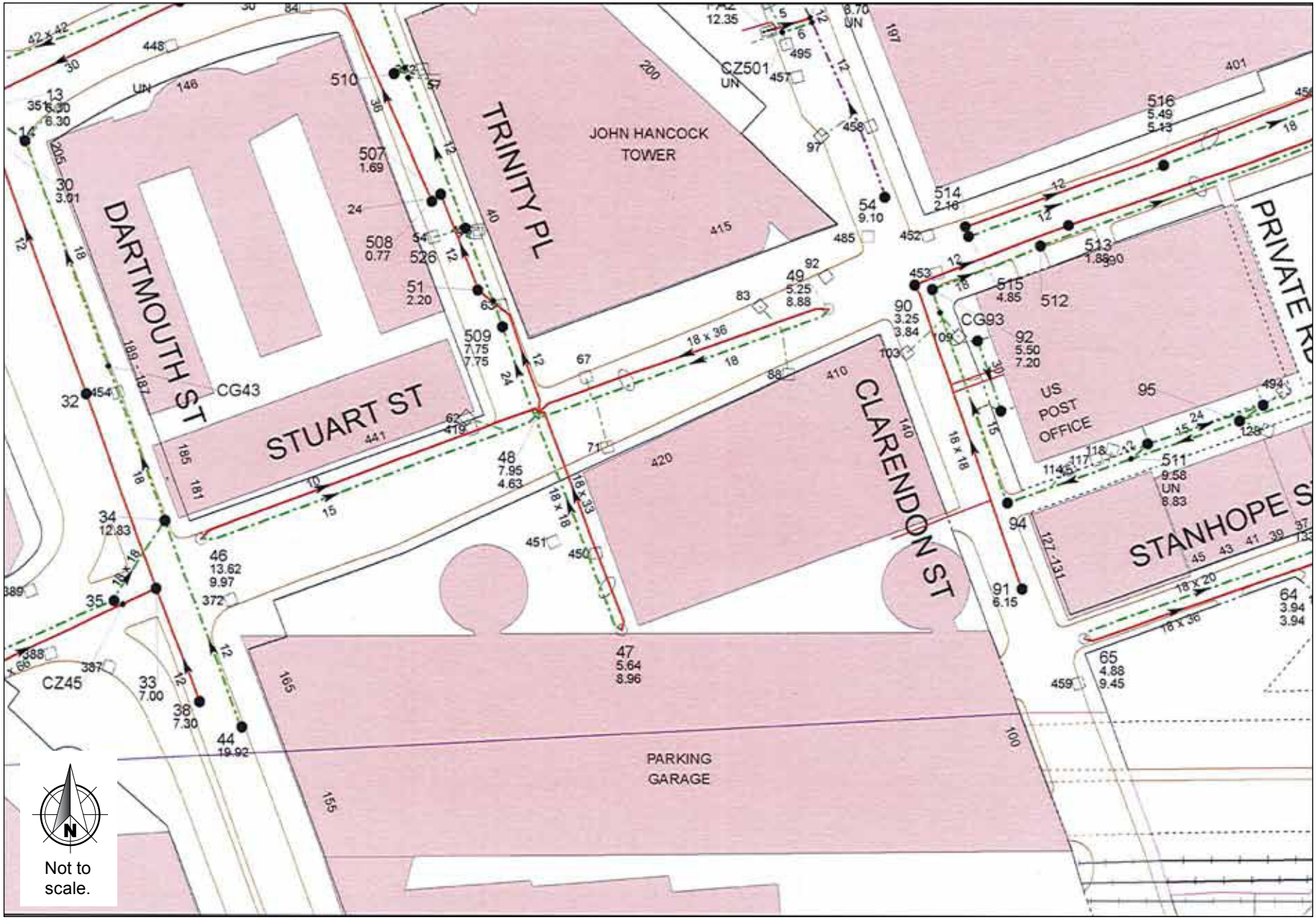
The total sewer flow from the existing building is estimated at 9,329 gallons per day (gpd) based on the existing building uses and design sewer flows provided in 314 CMR 7.00-Sewer System Extension and Connection Permit Program as summarized in Table 3-8.

