PUBLIC NOTICE

The Boston Redevelopment Authority ("BRA"), pursuant to Article 80 of the Boston Zoning Code, hereby gives notice that a Draft Project Impact Report ("DPIR") was filed by The Druker Company, Ltd. ("Proponent") on June 3, 2008 for the 350 Boylston Street project (the "Project") to be located on four parcels located at 324-334, 336-342, 344-350 and 352-360 Boylston Street in the area bounded by Boylston, Arlington and Providence Streets in Boston's Back Bay.

The Project consists of a mixed-use development of approximately 221,230 square feet (sf) of gross floor area. The specific uses proposed for this newly constructed, nine-story building will include approximately 15,000 sf of ground floor retail and restaurant space, and eight floors of first class office and related support space. Approximately 150 parking spaces and an approximately 6,000 sf fitness center and spa for use by the building's office tenants are planned for three below-grade levels.

The BRA in the Preliminary Adequacy Determination for such DPIR may waive further review pursuant to Section 80B-5.4(c)(iv), if, after reviewing public comments, the BRA finds that such DPIR adequately describes the proposed Project's impacts. The DPIR may be reviewed in the office of the Secretary of the BRA, Room 910, Boston City Hall, Boston, MA 02201, between 9:00 AM and 5:00 PM, Monday through Friday, except legal holidays. Public comments on the DPIR should be transmitted to Mr. Jay Rourke, BRA, at the address stated above by August 1, 2008.

BOSTON REDEVELOPMENT AUTHORITY
Harry R. Collings, Executive Director / Secretary

Draft Project Impact Report

Submitted pursuant to Article 80 of the Boston Zoning Code

350 Boylston Street

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

Submitted by:
The Druker Company, Ltd.
50 Federal Street
Boston, MA 02110

June 3, 2008

Epsilon Associates Inc.

Draft Project Impact Report

350 Boylston Street

Submitted to:

BOSTON REDEVELOPMENT AUTHORITY
One City Hall Square
Boston, MA 02201

Submitted by:

THE DRUKER COMPANY, LTD.

Prepared by:

EPSILON ASSOCIATES, INC.
3 Clock Tower Place
Suite 250
Maynard, MA 01754

In Association with:

Pelli Clarke Pelli Architects
CBT Architects, Inc.
Goulston & Storrs, P.C.
Vanasse Hangen Brustlin, Inc.
Haley & Aldrich, Inc.
Nitsch Engineering, Inc.
Weidlinger Associates, Inc.
Cosentini Associates, Inc.
Moriarty & Associates

June 3, 2008

Table of Contents

Table of Contents (Continued)

Table of Contents (Continued)

Table of Contents (Continued)

Table of Contents (Continued)

List of Appendices

List of Figures

List of Figures (Continued)

List of Tables

List of Tables

1.0 EXECUTIVE SUMMARY

1.1 Introduction

350 Boylston is a mixed use office and retail project at the southwest corner of Arlington and Boylston Streets, diagonally across from Boston's beloved Public Garden. This corner is also shared with the historically significant Arlington Street Church to the North and The Heritage on The Garden, a residential, office and retail complex to the East. With such prestigious neighbors, the design of 350 Boylston will reinforce the texture and scale of Boston's Back Bay as a contemporary building at this important corner.

Designed by internationally renowned architect Cesar Pelli, the building creates a new commercial structure for the 21st century that is respectful of Back Bay's rich architectural traditions. The building massing, fenestration, materials and texture have all been carefully crafted to create a clearly contemporary building, while being sympathetic and compatible with the adjacent context. Pelli has approached the project design as a wonderful opportunity to create a new landmark for the City of Boston.

The Project consists of a mixed-use development of approximately 221,230 square feet (sf) of gross floor area (as defined under the Boston Zoning Code). The specific uses proposed for this newly constructed, nine-story building will include approximately 15,000 sf of ground floor retail and restaurant space, and eight floors of first class office and related support space. Approximately 150 parking spaces and an approximately 6,000 sf fitness center and spa for use by the building's office tenants are planned for three below-grade levels.

Over the last three decades, Cesar Pelli has designed some of the world's most recognizable buildings, including the World Financial Center in New York (1988), the Petronas Towers in Kuala Lumpur (1998), the International Finance Centre in Hong Kong (2003), and the Carnival Center for the Performing Arts in Miami (2006), and in Boston, Pelli has designed the proposed tower over South Station Air Rights.

1.2 Summary of Benefits and Impacts

1.2.1 Benefits

350 Boylston Street provides a number of public benefits to the City of Boston such as improving retail vitality and providing first class office space in this highly visible and accessible location. The area will be enhanced by the urban design and architectural character provided by a new signature building designed by a world-class architect which is sensitive to its architectural neighbors, including the Arlington Street Church, The Public Garden, and The Heritage On The Garden.

1.2.1.1 Economic Benefits

Increased Employment

350 Boylston Street will create approximately 300 construction jobs and approximately 880 permanent jobs. The permanent jobs will result from the proposed retail and commercial components and building operations and security.

Linkage Payments

In accordance with Section 80-7 of Article 80 of the Boston Zoning Code, the Proponent will make both a housing contribution grant and a jobs construction grant to the Neighborhood Housing Trust and the Neighborhood Jobs Trust. The Project will generate approximately $952,000 in housing linkage funds and approximately $190,000 in jobs linkage funds to the City of Boston.

Tax Revenues

350 Boylston Street will substantially increase property, sales and wage tax revenues to the City of Boston and the Commonwealth of Massachusetts. The new development is anticipated to generate approximately $1,800,000 in annual property taxes.

Boston Residents Construction Plan

A Boston Residents Construction Plan will be submitted in accordance with the Boston Jobs Policy. The Plan will provide that the proponent will make reasonable good-faith efforts to have at least 50% of the total employee work hours be by Boston residents, at least 30% of the total employee work hours by minorities and at least 10% of the total employee work hours by women.

Employment Opportunity Plan

The proponent will submit a voluntary Employment Opportunity Plan outlining reasonable good faith efforts to have 50% of the permanent employees in the operation and maintenance of the project be Boston Residents.

1.2.1.2 Urban Planning and Design Benefits

Careful project design resulted in plans for buildings and civic spaces that are sensitive to the existing character of the neighborhood. As previously described, the design was developed to complement existing structures and respect the Back Bay architectural traditions and the historic significance of the neighborhood.

Improved Street and Pedestrian Environment

350 Boylston Street's streetscape improvements and retail space will be enhanced and enliven the public realm and pedestrian environment on Boylston Street adjacent to the site.

Urban Design

350 Boylston Street incorporates a design that creates a building for the 21st century. Located diagonally across from the Public Garden and near the Arlington Street Church and The Heritage on The Garden, Pelli has approached the Project design as a wonderful opportunity to create a new landmark for the City of Boston.

Streetscape Improvements

The Boylston Street sidewalks will follow the design guidelines established by the Boylston Street Improvements Master Plan. In addition, five street trees will be planted from the building entry to the western edge of the site to enliven the street and initiate a tree planting program on this side of Boylston.

Sustainable Design/ Green Building

350 Boylston Street is registered in the USGBC LEED Core and Shell (LEED-CS) rating system and will be submitting for pre-certification in the near term, targeting LEED Silver. The Project will be in compliance with Article 37 of the Boston Zoning Code.

Smart Growth/Transit-Oriented Development

Consistent with smart growth principles, 350 Boylston Street seeks to focus development in an area that has been built on previously, has excellent access to public transportation (adjacent to the Arlington Street MBTA), and has a mix of uses.

Groundwater Recharge

350 Boylston Street will comply with Article 32 of the Boston Zoning Code, Groundwater Conservation Overlay District. The Proponent is not only committed to recharging groundwater upon Project completion, but also intends to implement groundwater recharge during construction. The Proponent has and will continue to work with the Boston Groundwater Trust and the community in general, to monitor, maintain, protect, and improve (where possible) groundwater levels at and adjacent to the site.

Transportation Demand Management

The Arlington Street MBTA station is adjacent to the Project site, and the Proponent will encourage the use of the MBTA system. In addition, bicycle racks within the garage and showers will be provided for people working in the building who commute to and from work by bicycle. The Proponent will designate an on-site Employee Transportation

Coordinator, and will become a member of a local Transportation Management Association. In addition, the Proponent will work with all tenants and employers in the building to implement a package of TDM strategies such as ride matching, vanpool programs, and transit pass sales.

1.2.2 Impacts

Following is a summary of the impacts as described in this Draft PIR.

1.2.2.1 Transportation

The 350 Boylston Street Project enjoys an outstanding transit-oriented location, and benefits from truly multi-modal access. The edge of the site literally sits above the Green Line Arlington Station, and is located within Back Bay with its exceptional walking environment. In addition, the site is well-located in relation to the regional highway network, with convenient links to I-90, I-93 and Storrow Drive.

The transportation analysis concluded that there will be no significant traffic impact throughout the extensive study area as a result of the Project. The Project does not represent a total new addition to the site, but rather replaces four existing buildings that already generate travel demand today.

The site is well located with regard to both the local and regional roadway networks, and vehicular trips are distributed in multiple directions. Even in the vicinity of the Project site itself, where the greatest concentration of project trips is expected, there will be no significant impacts as a result of the Project. Indeed, vehicular access for the site benefits from the largely one-way street grid of the Back Bay, which generally eliminates the introduction of conflicting left-turning traffic movements.

In addition to its immediate adjacency to the Green Line, a wide variety of MBTA services support the Project site. These include Orange Line and Commuter Rail service at Back Bay, as well as a variety of bus routes. The pedestrian environment and accessibility of the site is excellent, and the Project will provide facilities in the building for bicycles, including showers, that will encourage bicycling as choice of travel mode.

There is currently no parking on the Project site, and the Project will provide approximately 150 parking spaces for tenants and visitors to the building, which will be exempt from the Parking Freeze. The parking garage will provide adequate supply for any additional parking demand of the Project. Finally, the Project will eliminate the site's current reliance on on-street servicing by the inclusion of an internal loading dock accessed on Providence Street.

1.2.2.2 Environmental Impacts

Wind

A qualitative assessment was made to determine the effect of the proposed Project on pedestrian level winds (PLWs) in its vicinity. All of the 39 locations considered for both the existing and build conditions are projected to have PLWs within the Boston Redevelopment Authority guideline of not having wind speed of 31 mph more often than once in 100 hours. In fact, all locations for existing and build conditions have an estimated PLW Category 3 (Comfortable for walking) or better, and most are in Category 2 (Comfortable for short periods of sitting or standing).

Shadow

Shadow impacts from the 350 Boylston Street are expected to be minor. New shadow is limited to the immediate surroundings and will generally be cast across portions of Boylston Street and its sidewalks, Arlington Street and its sidewalks, and Park Plaza and its sidewalks. During 13 of the 14 time periods studied, no new shadow will be cast onto the Public Garden. Only at 12:00 PM during the winter solstice will shadow be cast onto a minor portion of the Public Garden. However, the shadow is within the boundaries of a larger area which would be cast in shadow by a structure on the site conforming to the as-of-right height limit in effect on May 1, 1990. Accordingly, the Project does not cast "new shadow" as defined under the Public Garden Shadow Act.

During 12 of the 14 time periods studied, no new shadow will be cast onto the Arlington Street Church. At 9:00 AM and 12:00 PM during the winter solstice shadow will be cast on portions of the south slope of the Church's roof. However, these impacts are limited to a portion of the south slope of the roof and the south elevation and will not impact the primary Arlington Street elevation or main portico entrance.

Air Quality

An air quality analysis was conducted to determine the impact of carbon monoxide (CO) emissions from combustion and mobile source emissions generated by the Project. The air quality analysis results show that CO, NOx, PM, and SO2 concentrations at all sensitive receptors studied are well under NAAQS thresholds.

Solid and Hazardous Waste

There are no documented hazardous waste conditions on the Project site. Prior to commencement of the work, investigations will be performed at the site and in the existing buildings to evaluate the presence of contaminated soils, groundwater, asbestos, lead paint, or other hazardous materials that may exist. If such materials are present, work plans will be prepared by appropriately licensed professionals to identify the means and methods for safe removal and legal disposal or recycling of these materials.

Water Quality/Stormwater

In compliance with the City of Boston's Groundwater Conservation Overlay District Regulations, the Project will infiltrate 1-inch of stormwater runoff captured from the entire building rooftop. Due to the fact that this volume of stormwater runoff is infiltrated into the groundwater through a recharge system proposed in Providence Street, whereby pollutants will be filtered by the microorganisms in the soil, the Project will improve the water quality of runoff leaving the site. Since the existing site is generally composed of building roofs with roof drain systems that likely connect directly into the City's closed drainage system without any sort of treatment, the proposed design provides greater water quality treatment than is provided for in the existing condition.

Flood Hazard Zones

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the Site located in the City of Boston - Community Panel Number 250286 0010 C indicates the FEMA Flood Zone Designations for the site area. The map shows that the Project is located in a Zone C, Area of Minimal Flooding.

Noise

The noise analysis conducted for the Project includes a noise-monitoring program to determine existing noise levels and an estimate of future noise levels when the Project is in operation. The analysis indicates that predicted noise levels from Project mechanical equipment (with appropriate noise mitigation) will be below the most stringent City of Boston Noise Zoning requirements for nighttime and daytime residential zones, and well below existing measured baseline noise levels in the area.

Geotechnical/Groundwater

Potential impacts during excavation and foundation construction include impacts to area groundwater levels and ground and building movements due to excavation. Additionally, construction activities will generate ground vibrations, dust, and noise. The excavation support wall and foundation design and construction will be conducted to limit potential adverse impacts, especially to adjacent structures and to groundwater levels.

Provisions will be incorporated into the design and construction procedures to limit potential adverse impacts. The Project will comply with the Groundwater Conservation Overlay District (GCOD).

Construction

A Construction Management Plan ("CMP") in compliance with the City's Construction Management Program will be submitted to the Boston Transportation Department ("BTD") once final plans are developed and the construction schedule is fixed. The construction contractor will be required to comply with the details and conditions of the approved CMP.

Proper pre-planning with the City and neighborhood will be essential to the successful construction of the Project. Construction methodologies, which ensure public safety and protect nearby residences, will be employed. Techniques such as barricades, walkways, and signage will be used. The CMP will include routing plans for trucking and deliveries, plans for the protection of existing utilities, and control of noise and dust.

Periodic meetings will also be held with neighborhood representatives to describe the ongoing work and to discuss measures that will be taken to minimize impacts on the community. The Project superintendent will contact abutters and close neighbors on a regular basis during the work.

During the construction phase of the Project, the Proponent will provide the name, telephone number and address of a contact person to communicate with on issues related to the construction. The construction contact will be a person whose responsibility it will be to respond to the questions/comments/complaints of the residents of the neighborhoods.

Sustainability

The Project is registered in the USGBC LEED Core and Shell (LEED-CS) rating system and will be submitting for pre-certification in the near term, targeting LEED Silver. The Project will be in compliance with Article 37 of the Boston Zoning Code.

Historic Resources

350 Boylston Street. includes the removal of four existing buildings considered by many to contribute to the architectural character of the Back Bay. For that reason, the Proponent has explored and considered alternatives to their proposed demolition. As discussed in greater detail in Section 6.4, each of the alternatives which included retaining any portion of the existing four buildings proved infeasible and architecturally inappropriate to this important site.

As designed, the new building will continue the Arlington and Boylston Streets/Back Bay building massing and height relating to the existing buildings across Arlington Street and west of the Project site along Boylston as well as across Providence Street. The new building will utilize a two story base, consistent with older, existing commercial buildings in the Back Bay. Projecting bays, inspired by the rowhouses of the Back Bay, will articulate and lend scale to the upper floors along the Boylston and Arlington Street facades.

Infrastructure

The existing infrastructure surrounding the site of the 350 Boylston Street development is of adequate capacity to service the needs of the Project. The Project will not significantly increase the effluent entering the existing Boston Water and Sewer Commission (BWSC) sewer system. The total daily discharge for the proposed Project is estimated as 20,200 gallons per day (gpd), which represents a net increase/decrease of approximately 16,711 gpd from the existing conditions.

The requirement to recharge stormwater, or rainfall, into the ground has been implemented by the BRA through the Groundwater Conservation Overlay Districts, within which the Site is included (GCODs). The Proponent has met with the Boston Groundwater Trust and will continue to consult with them as the Project moves forward.

1.3 Development Team

Project Name:	350 Boylston Street
Location:	324-360 Boylston Street bounded by Boylston, Arlington and Providence Streets.
Proponent:	The Druker Company, Ltd. 50 Federal Street Boston, MA 02110 (617) 357-5700 Ronald M. Druker, President Harold Dennis, Executive Vice President
Architects:	Pelli Clarke Pelli Architects 1056 Chapel Street New Haven, CT 06510 (203) 777-2515 Cesar Pelli, FAIA Fred W. Clarke, FAIA Mark A. Shoemaker, AIA
	CBT Architects 110 Canal Street Boston, MA 02114 (617) 262-4354 Robert A. Brown, AIA, IIAD James J. Monteverde, AIA

Permitting Consultants:	Epsilon Associates, Inc. 3 Clock Tower Place, Suite 250 Maynard, MA 01754 (978) 897-7100 Cindy Schlessinger Doug Kelleher
Legal Counsel:	Goulston & Storrs 400 Atlantic Avenue Boston, MA 02210 (617) 482-1776 Marilyn L. Sticklor, Esq.
Transportation and Parking Consultants:	Vanasse Hangen Brustlin, Inc. 99 High Street Boston, MA 02110 (617) 728-7777 R. David Black
Geotechnical Consultant:	Haley & Aldrich 465 Medford Street, Suite 2200 Boston, MA 02129 (617) 886-7400 Mark Haley, P.E. Michael J. Atwood, P.E.
Civil Engineer:	Nitsch Engineering, Inc. 186 Lincoln Street Boston, MA 02111 (617) 338-0063 John M. Schmidt, P.E. Joshua J. Alston, P.E.
Structural Engineer:	Weidlinger Associates, Inc. 201 Broadway, 4th Floor Cambridge, MA 02139 (617) 374-0000 Minhaj A. Kirmani, Ph.D., P.E. Wayne Siladi, P.E.
MEP Engineer:	Cosentini Associates, Inc. One Broadway Cambridge, MA 02142 (617) 494-9090 Richard P. Leber, P.E. Robert M. Leber, P.E.

Construction Manager:	Moriarty & Associates 3 Church Street Winchester, MA 01890 (781) 729-3900 John Moriarty

1.4 Regulatory Status

A Project Notification Form was submitted to the BRA on December 18, 2007. This Draft PIR has been prepared in response to the Scoping Determination issued by the BRA on March 20, 2008 pursuant to Article 80 of the City of Boston Zoning Code. The Draft PIR presents a comprehensive analysis of project impacts and proposed mitigation measures as outlined in the Scoping Determination.

2.0 PROJECT DESCRIPTION

2.1 Project Area

The Project will be located on an approximately 27,654 square foot parcel of land located at the intersection of Boylston and Arlington streets in Boston's Back Bay diagonally across from The Public Garden, as shown in Figure 2-1. The site is bounded by Boylston, Arlington and Providence Streets and an existing building located at 364 Boylston Street, and includes four parcels of land together having approximately 221 feet of frontage on Boylston Street. The site presently is occupied by four commercial structures located at 324-334, 336-342, 344-350 and 352-360 Boylston Street, as shown on Figure 2-2 and in Appendix A.

2.2 Project Description

As previously described, 350 Boylston is a mixed use office and retail project at the southwest corner of Arlington and Boylston Streets, diagonally across from Boston's beloved Public Garden. This corner is also shared with the historically significant Arlington Street Church to the North and The Heritage on The Garden, a residential, office and retail complex to the East. With such prestigious neighbors, the design of 350 Boylston will reinforce the texture and scale of Boston's Back Bay as a contemporary building at this important corner.

Designed by internationally renowned architect Cesar Pelli, the building creates a new commercial structure for the 21st century that is respectful of Back Bay's rich architectural traditions. The building massing, fenestration, materials and texture have all been carefully crafted to create a clearly contemporary building, while being sympathetic and compatible with the adjacent context. Pelli has approached the project design as a wonderful opportunity to create a new landmark for the City of Boston.

The Building is a mixture of rich materials which are derived from buildings in Back Bay yet are distinctly modern in their detail.

The building's overall massing strategy is two-fold. The primary horizontal massing is designed to create a rich fabric of elements which reinforce the street wall along Arlington and Boylston Streets with an important accent at the intersection of these two streets. This interweaving of a stone wall with punched windows and articulate metal and glass bays recalls the rhythm of Back Bay's townhouse module while simultaneously being detailed in a very contemporary way.

The second massing strategy embraces the classical tripartite vertical organization of the building which clearly defines a two-story base, a five-story shaft or body to the building, and a distinctive two-story top which steps back from both Arlington and Boylston Streets. By stepping the top floors back and increasing the glass and metal of these upper facades the overall building height and mass is diminished as exterior balconies are created that

FIGURE 2-1: LOCUS MAP [AERIAL] SCALE 1" = 250 FT

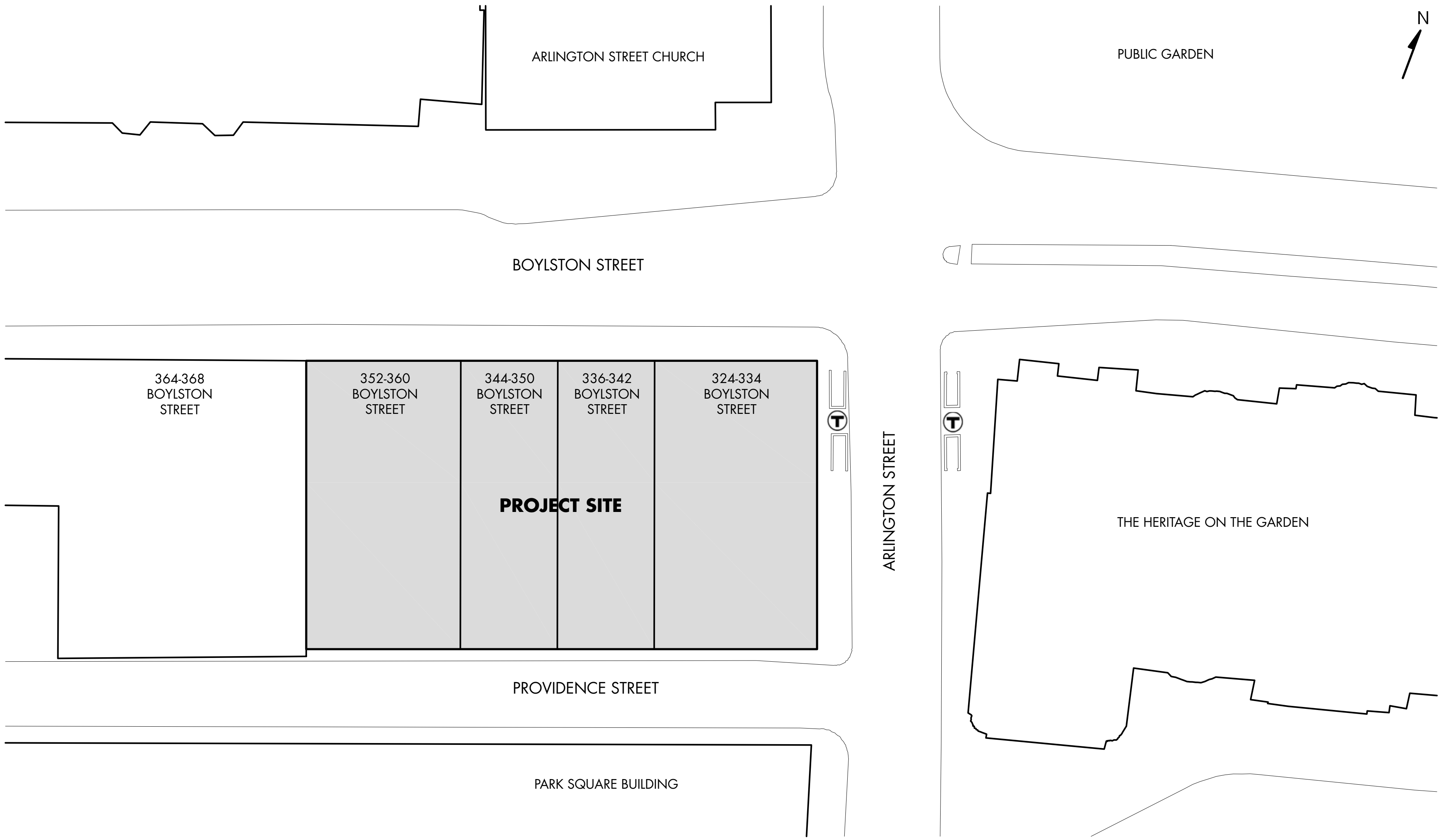


FIGURE 2-2: EXISTING SITE PLAN

energize the urban nature of this corner. The bay windows transform through the façade vertically tying the ground, middle and building top into a unified structure, breaking the horizontality of the mass as well.

The Boylston Street sidewalks will follow the design guidelines established by the Boylston Street Improvements Master Plan. In addition, five street trees will be planted from the building entry to the western edge of the site to enliven the street and initiate a tree planting program on this side of Boylston.

With the development of this new building, all loading and parking will be accessed from Providence Street and located in the building, eliminating the on-street loading that exists today for this building. The loading dock and garage entry are located on the western end of the project on Providence Street, so the retail character at Providence and Arlington Street is extended on this important corner which is quite visible from Park Square. Figure 2-3 is a site plan of the proposed Project.

2.2.1 Building Program

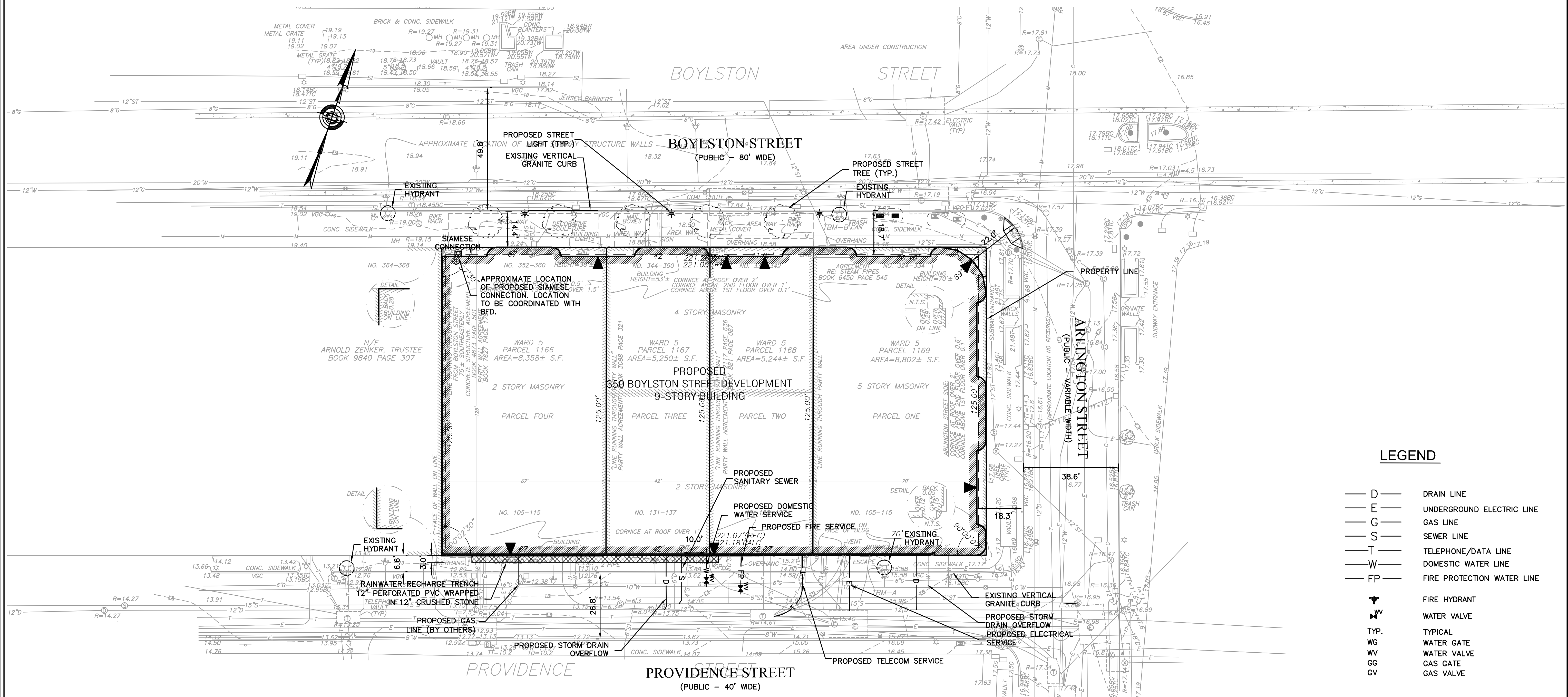
Table 2-1 presents the approximate dimensions of the Project:

Table 2-1 Approximate Project Dimensions

Project Element	Dimension
Project Site	221' X 125' (27,654 sf)
Parking	150 spaces
Floor Area Ratio	8.0
Building Height	120 feet
Office	200,000 sf
Retail/restaurant	15,000 sf
Fitness Center/spa	6,000 sf

2.2.2 Alternatives

The determination of the development program and the building massing for the Project evolved following consideration of an extensive series of urban design analyses as well as The Public Garden Shadows Act and other regulatory parameters such as the allowable Floor Area Ratio and allowable building height under the Boston Zoning Code.



Nitsch Engineering

www.nitscheng.com
186 Lincoln Street, Suite 200
Boston, MA 02111-2403
T: (617) 338-0063
F: (617) 338-6472

- Civil Engineering
- Land Surveying
- Transportation Engineering
- Planning
- GIS Services

JNEI JOB #	6510
FILE:	6510siteplan
SCALE:	1"=40'
DATE:	05/02/08
DES./COMP:	–
FIELD BOOK:	
DRAFTED BY:	BMD
CHECKED BY:	JJA

Figure 2-3
SITE PLAN
350 BOYLSTON STREET
BOSTON, MASSACHUSETTS

The renovation and reuse of all the existing structures, renovation and reuse of only the Arlington Building, and retention of only the Arlington Building's street façades were also considered. As discussed in greater detail in Section 6.4, each of these alternatives yielded buildings with significantly less floor area and parking than the as-of-right proposal, which in combination with greater construction costs incurred to work with and around existing buildings and foundations, make these reuse schemes economically and in all instances, architecturally infeasible or inappropriate.

Reuse of the existing facades would not be possible due to the inability to use temporary external support of the façade because this weight can not be placed on the existing MBTA Green line tunnel and station, utilities, and steam main located below the sidewalks on Boylston and Arlington streets. Retaining only portions of the existing building's façade by dismantling and reconstruction, aside from being extremely costly are generally not considered acceptable means of preservation given the compromised architectural integrity resulting from reconstructing historic building fabric. Furthermore, the Proponent strongly believes that the possible alternatives that would retain only the façades of the existing buildings, even if possible, would lack the appropriate architectural integrity that this important location deserves and requires.

2.2.3 Development Schedule

Construction of the Project is expected to take approximately 24 months, and is anticipated to commence in the spring/summer of 2009 and be complete in the spring/summer of 2011.

2.3. Legal Information

2.3.1 Legal Judgments Adverse to the Project

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

2.3.2 History of Tax Arrears on Property Owned in Boston by the Proponent

The Proponent does not have a history of tax arrears on any property owned within the City of Boston.

2.3.3 Site Control / Legal Easements

The site is owned by the Arlington-Boylston Realty Trust, under Declaration of Trust dated December 19, 1967, recorded with the Suffolk County Registry of Deeds in Book 8172, Page 335, as amended of record. Arlington-Boylston Realty Trust is an affiliate of The Druker Company, Ltd.

2.4 Anticipated Permits

Table 2-2 contains a list of agencies from which permits or other actions are anticipated:

Table 2-2 Anticipated Permits, Approvals and Notifications

Agency Name	Permit / Approval / Notification
LOCAL	
Boston Redevelopment Authority	Development Impact Project Plan/Article 80 Large Project Review Design Review Article 86 Review
Boston Zoning Board of Appeal	Zoning Relief (Special Exceptions and Conditional Use Permits); Building Code Relief (NStar Vaults without Sprinkler System)
Boston Civic Design Commission	Schematic Plan Design Review
Boston Transportation Department	Transportation Access Plan Agreement Construction Management Plan
Boston Landmarks Commission	Article 85 (Demolition Delay) Review
Boston Air Pollution Control Commission	Exemption of Parking Spaces for Employees/Visitors
Boston Fire Department	Fire Prevention Permits
Boston Water and Sewer Commission	Water and sewer connection permits Cross-connection permit (if required) Site Plan Review
Public Works Department	Curb cut permit
Public Safety Commission	Permit to erect and maintain parking structure
Joint Committee on Licenses	Flammable storage license
Public Improvement Commission	Improvements within public streets or sidewalks Approval of subsurface rights below Providence Street and sidewalk to be used for recharge
Inspectional Services Department	Demolition Permit Building Permit
STATE	
Department of Environmental Protection	Pre-demolition notification
FEDERAL	
Federal Aviation Administration	Determination of No Hazard for crane (if in excess of 200')

This table presents a preliminary list of permits, approvals and notifications from governmental agencies which are presently expected to be required for the Project, based on Project information currently available. It is possible that not all of these permits or actions will be required, or that additional permits or actions may be needed, all of which will become evident during Project design and development.

The Project also will comply with An Act Protecting the Boston Public Garden, St. 1992 c 384, although no permit or approval is required.

2.5 Consistency with Zoning

The Project will require special exceptions regarding height and parapet setback and conditional use permits for parking within the Restricted Parking Overlay District and for work in the Groundwater Conservation Overlay District.

2.5.1 Zoning District

The site is located within the B-8-120C District under the Boston Zoning Code (the "Code"). The site is also located within the Groundwater Conservation Overlay District and the Restricted Parking Overlay District under the code.

2.5.2 Use Regulations

Pursuant to Section 8-7 of the Code, the Project's contemplated retail, restaurant, office and related accessory uses are allowed in the B-8-120C District. As outlined below, the Project's parking will require a conditional use permit.

2.5.3 Dimensional Regulations

Under Section 16-1 of the Code, the maximum height of the Project beyond a point 100 feet from the westerly sideline of Arlington Street is 120 feet. Under Section 16-6, the maximum height of the Project on the south side of Boylston Street from the westerly sideline of Arlington Street to a point 100 feet west of Arlington Street is 85 feet to a depth of 50 feet from Boylston Street and 130 feet behind the depth of 50 feet. However, under Section 16-6, a special exception from the Board of Appeal (after a public hearing provided for under Section 6A of the Boston Zoning Code) is available to increase the height uniformly to 130 feet within the area within 100 feet from the westerly sideline of Arlington Street. The Proponent intends to seek such a special exception so that the height within 100 feet of Arlington Street will be approximately 122 feet.

Under Section 21-1 of the Code, certain parapet setback requirements are applicable. However, under Section 21-2, a special exception from the Board of Appeal (after a public hearing provided for under Section 6A of the Boston Zoning Code) is available from the parapet setback requirements in the B-8-120C District. The BRA would make a recommendation to the Board of Appeal certifying that the parapet setback elimination has been subject to BRA Design Review. The Proponent intends to seek such a special exception to eliminate the parapet setback requirements.

2.5.4 Restricted Parking Overlay District

The Site is located within the Restricted Parking Overlay District. Under Section 3-1A(c) of the Code, accessory off-street parking for any non-residential use within the Restricted Parking Overlay District is a conditional use. Accordingly, the Proponent intends to seek a conditional use permit for parking within the Restricted Parking Overlay District.

2.5.5 Groundwater Conservation Overlay District

The Site is located within the Groundwater Conservation Overlay District. Under Section 32-4 of the Code, any new structure that will occupy more than 50 square feet of lot area within the Groundwater Conservation Overlay District requires a conditional use permit. Accordingly, the Proponent intends to seek a conditional use permit for work in the Groundwater Conservation Overlay District.

2.6 Community Outreach

The Proponent is committed to soliciting the input of the surrounding neighborhood, city agencies, and interested groups. The Proponent has met with members of the community, including the Back Bay Association, the Neighborhood Association of the Back Bay, the Friends of the Public Garden and The Heritage on the Common; interested organizations including the Boston Preservation Alliance; city agencies including the BRA, the Boston Civic Design Commission, the Boston Landmarks Commission, and the Boston Groundwater Trust; and elected officials.