Table 3-8 Existing Sanitary Sewer Flows

Use	Quantity	Unit Flow Rate	Estimated Maximum Daily Flow (gpd)
Hotel	65 rooms	110 gpd/room	7,150 gpd
Coffee/Donut Shop	20 seats	20 gpd/seat	400 gpd
Office Space	10,000 sf	75 gpd/1,000 sf	750 gpd
Conference Center	343 seats	3 gpd/seat	1,029 gpd
Total			**9,329 gpd**

3.5.2.2 Project-Generated Sanitary Sewer Flow

The Project will generate an estimated 66,040 gallons per day (gpd) based on design sewer flows provided in 314 CMR 7.00-Sewer System Extension and Connection Permit Program as summarized in Table 3-9. This is a net increase of 56,711 gpd over the estimated flows from the existing building.



40 Trinity Place Boston, Massachusetts

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Figure 3-7
BWSC Storm Drain and Sanitary Sewer System

Table 3-9 Projected Sanitary Sewer Flows

Use	Quantity	Unit Flow Rate	Estimated Maximum Daily Flow (gpd)
Hotel	220 rooms	110 gpd/room	24,200 gpd
Residential Units	284 beds*	110 gpd/bed	31,240 gpd
Restaurant	260 seats**	35 gpd/seat	9,100 gpd
University Club	60 members***	25 gpd/member	1,500 gpd
Total			**66,040 gpd**

Assumptions:

*Average of 2 beds per residential unit

**1 seat per 30 sf (7,810 sf total)

***Assumed new 10,000 sf of space used as gym and would accommodate 60 new members

3.5.2.3 Sanitary Sewer Connection

It is anticipated that sanitary services for the Project will tie into the BWSC 18-inch by 33-inch sanitary sewer main in Trinity Place. All existing building services will be cut and capped at the main if the lines are not reused.

The flow full capacity of the 12-inch sanitary sewer located near the northwest corner of the Project site in Trinity Place is 2.94 cubic feet per second (cfs) (1.9 million gallons per day (MGD)). The projected maximum daily sewer flow for the Project is 0.067 MGD, which is about 3.5% of this line's capacity.

The Proponent will submit a Site Plan to the BWSC for review and approval. Based on the proposed estimated sanitary flow, a Sewer Connection Permit or Self-Certification will be required. This Permit will be submitted to BWSC for review and approval prior to submitting to MassDEP.

3.5.2.4 Effluent quality

The Project is not expected to generate industrial wastes.

3.5.2.5 Sewer system mitigation

To help conserve water and reduce the amount of wastewater generated by the Project, and to meet Leadership in Energy and Environmental Design (LEED) requirements, the Proponent will make use of water conservation devices such as low-flow toilets, waterless urinals, and flow-restricting faucets.

3.5.3 Water system

3.5.3.1 Existing Water Service

The water distribution system in the vicinity of the Project site is owned and maintained by BWSC (see Figure 3-8). There is a 12-inch cast iron (CI) distribution line located in Stuart Street that is part of BWSC's Southern High service network. Originally installed in 1928, it was cleaned and cement-lined in 2010. Also, there is a 12-inch pit cast iron (PCI) distribution line located in Trinity Place that is part of BWSC's Southern High service network and was installed in 1921.

According to BWSC records, the existing building has one existing water service, a four-inch domestic water service located near the northwest corner of the Project site. This service connects to the 12-inch (Southern High) water main in Trinity Place. It appears that the existing building is serviced by an eight-inch fire protection line from the adjacent building (410 Stuart Street). This service connects to the 12-inch (Southern High) water main in Stuart Street. The location of the existing fire protection service will be confirmed as the Project moves to the Design Development phase.

There are two fire hydrants located in the vicinity of the Project site. One hydrant is located on Stuart Street and the other is located on Trinity Place. It appears that these hydrants will provide sufficient coverage for the Project. The Proponent will confirm this with BWSC and the Boston Fire Department (BFD) during the detailed design phase.

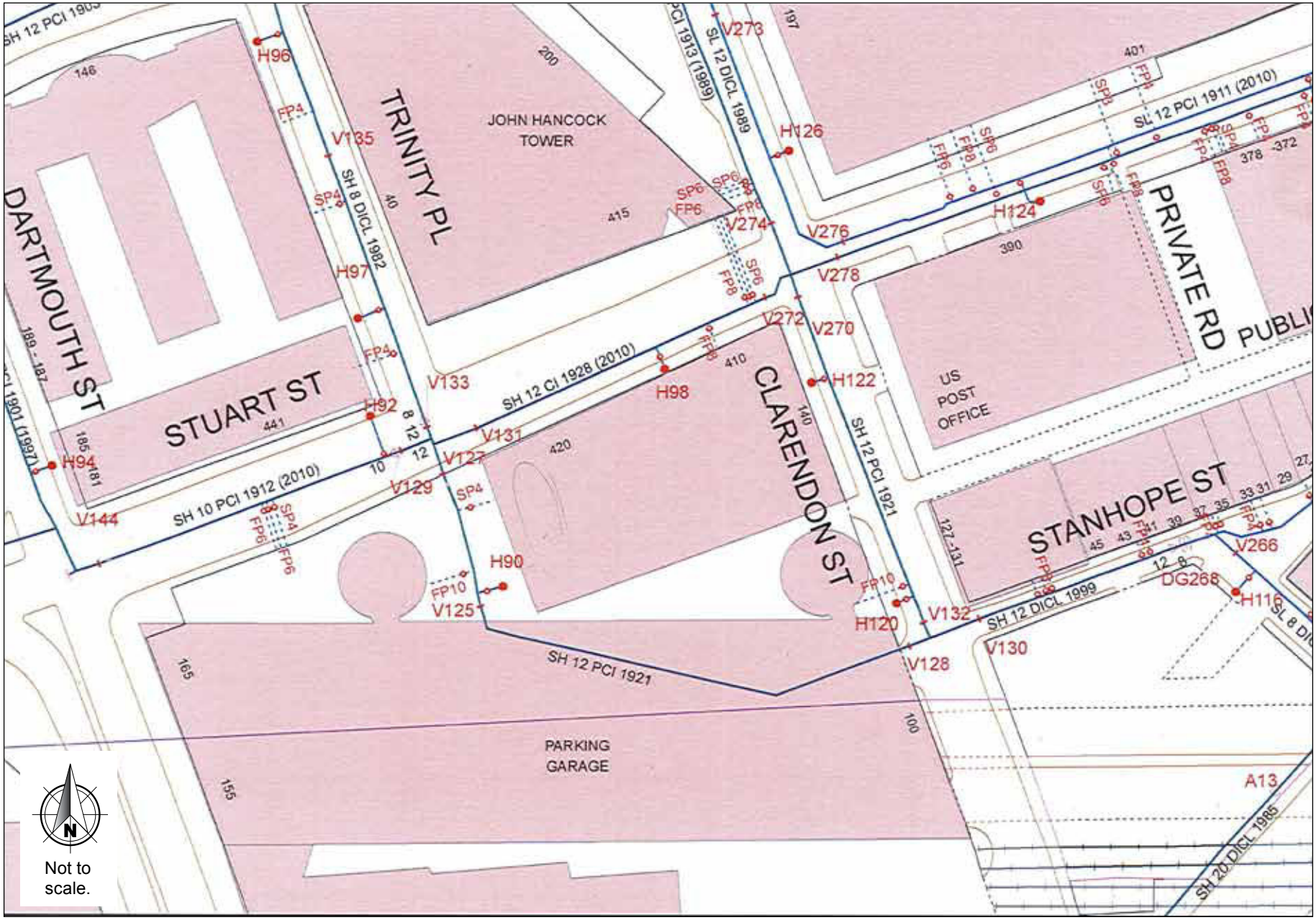
3.5.3.2 Anticipated Water Consumption

The maximum daily water demand is estimated to be 72,600 gpd based on the sewage flow estimate and an added factor for system losses including the average requirements for the Project's cooling system. More detailed water use and meter sizing calculations will be submitted to BWSC as part of the Site Plan approval process.