The Proponent is committed to continuing to meeting with interested parties as the Draft PIR review process continues.

3.0 TRANSPORTATION

3.1 Introduction

From the transportation perspective, the 350 Boylston Street Project enjoys an outstanding transit-oriented location, and benefits from truly multi-modal access. The edge of the site literally sits above the Green Line Arlington Station, and is located within Back Bay with its exceptional walking environment. In addition, the site is well-located in relation to the regional highway network, with convenient links to I-90, I-93 and Storrow Drive.

As described in detail in this chapter, the transportation analysis concludes that there will be no significant traffic impact throughout the extensive study area as a result of the Project. The Project does not represent a total new addition to the site, but rather replaces four existing buildings that already generate travel demand today.

The site is well located with regard to both the local and regional roadway networks, and vehicular trips are distributed in multiple directions. Even in the vicinity of the Project site itself, where the greatest concentration of project trips is expected, there would be no significant impacts as a result of the Project. Indeed, vehicular access for the site benefits from the largely one-way street grid of the Back Bay, which generally eliminates the introduction of conflicting left-turning traffic movements.

In addition to its immediate adjacency to the Green Line, a wide variety of MBTA services support the Project site, These include Orange Line and Commuter Rail service at Back Bay, as well as a variety of bus routes. The pedestrian environment and accessibility of the site is excellent, and the Project will provide facilities in the building for bicycles, including showers, that will encourage bicycling as choice of travel mode.

There is currently no parking on the Project site, and the Project will provide approximately 150 parking spaces, exempt from the Parking Freeze. The parking garage will provide adequate supply for the additional parking demand of the Project. Finally, the Project will eliminate the site's current reliance on on-street servicing by the inclusion of an internal loading dock accessed on Providence Street.

This chapter presents an evaluation of the existing and future transportation aspects of the Project. The transportation analysis was performed in order to evaluate any potential transportation impacts of the proposed Project, as required under Article 80 of the City of Boston Zoning Code. This chapter constitutes the Transportation Access Plan for the Project, and includes analysis of the following aspects:

- Vehicle traffic on study area roadways and intersections;
- Parking conditions;
- Public transportation;

- Pedestrian environment;
- Bicycle activity; and
- Service and Loading

In addition, this chapter assesses the transportation impacts that are expected in the study area under future conditions. In brief, this chapter:

- Defines and quantifies existing transportation conditions in the Project study area as defined by the Boston Transportation Department (BTD);
- Estimates the transportation impacts that will be generated by the Project under future conditions; and
- Develops a set of mitigation strategies and improvement measures which will help to lessen the transportation effects of the Project and to provide improvements to the transportation infrastructure of the surrounding area.

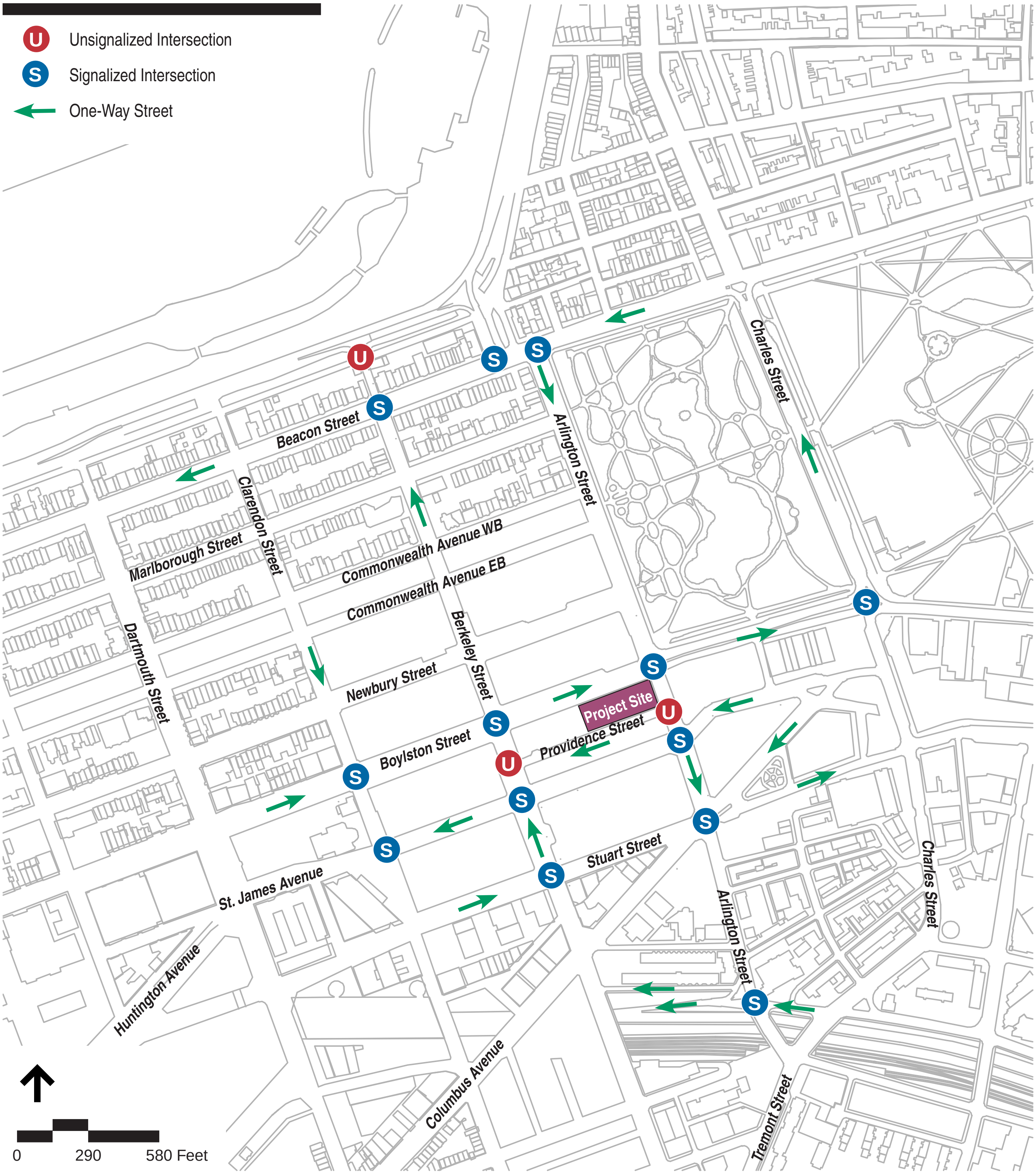
The sections below provide a summary of the findings of the transportation analysis, including anticipated impacts, proposed mitigation and improvement actions, a discussion of the study methodology, and a description of the study area. Subsequent sections provide detailed discussions of existing and future conditions expected both with and without the proposed Project.

3.2 Project Description

The Project site is located at the corner of Arlington and Boylston Streets in Boston's Back Bay neighborhood (see Figure 3-1).

The Project will comprise a total of approximately 200,000 SF of office space on nine floors, along with approximately 15,000 SF of street level retail space fronting Boylston Street and Arlington Street. In addition, an approximately 6,000 SF fitness center/spa for use by tenants will be located below grade. The office lobby will be located at the center of the Boylston Street frontage, with retail units having separate doorways on Boylston Street and Arlington Street.

A below grade parking garage will provide approximately 150 off-street parking spaces, exempt under the Parking Freeze, and bicycle racks for use by building tenants only. The garage will be accessed via a car ramp on Providence Street, and will be connected to the office lobby by elevator. An off-street service area will also be provided on Providence Street. Providence Street has limited traffic activity, and its primary function is to provide access to existing on-street parking and on-street commercial vehicle parking for adjacent buildings. Accordingly, it is a very appropriate location for vehicular access for the Project site. Accordingly, vehicular conflicts, for both garage and service traffic, will be minimal.



Vanasse Hangen Brustlin, Inc.

Project Study Area Roadways and Intersections

Figure 3-1

350 Boylston Street
Boston, MA

The existing and proposed site plans are presented in Figures 2-3 and 2-3.

3.3 Transportation Context

The Project site is well located in relation to the local and regional roadway networks. Regional access to and from Storrow Drive (connecting to I-93 North, Route 1 and Route 2) is provided via Arlington Street and Berkeley Street. Access to and from the Massachusetts Turnpike West is provided at the Copley Square I-90 interchange via Boylston Street, St. James Avenue and Stuart Street, with additional I-90 westbound on-ramps at Arlington Street and Clarendon Street. Connections with the Southeast Expressway I-93 south are provided via the Berkeley Street and Arlington Street/Herald Street corridors.

The Project site enjoys excellent transit access and is well served by MBTA subway and bus services. Head-houses for the Arlington Green Line station is located immediately abutting the site, and Back Bay station is a 10-minute walk from the site, providing access to Orange Line and Commuter Rail service. In addition, several MBTA bus routes provide access to Back Bay and the Project site itself.

The Project site is located within the walking catchment of several Boston neighborhoods, and enjoys excellent pedestrian accessibility. Back Bay, Beacon Hill, Downtown, Chinatown, Bay Village and the South End are all within reasonable walking distance of the Project. The site benefits from continuous sidewalks on both the Boylston Street and Arlington Street frontages, and pedestrian crossing facilities are provided at the immediately adjacent Boylston Street/Arlington Street signalized intersection. Several bike racks are provided within the public realm in the vicinity of the Boylston Street frontage.

3.4 Study Methodology

The transportation analysis presented in this chapter conforms to the BTD "Transportation Access Plans Guidelines" (2001) and is responsive to the Scoping Determination issued by the BTD in its letter of February 13, 2008 to the BRA.

The study evaluates both existing and future transportation conditions. For existing conditions, surveys and compilation of existing transportation conditions within the study area include the following:

- An inventory of the transportation infrastructure within the defined project study area;
- Transportation characteristics of the site, including access, egress, parking, loading activities;
- Geometric and operational characteristics of study area roadways and intersections;
- Existing traffic control at study area intersections (*i.e.*, traffic signalization, stop signs, one-way streets, etc.);

- Area off-street and on-street parking supply and availability;
- An inventory of study area sidewalks and crosswalks;
- Pedestrian activity along study area roadways, and at study area intersections;
- Bicycle accommodation along study area roadways and activity at study area intersections;
- Public transportation options within the study area, including bus, trolley, commuter rail, existing peak hour demands, and existing capacity by specific transit service type.

To facilitate the evaluation of any potential long-term impacts, future transportation conditions were analyzed within the study area. The future No-Build condition is analyzed based on projections of roadway volumes assuming that the Project is not implemented. The future Build condition assesses conditions assuming completion of the 350 Boylston Street Project as proposed. Traffic conditions are analyzed for the morning and evening peak commuter periods based on a 5-year analysis horizon, to include the following scenarios:

- 2008 Existing Condition;
- 2013 No-Build Condition; and
- 2013 Build Condition

The transportation analysis, or Transportation Action Plan (TAP), will serve as the basis for a Transportation Access Plan Agreement (TAPA) to be executed by both the proponent and the BTD. As such, this chapter also includes discussion of a Transportation Demand Management (TDM) plan for the Project, and a Construction management Plan (CMP) which will be developed to address the Project's short-term construction impacts.

3.5 Study Area

The Project study area includes 16 intersections that have been defined specifically by the BTD. These intersections, shown on Figure 3-1, are as follows:

1. Boylston Street / Arlington Street
2. Boylston Street / Berkeley Street
3. Boylston Street / Clarendon Street
4. Clarendon Street / St. James Avenue
5. St. James Avenue / Berkeley Street
6. St. James Avenue / Arlington Street
7. Providence Street / Berkeley Street

8. Providence Street / Arlington Street
9. Berkeley Street / Beacon Street
10. Berkeley Street / Storrow Drive Ramps
11. Arlington Street / Beacon Street
12. Beacon Street / Storrow Drive Ramps
13. Boylston Street / Charles Street
14. Arlington Street / Stuart Street / Columbus Avenue
15. Stuart Street / Berkeley Street
16. Arlington Street / Cortes Street / Massachusetts Turnpike Ramp

These study area intersections were evaluated in detail in accordance with BTD guidelines using standard traffic engineering analysis techniques to identify incremental impacts of future traffic growth and site-generated traffic. A description of the existing physical and geometric characteristics of roadways and intersections located within the Project study area are presented in the following sections of the report, along with descriptions of non-auto transportation infrastructure serving the Project site.

3.6 Existing Transportation Conditions

Existing transportation conditions in the study area are described in this section, including: roadway geometry; traffic controls; daily traffic volumes; peak hour traffic, pedestrian and bicycle volumes; parking supply and utilization; transit service; and loading and service activities. Detailed evaluation of existing traffic operations is presented in Section 3.7 alongside the future conditions analyses.

3.6.1 Existing Transportation Infrastructure

Existing transportation infrastructure and operating characteristics are described separately for roadways, intersections, parking, crash history, public transportation, pedestrian environment, bicycle activity and servicing/loading.

3.6.1.1 Existing Roadway Conditions

Key roadways supporting the Project site include the following:

Boylston Street is an arterial roadway providing access to the Project site from Cambridge, Brookline, Fenway and other neighborhoods to the west. It runs west-east from beyond Massachusetts Avenue in the west to its intersection with Tremont Street in the east, thereby providing connections to Downtown, Chinatown and the I-93 central artery corridor.

In the vicinity of the Project, Boylston Street is one-way with four lanes in the eastbound direction. Metered parking and sidewalks are available on both sides of the street. However, at this time, the area on the approach to Arlington Street is temporarily disrupted by construction activity associated with the MBTA Arlington station improvements.

Berkeley Street is an arterial roadway providing access to the Project site, via Boylston Street, from the south, and is an important connector from I-93 south well as the South End and other Boston neighborhoods. In addition, it is a major connector to Storrow Drive, thereby serving regional destinations to the north, northwest and northeast. It runs south-north from its intersection with East Berkeley Street and Tremont Street in the south to the intersection with the Storrow Drive Ramps in the north.

In the vicinity of the Project Berkeley Street is one-way with four lanes in the northbound direction. Metered parking and sidewalks are available on both sides of the street.

Arlington Street runs north-south from its intersection with Beacon Street and Storrow Drive Ramps in the north to its intersection with Tremont Street and Herald Street in the south. It is a major connector to I-93 south.

In the vicinity of the Project, Arlington Street is one-way with four lanes in the southbound direction. Metered parking and sidewalks are available on both sides of the street.

Clarendon Street runs north-south from its intersection with the Storrow Drive Ramps in the north to its intersection of Tremont Street in the south. It is an important connector to Back Bay from Storrow Drive west, and also connects to the South End and I-93 south.

In the vicinity of the Project Clarendon Street is one-way with two lanes in the southbound direction. Metered parking and sidewalks are available on both sides of the street.

Beacon Street runs east-west from Tremont Street in downtown Boston to Massachusetts Avenue and beyond in the west. It provides a connection to the Project site from Downtown, via Arlington Street, and is an important route from Back Bay to Massachusetts Avenue, Brookline, Fenway, Brighton and other neighborhoods to the west.

In the vicinity of the Project site Beacon Street is one-way with three lanes in the westbound direction. Metered parking and sidewalks are available on both sides of the street.

Stuart Street runs west-east from Dartmouth Street at Copley Square in the west to Arlington Street, continuing thereafter as Kneeland Street. It provides a connection from the Huntington Avenue corridor in the west and from the I-90 eastbound off-ramp at Copley, and connects with Chinatown and the South Station area to the east.

In the vicinity of the Project site Stuart Street is one-way with two lanes in the eastbound direction. Metered parking and sidewalks are available on both sides of the street.

St. James Avenue runs west-east from Dartmouth Street at Copley Square in the west to its intersection with Arlington Street. From the east it provides connections from Chinatown and Downtown via Park Plaza, and is an important route to the westbound I-90 on-ramp at Copley.

In the vicinity of the Project St. James Street is two-way with two lanes in the westbound and one lane in the eastbound direction. Metered parking and sidewalks are available on both sides of the street.

Commonwealth Avenue runs west-east through Back Bay and terminates at Arlington Street. While it has a generous boulevard layout, it performs a secondary role in providing access to and from the west.

Providence Street runs east-west from Arlington Street in the east to Berkeley Street in the west. It is one-way with one travel lane in the westbound direction. Intermittent parking and limited sidewalks are available on both sides of the street. Providence Street performs a minor traffic function and primarily provides rear service access to buildings fronting Boylston Street and St. James Avenue.

3.6.1.2 Study Area Intersections

The Project study area includes 16 intersections defined by the BTD, as shown in Figure 3-1. The physical characteristics, geometric layout, traffic controls and pedestrian accommodations are summarized below.

Boylston Street at Arlington Street is a four-legged intersection that operates under two-phase traffic signal control, with an exclusive pedestrian phase. The Boylston Street one-way eastbound approach provides three through lanes and a through/right lane. As noted previously, this approach is impacted significantly by construction activity related to the MBTA headhouse, and is temporarily reduced to two lanes. The Arlington Street one-way southbound approach provides four lanes comprising two through lanes, a shared left/through lane and a left-turn lane.

Boylston Street at Berkeley Street is a four-legged intersection that operates under two-phase traffic signal control, with an exclusive pedestrian phase. The Boylston Street one-way eastbound approach provides three through lanes, one of them as a through/left lane. The Berkeley Street one-way northbound approach provides two through lanes and shared right/through lane.

Boylston Street at Clarendon Street is a four-legged intersection that operates under two-phase traffic signal control, with an exclusive pedestrian phase. The Boylston Street one-way eastbound approach provides three through lanes, one of them a through/right lane. The Clarendon Street one-way southbound approach provides two through lanes, one of them being a shared left/through lane.

Clarendon Street at St. James Avenue is a four-legged intersection that operates under two-phase traffic signal control, with concurrent pedestrian accommodations. The Clarendon Street one-way southbound approach provides two through lanes, one of them a through/right lane. The St. James Avenue one-way westbound approach provides two through lanes and a shared left/through lane.

St. James Avenue at Berkeley Street is a four-legged intersection that operates under two-phase traffic signal control, with an exclusive pedestrian phase. The Berkeley Street one-way northbound approach provides one through lane, one shared left/through lane and a shared right/through lane. The St. Ja*mes Avenue westbound approach provides two shared lanes.*

St. James Avenue at Arlington Street is a four-legged intersection that operates under two-phase traffic signal control, with an exclusive pedestrian phase. The Park Plaza one-way westbound approach provides three through lanes, one of them a through/left lane. The Arlington Street one-way southbound approach provides three through lanes and a shared a shared right/through lane.

Providence Street at Berkeley Street is a three-legged, unsignalized intersection. The Berkeley Street one-way northbound approach provides three through lanes. The Providence Street one-way westbound stop-controlled approach provides one right-turn only lane.

Providence Street at Arlington Street is a three-legged, unsignalized intersection. The Arlington Street one-way southbound approach provides three through lanes and one shared right/through lane. Providence Street provides one travel lane westbound the intersection. Accordingly, there are no conflicting traffic movements. Crosswalks are provided on Arlington Street and Providence Street.

Berkeley Street at Beacon Street is a four-legged intersection that operates under two-phase traffic signal control, with an exclusive pedestrian phase. The Berkley Street one-way northbound approach provides three through lanes, one of them a through/left lane. The Beacon Street one-way westbound approach provides two through lanes and a shared a shared right/through lane.

Berkeley Street at Storrow Drive Ramps is a five-legged, unsignalized intersection. The Berkeley Street one-way northbound approach provides two through lanes. The Back Street Alley one-way westbound approach provides one shared left/through lane. Storrow Drive Ramps provide one lane eastbound and one lane westbound.

Arlington Street at Beacon Street and Storrow Drive Ramps is a four-legged, staggered intersection that operates under three-phase traffic signal control, with concurrent pedestrian accommodations. The Beacon Street one-way westbound approach provides three through lanes, one of them a through/right lane, and an exclusive left turn lane. The Storrow Drive Off-Ramps provide three lanes operating effectively as a right lane, shared lane and left lane. Arlington Street is one-way southbound away from the intersection.

Boylston Street at Charles Street is a four-legged intersection that operates under two-phase traffic signal control, with an exclusive pedestrian phase. The Boylston Street eastbound approach provides two through lanes and two left-turn lanes, which are separated by a median barrier. The westbound approach provides a right-turn only lane. The Charles Street one-way northbound approach provides two through lanes and a shared right/through lane.

Arlington Street at Stuart Street and Columbus Avenue is a six-legged intersection that operates under four-phase traffic signal control, with an exclusive pedestrian phase. The Arlington Street one-way southbound approach provides four through travel lanes, with the outer lanes serving as shared turning lanes. The westbound Columbus Avenue approach provides two through/left lanes, and a channelized U-Turn onto Stuart Street eastbound. Stuart Street provides two lanes, and Columbus Ave eastbound provides two travel lanes as well.

Stuart Street at Berkeley Street is a four-legged intersection that operates under two-phase traffic signal control, with an exclusive pedestrian phase. The Berkeley Street one-way northbound approach provides three through lanes, one of them a through/right lane. The Stuart Street one-way eastbound approach provides one through lanes and a shared left/through lane.

Arlington Street at Cortes Street, Massachusetts Turnpike Ramp and Marginal Road is a five-legged intersection that operates under two-phase traffic signal control, with exclusive pedestrian control. The Arlington Street one-way southbound approach provides three through lanes and a shared right/through lane. Marginal Road provides two lanes, one of them a shared left/through lane. Both the I-90 on-ramp and Cortes Street are one-way away from the intersection.

3.6.2 Existing Traffic Conditions

An extensive transportation data collection program was performed to facilitate development of existing condition traffic networks. This effort included morning and evening peak hour turning movement counts (TMCs) from 7:00 to 9:00 AM and from 4:00 to 6:00 PM at all study area intersections. In addition, an automatic traffic recorder (ATR) count was conducted along Providence Street. Traffic count data sheets are included in the Transportation Appendix.

3.6.2.1 Daily Traffic Counts

A set of average daily traffic counts at 24 Back Bay locations is available from the analysis being performed in support of the Storrow Drive under-pass evaluation. Details are included in the Transportation Appendix, and daily traffic volumes in the vicinity of the Project are summarized in Table 3-1 below.

Table 3-1 Daily Traffic Volumes on Study Roadways

Count Location	Daily Traffic Volume
Boylston Street (west of Berkeley Street)	13,900
Boylston Street (east of Arlington Street)	24,800
St. James Avenue (west of Berkeley Street)	8,700
Stuart Street (west of Berkeley Street)	10,400
Arlington Street (north of Newbury Street)	22,700
Arlington Street (south of Stuart Street)	9,900
Park Plaza (east of Arlington Street)	16,800

Source: Department of Conservation and Recreation (DCR)

An ATR count was performed on Providence Street to determine hourly traffic activity. The count data sheets are included in the Transportation Appendix, and the results are presented in Table 3-2, illustrating the daily variation in traffic demand over the course of a weekday.

Table 3-2 Summary of Weekday Traffic on Providence Street

Hour Beginning	Westbound Volume
Midnight	4
1:00 AM	4
2:00 AM	6
3:00 AM	2
4:00 AM	0
5:00 AM	8
6:00 AM	29
7:00 AM	34
8:00 AM	40

Table 3-2 Summary of Weekday Traffic on Providence Street (Continued)

Hour Beginning	Westbound Volume
9:00 AM	39
10:00 AM	21
11:00 AM	35
Noon	56
1:00 PM	34
2:00 PM	27
3:00 PM	36
4:00 PM	61
5:00 PM	77
6:00 PM	41
7:00 PM	24
8:00 PM	21
9:00 PM	16
10:00 PM	10
11:00 PM	0
Daily Total	**625**

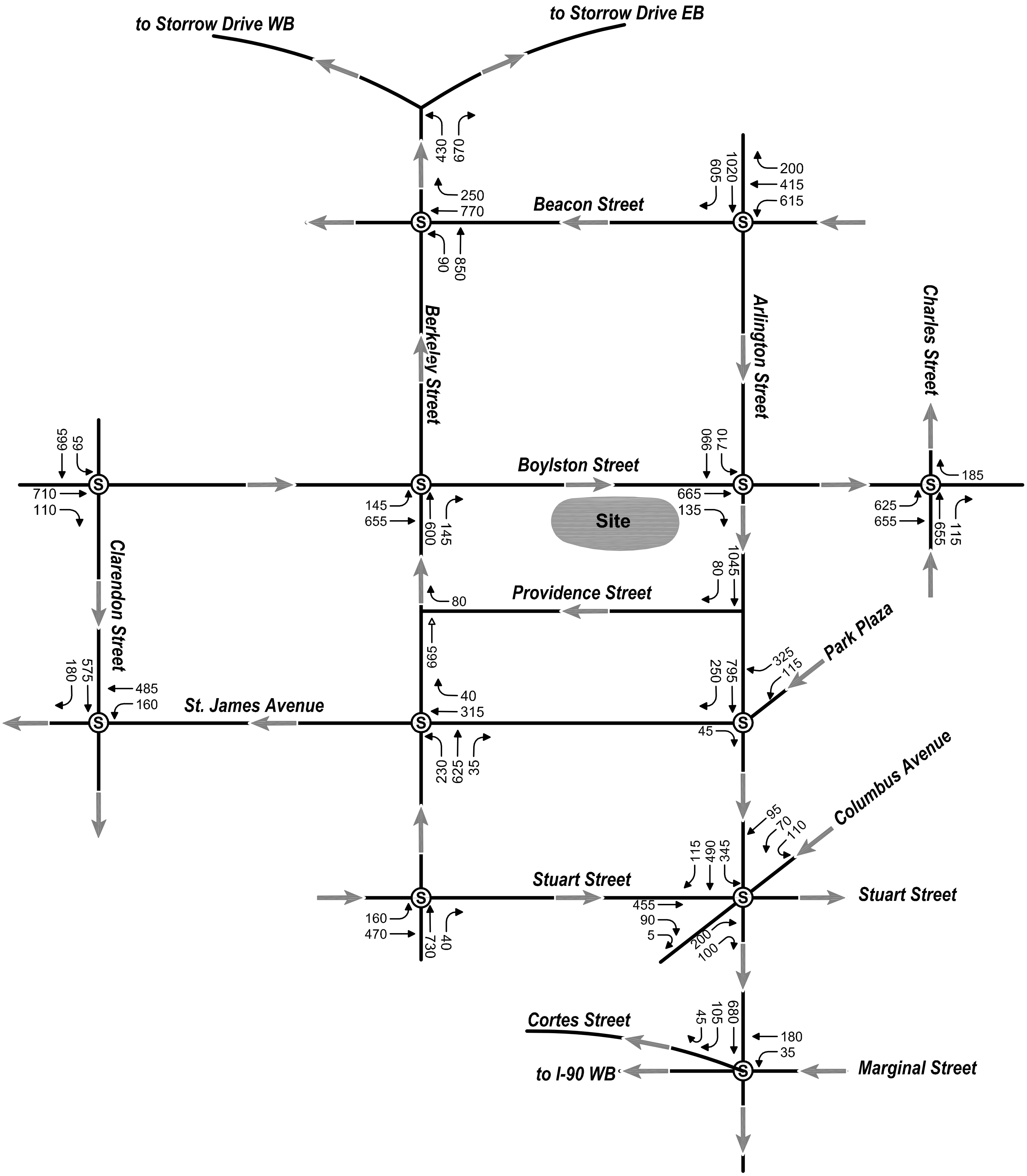
Source: ATR counts conducted by Vanasse Hangen Brustlin, Inc. on Wednesday March 26, 2008.

As shown in Table 3-2, the daily traffic volume on Providence Street between Berkeley Street and Arlington Street is approximately 625 vehicles. During the morning peak hour, 8 – 9 AM, the volume is approximately 40 vehicles, while the highest hourly volume occurs in the evening peak, 5 – 6 PM, with almost 80 vehicles. Typically, the traffic flow on Providence Street over the course of the day is less than one vehicle every minute.

3.6.2.2 Peak Hour Traffic Volumes

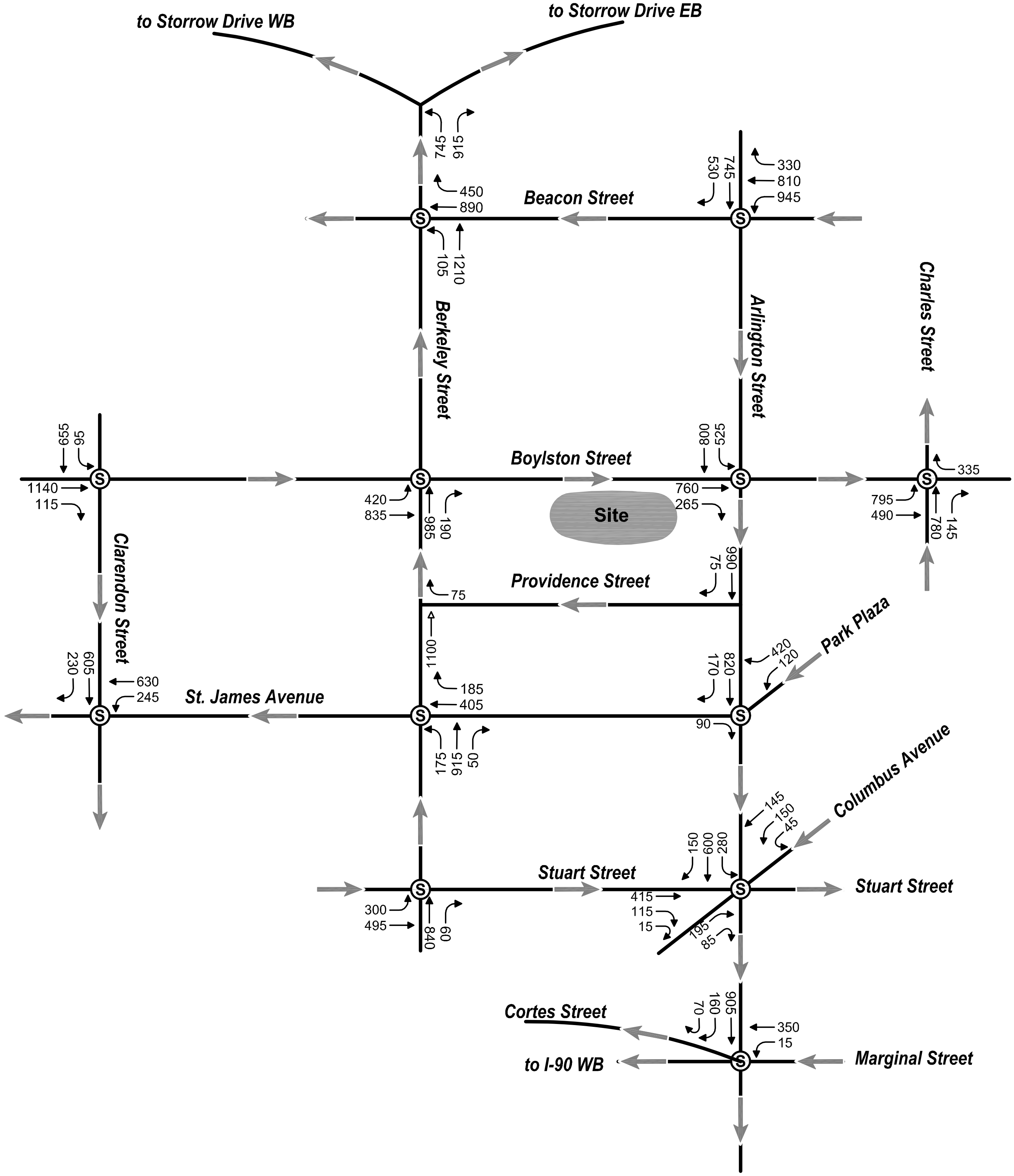
Manual classified turning movement counts (TMCs) were conducted in March 2008 at all study area intersections. TMCs were conducted from 7:00 AM through 9:00 AM and from 4:00 PM and 6:00 PM

The intersection turning movement counts were used to establish traffic networks for Existing 2008 Conditions for the morning and evening peak hours. The networks were balanced by comparing data between adjacent intersections. The study area's overall morning peak hour was determined to occur between 8:00 - 9:00 AM, and the evening peak was determined to occur between 5:00 - 6:00 PM. Existing Condition (2008) morning and evening peak hour traffic volumes are shown in Figures 3-2 and 3-3, respectively.



2008 Existing Weekday Morning Peak Hour Traffic Volumes

Figure 3-2



Vanasse Hangen Brustlin, Inc.

2008 Existing Weekday Evening
Peak Hour Traffic Volumes

Figure 3-3

3.6.3 Parking

This section describes the existing parking supply and demand in the study area, including both off-street and on-street parking. There are eighteen off-street public parking lots and garages within a quarter mile radius of the Project site. In addition, on-street parking spaces are provided largely for short-term and resident parking needs.

3.6.3.1 Off-Street Commercial Parking Facilities

Table 3-3 presents information on the off-street, commercial parking facilities and their capacities. The location of each facility is shown in Figure 3-4. In total, there are approximately 3,100 commercial spaces within a one-quarter mile radius of the Project site. There is no publicly-available information for the utilization of these spaces.

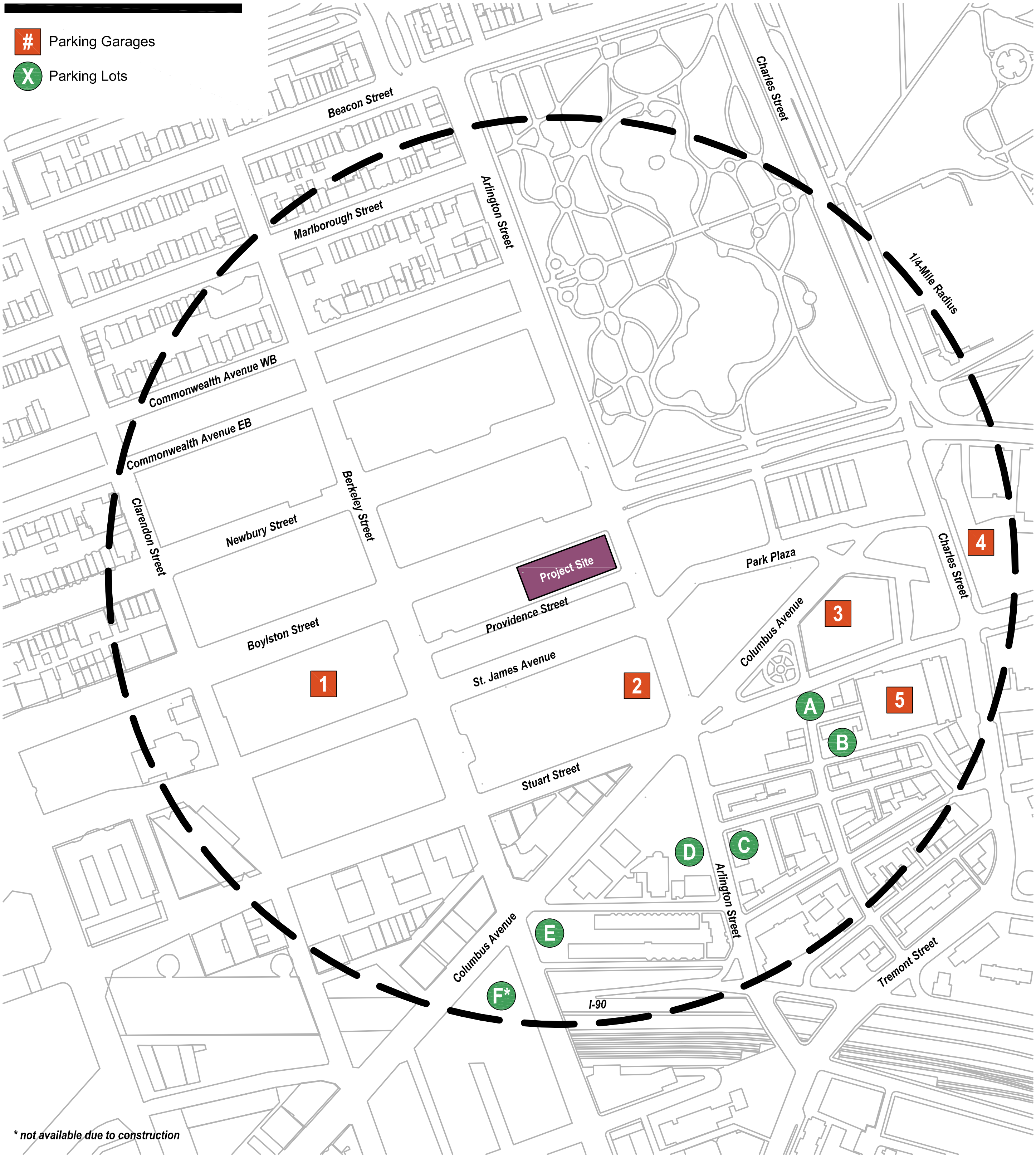
Table 3-3 Off-Street Commercial Parking Facilities

	Facility/Location Name	Commercial Spaces
	Parking Garages	
1	John Hancock Garage (100 Clarendon)	576
2	Greyhound Bus Garage (10 St. James)	170
3	DeMateo Motor Mart (26 Park Plaza)	900
4	Transportation Building Garage (10 Park Plaza)	275
5	57 Hotel Garage (200 Stuart Street)	900
	Surface Lots	
A	Billy's Service Lot	13
B	Church Street Lot (57-59 Church Street)	17
C	A&C Parking	35*
D	General Trading Co (107-127 Arlington Street)	84
E	Columbus Ave Lot (206 Columbus Ave)	52
F	Pinstripe Parking (130-132 Arlington Street)	71
	Total	3,093

Source: Boston Air Pollution Control Commission-Freeze Bank
* currently unavailable due to construction

3.6.3.2 On-Street Parking

Information regarding on-street parking in the area around the Project site is summarized in Table 3-4. Figure 3-5 presents a summary of parking spaces within a one-quarter mile walk of the Project site, including meter/time-restricted, resident and other (HCP, etc.) spaces. The spaces are presented for each side of each block within the walking catchment.



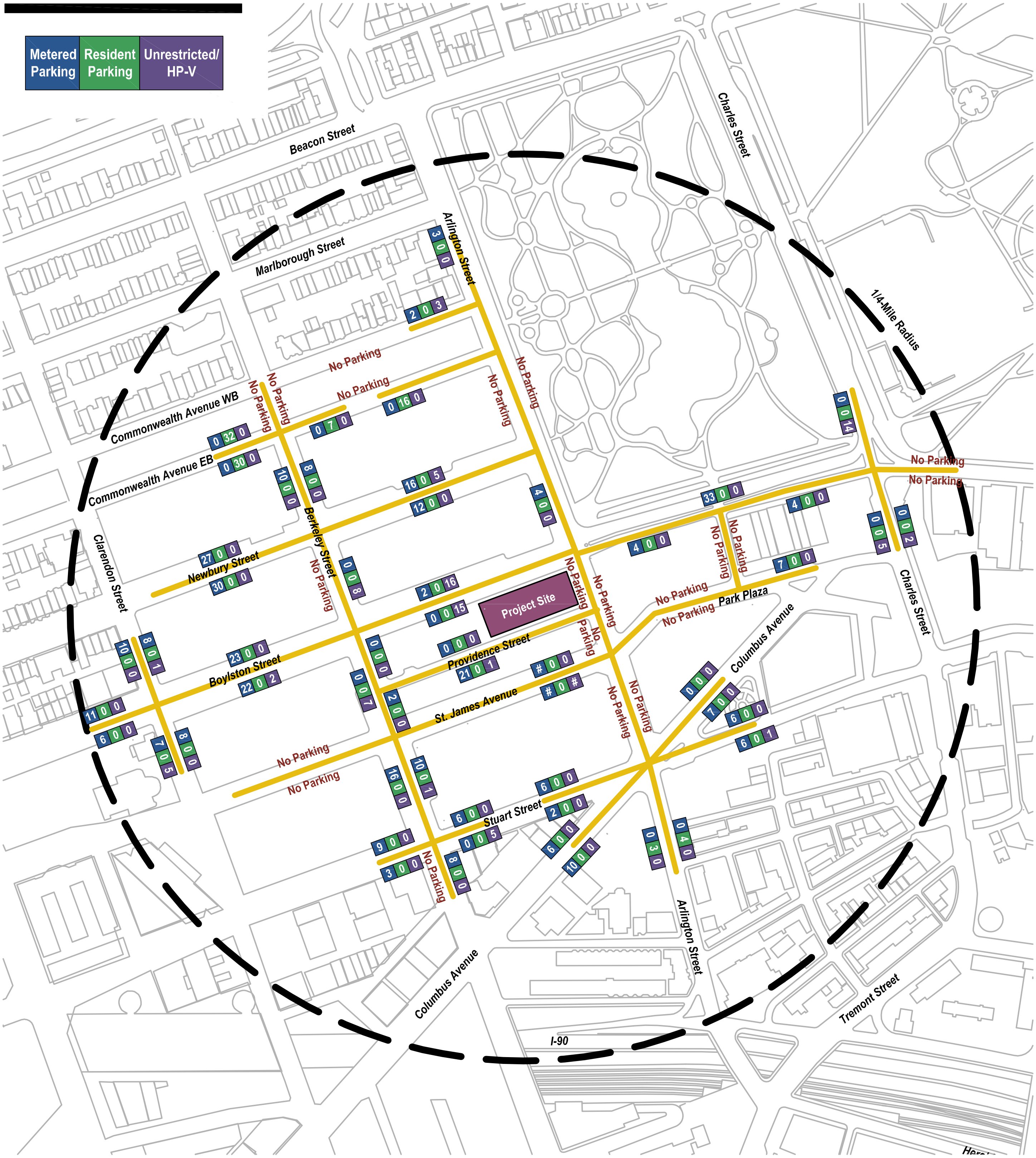
* not available due to construction

Vanasse Hangen Brustlin, Inc.

Off-Street Public
Parking Facilities

Figure 3-4

350 Boylston Street
Boston, MA



Vanasse Hangen Brustlin, Inc.

Daytime On-Street
Parking Regulations

Figure 3-5

350 Boylston Street
Boston, MA

There are approximately 588 on-street spaces in the defined study area. 470 spaces are metered/time-restricted spaces, while 92 are resident permit spaces. The remaining 26 spaces are HPC spaces or other use.

Mid-day parking occupancy was observed throughout the walking catchment, and parking was found to be heavily used. 94 percent of meter/time-restricted spaces were occupied, while 100 percent of resident spaces were occupied. As is typical throughout the Back Bay, the availability of on-street parking is fairly limited, and resident spaces are used almost all the time.

Table 3-4 On-Street Parking Spaces

Street	Location	Metered		Residential		Other	
		Total Spaces	% occupied	Total Spaces	% occupied	Total Spaces	% occupied
Boylston Street	From Dartmouth Street to Charles Street	134	99%	0	0	4	100 %
Arlington Street	From Marlborough Street to Winchester Street	7	100%	7	100%	0	0
Berkeley Street	From Commonwealth Avenue to Columbus Avenue	69	54%	0	0	1	100%
Commonwealth Avenue WB	Near intersection with Arlington Street	2	100%	0	0	3	33%
Commonwealth Avenue EB	Near intersection with Berkeley Street and intersection with Arlington Street	0	0	85	99%	0	0
Newbury Street	From Clarendon Street to Arlington Street	85	87%	0	0	5	100%
Providence Street	From Berkeley Street to Arlington Street	21	100%	0	0	1	100%
St. James Avenue	From Boylston Street to Arlington Street	30	100%	0	0	1	100%
Stuart Street	Near intersection with Berkeley Street and intersection with Arlington Street	38	95%	0	0	6	83%
Clarendon Street	Near intersection with Boylston Street	33	97%	0	0	5	80%
Charles Street	Near intersection with Boylston Street	21	100%	0	0	0	0
Columbus Avenue	Near intersection with Arlington Street	23	91%	0	0	0	0
Park Plaza	Near intersection with Arlington Street	7	100%	0	0	0	0
Total		**470**	**94%**	**92**	**100%**	**26**	**87%**

Source: Vanasse Hangen Brustlin, Inc. field survey conducted May 1st, 2008.

On-street parking and other curbside regulations are shown in Figure 3-6, which presents an existing plan of the site and its surroundings based on field-measurements.

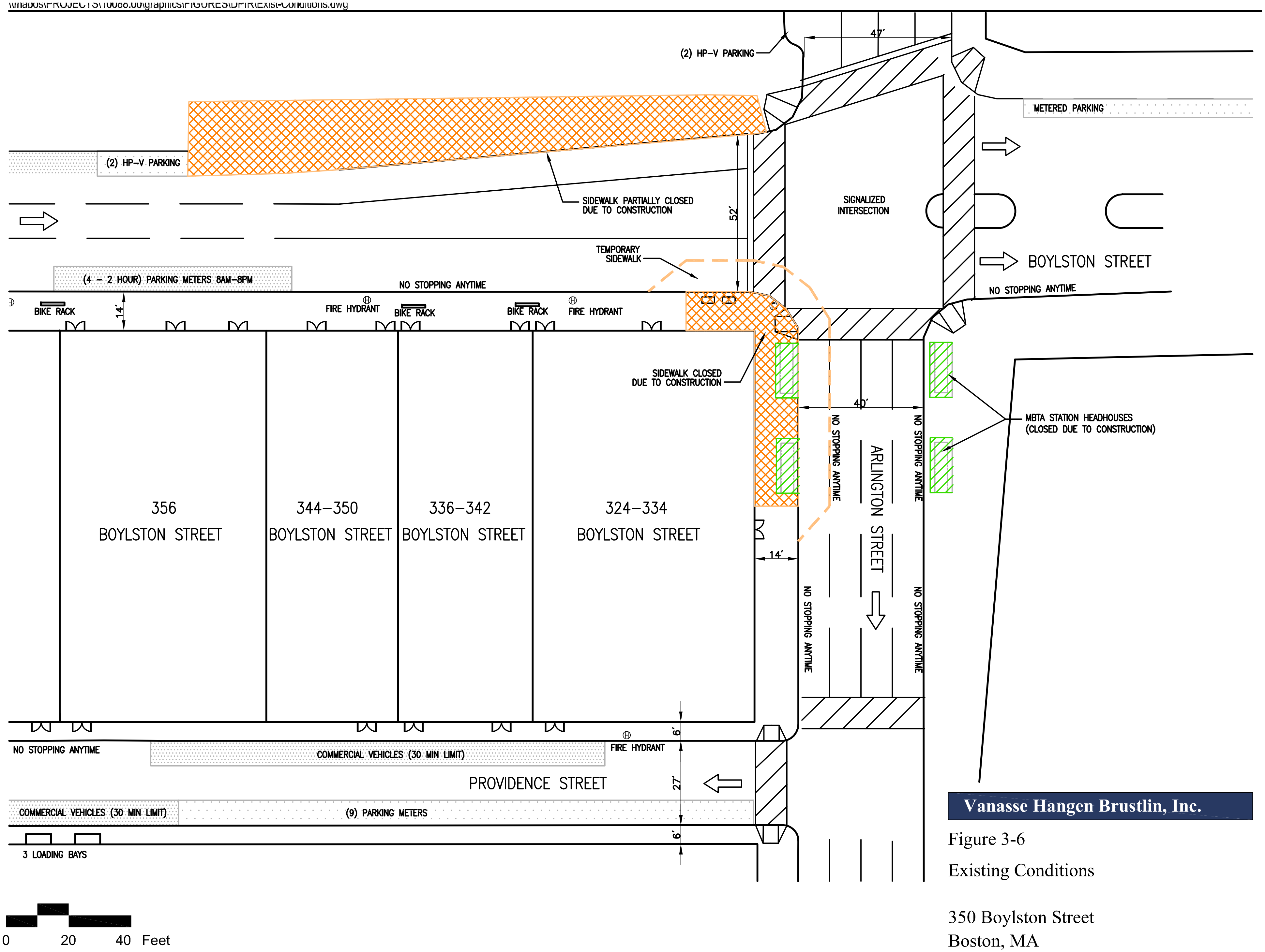
3.6.4 Crash History

Crash data for the study area intersections were obtained from the Massachusetts Highway Department (MHD) for the most recently available three-year period (2004-2006). Crash data are presented in Table 3-5.

A total of 144 crashes occurred at the 13 study area intersections over the three-year period, of which the majority involved property damage only. No fatalities were reported. Approximately 85 percent of crashes occurred outside of the weekday peak periods. The following intersections experienced an average of 5 or more crashes per year:

- Columbus Avenue/Stuart Street
- Cortes Street/Marginal Street/I-90 Ramp

It is noted that both of these locations have non-symmetric geometric layouts as compared with the symmetric configuration of many Back Bay intersections. It is possible that this is a contributing factor to the higher crash rates. At both locations, almost half of the collisions were of the angle type.



Vanasse Hangen Brustlin, Inc.

Figure 3-6

Existing Conditions

350 Boylston Street
Boston, MA

Table 3-5 Vehicular Crash Summary (2004 – 2006)

	Arlington Street					Berkeley Street					Boylston Street		Clarendon	Total
Year	Beacon Street	Boylston Street	Columbus Avenue/ Stuart Street	Cortes Street/ Marginal Street/ I-90	St. James Street/Pa rk Plaza	Storrow Drive Ramps/ Back Street	Beacon Street	Boylston Street	St. James Street	Stuart Street	Charles Street	Clarendon Street	St. James Street	
2004	3	8	8	7	2	4	9	2	3	9	7	7	5	74
2005	1	2	10	1	1	0	0	1	1	0	2	3	1	23
2006	3	4	8	7	3	3	2	4	3	5	1	3	1	47
Total	7	14	26	15	6	7	11	7	7	14	10	13	7	144
Average Year	2.3	4.7	8.7	5	2	2.3	3.7	2.3	2.3	4.7	3.3	4.3	2.3	47.9
Collision Type														
Angle	2	3	12	7	1	4	3	2	2	6	2	2	2	48
Head-on	0	1	1	1	0	2	0	0	1	0	0	0	0	6
Rear-end	1	5	5	0	2	0	2	2	1	2	1	2	0	23
Sideswipe	4	3	6	1	2	0	5	1	0	3	3	2	3	33
Single-Vehicle	0	0	0	0	0	0	0	0	0	1	1	2	0	4
Unknown	0	2	2	6	1	1	1	2	3	2	3	5	2	30
Total	7	14	26	15	6	7	11	7	7	14	10	13	7	144
Severity														
Injury	2	1	5	6	1	1	1	0	1	6	4	4	0	32
Property Only	4	8	14	7	3	4	9	5	4	5	5	4	3	75
Unknown	1	5	7	2	2	2	1	2	2	3	1	5	4	37
Total	7	14	26	15	6	7	11	7	7	14	10	13	7	144
Time of Day														
Weekday 7AM-9AM	0	4	2	2	0	2	1	0	0	3	0	0	1	15
Weekday 4PM-6PM	1	1	0	1	0	0	0	1	1	1	0	2	0	8

Table 3-5 Vehicular Crash Summary (2004 – 2006) (Continued)

Year	Arlington Street					Berkeley Street					Boylston Street		Clarendon	Total
	Beacon Street	Boylston Street	Columbus Avenue/ Stuart Street	Cortes Street/ Marginal Street/ I-90	St. James Street/Pa rk Plaza	Storrow Drive Ramps/ Back Street	Beacon Street	Boylston Street	St. James Street	Stuart Street	Charles Street	Clarendon Street	St. James Street	
Saturday 11AM-2PM	0	0	0	1	1	0	0	0	0	1	1	1	0	5
Weekday other	4	7	17	6	3	4	8	4	5	4	3	6	4	75
Weekend other	2	2	7	5	2	1	2	2	1	5	6	4	2	41
Total	7	14	26	15	6	7	11	7	7	14	10	13	7	144
Pavement Conditions														
Dry	4	12	19	8	3	7	8	4	5	11	8	9	7	105
Wet	2	2	7	4	2	0	3	2	2	2	1	1	0	28
Snow	1	0	0	0	0	0	0	0	0	0	0	1	0	2
Other	0	0	0	1	1	0	0	0	0	0	0	0	0	2
Unknown	0	0	0	2	0	0	0	1	0	1	1	2	0	2
Total	7	14	26	15	6	7	11	7	7	14	10	13	7	144

Source: Massachusetts Highway Department

3.6.5 *Public Transportation*

The Back Bay and the Project site are served by several public transportation services operated by the Massachusetts Bay Transportation Authority (MBTA). MBTA services are shown in Figure 3-7. Detailed Information on the public transportation services available in the study area is summarized in Table 3-6.

Table 3-6 Study Area Public Transit Services

Transit Line/Route	Destination	Closest Stop	Rush-Hour Frequency (minutes)
Green Line B	Lechmere – Boston College	Arlington Station, 0.03 miles	5
Green Line C	Lechmere – Cleveland Circle	Arlington Station, 0.03 miles	6/7
Green Line D	Lechmere - Riverside	Arlington Station, 0.03 miles	5
Green Line E	Lechmere – Heath Street	Arlington Station, 0.03 miles	5
Orange Line	Oak Grove – Forest Hills	Back Bay Station, 0.4 miles	5
Bus #9	City Point - Copley Square via Broadway Station	Boylston/Berkeley 0.10 miles	7/8
Bus #39	Forrest Hills Station to Back Bay Station via Huntington Avenue	St. James/Arlington 0.11 miles	6
Bus #43	Ruggles Station to Park & Tremont Streets via Tremont Street	Charles/Park Plaza 0.26 miles	10
Bus #55	Jersey & Queensberry to Copley Square or Tremont Street via Ipswitch Street	Boylston/Berkeley 0.10 miles	16/17
Bus #57	Watertown to Kenmore Station via Newton Corner and Brighton Center	St. James/Arlington 0.11 miles	6/7
Express Bus #504	Watertown to Newton Corner via Masspike	St. James/Arlington 0.11 miles	8
Express Bus #555	Riverside to Downtown Boston via Newton, Masspike and Copley Square	St. James/Arlington 0.11 miles	Off-peak only

Source: Massachusetts Bay Transportation Authority

Vanasse Hangen Brustlin, Inc.

Public Transportation

Figure 3-7

350 Boylston Street
Boston, MA

3.6.5.1 MBTA Rapid Transit Services

The following rapid transit subway lines serve the area and are accessible to the Project site.

Green Line B – provides service from Lechmere to Boston College, running every 5 minutes during the peak hour. The closest stop to the Project site is at the Arlington Station, which is accessed at both Arlington Street and Berkeley Street.

Green Line C – provides service from Lechmere to Cleveland Circle, running every 6 to 7 minutes during the peak hour. The closest stop to the Project site is at the Arlington Station, which is accessed at both Arlington Street and Berkeley Street.

Green Line D – provides service from Lechmere to Riverside, running every 5 minutes during the peak hour. The closest stop to the Project site is at the Arlington Station, which is accessed at both Arlington Street and Berkeley Street.

Green Line E – provides service from Lechmere to Heath Street, running every 5 minutes during the peak hour. The closest stop to the Project site is at the Arlington Station, which is accessed at both Arlington Street and Berkeley Street.

The Green Line connects with the Red Line at Park Street and the Blue Line at Government Center.

Orange Line – provides service from Oak Grove to Forest Hills, running every 5 minutes during the peak hour. The closest station to the Project site is back Bay station, which is accessible from both Clarendon Street and Dartmouth Street, less than a half-mile away. The orange Line connects with the Silver Line at NE Medical Center and Downtown Crossing, the Red Line at Downtown Crossing, and the Blue Line at State Street.

In addition, Commuter Rail service to South Station is available at Back Bay Station, including the Worcester, Needham, Providence and new Bedford/Fall River lines. Connections are available at South Station to the Forge Park, Middleborough/Lakeville, Kingston/Plymouth and Green Bush Commuter Rail lines, as well as Amtrack. In addition, inter-city bus services can be accessed at the South Station Bus Station.

3.6.5.2 MBTA Bus Services

Route 9 – provides service from City Point to Copley Square, via Broadway Station, running every 7 to 8 minutes during the peak hour. The closest stop to the Project site is at Boylston Street/Berkeley Street, which is about 0.10 miles away.

Route 39 – provides service from Forrest Hills Station to Back Bay Station, via Huntington Avenue, running every 6 minutes during the peak hour. The closest stop to the Project site is at the intersection of St. James Avenue and Arlington Street, which is about 0.11 miles away.

Route 43 – provides service from Ruggles Station to Park and Tremont Streets, via Tremont Street, running every 10 minutes during the peak hour. The closest stop to the Project site is at the intersection of Charles Street and Park Plaza, which is about 0.26 miles away.

Route 55 – provides service from Jersey and Quansberry Streets to Copley Square or Tremont Street, via Ipswitch Street, running every 16 to 17 minutes during the peak hour. The closest stop to the Project site is at the intersection of Boylston and Berkeley Streets, which is about 0.10 miles away.

Route 57 – provides service from Watertown Yard to Kenmore Station, via Newton Corner and Brighton Center, running every 6 to 7 minutes during the peak hour. The closest stop to the Project site is at the intersection of St. James Avenue and Arlington Street, which is about 0.11 miles away.

Route 504 – provides express service from Watertown to Newton Corner, via the Masspike, running every 8 minutes during the peak hour. The closest stop to the Project site is at the intersection of St. James Avenue and Arlington Street, which is about 0.11 miles away.

Route 555 – provides express service from Riverside to Downtown Boston, via Newton, Masspike and Copley Square, running every 20 minutes during off peak hours. There is no service provided during the rush hours. The closest stop to the Project site is at the intersection of St. James Avenue and Arlington Street, which is about 0.11 miles away.

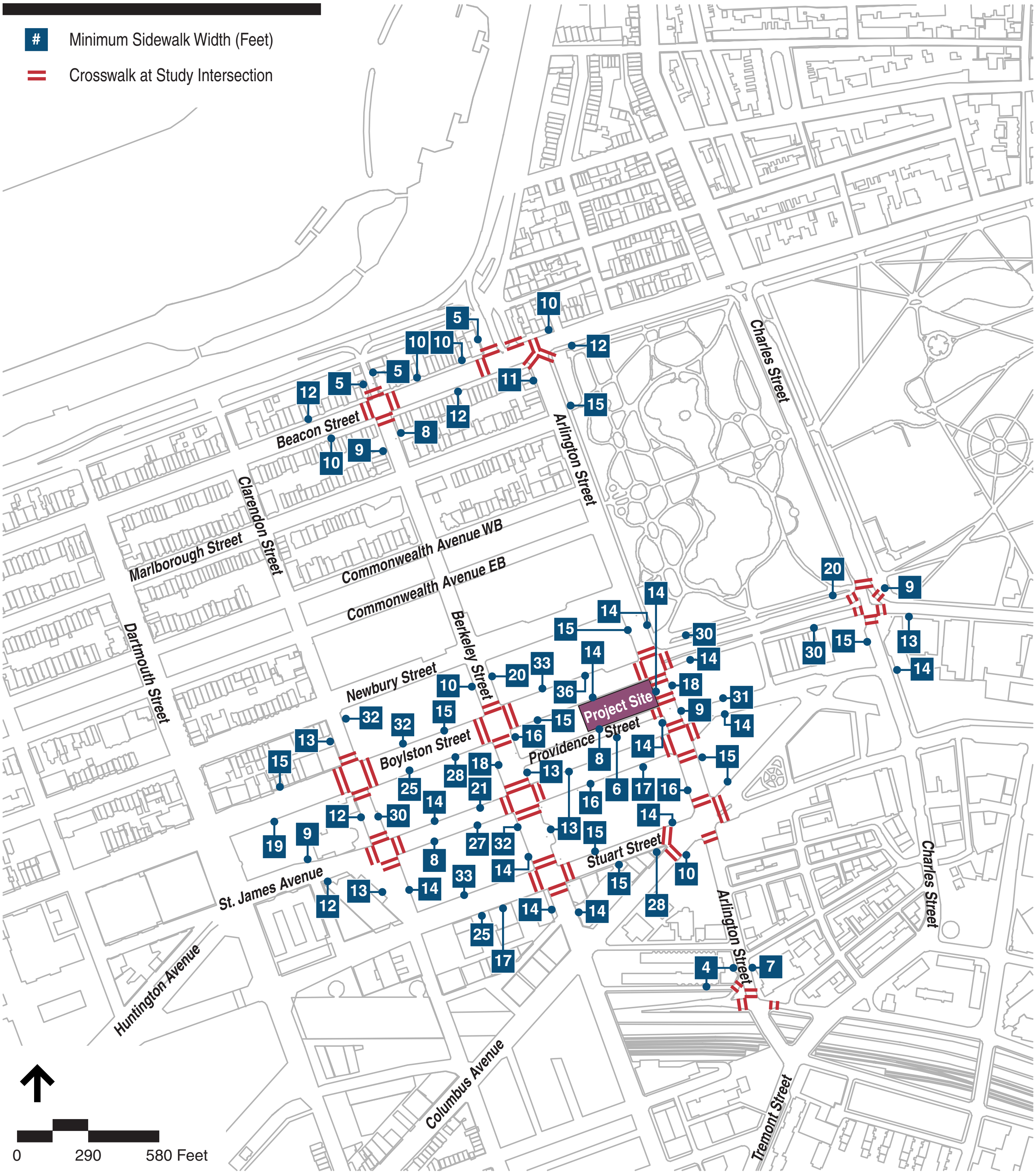
3.6.6 Pedestrian Environment

The study area benefits from an extensive sidewalk network with generally wide sidewalks, and the Project site is very accessible for walking. Much of Back Bay, Beacon Hill, Downtown, Chinatown, Bay Village and the South End are within a 10 – 20 minute walk of the Project site. An inventory of crosswalks and sidewalk widths at study intersections and their approaches is presented in Figure 3-8. Side-walks, street furniture and crosswalks in the vicinity of the site are shown in Figure 3-6, presented previously.

3.6.6.1 Existing Pedestrian Volumes

Morning and evening peak hour pedestrian counts were conducted at each of the study area intersections. Peak hour pedestrian flows are graphically represented in Figures 3-9 and 3-10 for the morning and evening peak hours, respectively.

The highest pedestrian flows occur at St. James Avenue/Berkeley Street and Boylston Street/Berkeley Street during the morning peak hour and Boylston Street/ Clarendon Street and Boylston Street/Berkeley Street during the evening peak hour.

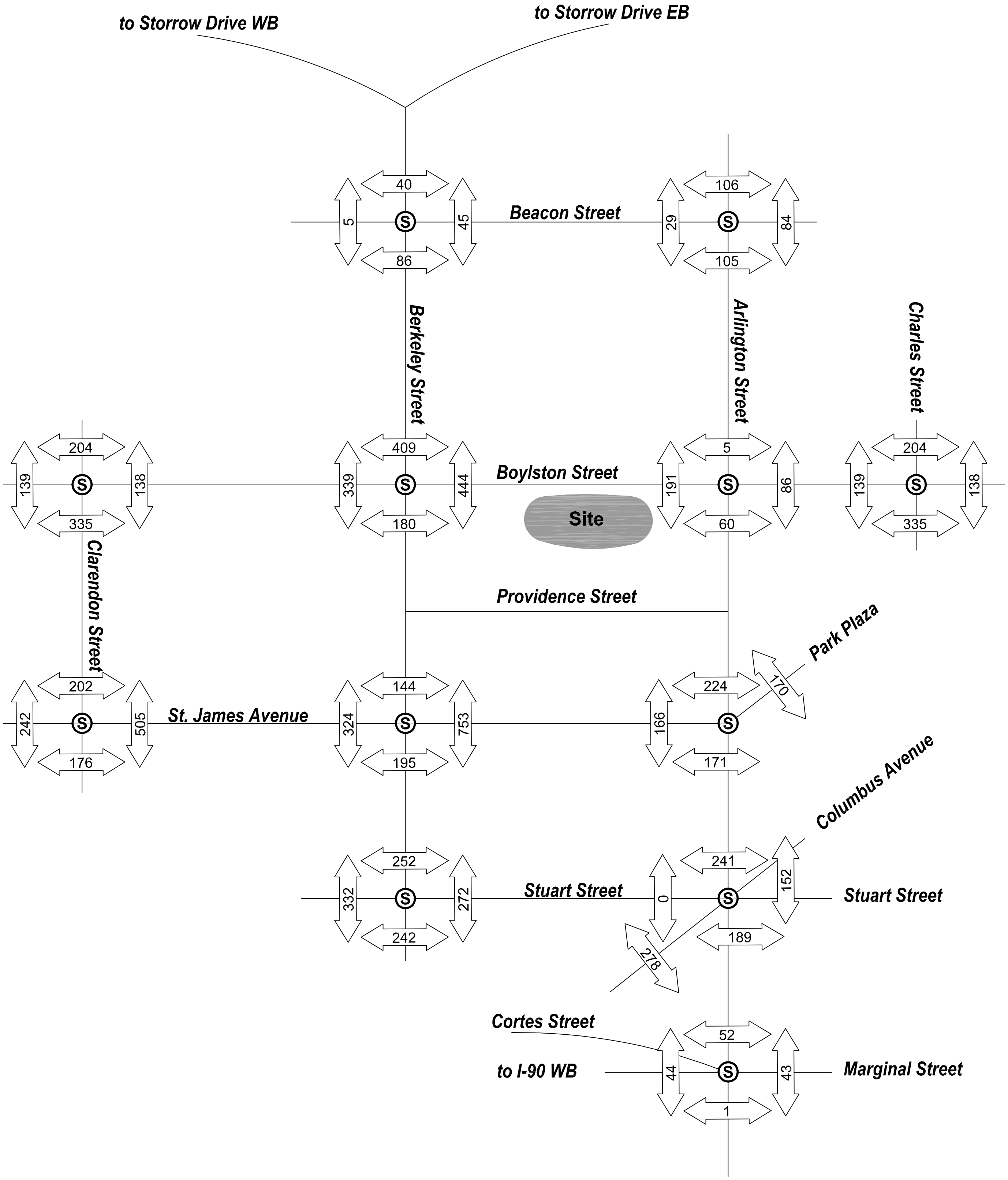


Vanasse Hangen Brustlin, Inc.

Sidewalk and Crosswalk Inventory at Study Area Intersections

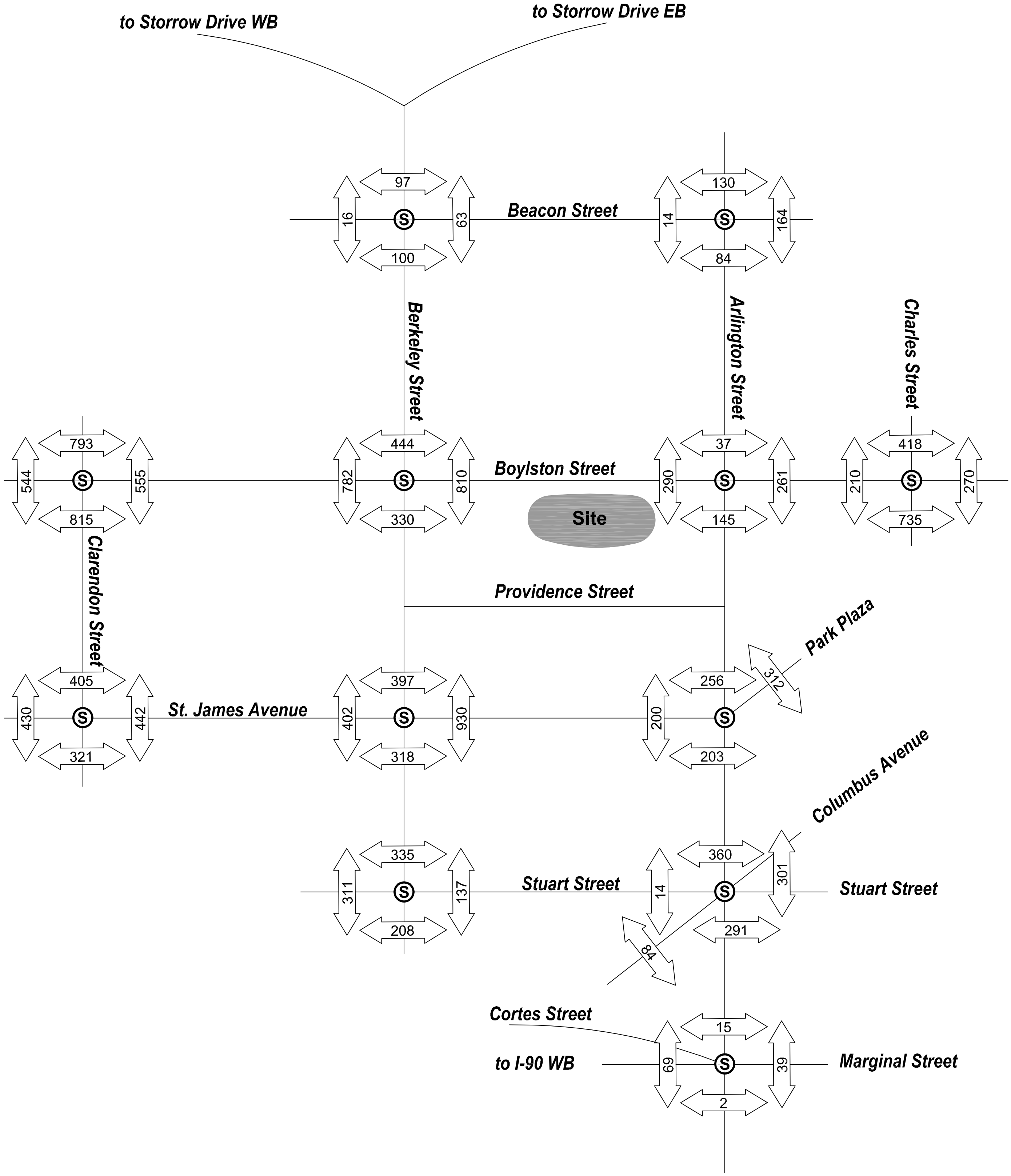
Figure 3-8

350 Boylston Street
Boston, MA



2008 Existing Weekday Morning Peak Hour Pedestrian Volumes

Figure 3-9



Vanasse Hangen Brustlin, Inc.

2008 Existing Weekday Evening Peak Hour Pedestrian Volumes

Figure 3-10

The individual intersection with the highest pedestrian volume was St. James Avenue/Berkeley Street during the morning peak hour. At the intersection of St. James Avenue/Berkeley Street, just over 1,000 pedestrians cross St. James Avenue and almost 350 pedestrians cross

Berkeley Street during the morning peak hour. During the evening peak hour the intersection with the highest pedestrian volume was Boylston Street/Clarendon Street, where almost 1,100 pedestrians cross Boylston Street and just over 1,608 pedestrians cross Clarendon Street.

3.6.6.2 Pedestrian Level of Service

A quantitative assessment of pedestrian level of service (LOS) was conducted for crosswalks at all signalized study area intersections. LOS is represented by a letter grade ranging from "A" (best) to "F" (worst) that is based upon the delay that pedestrians experience at the intersection while waiting to cross. LOS D is considered to be an acceptable level of service. LOS "E" and "F" are generally considered to be associated with long delay, and therefore high likelihood of non-compliance.

The pedestrian LOS criteria at signalized intersections as prescribed by the Highway Capacity Manual (HCM) are shown in Table 3-7A. Table 3-7B presents a summary of the pedestrian analyses for signalized study intersections for the morning and weekday evening peak hours under Existing 2008 conditions.