3.5.3.3 Proposed Water Service

Separate services will be provided for domestic use and fire protection. A domestic water line and two fire protection lines will serve the development and are expected to tie into the 12-inch water main (Southern High) on Trinity Place with a tapping sleeve and valve connection. Water meters will be of a type approved by BWSC and tied into the BWSC's Automatic Meter Reading system.

Irrigation is currently not proposed for the Project. If it is added to the Project, the Proponent will provide BWSC an estimate of the water usage.



40 Trinity Place Boston, Massachusetts

Howard/Stein-Hudson Associates, Inc.
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Figure 3-8
BWSC Water Distribution System

It is anticipated that the existing domestic water service will be abandoned and cut and capped at the main with the valve box, frame and cover removed. If a fire protection service needs to be removed, it will be coordinated with BWSC, BFD, and Inspectional Services Department. A Termination Verification Approval Form for Demolition will be submitted for approval by BWSC prior to demolition of any existing structures. The Contractor will obtain a Hydrant Meter Permit from BWSC if hydrant use is required during construction.

3.5.3.4 Water Supply Conservation and Mitigation Measures

The Proponent will use low-flow plumbing fixtures in compliance with LEED requirements, and the Proponent has incorporated waterless urinals into existing properties to further reduce water consumption. It is expected that low-flow water closets and showers will be used. Lavatories are expected to have aerated faucets to reduce water usage.

3.5.4 Storm Drainage System

3.5.4.1 Existing Storm Drainage System

The storm drain system in the vicinity of the Project site is owned and maintained by BWSC (see Figure 3-7). There is an 18-inch storm drain in Stuart Street off the northerly side of the site. Also, there is an 18-inch by 18-inch storm drain in Trinity Place that runs along the westerly side of the site. Both lines eventually discharge into a 24-inch storm drain in Trinity Place near the northwest corner of the Project site.

The existing building occupies nearly the entire parcel. The remainder of the Project site, consisting of a small parking area between the existing building and the parking garage to the south, is primarily impervious. There are no landscaped areas around the perimeter of the existing building.

Runoff from the Project site is currently collected and conveyed to the surrounding municipal storm drain systems. There are no stormwater management systems that would attenuate peak flows and the Project site provides little opportunity for recharge. Runoff from paved surfaces around the property is generally captured in catch basins. Very little water quality treatment is realized before these areas are drained to the municipal storm drain system.

Rooftop runoff from the existing building is collected and discharged to the 18-inch by 18-inch storm drain in Trinity Place through two building drain services. It appears that the runoff from the small parking area on the southerly side of the site drains overland and is captured by catch basins in Trinity Place that tie into the 18-inch by 18-inch storm drain.

3.5.4.2 Proposed Storm Water System

The proposed stormwater management system will be designed to improve existing conditions. It is anticipated that a stormwater infiltration system will be constructed to promote groundwater recharge and help meet the requirements of Article 32 of the Zoning Code. It is expected that the infiltration system will have an overflow tied into BWSC's 18″x18″ storm drain in Trinity Place to alleviate the system during large rainfall events. Runoff from paved areas will be routed through a deep sump structure with an outlet trap to remove oil, sediment, and debris before discharge to the municipal storm drain system.

After construction, the Project site will continue to consist primarily of impervious surfaces, associated with building roofs and paved surface parking.

All storm drain system improvements will be designed in accordance with BWSC's design standards and the 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 off-site drain work. Any storm drain connections terminated as a result of construction will be cut and capped at the storm drain in the street in accordance with BWSC standards.

Erosion and sediment controls will be used during construction to protect adjacent properties and the municipal storm drain system. An operation and maintenance plan will be developed to support the long-term functionality of the proposed stormwater management system.

3.5.4.3 Groundwater Conservation Overlay District

The Project lies within the Groundwater Conservation Overlay District (GCOD), established pursuant to Article 32 of the Zoning Code. To meet the requirements of Article 32, the Project design proposes the construction of a recharge system. It is anticipated that the recharge system will have the capacity to infiltrate a volume of rainfall equivalent to one inch over the impervious surfaces of the Project. An overflow pipe will be designed to convey runoff from larger storm events to the 18-inch by 18-inch storm drain pipe in Trinity Place.

It is expected that the rooftop runoff from the new building will be collected and directed to the proposed recharge system. No pretreatment is proposed since the rooftop runoff is normally considered clean.