Table 3-7A Pedestrian Level of Service (LOS) Criteria

Level-of- Service	Signalized Pedestrian Delay (seconds)
A	< 10
B	10-20
C	20-30
D	30-40
E	40-60
F	> 60

Source: 2000 HCM

Table 3-7B Pedestrian Level of Service Summary, Existing (2008) Weekday

Location	Crosswalk	2008 Existing Condition Weekday Morning		2008 Existing Condition Weekday Evening	
		Average Pedestrian Delay	LOS[1]	Average Pedestrian Delay	LOS[1]
Boylston Street / Arlington Street	North South East West	43.2 41.4 44.2 44.2	E E E E	43.2 41.4 44.2 44.2	E E E E
Boylston Street / Berkeley Street	North South East West	44.2 46.1 47.0 45.1	E E E E	44.2 46.1 47.0 45.1	E E E E
Boylston Street / Clarendon Street	North South East West	44.2 44.2 49.0 49.0	E E E E	44.2 44.2 49.0 49.0	E E E E
Clarendon Street / St. James Avenue	North South East West	45.1 45.1 43.2 43.2	E E E E	45.1 45.1 43.2 43.2	E E E E
St. James Avenue / Berkeley Street	North South East West	45.1 46.1 45.1 40.5	E E E E	45.1 46.1 45.1 40.5	E E E E
St. James Avenue / Arlington Street	North South East West	39.6 39.6 42.3 42.3	D D E E	39.6 39.6 42.3 42.3	D D E E
Berkeley Street / Beacon Street	North South East West	37.0 43.2 45.1 45.1	D E E E	38.7 45.1 47.0 47.0	D E E E
Arlington Street / Beacon Street / Storrow Drive Ramps	North South East West	37.8 37.0 47.0 52.0	D D E E	37.8 37.0 47.0 52.0	D D E E
Boylston Street / Charles Street	North South East West	30.6 27.2 28.1 26.4	D C C C	30.6 27.2 28.1 26.4	D C C C
Arlington Street / Stuart Street / Columbus Avenue	North South East West Southwest	37.0 37.0 40.5 37.0 41.4	D D E D E	37.0 37.0 40.5 37.0 41.4	D D E D E
Stuart Street / Berkeley Street	North South East West	46.1 46.1 41.4 41.4	E E E E	46.1 46.1 41.4 41.4	E E E E
Arlington Street / Cortes Street / Mass. Turnpike	North East West	36.1 36.1 36.1	D D D	36.1 36.1 36.1	D D D

1 Pedestrian Level-of-Service

As shown in Table 3-7B, most signalized intersection crosswalks currently show a pedestrian Level of Service of E, although LOS D or C is experienced at a number of locations.

The reason for LOS E at study area intersections is largely due to the fact that most intersections have exclusive pedestrian phases and operate at a cycle length of 100 seconds in the AM and PM peaks. This normally results in longer delays for pedestrians compared to concurrent phasing, as the pedestrian has to wait for the exclusive phase rather than being able to walk concurrently with the appropriate traffic movement. While a concurrent walk is usually better for pedestrians, it is not always possible when traffic volumes, and conflicting turning movements in particular, are high.

3.6.7 Bicycle Activity

There are no on-street bicycle lanes or off-street bicycle paths in the study area, and cyclists must generally share travel lanes with vehicular traffic. However, overall, Back Bay is supported by the Paul White bicycle path along the Charles River, connections through Boston Common to Downtown and Beacon Hill, and the South-West corridor bike path from Forest Hills to Back Bay station.

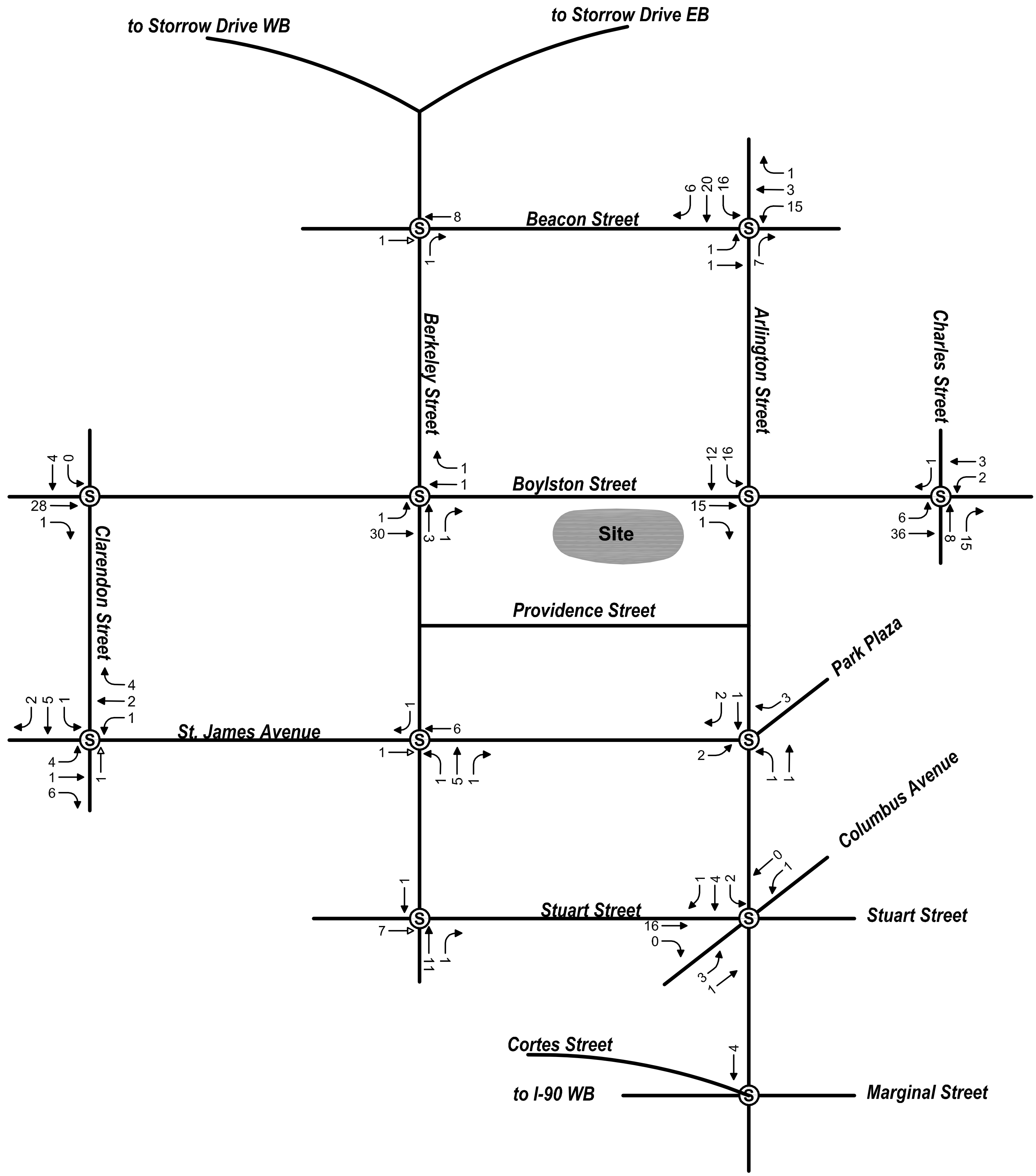
Currently, there are no bicycle-parking facilities within the existing buildings on the Project site. However, there are bicycle racks in various locations in the public realm that provide short-term bicycle parking. These include bicycle racks on Boylston Street in the vicinity of the Project site, as shown in Figure 3-6, presented previously. Morning and evening peak hour bicycle counts were conducted at each of the study area intersections. Peak hour bicycle volumes are presented in Figures 3-11 and 3-12 for the morning and evening peak hours, respectively.

3.6.8 Loading

Currently, there are no internal loading facilities on the Project site, and servicing and loading is limited to on-street facilities. On street curb regulations in the vicinity of the site are shown in Figure 3-6, presented previously. On Providence Street, there is a commercial vehicle zone with a 30-minute limit along approximately two-thirds of the Project site frontage, which provides a loading zone for vehicles servicing the existing buildings through rear service doors.

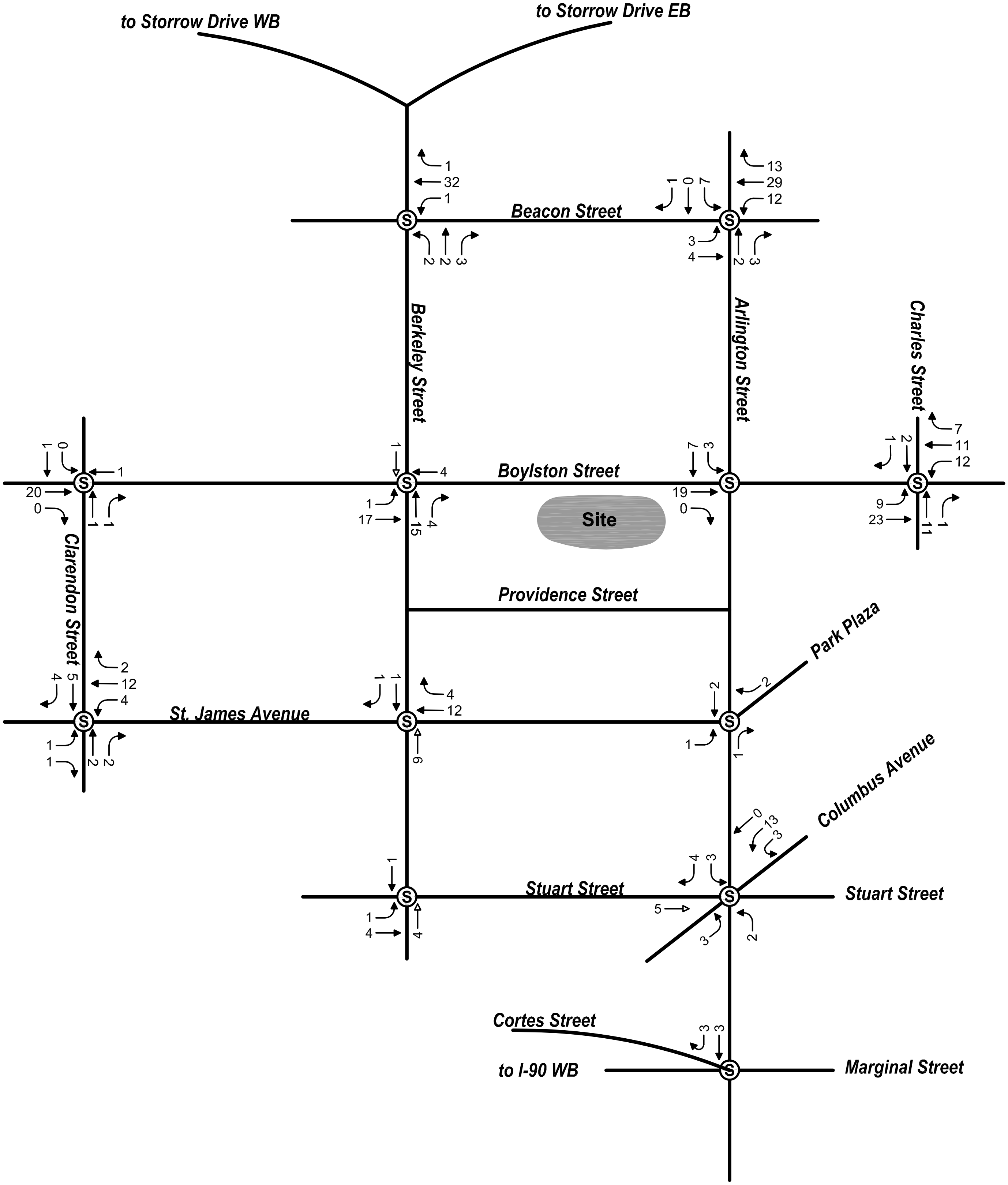
3.7 Evaluation of Long-Term Transportation Impacts

To evaluate future roadway operations, traffic volumes in the study area are projected to the year 2013 to reflect a five-year planning horizon. The 2013 No-Build traffic volumes include all existing traffic, new traffic attributable to general/regional background growth, and traffic generated by identified planned/approved developments in the area. Anticipated site-generated traffic volumes that are expected to be generated by the Project are added to the No-Build traffic volumes to reflect Build traffic volume.



2008 Existing Weekday Morning Peak Hour Bicycle Volumes

Figure 3-11



Vanasse Hangen Brustlin, Inc.

2008 Existing Weekday Evening Peak Hour Bicycle Volumes

Figure 3-12

3.7.1 2013 No Build Condition

The 2013 No Build Condition considers study area traffic conditions if the 350 Boylston Street Project is not built. 2013 No Build Condition traffic volumes are developed using information from projects located in the area, including The Columbus Center, The Clarendon Hotel and the Mandarin Oriental Hotel.

The 2007 Existing Condition volumes are adjusted to 2013 with a growth rate of 1.0 percent per year. The three specific projects that are planned, approved and/or under construction are added to these adjusted volumes to create the 2013 No-Build Condition weekday morning and evening peak hour traffic volumes.

The resulting 2013 No-Build morning and evening peak hour traffic volumes are presented in Figures 3-13 and 3-14.

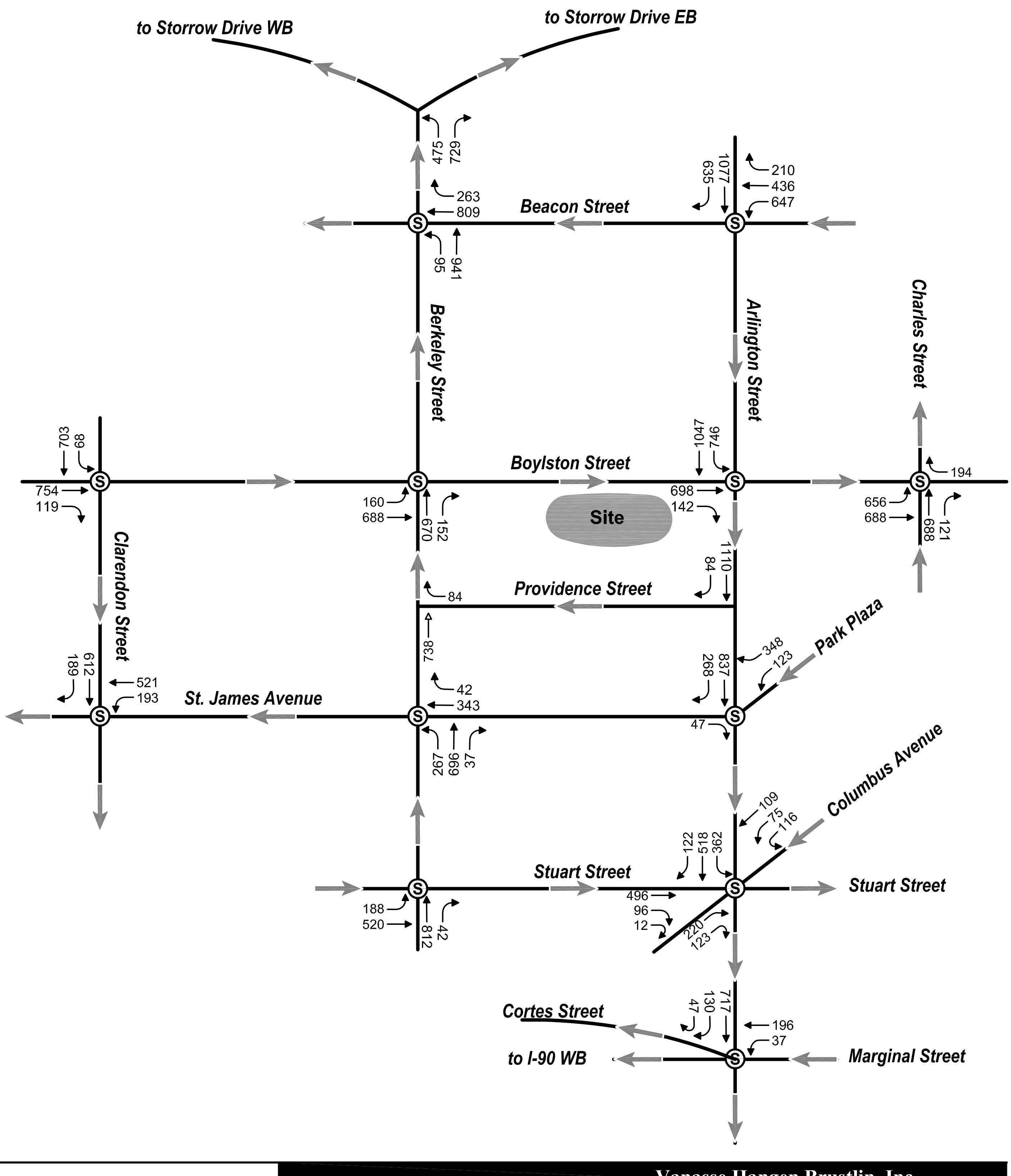
3.7.2 2013 Build Condition

2013 Build Condition traffic volumes for the study area intersections are determined by estimating site-generated traffic volumes, distributing the trips on the highway network, and assigning the trips to the study area roadways. The site-generated volumes are added to the 2013 No-Build traffic volumes to create the Build volume networks. The following sections describe the procedure used to estimate site-generated traffic. As discussed in more detail later, a very conservative (worst-case) approach is adopted for site-generated tips, as no "credit" is included for existing parking trips associated with the existing buildings on the site.

3.7.2.1 Project-Generated Trips and Mode Split

The 350 Boylston Street Project will contain a mix of Office and Retail space. The Institute of Transportation Engineers (ITE) trip rates for Land Use Code (LUC) 710 General Office and LUC 820 Retail are used as a basis for project trip generation.

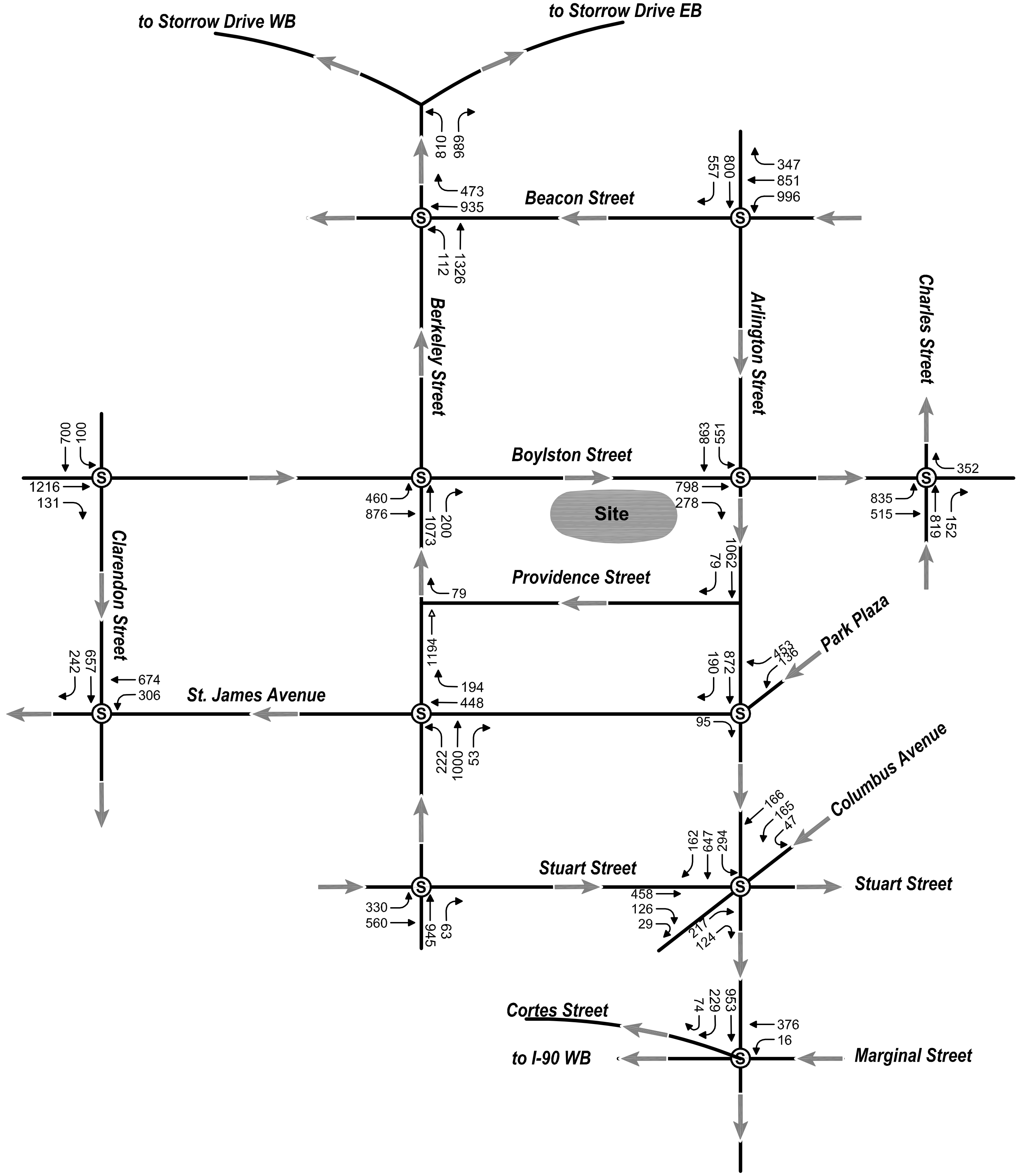
ITE vehicle trip generation rates are based on trip rates derived from surveys of similar land uses in generally auto-oriented, suburban locations. Since the Project is located in a mixed-use, transit-oriented and pedestrian-friendly urban area, the number of person trips is a more accurate representation of expected activity associated with the proposed Project. Accordingly, standard average vehicle occupancies (AVO) of 1.2 and 1.6 persons per vehicle are applied to the ITE trip rates for Office and Retail uses, respectively. The projected person trips for the Project are presented in Table 3-8. It should be noted that the projections of person trips are for the Project itself in isolation, and do not include the deduction of person trips associated with the existing buildings.



Vanasse Hangen Brustlin, Inc.

2013 No-Build Weekday Morning Peak Hour Traffic Volumes

Figure 3-13



Vanasse Hangen Brustlin, Inc.

2013 No-Build Weekday Evening Peak Hour Traffic Volumes

Figure 3-14

Table 3-8 Project Person Trip Generation Summary

	ITE-Based Trips	AVO	Person Trips
Morning Peak Hour			
Retail			
In	10	1.6	16
Out	6	1.6	10
Office			
In	288	1.2	345
Out	39	1.2	47
Total			
In	298		
Out	46		
Evening Peak Hour			
Retail			
In	29	1.6	47
Out	31	1.6	50
Office			
In	53	1.2	64
Out	261	1.2	313
Total			
In	82		
Out	292		
Weekday Daily			
Retail			
In	344	1.6	551
Out	344	1.6	551
Office			
In	1,162	1.2	1,394
Out	1,162	1.2	1,394
Total			
In	1,506		
Out	1,506		

Source: Institute of Transportation Engineers *Trip Generation 7th Edition*

Mode share is based on the recommended area-specific data provided by the BTD, as presented in Table 3-9. The mode shares reflect the location of the Project in Back Bay in a dense, mixed-use urban environment with an excellent pedestrian environment and high quality transit service and the mode split.

Table 3-9 Project Mode Split

Mode	Office	Retail
Automobile	37%	33%
Transit	38%	31%
Walk/Bike/Other	25%	36%
Total	100%	100%

The mode shares are applied to the projected person trips in order to determine the numbers of trips by vehicle, transit, pedestrian and bicycle. The numbers of person trips by vehicle are adjusted by vehicle occupancy rates of 1.2 and 1.6 for Office and Retail uses, respectively, as typically used in analysis for other Back bay projects, to determine the numbers of vehicle trips. The final projected vehicle, transit, pedestrian and bicycle trips are shown in Table 3-10. Again, it should be noted that the projections of project trips are for the Project itself in isolation, and do not include the deduction of trips associated with the existing buildings.

Table 3-10 Project Trip Generation by Mode

	Person Trips	Transit Trips	Walk/Bicycle Trips	Trips by Vehicle	AVO	Vehicle Trips
Morning Peak Hour						
Retail						
In	16	5	6	5	1.6	3
Out	10	3	4	3	1.6	2
Office						
In	345	131	86	128	1.2	107
Out	47	18	12	17	1.2	15
Total						
In	361	136	92	133		110
Out	57	21	15	21		17
Evening Peak Hour						
Retail						
In	47	15	17	15	1.6	10
Out	50	15	18	17	1.6	10
Office						
In	64	24	16	24	1.2	20
Out	313	119	78	116	1.2	97
Total						
In	111	39	33	39		30
Out	363	134	96	133		107
Weekday Daily						
Retail						
In	551	116	253	182	1.6	114
Out	551	116	253	182	1.6	114
Office						
In	1,394	446	335	613	1.2	512
Out	1,394	446	335	613	1.2	512
Total						
In	1,945	562	588	795		626
Out	1,945	562	588	795		626

Overall project trip generation for the Project (excluding the respective deductions for the existing buildings) includes approximately 157 transit trips and 107 walk and bicycle trips in the morning peak hour, and approximately 173 transit trips and 129 pedestrian and bicycle trips in the evening peak hour.

As shown in Table 3-10, the Project in isolation is expected to generate approximately 127 new vehicle trips (110 in, 17 out) during the weekday morning peak hour, and 137 new vehicle trips (30 in, 107 out) during the weekday evening peak hour. The vehicle trips include taxis and other drop-off/pick-up trips as well as trips parking on the Project site.

The vehicle trips are separated into trips using the Project garage and trips dropping-off/picking up on Boylston Street based on the proportions of inbound and outbound trips in each peak period. Project vehicle trips are summarized in Table 3-11, which also includes the estimated existing vehicle trip generation for the existing buildings on the Project site.

Table 3-11 Project Vehicle Trip Summary

	Garage Trips	Non-Garage Trips	Total Project Trips	Less Existing Trips	Net Increase
Morning Peak Hour					
Retail					
In	1	2	3	9	**-6**
Out	0	2	2	9	**-7**
Office					
In	92	15	107	23	**84**
Out	0	15	15	23	**-8**
Total					
In	93	17	110	32	**78**
Out	0	17	17	32	**-15**
Evening Peak Hour					
Retail					
In	0	10	10	9	**1**
Out	0	10	10	6	**4**
Office					
In	0	20	20	4	**16**
Out	77	20	97	21	**76**
Total					
In	0	30	30	13	**17**
Out	77	30	107	27	**80**

The Project site currently includes a substantial amount of office and retail space, which already generates trips throughout the day and during the peak periods. Accordingly, the proposed Project itself does not represent a total addition of new trips associated with the Project site. Rather, there will be a net increase in trips which reflects the elimination of existing trips.

As shown in Table 3-11, it is estimated that the site currently generates approximately 40 and 78 vehicle trips in the morning and evening peak hours, respectively, based on the same trip generation parameters (trip rate, mode share and AVO) applied for the proposed

Project. As a result the Project is expected to generate net increases of 87 vehicle trips in the morning peak hour, and 59 trips in the evening peak hour, equivalent to about one car per minute distributed over the entire roadway network.

Vehicle trips generated by the Project site today do not, of course, park on the site, as there is no on-site parking. These trips currently use other parking facilities in the area or drop-off/pick-up at the site, and strictly speaking do not represent additional trips on the network.

However, to present a conservative analysis, no "credit" is applied for the current parking trips, and all of the trips to and from the new Project garage on the site are assumed to be new trips to the roadway network. Even without the trip generation credit for the current site, the overall increase in project vehicle trips during the peak hours is projected to be equivalent to only about one car every 30 seconds, spread over the entire roadway network.

3.7.2.2 Vehicle Trip Distribution

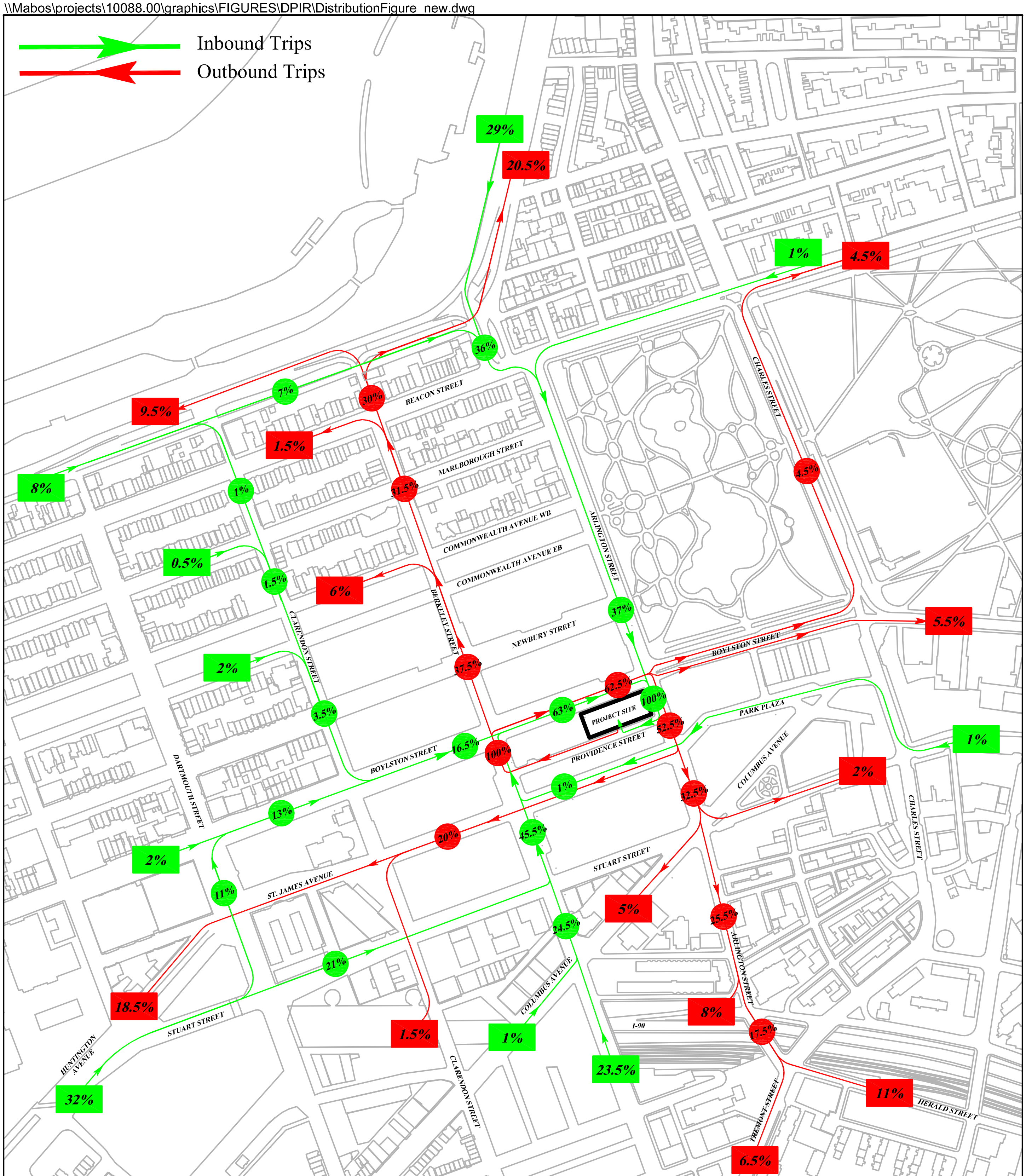
Table 3-12 summarizes the trip distribution patterns for the proposed project based on trip distribution data for this location provided by the BTD. The trip distribution and assignment to the roadway network is presented in Figures 3-15 and 3-16 for the morning and evening peak hours, respectively.

Table 3-12 Project Trip Distribution

	Percentage Traffic Assigned by Route			
Origin Travel Route	AM In	AM Out	PM In	PM Out
Storrow Drive EB	8	20.5	8.5	24
Storrow Drive WB	29	9.5	25.5	11
Beacon Street EB	0	4.5	0	1
Beacon Street WB	1	1.5	2.5	1
Boylston Street EB	2	5.5	5	4.5
Huntington Street	32	18.5	27	19.5
Berkeley Street NB	23.5	0	21	0
Arlington Street SB	0	25.5	0	29
Columbus Avenue	1	5	2	3.5
Local/Other	3.5	9.5	8.5	6.5
Total	100%	100%	100%	100%

Source: BTD Trip Distribution for Area 4

\\Mabos\projects\10088.00\graphics\FIGURES\DPIR\DistributionFigure_new.dwg



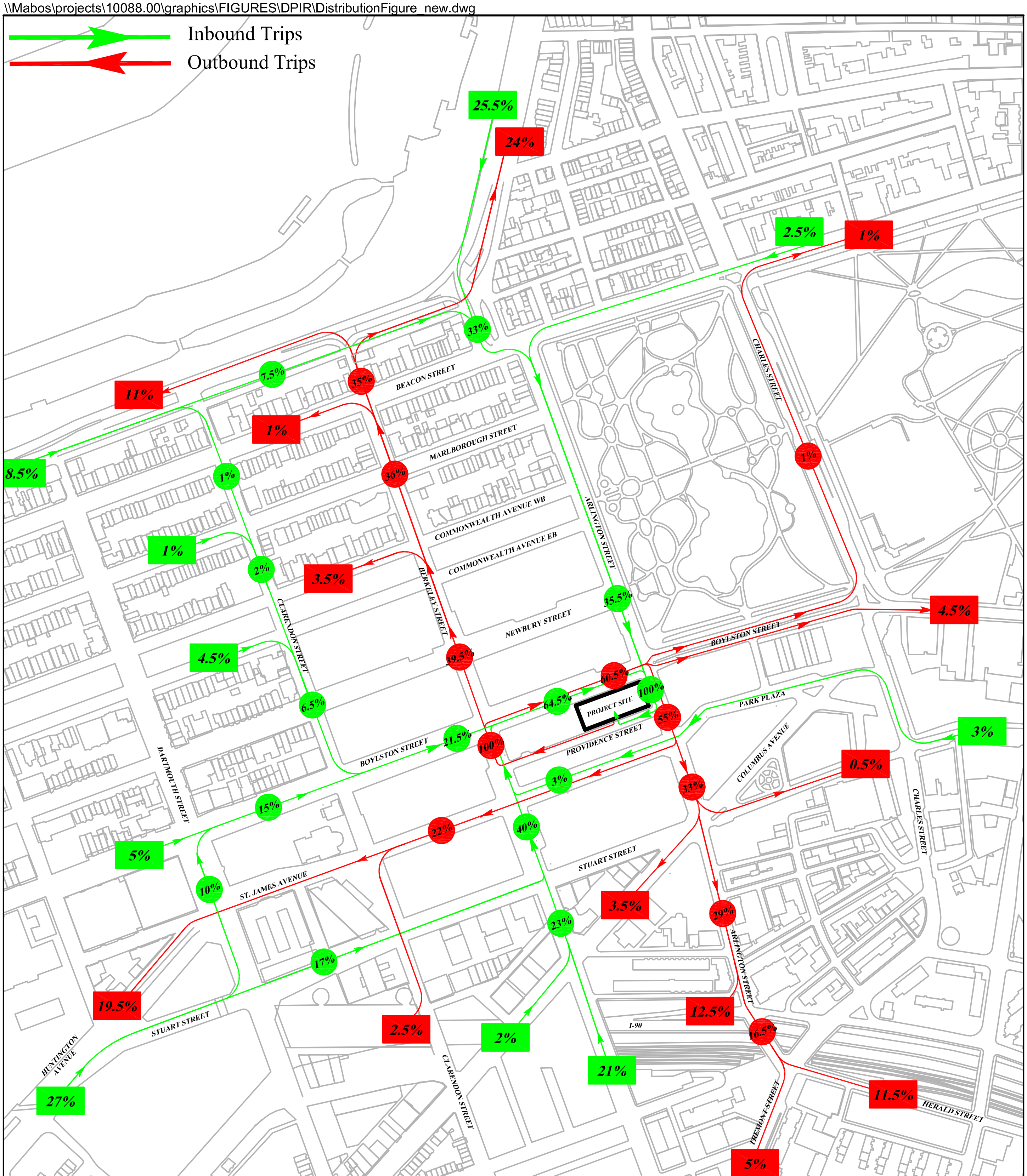
Vanasse Hangen Brustlin, Inc.

Morning Peak Hour
Project Trip Distribution

Figure 3-15

350 Boylston Street
Boston, MA

\\Mabos\projects\10088.00\graphics\FIGURES\DPIR\DistributionFigure_new.dwg



Vanasse Hangen Brustlin, Inc.

Evening Peak Hour
Project Trip Distribution

Figure 3-16

350 Boylston Street
Boston, MA

As shown, approximately 30 – 37 percent of project trips will utilize Storrow Drive (eastbound and westbound), while approximately 27 – 32 percent of project trips will utilize I-90 West, depending upon the direction of travel and which peak period.

3.7.2.3 Build Traffic Volumes

The project trips are assigned to the study are roadways based on the previously presented distribution. The resulting project trips are presented in Figures 3-17 and 3-18 for the morning and evening peak hours, respectively. Again, it should be noted that these volumes represent an over-estimate of the net increase in trips as a result of the Project due to the fact that no "credit" is applied for existing vehicle trips that park in the vicinity of the site today.

The project-generated traffic is combined with the 2013 No-Build traffic volumes to yield the 2013 Build traffic volumes. The resulting 2013 Build Condition morning and evening peak hour traffic volumes are presented in Figures 3-19 and 3-20, respectively.

3.7.2.4 Traffic Operations Analysis

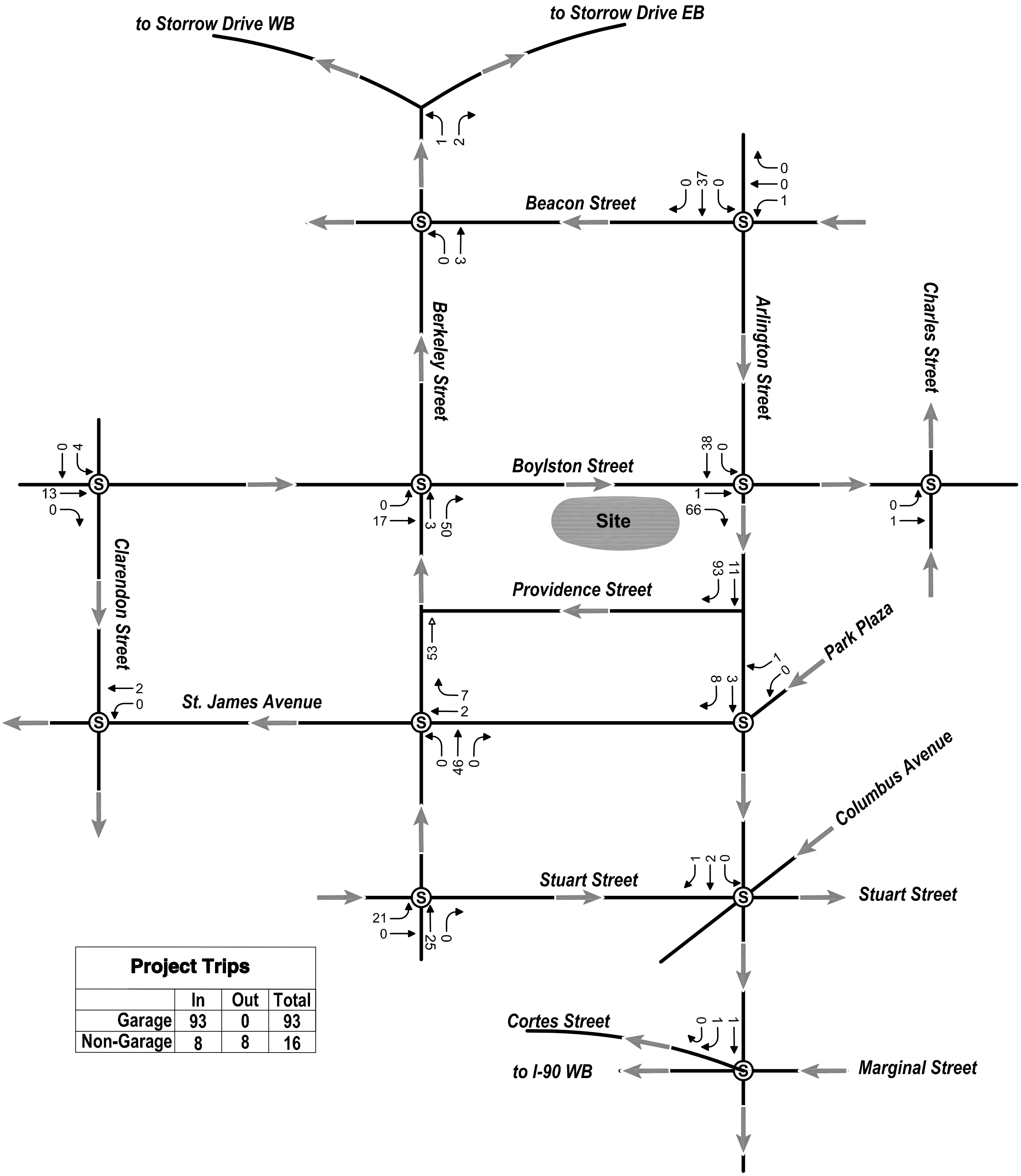
Level of Service (LOS) is the term used to denote the different operating conditions that occur on a given roadway or intersection under various volume loads. It is a qualitative measure of the effect of roadway/intersection geometry, speed, travel delay, freedom to maneuver, and safety. Level of service provides an index to the operational qualities of a roadway or intersection. LOS designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. The Highway Capacity Manual (HCM) evaluation criteria, which are different for signalized and unsignalized intersections, are presented in Table 3-13.

Table 3-13 Level of Service Criteria

Level of Service (LOS)	Unsignalized Intersection Delay (sec/veh)	Signalized Intersection Delay (sec/veh)
A	0-10	0-10
B	>10-15	>10-20
C	>15-25	>20-35
D	>25-35	>35-55
E	>35-50	>55-80
E	>50	>80

Source: HCM 2000

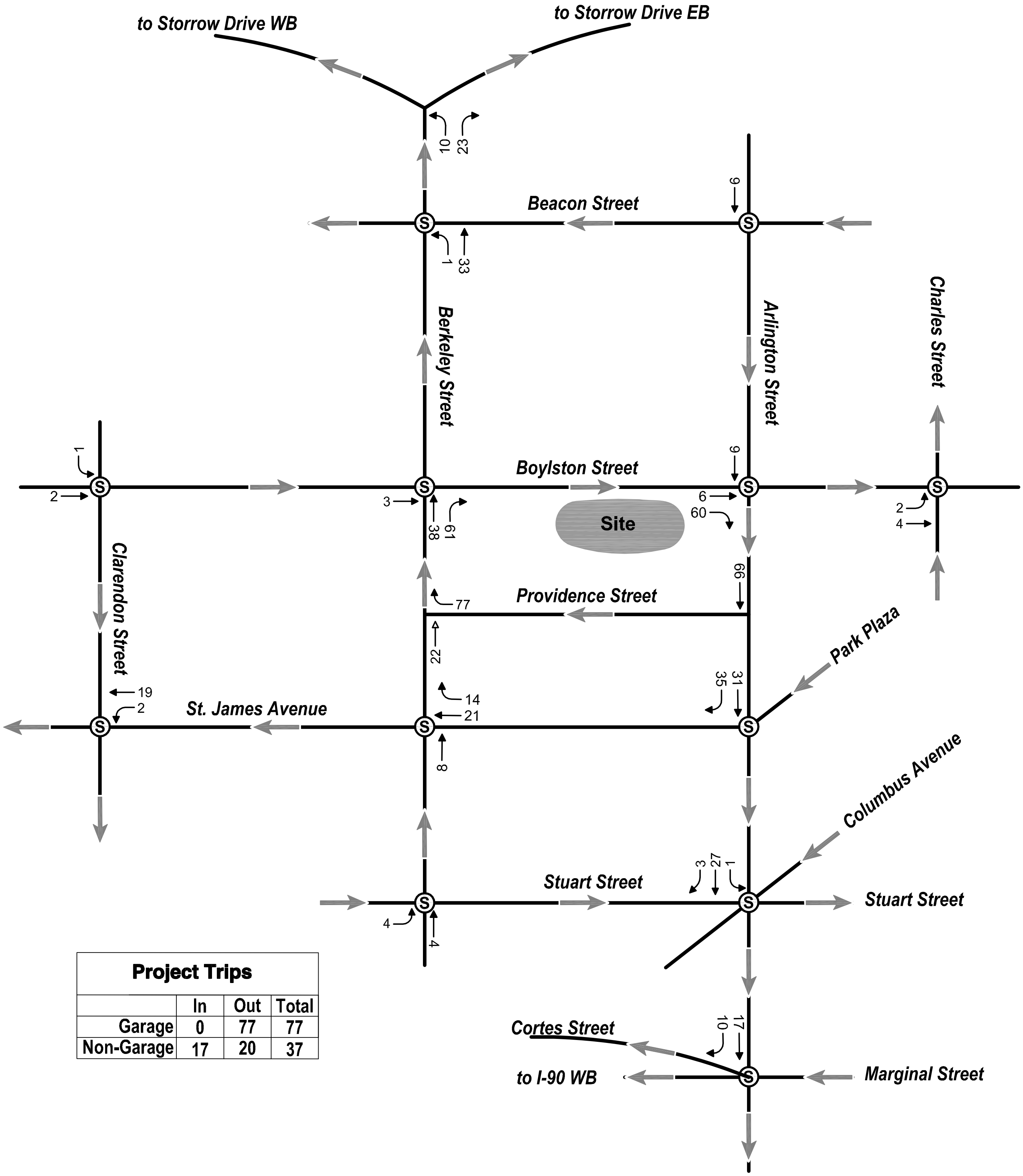
Level of service D or better is normally considered to be acceptable in urban areas.



Project Trips			
	In	Out	Total
Garage	93	0	93
Non-Garage	8	8	16

Weekday Morning Peak Hour
Project Trips

Figure 3-17



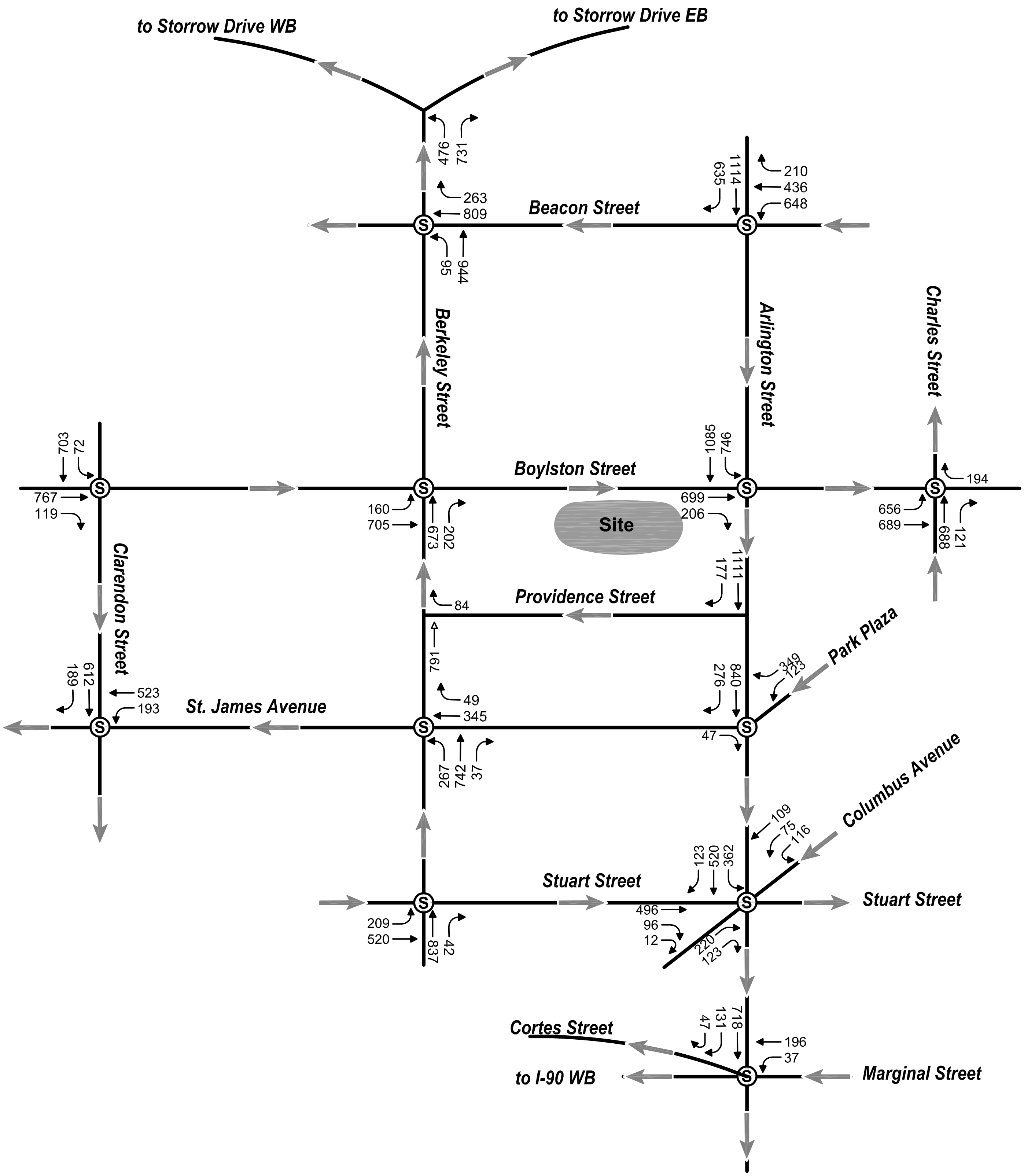
Project Trips

	In	Out	Total
Garage	0	77	77
Non-Garage	17	20	37

Vanasse Hangen Brustlin, Inc.

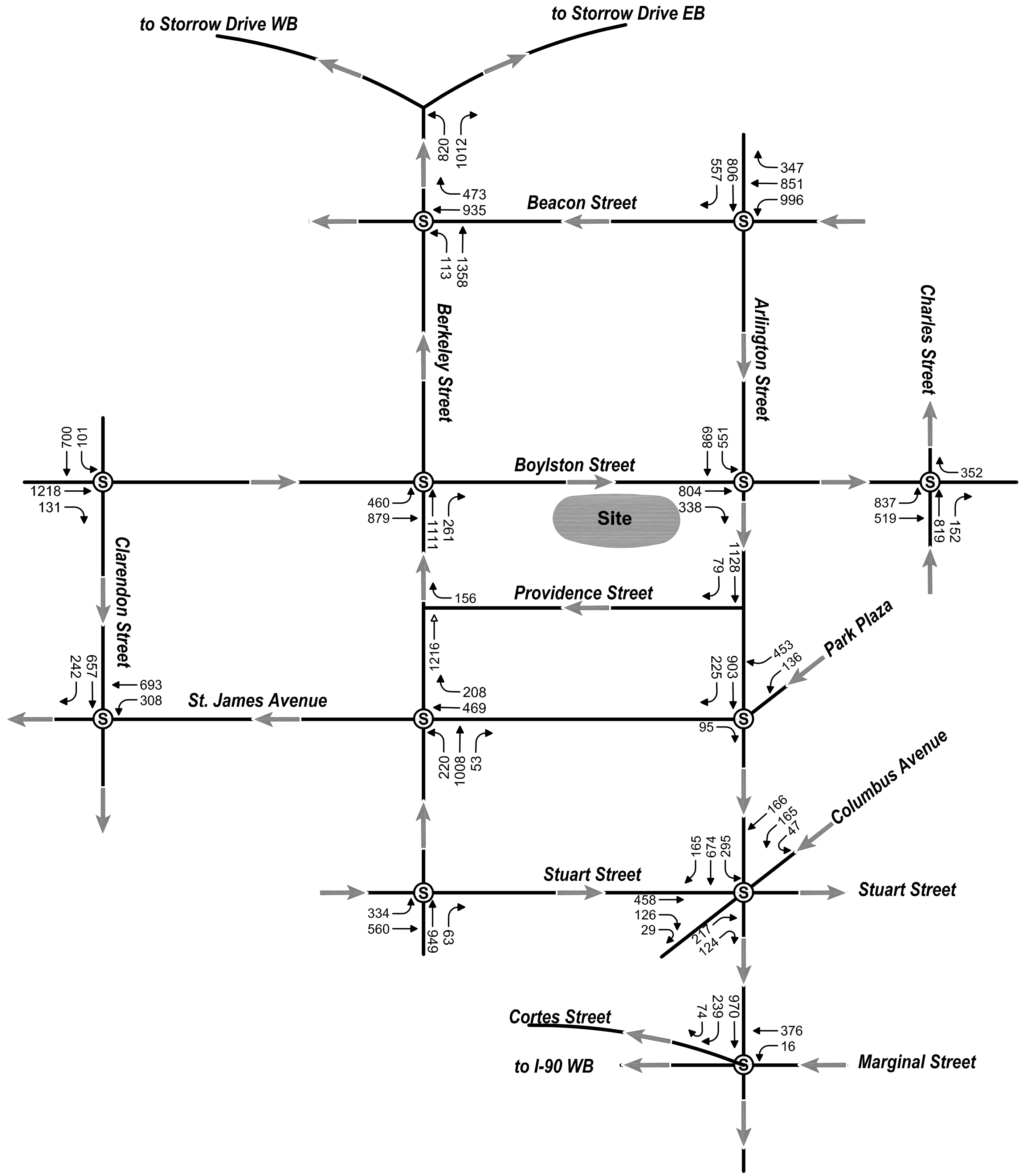
Weekday Evening Peak Hour
Project Trips

Figure 3-18



2013 Build Weekday Morning Peak Hour Traffic Volumes

Figure 3-19



Vanasse Hangen Brustlin, Inc.

2013 Build Weekday Evening
Peak Hour Traffic Volumes

Figure 3-20

Traffic operations analysis at study intersections was performed based on methodologies described in the Highway Capacity Manual. The Synchro software package was used for the analysis, as approved by the BTD. The traffic model was developed based on field observations and measurements, and using signal timings and phasing provided by the BTD. Analysis was performed for the morning and evening peak hours under 2008 Existing, 2013 No-Build and 2013 Build conditions.

Tables 3-14 and 3-15 present the operations analysis results for signalized study intersections during the morning and evening peak hours under 2008 Existing, 2013 No Build and 2013 Build conditions. Tables 3-16 and 3-17 present the corresponding operations analysis results for un-signalized study intersections. Complete Synchro reports are included in the Transportation Appendix.

Table 3-14 Signalized Intersection Capacity Analysis Summary – Morning Peak Hour

		2008 Existing Condition			2013 No-Build Condition			2013 Build Condition		
Location	Approach	LOS[1]	Delay[2]	V/C[3]	LOS[1]	Delay[2]	V/C[3]	LOS[1]	Delay[2]	V/C[3]
Boylston Street / Arlington Street	**Intersection**	**C**	**20.9**	**0.74**	**C**	**22.2**	**0.78**	**C**	**23.0**	**0.79**
	Eastbound Thru	C	34.3	0.83	D	36.7	0.87	D	38.0	0.87
	Eastbound Right	B	18.8	0.13	B	17.5	0.14	C	22.4	0.20
	Southbound Left	B	11.9	0.60	B	13.4	0.65	B	13.8	0.66
	Southbound Left/Thru	B	16.8	0.68	B	17.6	0.72	B	17.8	0.74
Boylston Street / Berkeley Street	**Intersection**	**B**	**11.4**	**0.54**	**B**	**11.4**	**0.58**	**B**	**11.8**	**0.61**
	Eastbound Left/Thru	B	10.0	0.46	B	10.1	0.49	B	10.2	0.50
	Northbound Thru/Right	B	12.9	0.64	B	12.7	0.71	B	13.4	0.76
Boylston Street / Clarendon Street	**Intersection**	**C**	**22.8**	**0.53**	**C**	**23.3**	**0.56**	**C**	**23.4**	**0.56**
	Eastbound Thru/Right	C	21.0	0.50	C	21.6	0.54	C	21.7	0.54
	Southbound Left/Thru	C	24.8	0.55	C	25.3	0.59	C	25.4	0.59
Clarendon Street / St. James Avenue	**Intersection**	**B**	**19.1**	**0.48**	**C**	**20.2**	**0.52**	**C**	**20.1**	**0.52**
	Westbound Left/Thru	C	34.4	0.45	D	35.5	0.50	D	35.3	0.50
	Southbound Thru/Right	A	6.0	0.51	A	6.6	0.54	A	6.6	0.54
St. James Avenue / Berkeley Street	**Intersection**	**B**	**19.6**	**0.57**	**C**	**22.8**	**0.63**	**C**	**25.7**	**0.66**
	Westbound Thru/Right	C	27.1	0.37	C	27.6	0.40	C	28.0	0.41
	Northbound	B	17.0	0.78	C	21.1	0.88	C	24.9	0.92
St. James Avenue / Arlington Street	**Intersection**	**B**	**11.7**	**0.44**	**B**	**11.9**	**0.47**	**B**	**12.6**	**0.47**
	Eastbound Right	B	19.5	0.04	B	19.5	0.04	B	19.5	0.04
	Southbound Thru/Right	A	6.7	0.50	A	6.8	0.53	A	7.8	0.54
	Southwest Left	B	19.9	0.08	B	20.0	0.08	B	20.0	0.08
	Southwest Thru	C	23.3	0.37	C	23.7	0.39	C	23.7	0.40
Berkeley Street / Beacon Street	**Intersection**	**C**	**33.3**	**0.72**	**D**	**39.8**	**0.78**	**D**	**39.8**	**0.78**
	Westbound Thru/Right	C	26.3	0.56	C	26.4	0.59	C	26.6	0.59
	Northbound Thru/Left	D	40.5	0.89	D	53.0	0.98	D	52.7	0.99
Arlington Street / Beacon Street / Storrow Drive Ramps	**Intersection**	**B**	**16.5**	**0.71**	**B**	**17.7**	**0.75**	**B**	**17.9**	**0.75**
	Westbound Left	A	7.9	0.72	A	9.3	0.76	A	9.3	0.76
	Westbound Thru	C	32.0	0.56	C	30.1	0.54	C	30.0	0.54
	Westbound Right	C	29.6	0.32	C	28.1	0.33	C	28.1	0.34
	Southbound Thru/Right	B	12.0	0.58	B	14.1	0.64	B	14.4	0.65
	Southbound Right	B	19.7	0.43	C	22.3	0.48	C	22.8	0.50
Boylston Street / Charles Street	**Intersection**	**C**	**23.3**	**0.64**	**C**	**23.9**	**0.67**	**C**	**23.9**	**0.67**
	Eastbound Left	B	18.3	0.24	B	18.4	0.25	B	18.4	0.25
	Eastbound Thru	C	23.4	0.62	C	24.1	0.65	C	24.1	0.65
	Westbound Right	B	18.3	0.19	B	18.5	0.20	B	18.5	0.20
	Northbound Thru/Right	C	28.9	0.68	C	29.8	0.71	C	29.8	0.71
Arlington Street / Stuart Street / Columbus Avenue	**Intersection**	**E**	**56.7**	**0.90**	**E**	**74.9**	**0.98**	**E**	**75.5**	**0.98**
	Eastbound Thru/Right	F	98.9	1.10	F	143.1	1.21	F	143.7	1.21
	Southbound	D	45.1	1.24dl	E	58.6	1.30dl	E	59.7	1.30dl
	Northeast Thru/Right	D	48.4	0.76	E	56.0	0.85	E	56.0	0.85
	Southwest Hard Left	C	29.7	0.07	C	29.8	0.08	C	29.8	0.08
	Southwest Thru/Left	C	31.8	0.27	C	32.2	0.30	C	32.2	0.30
Stuart Street / Berkeley Street	**Intersection**	**C**	**28.1**	**0.55**	**C**	**29.7**	**0.62**	**C**	**30.3**	**0.64**
	Eastbound Left/Thru	C	21.3	0.46	C	22.2	0.52	C	22.4	0.53
	Northbound Thru/Right	C	33.3	0.69	D	35.6	0.76	D	36.5	0.79
Arlington Street / Cortes Street / Mass. Turnpike	**Intersection**	**B**	**15.6**	**0.43**	**B**	**16.3**	**0.47**	**B**	**16.7**	**0.48**
	Westbound Left/Thru	D	40.6	0.77	D	41.1	0.78	D	41.1	0.78
	Southbound Thru/Right	A	9.2	0.32	A	10.0	0.35	B	10.5	0.36

1 Level of Service.
2 Average delay to all vehicles entering intersection, expressed in seconds per vehicle.
3 Volume-to-capacity ratio.

Table 3-15 Signalized Intersection Capacity Analysis Summary – Evening Peak Hour

Location	Approach	2008 Existing Condition			2013 No-Build Condition			2013 Build Condition		
		LOS[1]	Delay[2]	V/C[3]	LOS[1]	Delay[2]	V/C[3]	LOS[1]	Delay[2]	V/C[3]
Boylston Street / Arlington Street	**Intersection**	**B**	**19.2**	**0.72**	**B**	**19.6**	**0.76**	**B**	**20.0**	**0.77**
	Eastbound Thru	C	21.7	0.80	C	22.3	0.83	C	23.6	0.84
	Eastbound Right	A	7.7	0.24	A	6.2	0.27	A	8.2	0.43
	Southbound Left	B	18.3	0.54	B	19.0	0.59	B	18.9	0.59
	Southbound Left/Thru	C	21.3	0.65	C	21.9	0.70	C	21.9	0.71
Boylston Street / Berkeley Street	**Intersection**	**B**	**19.2**	**0.79**	**C**	**20.4**	**0.85**	**C**	**24.4**	**0.89**
	Eastbound Left/Thru	C	21.1	0.78	C	22.2	0.83	C	22.3	0.83
	Northbound Thru/Right	B	17.2	0.81	B	18.5	0.88	C	26.4	0.95
Boylston Street / Clarendon Street	**Intersection**	**C**	**25.2**	**0.65**	**C**	**26.4**	**0.70**	**C**	**26.4**	**0.70**
	Eastbound Thru/Right	C	24.9	0.71	C	26.4	0.76	C	26.4	0.76
	Southbound Left/Thru	C	25.6	0.60	C	26.5	0.64	C	26.5	0.64
Clarendon Street / St. James Avenue	**Intersection**	**B**	**12.5**	**0.59**	**B**	**13.9**	**0.65**	**B**	**14.4**	**0.66**
	Westbound Left/Thru	B	13.8	0.54	B	15.2	0.62	B	16.2	0.63
	Southbound Thru/Right	B	11.1	0.64	B	12.4	0.69	B	12.3	0.69
St. James Avenue / Berkeley Street	**Intersection**	**C**	**20.0**	**0.72**	**C**	**21.3**	**0.80**	**C**	**22.3**	**0.82**
	Westbound Thru/Right	C	32.2	0.69	C	34.7	0.76	D	36.4	0.80
	Northbound	B	12.5	0.74	B	13.2	0.83	B	13.4	0.84
St. James Avenue / Arlington Street	**Intersection**	**B**	**15.9**	**0.46**	**B**	**16.0**	**0.50**	**B**	**17.0**	**0.51**
	Eastbound Right	B	17.4	0.07	B	17.5	0.08	B	17.5	0.08
	Southbound Thru/Right	B	13.7	0.55	B	13.7	0.59	B	15.4	0.63
	Southwest Left	B	17.4	0.07	B	17.5	0.08	B	17.5	0.08
	Southwest Thru	C	20.8	0.38	C	21.3	0.41	C	21.3	0.41
Berkeley Street / Beacon Street	**Intersection**	**D**	**37.6**	**0.95**	**E**	**55.8**	**1.02**	**E**	**60.9**	**1.03**
	Westbound Thru/Right	C	30.3	0.89dr	C	33.2	0.93dr	C	33.2	0.93dr
	Northbound Thru/Left	D	45.4	1.03	E	79.2	1.12	F	88.8	1.15
Arlington Street / Beacon Street / Storrow Drive Ramps	**Intersection**	**C**	**29.1**	**0.95**	**D**	**35.7**	**1.01**	**D**	**35.8**	**1.01**
	Westbound Left	D	40.1	1.0	E	61.0	1.07	E	61.0	1.07
	Westbound Thru	B	18.6	0.55	B	19.1	0.58	B	19.1	0.58
	Westbound Right	B	19.7	0.56	C	21.1	0.60	C	21.1	0.60
	Southbound Thru/Right	C	27.5	0.69	C	28.8	0.73	C	28.9	0.73
	Southbound Right	D	36.7	0.38	D	38.8	0.47	D	39.0	0.47
Boylston Street / Charles Street	**Intersection**	**C**	**23.8**	**0.61**	**C**	**24.5**	**0.64**	**C**	**24.5**	**0.65**
	Eastbound Left	B	19.3	0.33	B	19.6	0.35	B	19.7	0.36
	Eastbound Thru	C	21.3	0.49	C	21.7	0.52	C	21.8	0.52
	Westbound Right	B	18.9	0.24	B	19.1	0.26	B	19.1	0.26
	Northbound Thru/Right	C	31.4	0.77	C	32.9	0.81	C	32.9	0.81
Arlington Street / Stuart Street / Columbus Avenue	**Intersection**	**D**	**37.9**	**0.80**	**D**	**45.9**	**0.89**	**D**	**45.4**	**0.90**
	Eastbound Thru/Right	E	63.8	0.89	F	83.5	1.01	F	81.7	1.00
	Southbound	C	20.9	0.80	C	23.2	0.86	C	23.7	0.88
	Northeast Thru/Right	D	52.6	0,73	E	62.7	0.85	E	62.7	0.85
	Southwest Hard Left	C	33.1	0.03	C	33.1	0.03	C	33.1	0.03
	Southwest Thru/Left	D	38.9	0.49	D	40.0	0.55	D	40.0	0.55
Stuart Street / Berkeley Street	**Intersection**	**C**	**31.0**	**0.66**	**D**	**35.6**	**0.74**	**D**	**35.9**	**0.74**
	Eastbound Left/Thru	C	22.1	0.54	C	23.5	0.62	C	23.6	0.62
	Northbound Thru/Right	D	38.6	0.82	D	45.8	0.92	D	46.3	0.92
Arlington Street / Cortes Street / Mass. Turnpike	**Intersection**	**C**	**22.8**	**0.62**	**C**	**24.7**	**0.68**	**C**	**25.3**	**0.70**
	Westbound Left/Thru	D	49.5	0.91	D	54.1	0.94	D	54.1	0.94
	Southbound Thru/Right	B	13.1	0.46	B	14.5	0.53	B	15.4	0.55

Table 3-16 Unsignalized Intersection Capacity Analysis Summary – Morning Peak Hour

		2008 Existing Condition				2013 No-Build Condition				2013 Build Condition			
Location	Approach	LOS[1]	Delay[2]	V/C[3]	Demand	LOS[1]	Delay[2]	V/C[3]	Demand	LOS[1]	Delay[2]	V/C[3]	Demand
Arlington Street / Providence Street	Southbound Thru/Right	A	0.0	0.18	1045	A	0.0	0.19	1100	A	0.0	0.19	1111
Berkeley Street / Providence Street	Westbound Right	B	12.9	0.16	80	B	13.5	0.18	84	B	13.9	0.18	84
	Northbound Thru	A	0.0	0.17	665	A	0.0	0.19	738	A	0.0	0.20	791
Berkeley Street / Storrow Drive Ramps	Eastbound Left/Thru	C	16.3	0.01	2	C	18.3	0.01	2	C	18.2	0.01	2
	Northbound Thru/Right	A	0.0	0.47	1100	A	0.0	0.51	1204	A	0.0	0.51	1207

Note: Overall Level of Service not available for unsignalized intersections.
1 Level of Service.
2 Average delay to all vehicles entering intersection, expressed in seconds per vehicle.

Table 3-17 Unsignalized Intersection Capacity Analysis Summary - Evening Peak Hour

		2008 Existing Condition				2013 No-Build Condition				2013 Build Condition			
Location	Approach	LOS[1]	Delay[2]	V/C[3]	Demand	LOS[1]	Delay[2]	V/C[3]	Demand	LOS[1]	Delay[2]	V/C[3]	Demand
Arlington Street / Providence Street	Southbound Thru/Right	A	0.0	0.18	990	A	0.0	0.19	1062	A	0.0	0.21	1128
Berkeley Street / Providence Street	Westbound Right	B	10.4	0.11	75	B	10.0	0.11	79	B	10.7	0.21	156
	Northbound Thru	A	0.0	0.23	1100	A	0.0	0.25	1194	A	0.0	0.26	1216
Berkeley Street / Storrow Drive Ramps	Eastbound Left/Thru	F	146.9	0.82	60	F	464.2	1.58	63	F	539.0	1.73	63
	Northbound Thru/Right	A	0.0	0.71	1660	A	0.0	0.77	1799	A	0.0	0.78	1832

Note: Overall Level of Service not available for unsignalized intersections.
1 Level of Service.
2 Average delay to all vehicles entering intersection, expressed in seconds per vehicle.

Under **Existing** conditions, all signalized and un-signalized study intersections operate at LOS D or better during the morning and evening peak hours, with the exception of Arlington Street at Stuart Street and Columbus Avenue, which experiences LOS E during the morning peak hour. This intersection deficiency is due largely to the poor level of service (LOS F) for the eastbound approach on Stuart Street. In addition, the eastbound move at the intersection of Berkeley Street and the Storrow Drive Ramps fails during the evening peak hour. However, this is a limited eastbound movement on the alleyway crossing Berkeley Street, and does not affect the remainder of the intersection.

Under **No-Build** conditions, some declines in intersection operations are projected, as would be expected due to regional growth and new traffic associated with other specific projects. The increases in delay under No-Build conditions do not result in any unacceptable levels of service at signalized study intersections, with the exception of some increase in the delay for the Existing LOS E at the intersection of Arlington Street at Stuart Street and Columbus Avenue in the morning peak hour. In the evening peak hour, the some movements in the intersection also experiences some decline even though the overall operation remains at LOS D.

Also, during the evening peak hour, it is expected that the Berkeley Street/Beacon Street intersection will decline under No-Build conditions to LOS E from its current LOS D. The un-signalized movement on the alleyway across Berkeley Street at the Storrow Drive Ramps would still be at LOS F under No-Build conditions, but with substantial increase in delay compared to Existing conditions.

Under **Build** conditions, no changes in overall intersection LOS grades are projected at signalized or un-signalized study intersections as a result of Project traffic. Further, there would be no changes to unacceptable level of service grades on any individual intersection approach due to Project traffic. However, it is noted that the delay for the northbound approach on Berkeley Street to Beacon Street would increase during the evening peak hour, resulting in LOS F rather than the already deficient LOS E under No-Build conditions.

Overall, the traffic operations analysis does not identify any significant or un-acceptable impacts as a result of the Project. While there will be some minor increases in delay for specific traffic movements in the future, there is generally more difference associated with the change from Existing to No-Build conditions compared to the change from No-Build to Build conditions.

The limited impacts to traffic operations as a result of the Project reflect the distribution of project trips in multiple directions. The net increase in vehicle trips is projected to be less than one or two vehicle trips every minute, depending on how much trip generation credit is assumed for the current site. Again it should be noted that no trip generation credit is included in the traffic operations analysis. Accordingly, even the limited changes projected as a result of the Project reflect a very conservative (worst case) analysis.

3.7.3 Parking

The 350 Boylston Street Project includes approximately 150 parking spaces in a below-grade garage. The spaces will be used exclusively by tenants of the Project, and will not be available for Public parking. Accordingly, the parking spaces are "Exempt" in relation to the Parking Freeze.

The parking supply is projected to be just adequate to satisfy the increased project demand for a Class A office building at this location. Indeed, the vehicle trip generation for the Project, which is based on the BTD mode share characteristics for this location, projects approximately 93 inbound trips to the Project garage in the morning peak hour. Typically, commuter vehicle trip generation for office use in the peak hour represents up to approximately 50 percent of the total trips for the peak period (normally a 3-hour period). Accordingly, the data suggest a project parking demand closer to 180 spaces, and the on-site parking may be slightly constrained.

As discussed in Section 3.6.3, parking facilities in the study area are well used, typical of conditions in the Back Bay. However, it is expected that short-term parking needs will be met by a combination of off-street and on-street parking. A large proportion of the short term parking demand for the Project will comprise retail shoppers. In practice, most of these trips will be shared trips with other Back Bay shopping locations, rather than "destination" trips generated by the Project. As a result, the real increase in parking demand by retail users will be more limited and spread out beyond the immediate vicinity of the Project site.

It is proposed that an approximately 70-foot drop-off/pick-up zone be provided at the building entrance on Boylston Street, which would replace the four existing parking meter spaces shown previously in Figure 3-6. No loss of on-street parking is necessary on Providence Street, as discussed in section 3.7.7.

3.7.4 Public Transportation

As discussed in Section 3.3, the Project site enjoys excellent transit access and is well served by MBTA subway and bus services. As shown previously in Figure 3-6, head-houses for the Arlington Green Line station are located immediately abutting the site, and Back Bay station is located within a 10-15 minute walk from the site, providing access to Orange Line and Commuter Rail service. In addition, several MBTA bus routes provide access to Back Bay and the Project site itself. A detailed description of available transit service is presented in Section 3.6.5.

The Project in isolation would be expected to generate in the order of 1,100 transit trips per day, with between approximately 150 and 180 transit trips during the morning and evening peak hours. Again, however, this estimate does not reflect the fact that the current buildings on the site generate transit trips, and the net increase in transit trips is expected to be closer to 110 trips in the morning peak hour and 70 trips in the evening peak hour.