3.5.5 Electrical Service

NSTAR owns and maintains the electrical transmission system located in Stuart Street and Trinity Place. The actual size and location of the proposed building services will be coordinated with NSTAR during the detailed design phase. It is anticipated that a transformer vault will be provided in the basement of the proposed building.

The Proponent is investigating energy conservation measures, including high efficiency lighting.

3.5.6 Telecommunications Systems

Comcast and Verizon own and maintain infrastructure in Boston. The Proponent will work with the appropriate company on the telecommunications infrastructure related to the Project during the design phase.

3.5.7 Gas Systems

National Grid owns and maintains a 12-inch low pressure gas main in Stuart Street. The existing building is serviced by a four-inch gas service coming from the 12-inch main. The Project is expected to use natural gas for heating and domestic hot water and potentially cooling. The actual size and location of the building services will be coordinated with National Grid during the detailed design phase.

3.5.8 Utility Protection during Construction

The Project's Contractor will notify utility companies and call "Dig Safe" prior to excavation. During construction, infrastructure will be protected using sheeting and shoring, temporary relocations, and construction staging as required. The Construction 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 Construction 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 Construction Contractor will be required to coordinate the shutdown with the utility owners and Project abutters to minimize impacts and inconveniences.

Chapter 4.0

Coordination With Other Governmental Agencies

4.0 COORDINATION WITH OTHER GOVERNMENTAL AGENCIES

4.1 Architectural Access Board Requirements

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

4.2 Massachusetts Environmental Policy Act (MEPA)

MEPA review is not expected to be required. While proposed demolition of the Building, which is listed on the Inventory of Historic and Archaeological Assets of the Commonwealth is a potential MEPA review trigger, MEPA review may be obviated by filing a Project Notification Form (PNF) with the MHC and entering a Memorandum of Agreement. The Project is not anticipated to trigger any other MEPA review thresholds.

4.3 Massachusetts Historical Commission State Register Review

The MHC has review authority over projects requiring state funding, licensing, permitting, and/or approvals that may have direct or indirect impacts to properties listed in the State Register of Historic Places. A MHC PNF will be filed to initiate the State Register Review process. The Proponent anticipates entering into a Memorandum of Agreement with MHC concerning the demolition of the building on the Project site.

4.4 Boston Landmarks Commission Article 80 Review

The submission of this PNF initiates review of the Project by the BLC under the City's Article 80 review process. Direct and indirect impacts to historic resources including, but not limited to, demolition, urban design, shadow, and wind will be addressed in the Draft PIR.

4.5 Boston Landmarks Commission Article 85 Review

The proposed demolition of the existing building on the Project site, 40 Trinity Place, will be subject to review by the BLC under Article 85 of the Boston Zoning Code. An Article 85 Application for the property will be submitted to the BLC.

4.6 Other Permits and Approvals

Section 1.7 of this PNF provides an anticipated list of agencies from which permits and approvals for the Project will be sought.

Chapter 5.0

Project Certification

5.0 PROJECT CERTIFICATION

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

Signature of Proponent's Representative

Jordan Warshaw

Trinity Stuart LLC
40 Trinity Place
Boston, MA 02116

10/29/12
Date

Signature of Preparer

Geoffrey Starsiak

Epsilon Associates, Inc.
3 Clock Tower Place, Suite 250
Maynard, MA 01754

10/29/12
Date

Appendix A

LEED Checklist

LEED 2009 for New Construction and Major Renovations

Project Checklist

40 Trinity - SILVER

07/20/2012

Sustainable Sites — Possible Points: 26

Y	?	N			
Y			Prereq 1	Construction Activity Pollution Prevention	
1			Credit 1	Site Selection	1
5			Credit 2	Development Density and Community Connectivity	5
1			Credit 3	Brownfield Redevelopment	1
6			Credit 4.1	Alternative Transportation—Public Transportation Access	6
1			Credit 4.2	Alternative Transportation—Bicycle Storage and Changing Rooms	1
3			Credit 4.3	Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles	3
		2	Credit 4.4	Alternative Transportation—Parking Capacity	2
	1		Credit 5.1	Site Development—Protect or Restore Habitat	1
1			Credit 5.2	Site Development—Maximize Open Space	1
		1	Credit 6.1	Stormwater Design—Quantity Control	1
		1	Credit 6.2	Stormwater Design—Quality Control	1
	1		Credit 7.1	Heat Island Effect—Non-roof	1
1			Credit 7.2	Heat Island Effect—Roof	1
	1		Credit 8	Light Pollution Reduction	1