The transit trips will be distributed amongst the multiple transit services. The most critical service is the Green Line subway in that its capacity can not be increased easily. By contrast, bus service capacity can be increased relatively easily by increasing headways. In any event, the number of project trips assigned to any individual bus route would be very small.

According to MBTA data, the highest daily ridership on the Green line is approximately 47,000 daily riders in each direction between Arlington and Boylston stations. The peak load/peak direction is approximately 6,650 inbound riders entering Copley station and approximately 6,060 outbound riders between Arlington and Copley stations. The line capacity on this segment of the Green line is estimated to be approximately 8,740 riders in each direction.

3.7.5 Pedestrians

As previously discussed, the Project site is located within the walking catchment of several Boston neighborhoods, and enjoys excellent pedestrian accessibility. Back Bay, Beacon Hill, Downtown, Chinatown, Bay Village and the South End are all within reasonable walking distance of the Project. The site benefits from continuous sidewalks on both the Boylston Street and Arlington Street frontages, and pedestrian crossing facilities are provided at the immediately adjacent Boylston Street/Arlington Street signalized intersection. It should be noted that the articulated footprint of he building will result in some localized widening of the existing sidewalks along the site frontage.

Section 3.6.6.2 presents an analysis of existing pedestrian levels of service at study intersections, which indicates that most signalized intersection crosswalks currently show a pedestrian Level of Service of E, although LOS D or C is experienced at several locations. This is largely a result of the fact that most intersections have exclusive pedestrian phases and operate at relatively long cycle lengths, which results in longer delays for pedestrians compared to concurrent phasing. However, any increase in the numbers of pedestrians would not impact these conditions, as they do not depend on the pedestrian volumes, but rather on the signal timings. Hence no impact to pedestrian crosswalk level of service is expected as a result of the Project.

While the Project in isolation would be expected to generate approximately 250 to 310 peak hour pedestrian trips (combining both walk trips and transit trips) at the Project site, the net increase compared to existing pedestrian activity associated with the existing buildings will be significantly less. It is unlikely that the increase in pedestrian activity would have any significant adverse effect. Indeed, it is the pedestrian activity itself that is desirable to activate the street frontage around the Project. Beyond the Project site, pedestrian trips will disperse in multiple directions.

3.7.6 *Bicycle Activity*

While it is hoped that bicycle travel will be attractive for commuters and others visiting the Project, any increase in actual bicycle volumes is expected to be relatively limited. There are no specific bike lanes or paths in the study area, although it is noted that the BTD is about to embark on a "Complete Streets Design Guidelines" project, which will include investigation of potential bike lanes on commonwealth Avenue and Columbus Avenue.

Several bike racks are provided within the public realm on the Boylston Street frontage, and these will be maintained as part of the Project, albeit in slightly different locations. Additional racks may be added if appropriate locations are identified. In addition, the Project will provide 27 bicycle parking spaces within the building, with access to shower and changing facilities for all tenants.

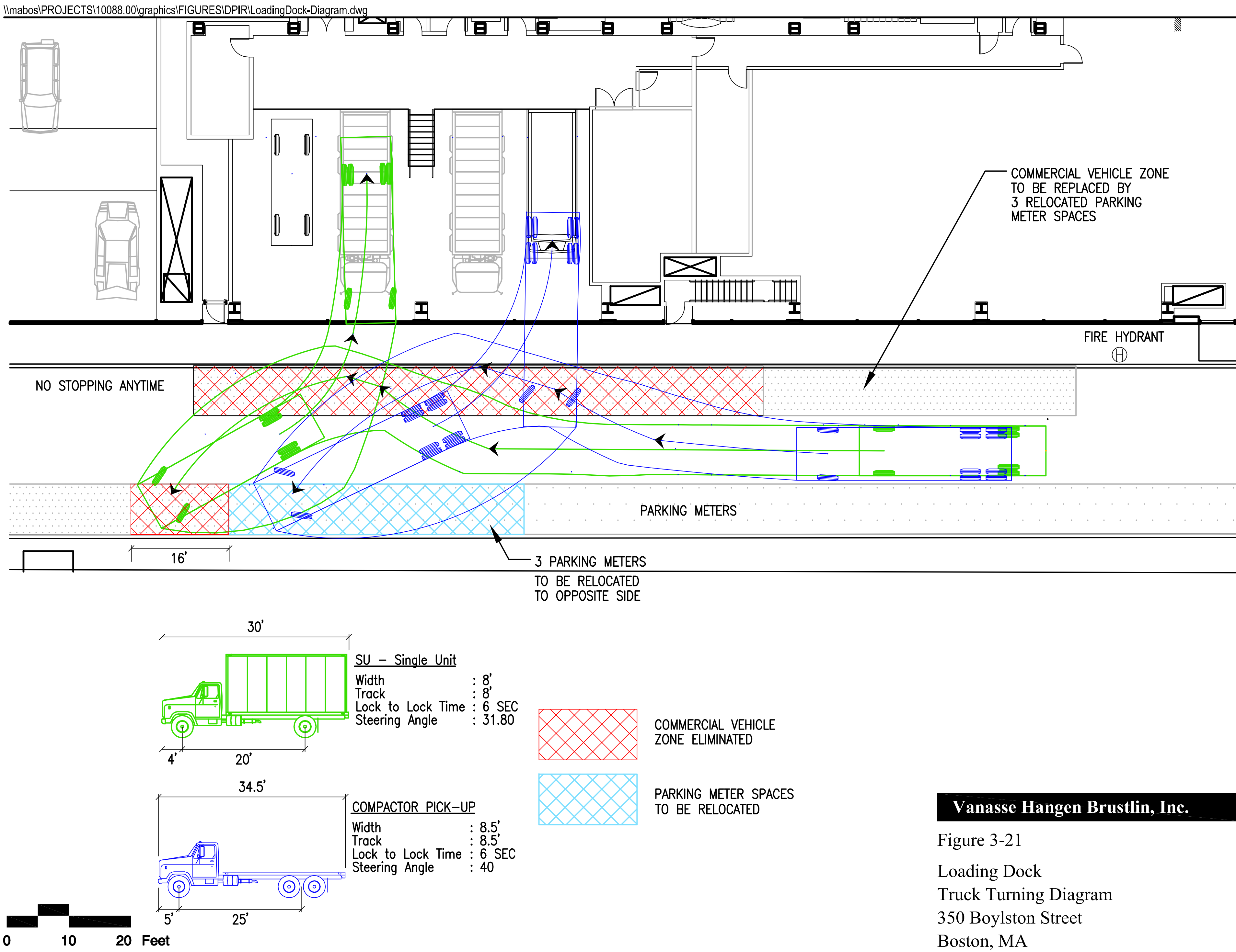
3.7.7 *Loading*

Loading and servicing for the Project will be provided in an internal loading dock on Providence Street, thereby substantially eliminating the amount of on-street servicing upon which the existing buildings rely. The loading dock will include a trash compactor and three loading bays each capable of accommodating 30-ft trucks, the largest size of truck typically servicing such buildings. Servicing by larger trucks for the proposed office and retail uses is very limited. The internal loading dock will significantly improve the on-street loading conditions on Providence Street.

Based on truck generation rates for similar land uses in the Back Bay, it is expected that the Project will generate a total of up to approximately 45 deliveries per day, including all sizes of cars, vans and trucks. Many of these deliveries will comprise cars or small vans including courier services, flower delivery, etc. While there will be some deliveries by panel trucks, the majority of delivery vehicles will comprise cars, vans and other small delivery vehicles.

The peak in deliveries typically occurs in the morning before 11 AM, with a maximum of 7 vehicles per hour at peak times. Typical servicing will include mail, and trash collection for the building. Deliveries by larger vehicles will be occasional only.

Figure 3-21 presents truck turning movements for the new loading dock, which benefit from the one-way traffic operation on Providence Street. The existing commercial vehicle zone on the north side of Providence Street which serves the existing buildings on the site will no longer be needed, as its function will be replaced by the loading dock. As shown in Figure 3-21, part of this area will be required for truck maneuvers, while the remainder will be available to accommodate 3 meter spaces to be relocated from the other side of Providence Street.



Vanasse Hangen Brustlin, Inc.

Figure 3-21

Loading Dock
Truck Turning Diagram
350 Boylston Street
Boston, MA

On the south side of Providence Street, there will be a small encroachment on the existing commercial vehicle zone opposite the new loading dock and car ramp to facilitate truck maneuvering, along with the displacement of 3 parking meter spaces which will be relocated to the north side as previously noted. Accordingly, there will be no loss of on-street parking.

3.8 Transportation Improvements

3.8.1 Project Improvements

The Project will yield several transportation improvements including the following:

- An internal loading dock with 4 bays will be provided to meet the servicing needs of the Project. In turn, this will reduce the extent of on-street loading associated currently with the Project site.
- A loading dock management plan will be implemented
- Sidewalks around the site will be re-constructed in accordance with The Boylston Street Improvement Plan, and will satisfy ADA requirements
- Long-term bicycle parking for building tenants will be provided inside the building, with access to changing facilities and showers

3.8.2 Transportation Demand Management

The Proponent will designate an on-site Employee Transportation Coordinator, and will become a member of the ABC (A Better City) Transportation Management Association (TMA). In addition, the proponent will work with all tenants and employers in the building to implement a package of TDM strategies, including the following:

- Marketing information including MBTA services
- Ridematching
- Vanpool programs
- Preferential parking for carpool/vanpools
- Transit pass sales
- Guaranteed Ride Home Program
- Secure, indoor bicycle storage
- Parking discounts for carpools and vanpools

- Flextime & Staggered work hours (when feasible)
- Compressed work weeks(when feasible)
- Telecommuting (when feasible)
- Showers/changing facilities for bicyclists

Transportation Management Associations (TMAs) have been an effective way to increase employee ride-sharing and transit use. TMAs, which are private non-profit organizations formed by employers, or groups of employers, provide a wide variety of TDM elements to members' employees. These services include ridematching for car and vanpools, vanpool coordination services, guaranteed ride home services, and alternative transportation marketing. By making these services readily available, tenants of the area will be more likely to implement elements of the TDM program.

The Proponent of the proposed Project will join the ABC TMA to provide these TDM programs and to coordinate with the neighboring buildings and tenants in the area.

3.8.3 Construction Management

The proponent will coordinate all construction activities with the on-going MBTA construction Project. However, the MBTA work is expected to be completed by the end of 2008, and therefore no overlap is anticipated. In coordination with the BTD, the proponent will develop a detailed evaluation of potential short-term construction-related transportation impacts including construction vehicle traffic, parking supply and demand, and pedestrian access. Detailed Construction Management Plans will be developed and submitted to the BTD for their approval. These plans will detail construction vehicle routing and staging.

3.8.3.1 Construction Vehicle Traffic

Construction vehicles will be necessary to move construction materials to and from the Project sites. In coordination with the BTD, every effort will be made to reduce the noise, control fugitive dust, and minimize other disturbances associated with construction traffic. Truck staging and lay-down areas for the Project will be carefully planned.

3.8.3.2 Construction Workers Traffic and Parking Issues

In coordination with the BTD, contractors will be encouraged to devise access plans for their personnel that de-emphasize auto use (such as seeking off-site parking, provide transit subsidies, on-site lockers, etc.) Construction workers will also be encouraged to use public transportation to access the Project site because no new parking will be provided for them.

3.8.3.3 Pedestrian Access During Construction

In coordination with the BTD, during the construction period, pedestrian activity adjacent to the parcels may be impacted by sidewalk closures. A variety of measures will be considered and implemented to protect the safety of pedestrians. Temporary walkways, appropriate lighting, and new directional and informational signage to direct pedestrians around the construction sites will be provided. After construction is complete, finished pedestrian sidewalks will be permanently reconstructed to meet ADA standards around the new facilities. Any damage as a result of construction vehicles or otherwise will be repaired per City standards.

3.8.4 Transportation Access Plan Agreement

As required under the Article 80 process, the proponent will prepare and submit a Transportation Access Plan Agreement (TAPA) for execution by the proponent and the BTD. In addition, a Construction Management Plan (CMP) will be prepared for review by the BTD and other City of Boston agencies.

4.0 ENVIRONMENTAL PROTECTION COMPONENT

4.1 Pedestrian Level Wind Analysis

4.1.1 Summary

A qualitative assessment has been made to determine the effect of the proposed building at 350 Boylston Street in Boston, Massachusetts, on pedestrian level winds (PLWs) in its vicinity. Results are obtained for both existing and build conditions.

All of the 39 locations considered for both the existing and build conditions are estimated to have PLWs within the Boston Redevelopment Authority guidelines for acceptable wind speed not exceeding 31 mph more often than once in 100 hours. In fact, all locations for existing and build conditions have an estimated PLW Category 3 (Comfortable for walking) or better, and most are in Category 2 (Comfortable for short periods of sitting or standing).

Detailed results are presented in Figures 4.1-12 to 4.1-19 and Table 4.1-1.

For this assessment, it has been assumed that there is no landscaping for existing conditions and none associated with the proposed Project. However, because the Boston Public Garden has trees and shrubs, and because the Project will include new street trees and canopies and awnings over lobby and retail spaces, this methodology reflects a conservative approach and the actual PLWs may be less than estimated at some locations.

4.1.2 Introduction

The wind assessment is based on:

1. An aerial map of the area surrounding the site;
2. A map of the area giving the heights of many buildings near the site;
3. Plans for the proposed Project showing all entrances;
4. The wind consultant's familiarity with the site and area due to other studies in the vicinity of the site;
5. An evaluation of the urban context of the proposed Project site;
6. A review of the Boston wind climate; and
7. The wind consultant's 36 years of experience dealing with PLWs.

The interaction of the wind with buildings and structures is very complicated and, at times, difficult to predict, especially for an urban area with a mixture of open spaces, low-rise and mid-rise buildings. Thus this evaluation provides a qualitative assessment of PLWs.

4.1.3 Location and Description of the Project and Surrounding Area

The site is at the southwest corner of Boylston and Arlington Streets. It is in downtown Boston at the edge of the Back Bay area. Currently, the site is occupied by four commercial structures located at 324-334, 336-342, 344-350 and 352-360 Boylston Street.

The site and numbered PLW locations are indicated in Figure 4.1-1. The PLW locations were chosen to be at entrances of the proposed Project and other nearby buildings, as well as other areas of expected pedestrian activity.

4.1.3.1 Description of Build Conditions

The four existing buildings will be replaced by the nine-story proposed Project that will occupy nearly all of the site (Figure 4.1-2). The numbered PLW locations are also shown in this Figure 4.1-2. PLW locations 15, 16, 17, 25, and 26 are at pedestrian entrances to the building and retail tenant spaces. Location 16 is the main entrance to the proposed building.

4.1.3.2 The Surrounding Area

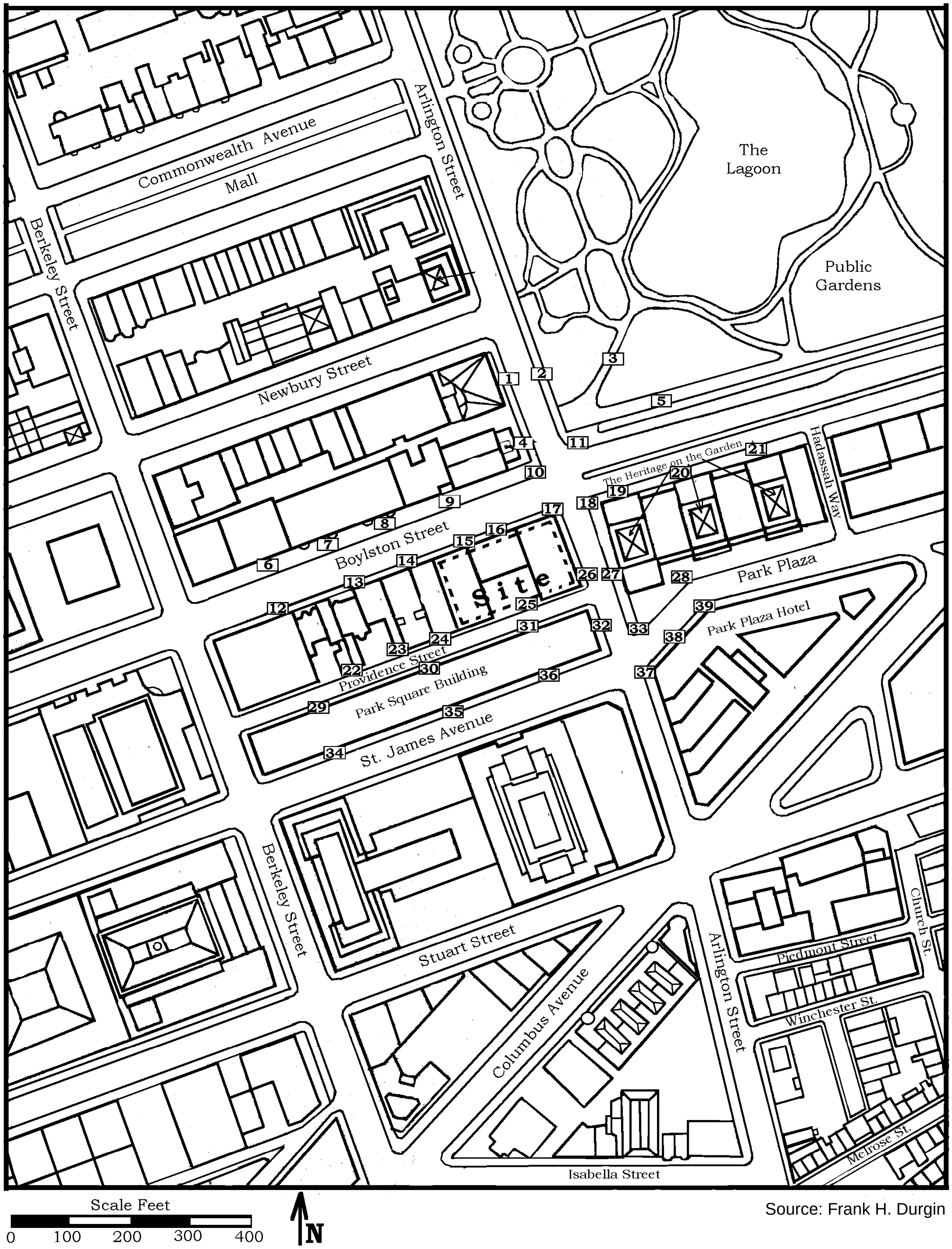
With the exception of the Boston Public Garden to the northeast, the site is surrounded by low-rise, mid-rise, and a few high-rise buildings. The Heritage on the Garden with its three towers is to the east of the site, the 180-foot Park Plaza Hotel is to the southeast, and the Park Square Building is to the south. The Park Square building is a slightly taller than the proposed Project. The remaining part of the block defined by Boylston, Arlington, Providence, and Berkeley Streets contains low- and mid-rise buildings up to about 85 feet. To the southwest is the original Berkeley Street Hancock Tower building and to the west the mid-rise building at 222 Berkeley Street. Further to the south southwest is the 800-foot Hancock Tower. To the north across Boylston Street are low- and mid-rise buildings from about 35 to 170 feet. The 170 foot building is taller than the proposed Project and offers sheltering for winds from the west northwest.

4.1.4 The Wind Climate

4.1.4.1 The Variation of Wind Speed with Height

In general, the natural wind is unsteady (i.e., it is gusty) and its average speed increases with height above the ground [1]. Figure 4.1-3 [1] depicts how the average wind speed varies with height for different types of terrain. While generally it does not happen, when one puts up any building, the possibility exists that the building will bring the higher speed winds at the top of the building down to ground level.

Figure 4.1-4 shows schematically how an isolated building interacts with the wind. Because the wind speed increases with height, as the wind is forced to a stop at the upwind façade, the pressure recovered on that façade is higher near the top than at the bottom of

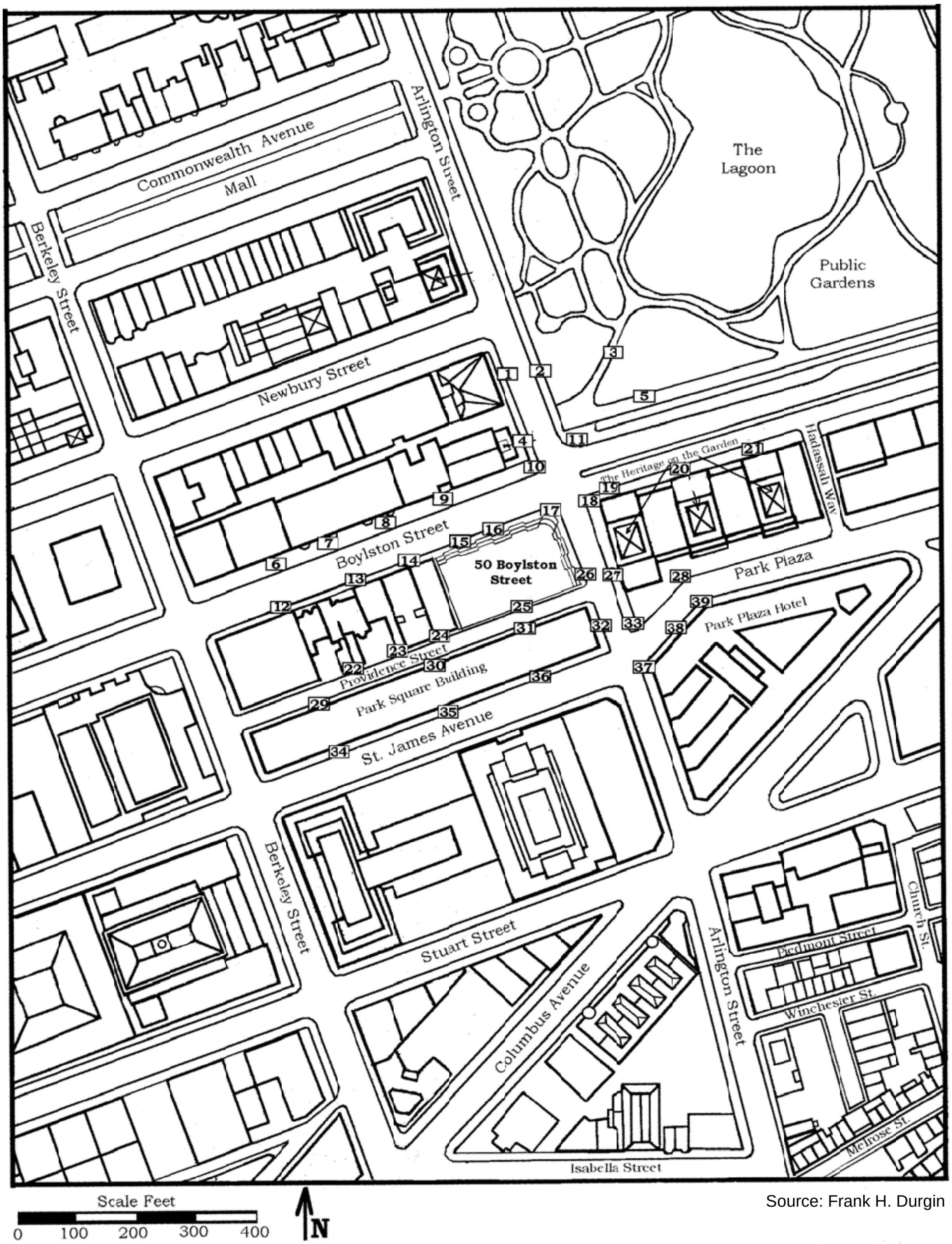


Source: Frank H. Durgin

350 Boylston Street Boston, Massachusetts

Figure 4.1-1

Map of Existing Conditions With PLW Location Numbers

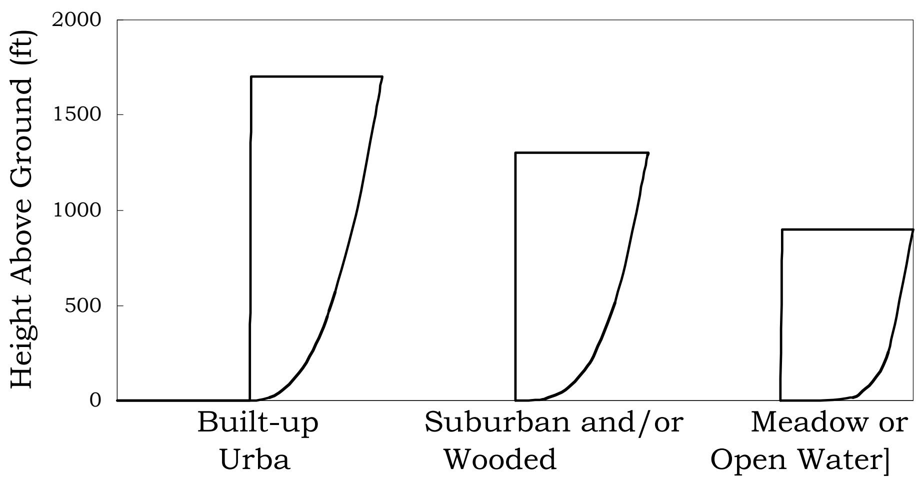


Source: Frank H. Durgin

350 Boylston Street Boston, Massachusetts

Figure 4.1-2

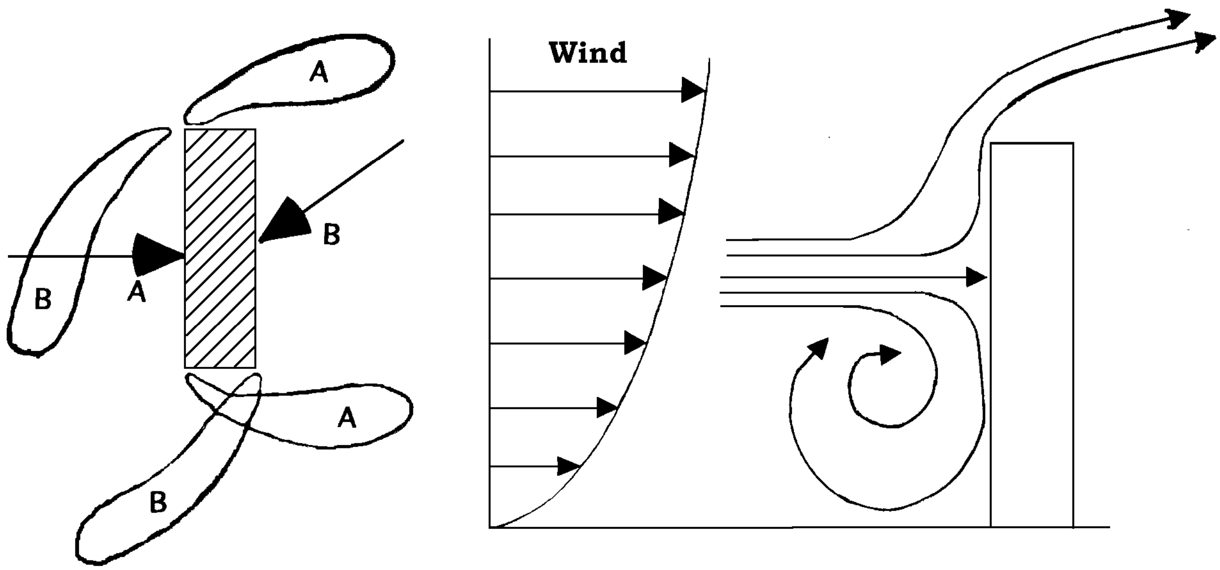
Map of Build Conditions With PLW Location Numbers



Source: Frank H. Durgin

Figure 4.1-3

Types of Earth's Boundary Layers After Davenport [1]



Source: Frank H. Durgin

Figure 4.1-4

Schematic of the Wind Interacting with a Typical Building the façade. As a result, the wind flows down the windward façade and forms the vortex upwind of the building shown in the figure. This vortex is stretched and accelerated as it goes around the two upwind lower corners, causing the accelerated flow areas (A) shown on the left hand side of Figure 4.1-4. Similar accelerated areas also occur for winds blowing at the corners of the building (B in Figure 4.1-4). Neither the existing nor the proposed Project are exposed in this way due to the surrounding buildings.

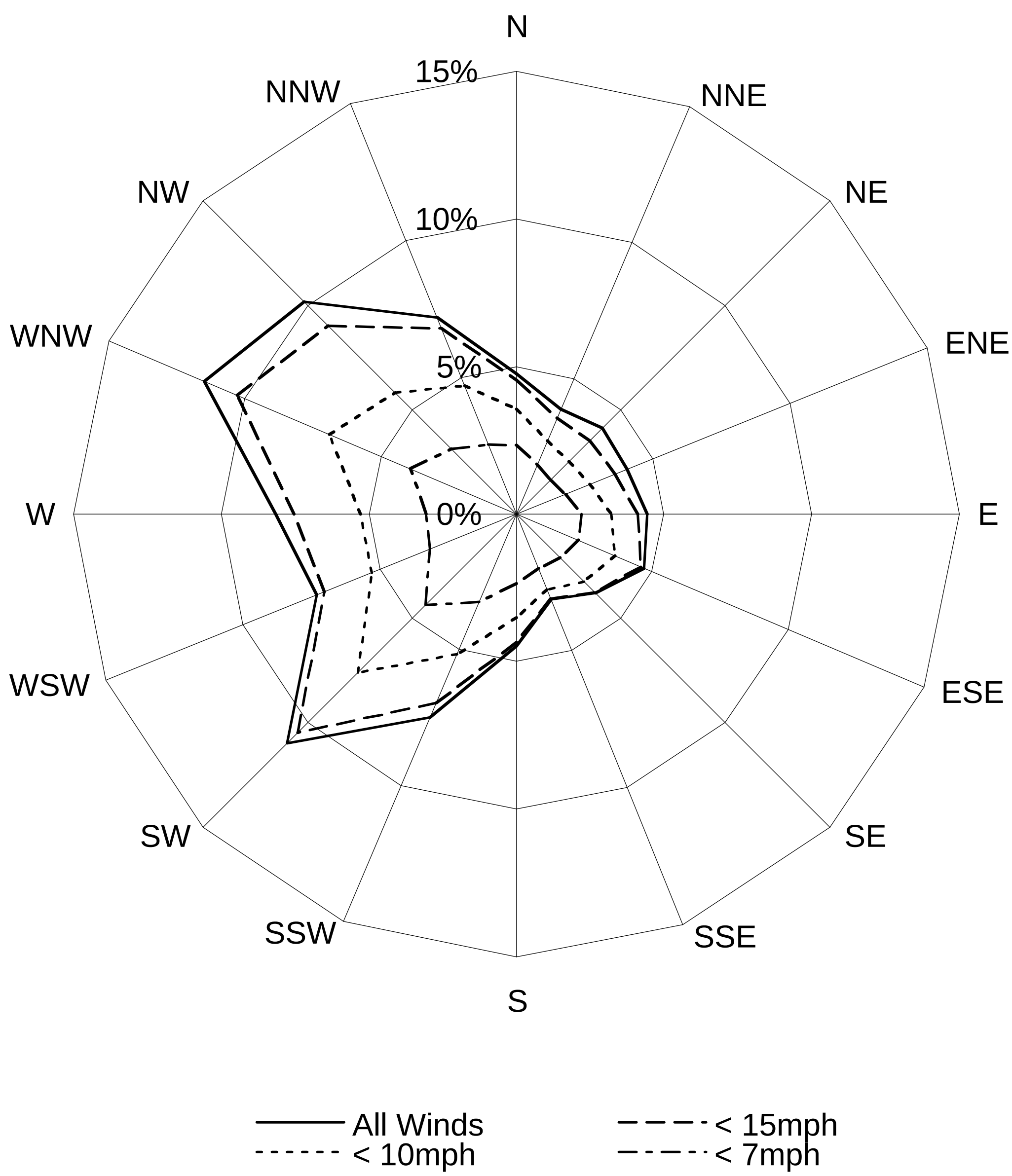
Buildings that do not change shape with height, if they are significantly taller than most of the surrounding buildings, almost invariably will be windy at their bases. However, when there are many buildings of similar height in an area, they tend to shelter one another. This is the case for the Project site and the proposed Project.

4.1.4.2 Statistical Description of the Boston Wind Climate

The Project site is located about four miles west southwest of Logan Airfield. Thus, the wind data from Logan Airfield usually used to define the winds for the Boston area is applicable. Figure 4.1-5 depicts a wind rose for Boston. The wind speeds are estimated at pedestrian level at the airport. The length of each line radiating from the center of the figure to the outermost crossing line is proportional to the total time the wind comes from that direction. The other lines crossing the radial lines indicate the frequency of winds less than 7, 10, and 15 mph. As noted in the figure, the wind rose is based on surface wind data from Logan Airfield taken from 1945 to 1965. Data from 1965 to 2006 is also available, but it is not believed to be as representative of the true winds in Boston. Many 25- to 40-story buildings have been built in the Financial District of Boston since 1965. The Financial District is just one mile south southwest of Logan Airfield.

Figure 4.1-5 shows that the winds in Boston come primarily from the northwest, west, and southwest. Figures 4.1-6 through 4.1-9 show pedestrian level wind roses for Boston for winter (December, January, and February), spring (March, April, and May), summer (June, July, and August), and fall (September, October, and November). These figures show that northwest winds tend to occur during the colder months and southwest winds during the warmer months. Spring and fall are transitional, but winds are stronger in the spring than in the fall. Strong easterly winds usually occur during storms when there is precipitation.

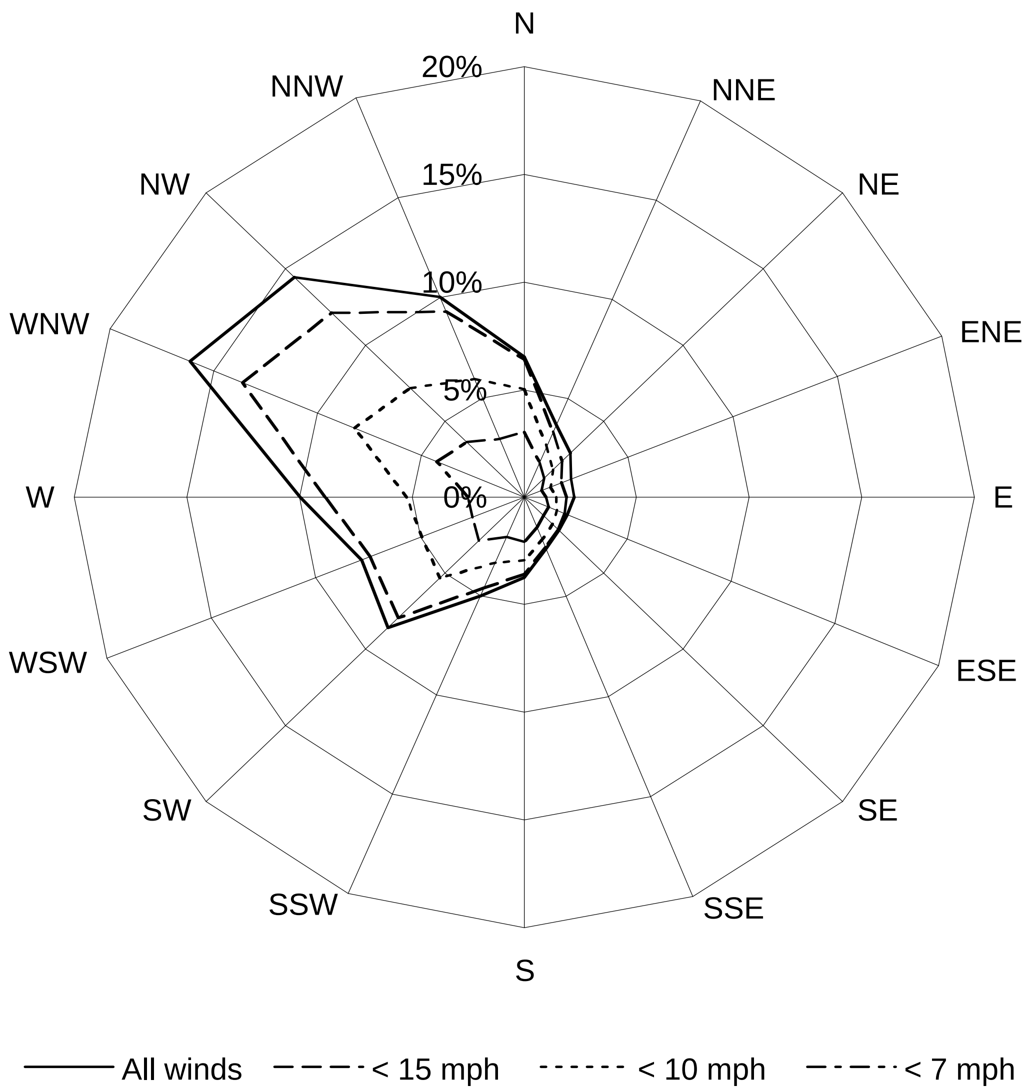
The average wind speed at Logan Airfield at 58 feet (the average height at which the data was taken) is 12.9 mph. At pedestrian height (i.e., at chest height, 4.5 feet) it is about 8.6 mph. The average wind speeds at 58 and 4.5 feet at Logan Airfield for each month are shown in Figure 4.1-10. Seasonally, the average wind speed at pedestrian level is 9.4 mph in the winter, 9.2 mph in the spring, 7.4 mph in the summer, and 8.2 mph in the fall.



Source: Frank H. Durgin

Figure 4.1-5

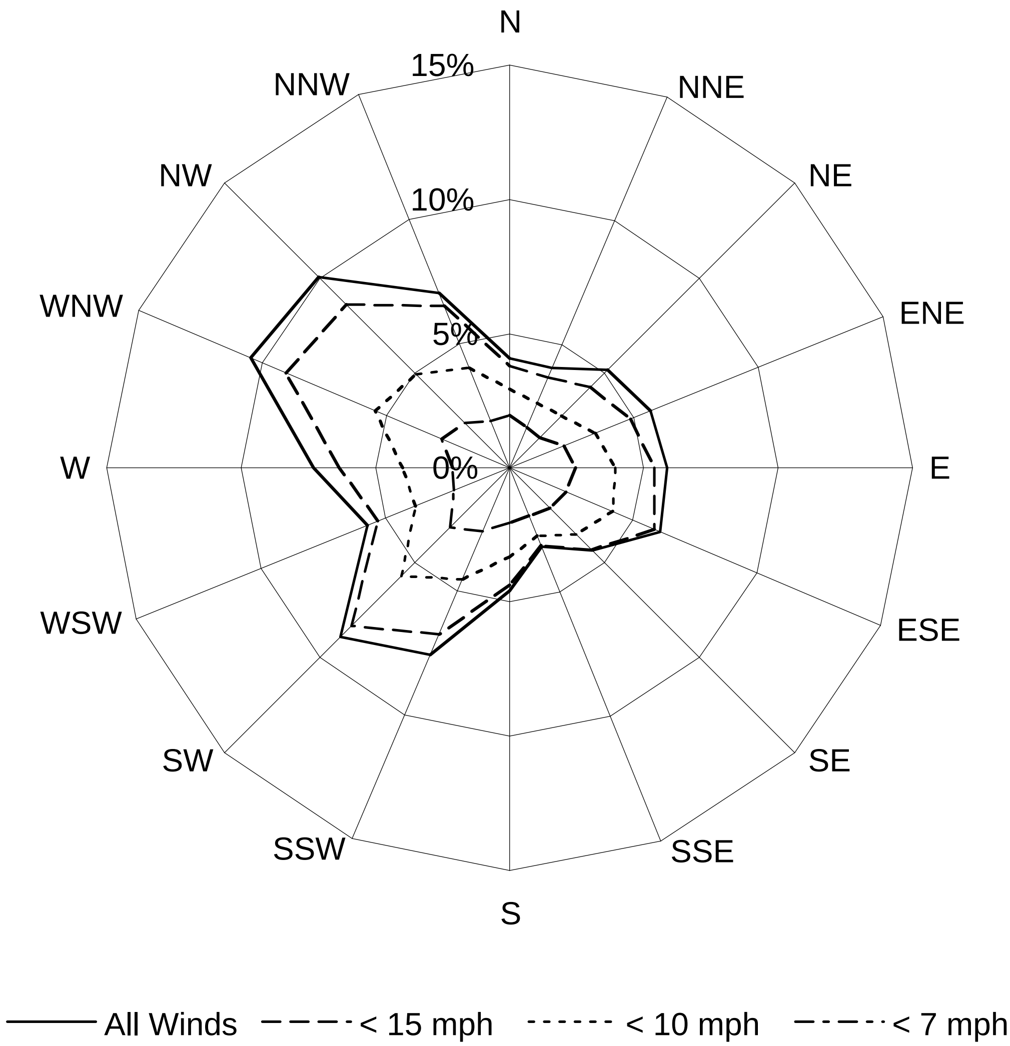
Annual Pedestrian Level Wind Rose for Boston Based on Surface Data from Logan Airfield 1945-1965



Source: Frank H. Durgin

Figure 4.1-6

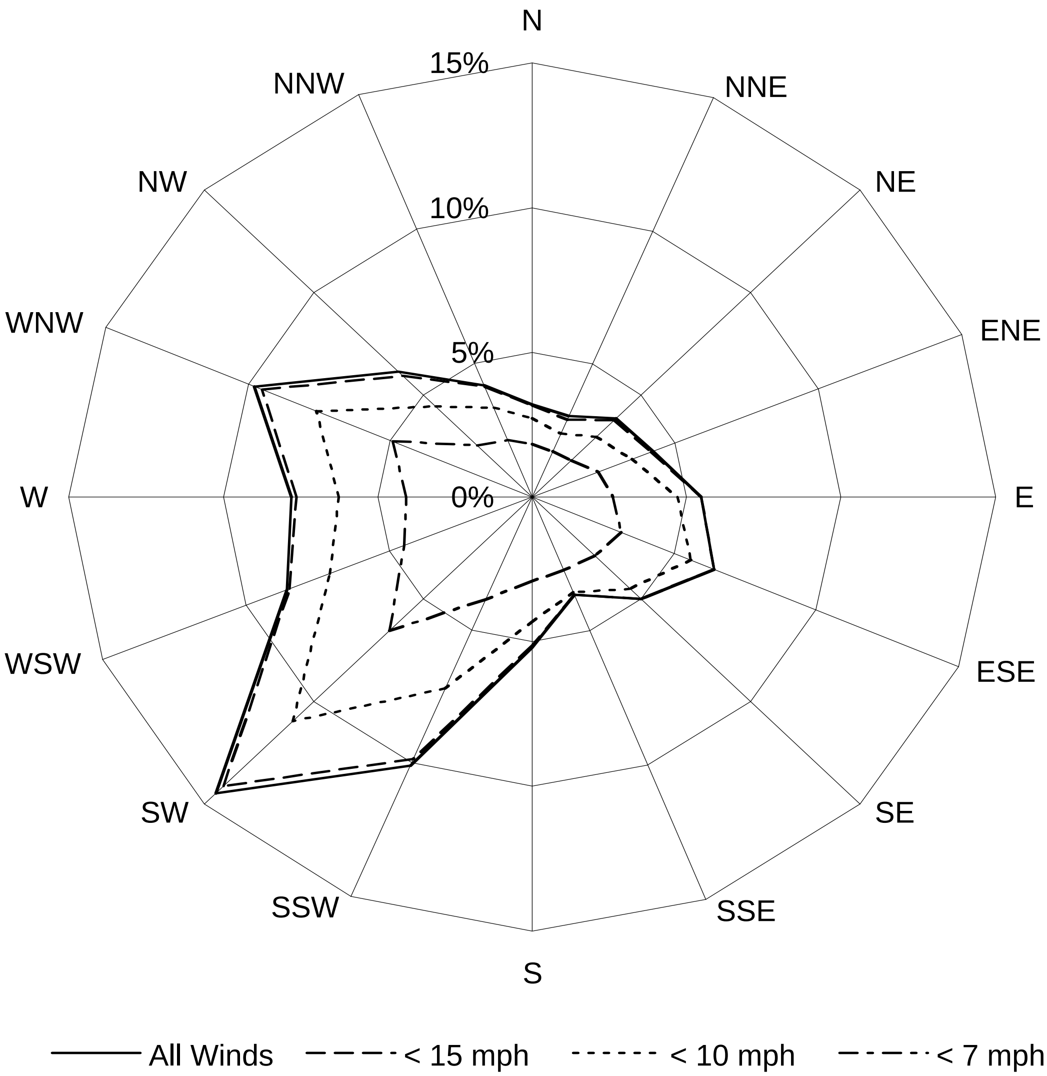
Winter (December, January, February) Pedestrian Level Wind Rose for Boston Based on Surface Data from Logan Airfield 1945-1965



Source: Frank H. Durgin

Figure 4.1-7

Spring (March, April, May) Pedestrian Level Wind Rose for Boston Based on Surface Data from Logan Airfield 1945-1965

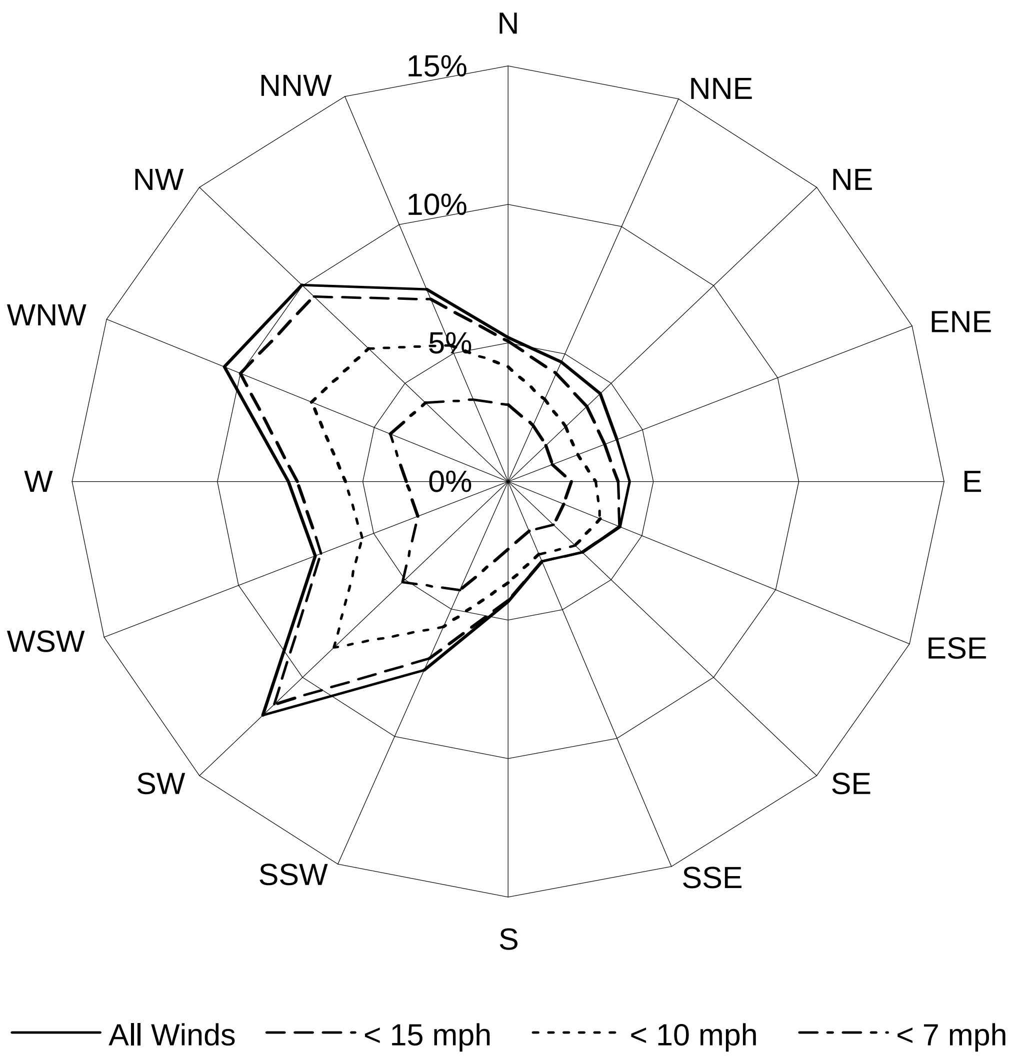


Source: Frank H. Durgin

Figure 4.1-8

Summer (June, July, August) Pedestrian Level Wind Rose for Boston

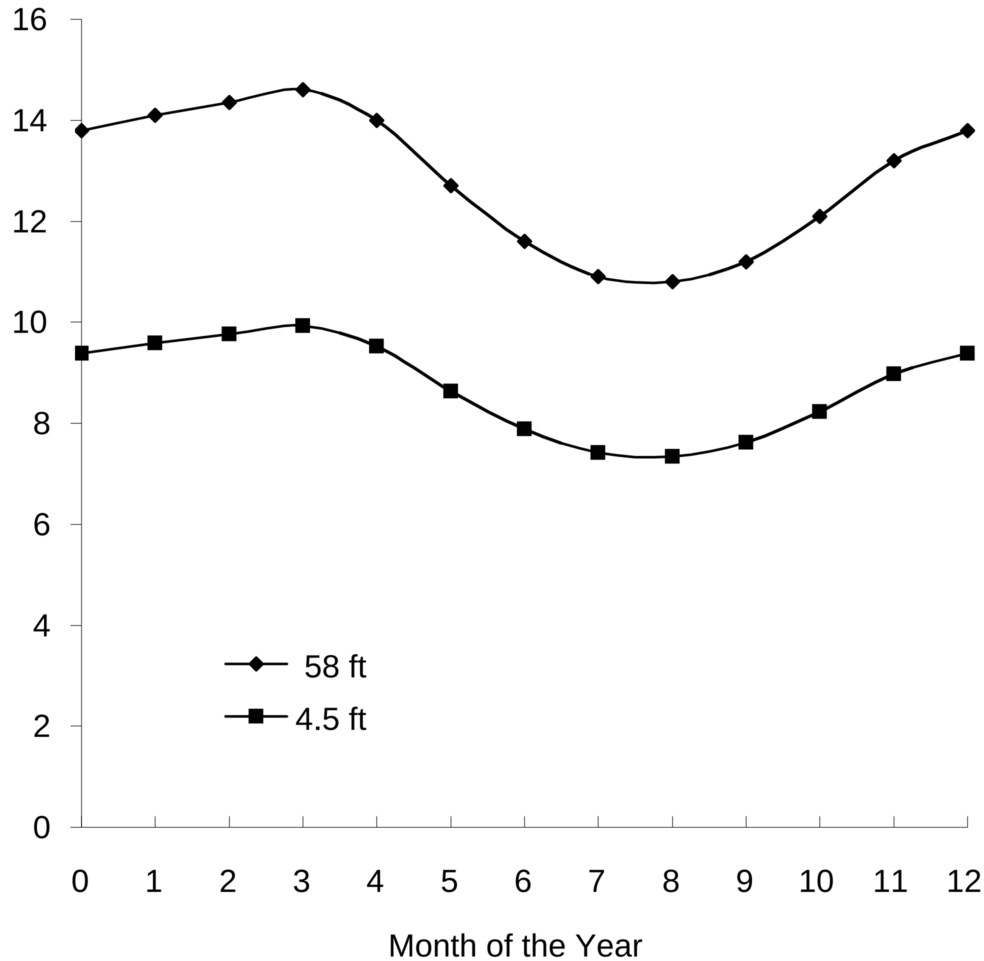
Based on Surface Data from Logan Airfield 1945-1965



Source: Frank H. Durgin

Figure 4.1-9

Fall (September, October, November) Pedestrian Level Wind Rose for Boston Based on Surface Data from Logan Airfield 1945-1965



Yearly Average is 12.9 mph at 58 feet

Source: Frank H. Durgin

Figure 4.1-10

Average Wind Speed at Logan Airfield Based on Surface Data from 1945-1965

Criteria

Since the early 1980s, the BRA has used a guideline criterion for acceptable winds of not exceeding a 31 mph effective gust more often than once in 100 hours. The effective gust is defined as the average wind speed plus 1.5 times the root mean square variation about the average. The effective gust can be shown to be about the fastest one-minute gust in an hour. When many locations are considered, the effective gust averages about 1.4 times the average hourly wind speed [3]. However, that ratio can vary widely from 1.4 for individual locations.

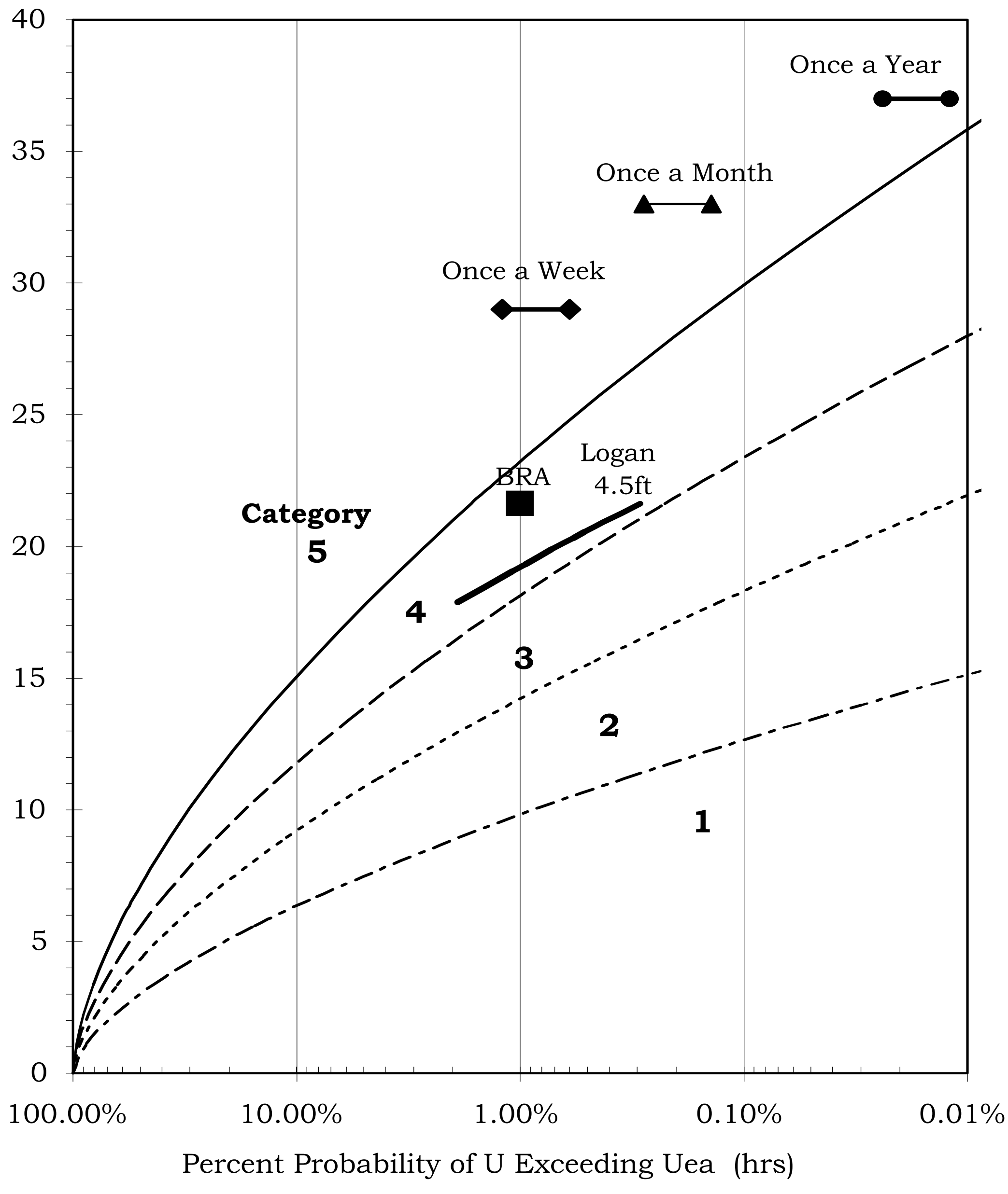
In 1978, Melbourne [2] developed a probabilistic criteria for average and peak PLWs, which accounted for different types of pedestrian activity as well as the safety aspects of such winds. Durgin [3] suggested the use of an Equivalent Average which combines the effects of average, gusting, and peak winds and later [4 and 5] reinterpreted Melbourne's criteria to apply to Equivalent Average winds (Figure 4.1-11). The Equivalent Average used in this figure is similar to an hourly average, but combines the effects of steady and gusting winds. Five categories of PLWs are defined:

1. Comfortable for Long Periods of Standing or Sitting;
2. Comfortable for Short Periods of Standing and Sitting;
3. Comfortable for Walking;
4. Uncomfortable for Walking;
5. Dangerous and Unacceptable.

These criteria are not absolute (any location can have dangerous winds in a major storm or hurricane). Rather, they imply that the location would have wind speeds such that the activity suggested could be undertaken comfortably most of the time, and would be perceived[1] as such, by most people who frequent the location. For example, the PLWs at Logan Airfield are in Category 4 (uncomfortable for walking) but near the dividing line between Category 4 and Category 3 (comfortable for walking) (see Figure 4.1-11). They are well under the BRA 31 mph effective gust wind speed guideline (converted to an equivalent average wind), however, which is in high Category 4. Therefore, most people would probably perceive conditions in the open at Logan Airfield as marginally comfortable for walking.

---

[1] On a somewhat windy day, a person familiar with the location would choose not to go there for the specified activity.



Source: Frank H. Durgin

Epsilon ASSOCIATES INC.

Figure 4.1-11

Pedestrian Level Wind Criteria for Equivalent Average Winds

4.1.5 Pedestrian Level Winds at the Site

The following sections include a discussion of the effects of northwest winter winds, southwest summer winds, and easterly storm winds for existing and build conditions. The results from northwest, southwest, and storm directions are summarized by an estimated prediction of the annual PLW Category at each location considered. When a PLW Category does not change, it does not mean the PLWs did not increase or decrease, but only that they did not change sufficiently for the PLW Category to change.

The estimated Categories for all locations, wind directions, and annual winds for both existing and build conditions are shown in Figures 4.1-12 to 4.1-19. The results for all locations, wind directions, and annual winds are tabulated in Table 4.1-1.

For the most part the weather in New England is dominated by either large coastal storms (fall, winter, and spring) or the Bermuda High (summer). Typically, when a coastal storm occurs, it rains or snows for four to 12 hours, then it clears, and, as the storm moves to the northeast, the winds blow from the northwest for three or four days until the next weather system arrives. These storms and the northwest winds following them occur mostly in the fall, winter, and spring. Northwest winds are particularly uncomfortable in the winter, when typically they occur on cold days. The Bermuda High is generally responsible for the southwest winds that occur in the summer.

4.1.5.1 Northwest (Winter) Winds

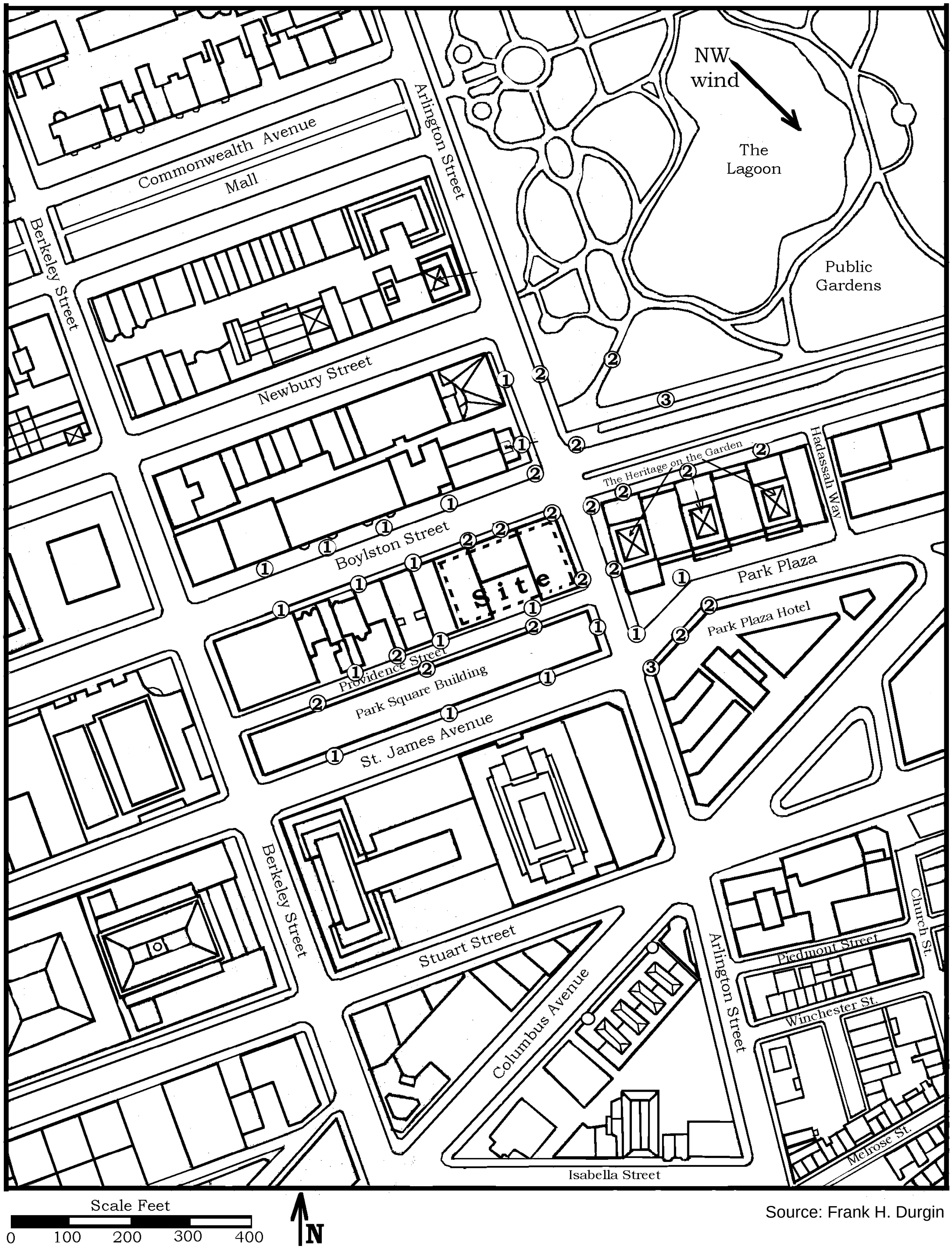
As shown in Figure 4.1-12, winter winds blow from the northwest, and the results for northwest winds include the effects of all winds blowing from west to north. The estimated Categories for all locations for existing and build conditions for northwest winds are shown in Figures 4.1-12 and 4.1-13 (also see Table 4.1-1).

For northwest winds, the PLW Category at 38 of the 39 locations considered did not change. The PLW Category at location 37 improved by one Category, due to sheltering effects of the proposed building. The PLW Category did not worsen at any location.

4.1.5.2 Southwest (Summer) Winds

Winds from the southwest are the prevailing winds in the summer. The results for southwest winds, as shown in Figure 4.1-14, include effects of all winds blowing from south to west. The estimated categories for all locations for existing and build conditions are shown in Figures 4.1-14 and 4.1-15 (also see Table 4.1-1).

For southwest winds, the PLW Category does not change at any of the 39 locations considered. This does not mean that the PLWs did not change, but only that they did not change sufficiently to cause a change in PLW Category.



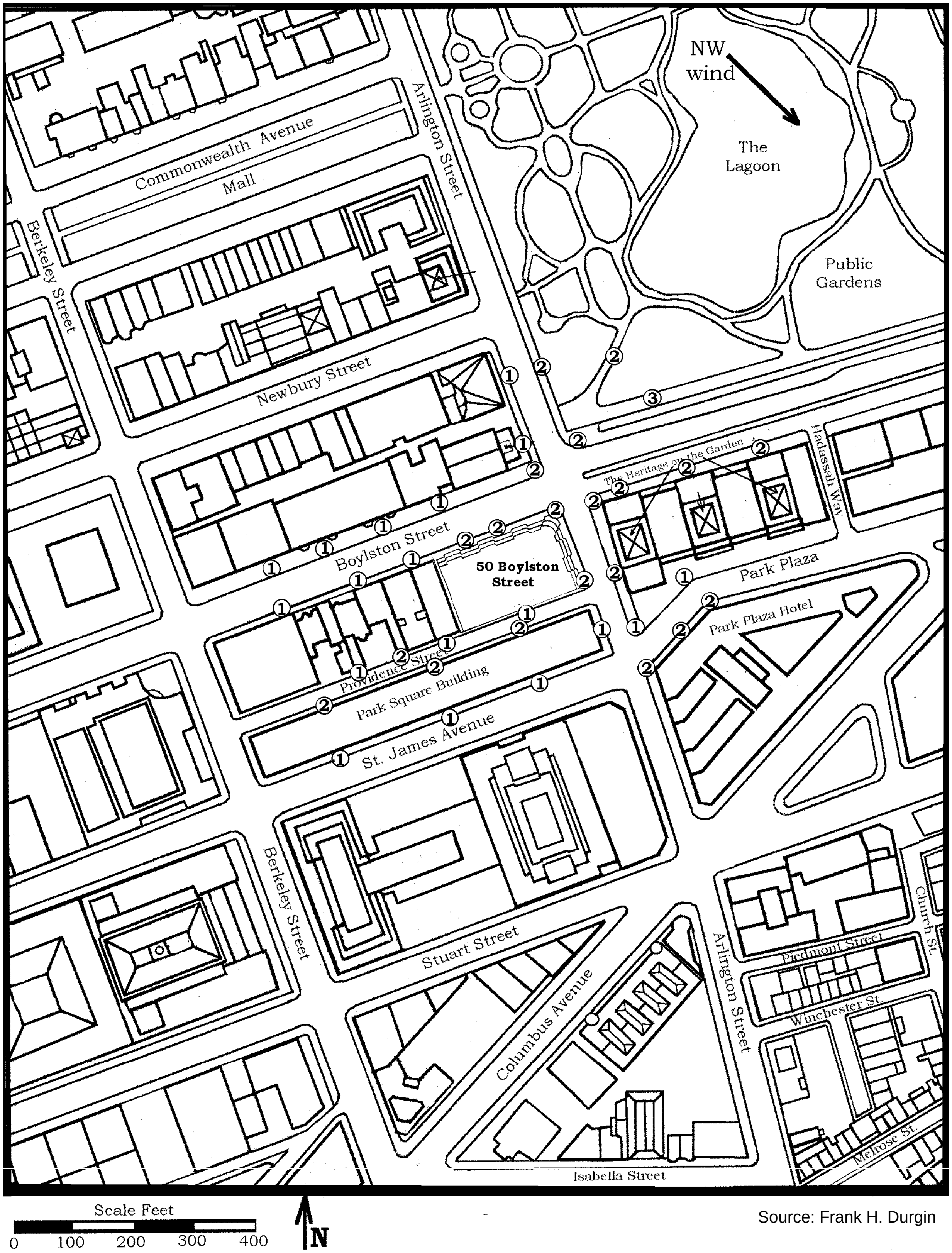
Source: Frank H. Durgin

350 Boylston Street Boston, Massachusetts

Epsilon ASSOCIATES INC.

Figure 4.1-12

PLW Categories for NW Winds and Existing Conditions



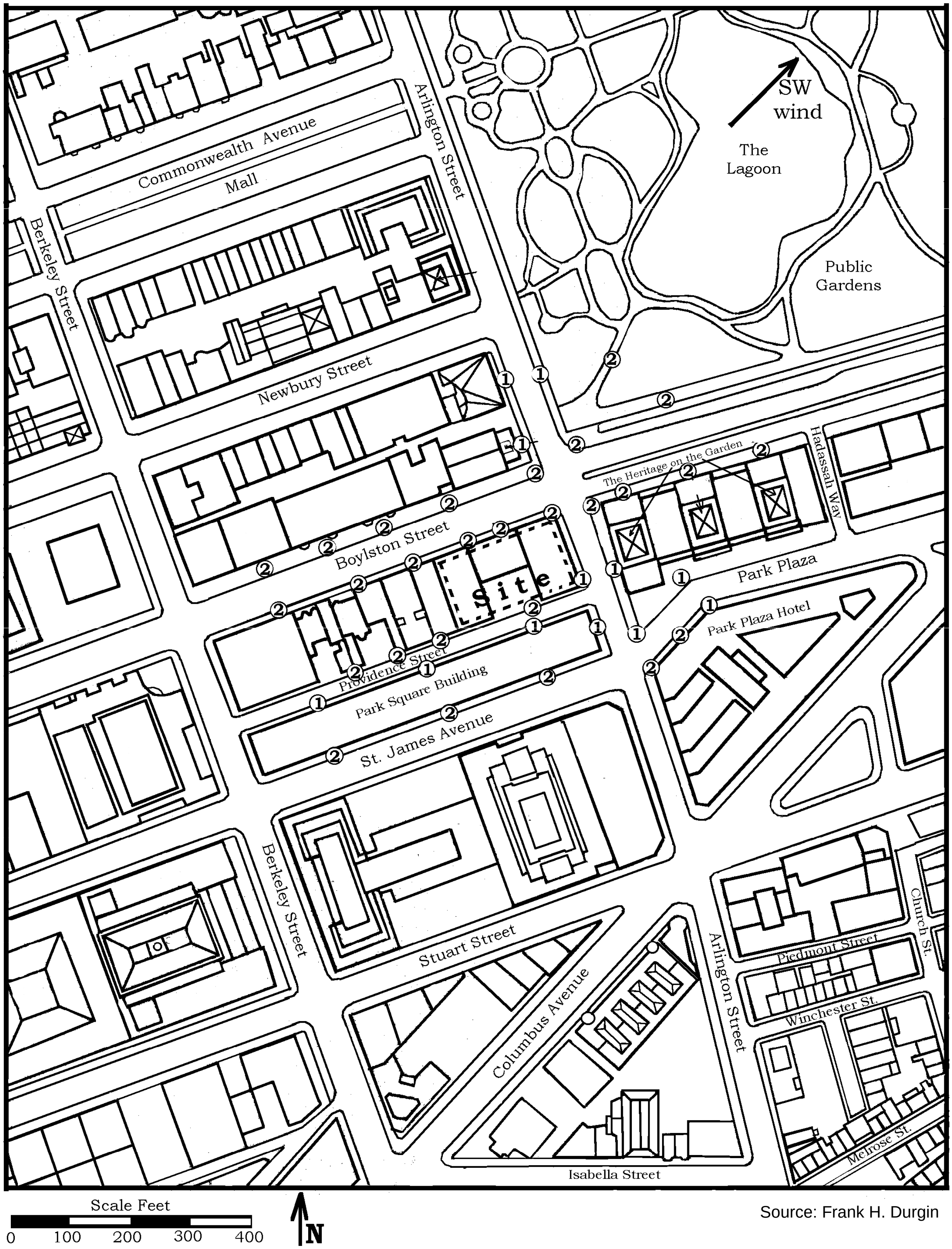
Source: Frank H. Durgin

350 Boylston Street Boston, Massachusetts

Epsilon ASSOCIATES INC.