Water Efficiency — Possible Points: 10

Y			Prereq 1	Water Use Reduction—20% Reduction	
		4	Credit 1	Water Efficient Landscaping	2 to 4
		2	Credit 2	Innovative Wastewater Technologies	2
2	1	1	Credit 3	Water Use Reduction	2 to 4

Energy and Atmosphere — Possible Points: 35

Y			Prereq 1	Fundamental Commissioning of Building Energy Systems	
Y			Prereq 2	Minimum Energy Performance	
Y			Prereq 3	Fundamental Refrigerant Management	
5	3	11	Credit 1	Optimize Energy Performance	1 to 19
		7	Credit 2	On-Site Renewable Energy	1 to 7
2			Credit 3	Enhanced Commissioning	2
2			Credit 4	Enhanced Refrigerant Management	2
	3		Credit 5	Measurement and Verification	3
2			Credit 6	Green Power	2

Materials and Resources — Possible Points: 14

Y			Prereq 1	Storage and Collection of Recyclables	
		3	Credit 1.1	Building Reuse—Maintain Existing Walls, Floors, and Roof	1 to 3
		1	Credit 1.2	Building Reuse—Maintain 50% of Interior Non-Structural Elements	1
2			Credit 2	Construction Waste Management	1 to 2
		2	Credit 3	Materials Reuse	1 to 2

Materials and Resources, Continued

Y	?	N			
2			Credit 4	Recycled Content	1 to 2
1	1		Credit 5	Regional Materials	1 to 2
		1	Credit 6	Rapidly Renewable Materials	1
		1	Credit 7	Certified Wood	1

Indoor Environmental Quality — Possible Points: 15

Y			Prereq 1	Minimum Indoor Air Quality Performance	
Y			Prereq 2	Environmental Tobacco Smoke (ETS) Control	
1			Credit 1	Outdoor Air Delivery Monitoring	1
		1	Credit 2	Increased Ventilation	1
1			Credit 3.1	Construction IAQ Management Plan—During Construction	1
	1		Credit 3.2	Construction IAQ Management Plan—Before Occupancy	1
1			Credit 4.1	Low-Emitting Materials—Adhesives and Sealants	1
1			Credit 4.2	Low-Emitting Materials—Paints and Coatings	1
1			Credit 4.3	Low-Emitting Materials—Flooring Systems	1
1			Credit 4.4	Low-Emitting Materials—Composite Wood and Agrifiber Products	1
1			Credit 5	Indoor Chemical and Pollutant Source Control	1
1			Credit 6.1	Controllability of Systems—Lighting	1
1			Credit 6.2	Controllability of Systems—Thermal Comfort	1
1			Credit 7.1	Thermal Comfort—Design	1
		1	Credit 7.2	Thermal Comfort—Verification	1
	1		Credit 8.1	Daylight and Views—Daylight	1
1			Credit 8.2	Daylight and Views—Views	1

Innovation and Design Process — Possible Points: 6

1			Credit 1.1	Innovation in Design: Specific Title	1
1			Credit 1.2	Innovation in Design: Specific Title	1
	1		Credit 1.3	Innovation in Design: Specific Title	1
		1	Credit 1.4	Innovation in Design: Specific Title	1
		1	Credit 1.5	Innovation in Design: Specific Title	1
1			Credit 2	LEED Accredited Professional	1

Regional Priority Credits — Possible Points: 4

1			Credit 1.1	Regional Priority: Specific Credit	1
1			Credit 1.2	Regional Priority: Specific Credit	1
	1		Credit 1.3	Regional Priority: Specific Credit	1
		1	Credit 1.4	Regional Priority: Specific Credit	1

53	15	42	**Total**		Possible Points: **110**

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