Figure 4.1-13

PLW Categories for NW Winds and Build Conditions



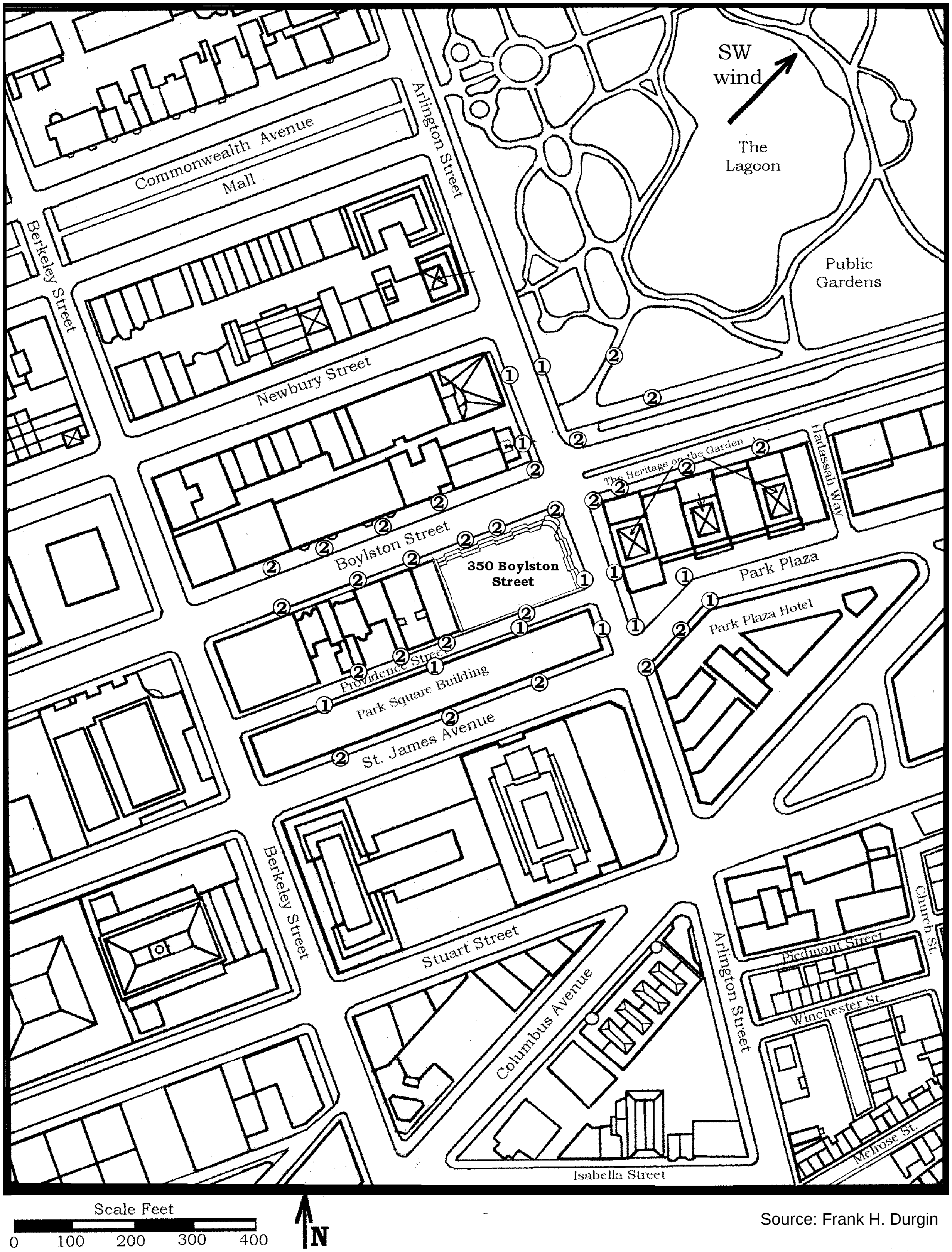
Source: Frank H. Durgin

350 Boylston Street   Boston, Massachusetts

Epsilon ASSOCIATES INC.

Figure 4.1-14

PLW Categories for SW Winds and Existing Conditions



Source: Frank H. Durgin

350 Boylston Street   Boston, Massachusetts

Epsilon ASSOCIATES INC.

Figure 4.1-15

PLW Categories for SW Winds and Build Conditions

4.1.5.3 Easterly Storm Winds

Easterly winds occur about one-third of the time. Light easterly winds occur as a storm starts or in the summer as a sea breeze. During the first four to 12 hours of a typical coastal storm, it rains or snows depending on the temperature. The wind is from the northeast or southeast depending on whether the center of the storm passes to the east or west of the city. The results for easterly storm winds includes the effects of all winds blowing from north to east to south (i.e., from the eastern side of the compass).

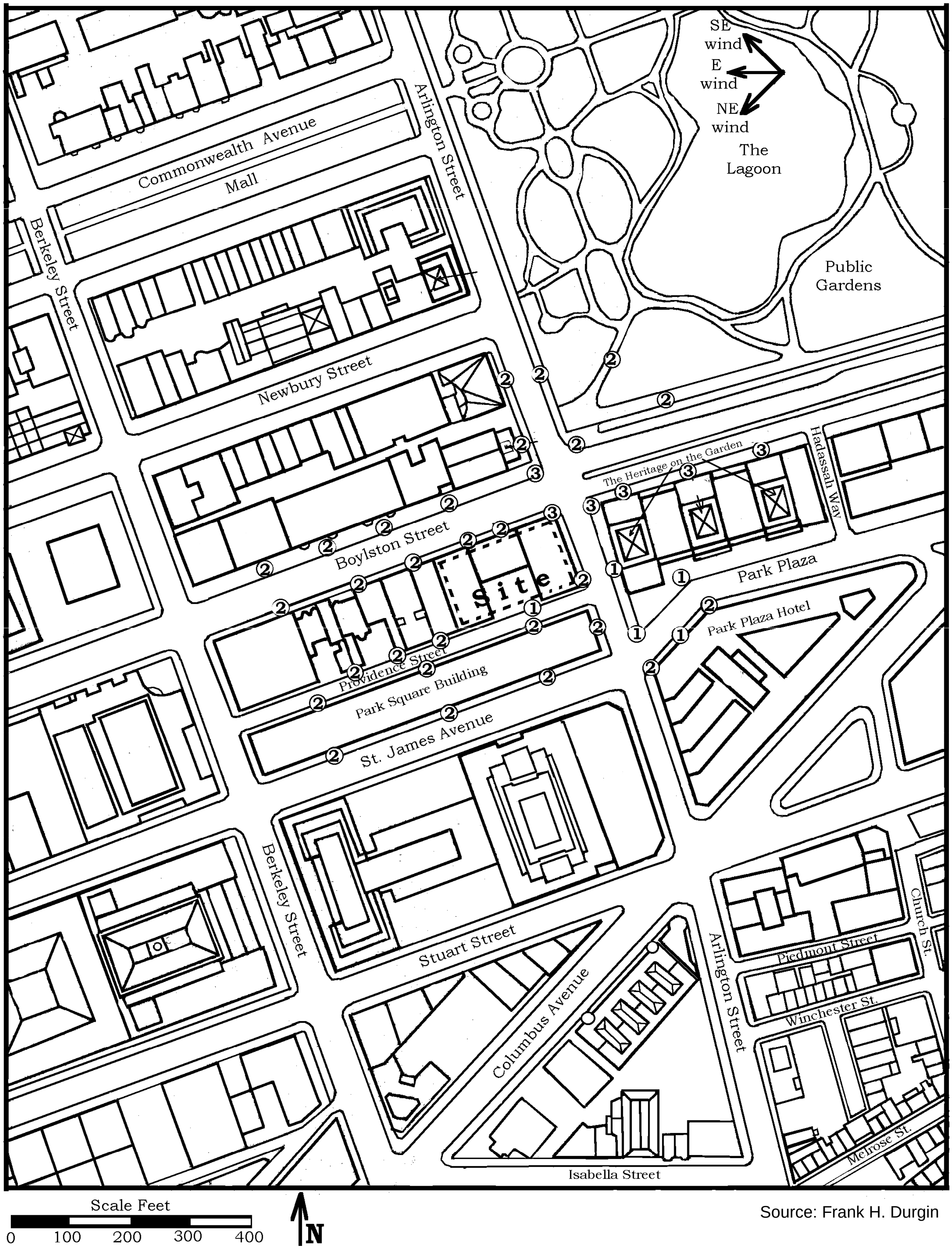
Since for strong easterly winds it will generally be raining or snowing, and people expect it to be windy, the emphasis in evaluating the effect of the proposed Project should be on entering or exiting the building. The Categories for all easterly wind directions from north-east-south were estimated and have been combined to obtain a single result for easterly winds. It is important to note that the total time the winds come from all of these easterly directions is about the same as the time the wind comes from either the northwest or southwest quadrants.

The estimated Categories for all locations for existing and build conditions are shown in Figures 4.1-16 and 4.1-19 (see Table 4.1-1).

For easterly winds, PLW Categories at 30 of the 39 locations considered are estimated to remain unchanged. The PLWs improved by one Category at locations 22, 23, 24, and 31 due to the increased sheltering of the proposed Project compared to the existing buildings. The PLWs worsened by one Category at locations 12, 13, 14, and 15 due to the increased height of the proposed Project compared to the existing buildings, but are still comfortable for walking.

4.1.5.4 Annual Winds

In the above discussion, only winds from three general wind directions are discussed. While those are important directions related to seasons and storms, one cannot infer the overall annual windiness at any location from those results. PLW Categories were estimated for the eight major wind directions (i.e., from the northeast, east, southeast, south, southwest, west, northwest, and north directions). Those estimated categories were then used with an eight compass point statistical description of the Boston wind climate to estimate the overall annual category for each of the 25 locations considered. The resulting estimated categories for each location for existing and build conditions are listed in the last column in Tables 4.1-1. In comparing these annual estimates with those for the five specific directions, it is important to note that the total occurrence of winds from the easterly directions is roughly equal to that for either northwest or southwest. These annual estimates are qualitative.

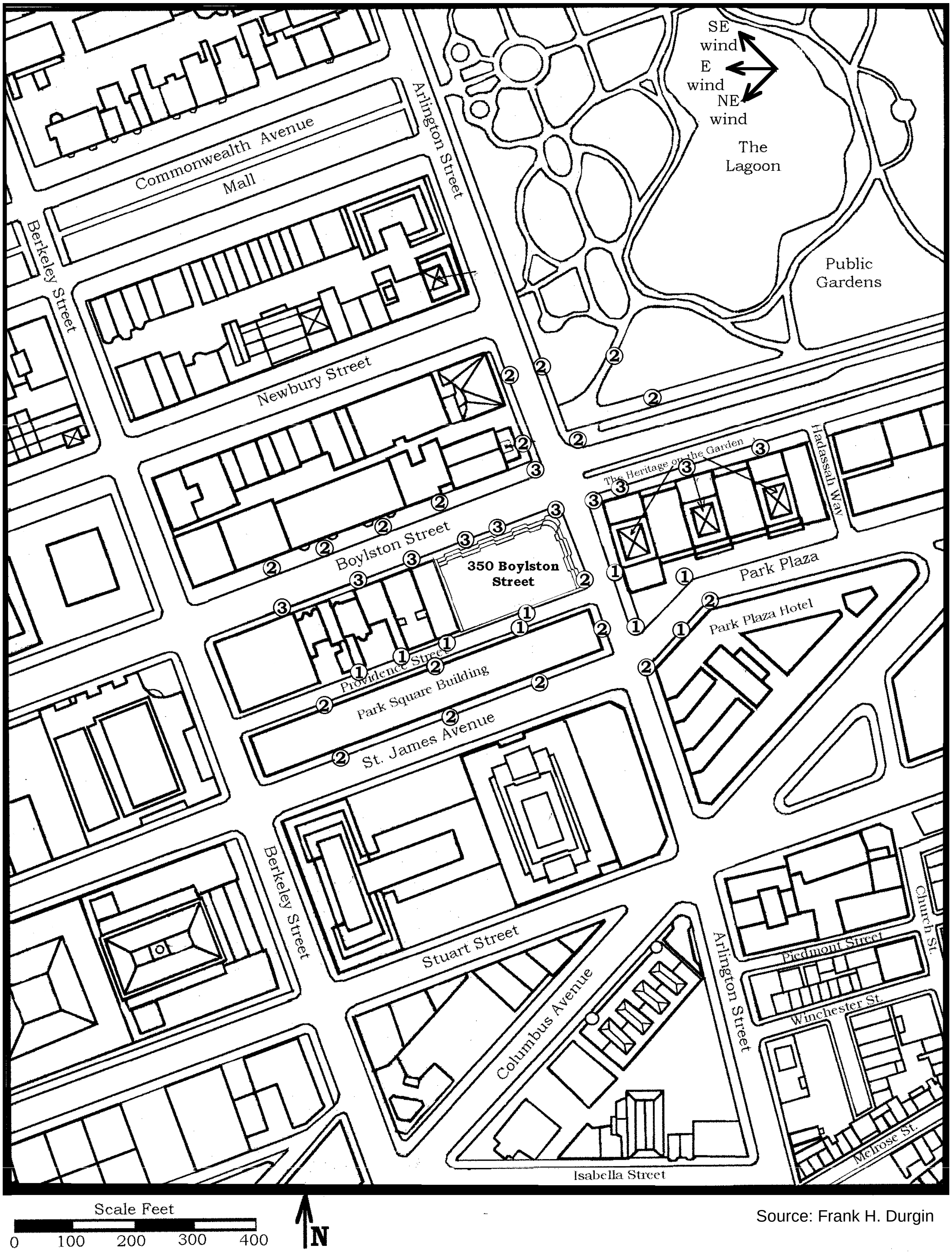


Source: Frank H. Durgin

350 Boylston Street Boston, Massachusetts

Figure 4.1-16

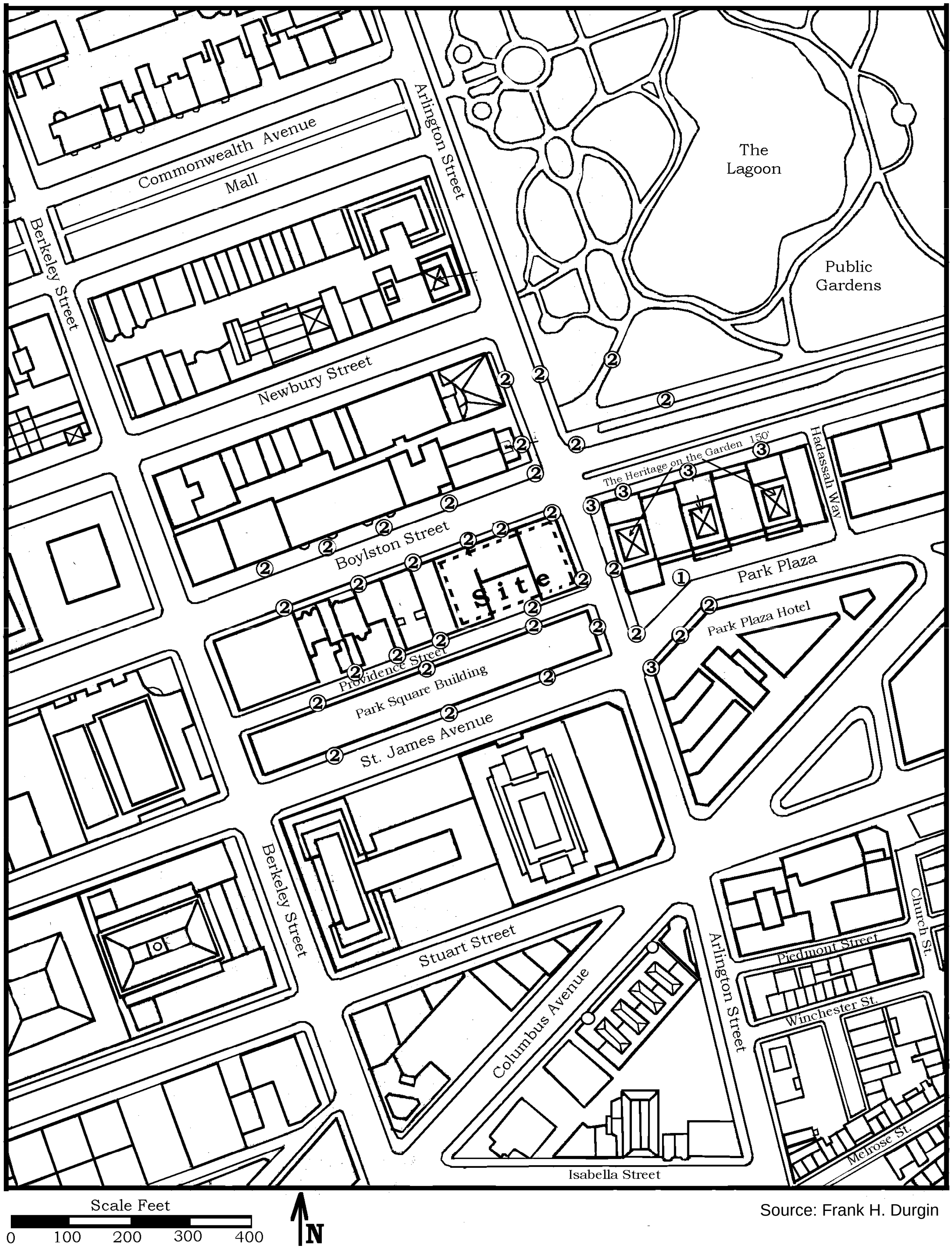
PLW Categories for Easterly Storm Winds and Existing Conditions



Source: Frank H. Durgin

Figure 4.1-17

PLW Categories for Easterly Storm Winds and Build Conditions



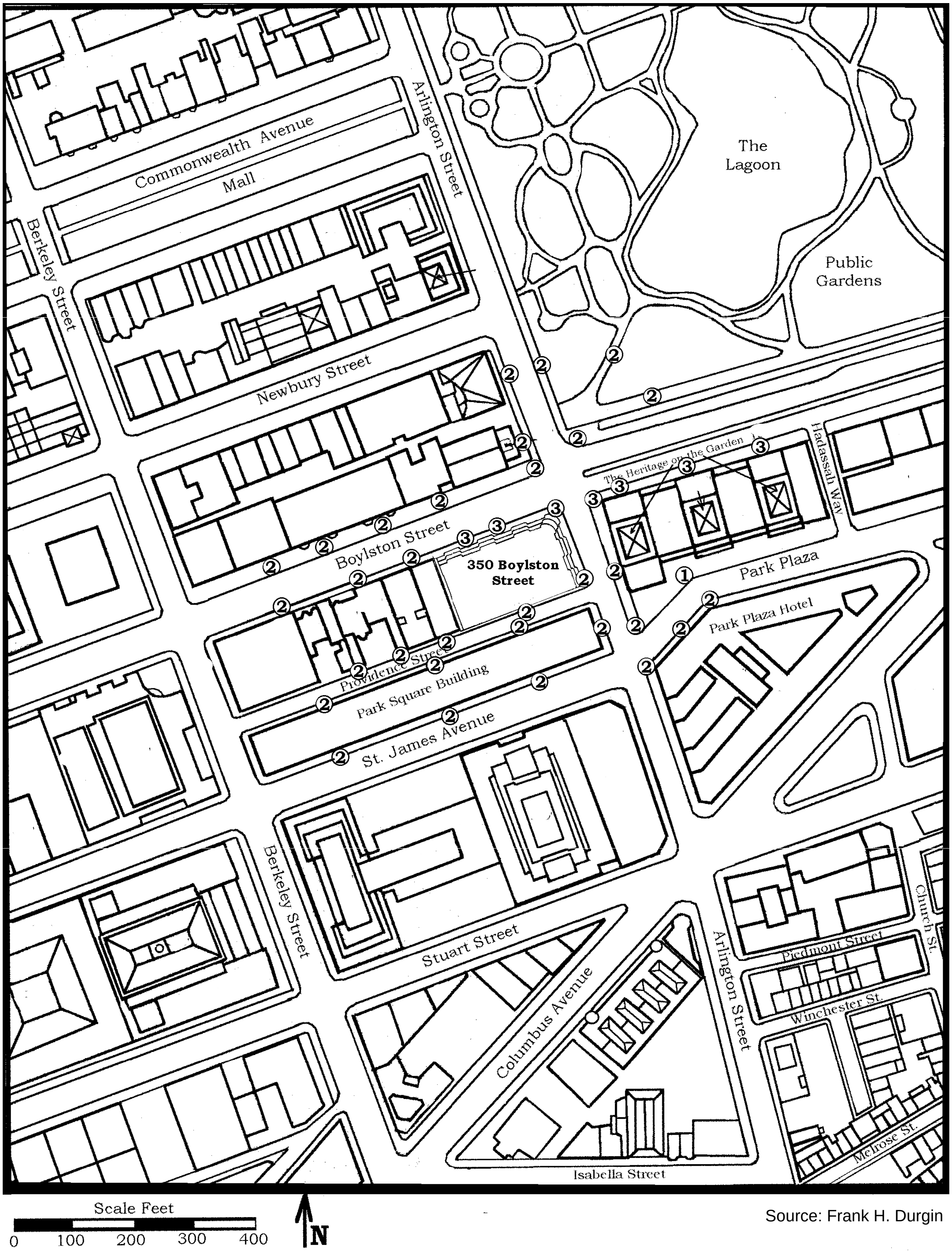
Source: Frank H. Durgin

350 Boylston Street Boston, Massachusetts

Epsilon ASSOCIATES INC.

Figure 4.1-18

PLW Categories for Annual Winds and Existing Conditions



Source: Frank H. Durgin

350 Boylston Street Boston, Massachusetts

Figure 4.1-19

PLW Categories for Annual Winds and Build Conditions

For annual winds, 35 of the 39 locations considered are expected not to change PLW Category. Of the four other locations, the annual PLWs are estimated to improve by one Category at location 37, and worsen by one Category at locations 15, 16, and 17, but are still comfortable for walking.

4.1.6 Conclusions

A qualitative assessment has been made to determine the effect of the proposed building at 350 Boylston Street in Boston, Massachusetts, on PLWs in its vicinity. Results are obtained for both existing and build conditions.

None of the 39 locations considered for either existing or build conditions is estimated to have PLWs that exceed the BRA guideline wind speed of 31 mph more often than once in 100 hours. In fact, although the proposed Project tends to increase PLWs slightly, all locations for both existing and build conditions have estimated PLWs in Category 3 (Comfortable for walking) or better, and most are in Category 2 (Comfortable for short periods of sitting or standing).

Detailed results are presented in Figures 4.1-12 to 4.1-19 and Table 4.1-1.

For this assessment, it has been assumed that there is no landscaping for existing conditions and none associated with the proposed Project. However, because the Boston Public Garden has trees and shrubs, and because the Project will include new street trees and canopies and awnings over lobby and retail spaces, this methodology reflects a conservative approach and the actual PLWs may be less than estimated at some locations.

4.1.7 References

1. Davenport, A.G., and Isyumov, N., “The Application of the Boundary Layer Wind Tunnel to the Prediction of Wind Loading”, Proceedings of Intl. Seminar on Wind Effects on Buildings and Structures, Ottawa, Canada, September, 1967.

2. Melbourne, W.H., “Criteria for Environmental Wind Conditions”, Journal of Industrial Aerodynamics, Vol.3, 1978, pp. 241-249.

3. Durgin, F.H., “Use of the Equivalent Average for Evaluating Pedestrian Level Winds”, Presented at the Sixth U.S National Conf. On Wind Engineering, University of Houston, Houston, Texas, March 7-10, 1989, Journal of Wind Engineering and Industrial Aerodynamics, Vol. 36, pp. 817-828, 1990.

4. Durgin, F.H., "Pedestrian Level Wind Studies at the Wright Brothers Facility", Progress in Wind Engineering (Proc. of the 8th International Conference on Wind Engineering), New York, Elsevier, Part 4, 1992, pp. 2253-2264.

5. Durgin, F.H., "Pedestrian Level Wind Criteria Using the Equivalent Average", Journal of Wind Engineering and Industrial Aerodynamics, Vol. 66 (1997), pp. 215-226.

Table 4.1-1 Estimated Categories for Northwest, Southwest, Easterly Storm, and Annual Winds for Existing and Build Conditions

Location	Northwest		Southwest		Storm		Annual	
Number	Existing	Build	Existing	Build	Existing	Build	Existing	Build
1	1	1	1	1	2	2	2	2
2	2	2	1	1	2	2	2	2
3	2	2	2	2	2	2	2	2
4	1	1	1	1	2	2	2	2
5	3	3	2	2	2	2	2	2
6	1	1	2	2	2	2	2	2
7	1	1	2	2	2	2	2	2
8	1	1	2	2	2	2	2	2
9	1	1	2	2	2	2	2	2
10	2	2	2	2	3	3	2	2
11	2	2	2	2	2	2	2	2
12	1	1	2	2	2	3	2	2
13	1	1	2	2	2	3	2	2
14	1	1	2	2	2	3	2	2
15	2	2	2	2	2	3	2	3
16	2	2	2	2	2	3	2	3
17	2	2	2	2	3	3	2	3
18	2	2	2	2	3	3	3	3
19	2	2	2	2	3	3	3	3
20	2	2	2	2	3	3	3	3
21	2	2	2	2	3	3	3	3
22	1	1	2	2	2	1	2	2
23	2	2	2	2	2	1	2	2
24	1	1	2	2	2	1	2	2
25	1	1	2	2	1	1	2	2
26	2	2	1	1	2	2	2	2
27	2	2	1	1	1	1	2	2
28	1	1	1	1	1	1	1	1
29	2	2	1	1	2	2	2	2
30	2	2	1	1	2	2	2	2
31	2	2	1	1	2	1	2	2
32	1	1	1	1	2	2	2	2
33	1	1	1	1	1	1	2	2
34	1	1	2	2	2	2	2	2
35	1	1	2	2	2	2	2	2
36	1	1	2	2	2	2	2	2
37	3	2	2	2	2	2	3	2
38	2	2	2	2	1	1	2	2
39	2	2	1	1	2	2	2	2

4.2 Shadow Impacts

4.2.1 Introduction and Methodology

A shadow impact analysis was conducted to investigate shadow impacts from the Project during three time periods (9:00 AM, 12:00 noon, and 3:00 PM) during the summer solstice (June 21), autumnal equinox (September 21), and the winter solstice (December 21). Due to the change in legislation regarding Eastern Daylight Time (Daylight Saving Time), the shadow impacts from the vernal equinox (March 21) and the autumnal equinox would be virtually the same. For this study, the vernal equinox shadow impacts are studied as if March 21 were still in Standard Time, meaning they are studied during the time periods of 10:00 AM, 1:00 PM, and 4:00 PM. In addition, shadow studies were conducted for the 6:00 PM time period during the summer solstice and autumnal equinox.

The shadow analysis presents net new shadows from the Project. The analysis focuses on public open spaces, major pedestrian areas, and the sidewalks adjacent to and in the vicinity of the Project site. Shadows have been determined using the applicable Altitude and Azimuth data for Boston, shown in Table 4.2-1.

Table 4.2-1 Azimuth and Altitude Data

Date	Local Time	Solar Position	
		Altitude	Azimuth
March 21	10:00 AM EDT	33.0	125.7
	1:00 PM EDT	48.0	-176.9
	4:00 PM EDT	30.5	-121.8
June 21	9:00 AM EDT	39.9	93.5
	12:00 PM EDT	68.8	149.4
	3:00 PM EDT	56.5	-113.7
	6:00 PM EDT	23.9	-79.3
September 21	9:00 AM EDT	25.9	115.3
	12:00 PM EDT	47.4	166.0
	3:00 PM EDT	37.4	-132.9
	6:00 PM EDT	7.3	-96.0
December 21	9:00 AM EST	14.2	141.9
	12:00 PM EST	24.1	-175.6
	3:00 PM EST	10.0	-135.1

4.2.2 Compliance Chapter 384 of the Acts of 1992

The Project is in compliance with Chapter 384 of the Acts of 1992, an Act Protecting the Boston Public Garden, known as the Public Garden Shadow Act. The Public Garden Shadow Act prohibits a permit-granting authority such as the BRA from authorizing a structure which would cast "new shadow" on the Public Garden, with certain exceptions set forth in Section 2 of the Act.

Section 1 of the Act defines "new shadow" as "the casting of a shadow at any time on an area which is not cast in shadow at such time by a structure which exists or for which a building permit has been granted on the date upon which application is made to a permit-granting authority for a proposed structure and **which would not be cast in shadow by a structure conforming to as-of-right height limits allowed by the Boston Zoning Code as in effect on May 1, 1990**" (emphasis added). Figure 4.2-13 shows the shadow which would be cast on December 21 by a structure conforming to the as-of-right Zoning Code as in effect on May 1, 1990 and compares the shadow which will be cast by the proposed Project to that shadow. Although, as discussed further below, a minor portion of the Public Garden will be in shadow cast by the proposed Project at 12:00 PM on December 21, that shadow is within the boundaries of a larger area which would be cast in shadow by a structure on the site conforming to the as-of-right height limit in effect on May 1, 1990. Accordingly, the Project does not cast "new shadow" as defined under the Public Garden Shadow Act, and the Project is in compliance with the Act.

4.2.3 Vernal Equinox (March 21)

No new shadow will be cast onto the Public Garden or the Arlington Street Church at 10:00 AM, 1:00 PM or 4:00 PM during the vernal equinox.

At 10:00 AM during the vernal equinox, shadow will be cast in a northwesterly direction across a minor portion of Boylston Street and a portion of Boylston Street's northern sidewalk.

At 1:00 PM, shadow will be cast in a northeasterly direction across minor portions of Boylston Street and Arlington Street, and across a minor portion of Arlington Street's eastern sidewalk.

At 4:00 PM, most of the area will be under existing shadow and the Project will not create any new shadow.

Figures 4.2-1 through 4.2-3 show shadow impacts during the vernal equinox.

proposed

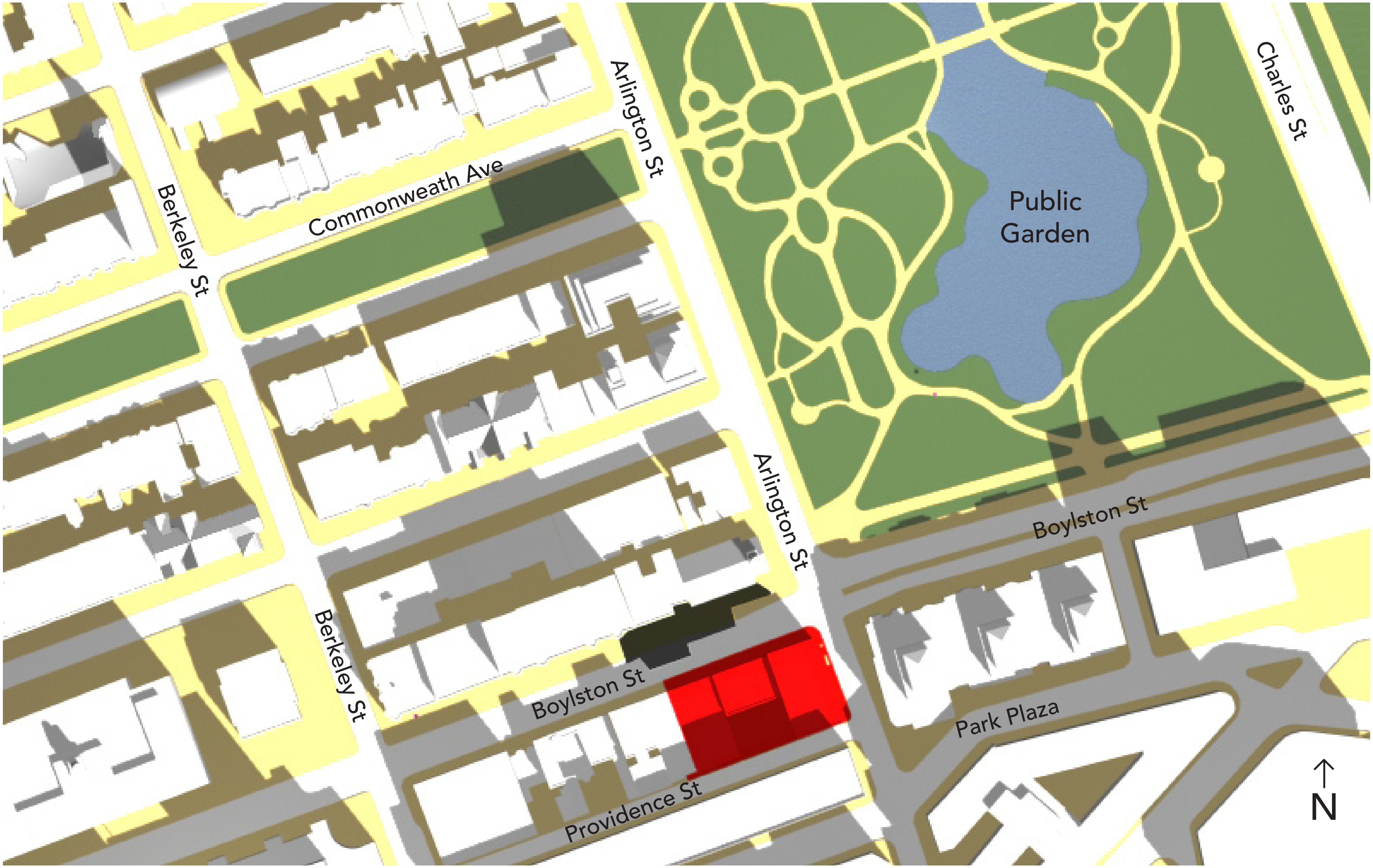


Figure 4.2-1

March 21, 2008
10:00am EDT

cbt

350 Boylston St
shadow analysis

proposed

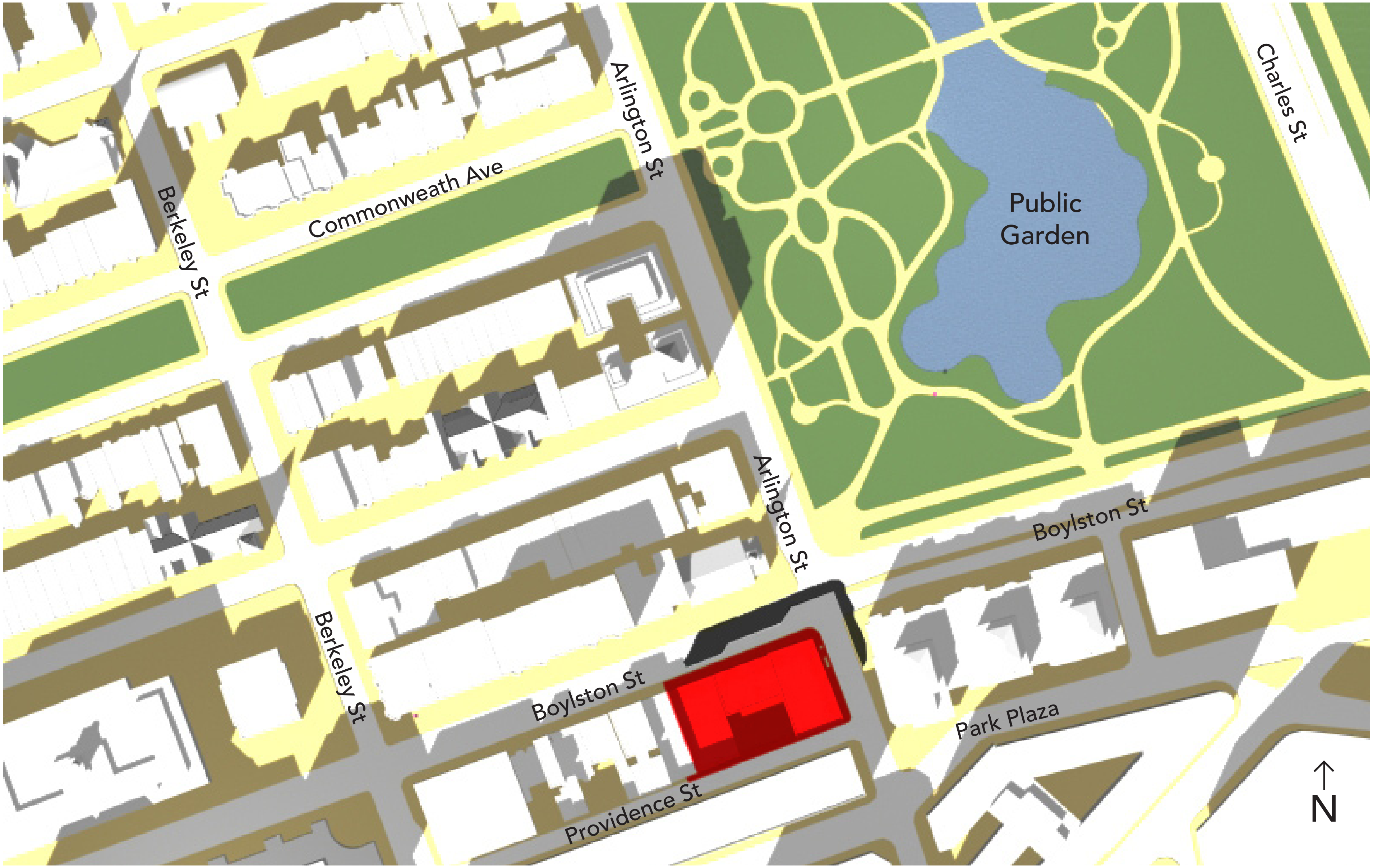


Figure 4.2-2

March 21, 2008
1:00pm EDT

cbt

350 Boylston St
shadow analysis

proposed

Figure 4.2-3

March 21, 2008
4:00pm EDT

cbt

350 Boylston St
shadow analysis

4.2.4 Summer Solstice (June 21)

No new shadow will be cast onto the Public Garden or the Arlington Street Church at 9:00 AM, 12:00 PM, 3:00 PM or 6:00 PM during the summer solstice.

At 9:00 AM during the summer solstice, new shadow will be cast northwesterly across a minor portion of Boylston Street.

At 12:00 PM, new shadow will be cast onto a minor portion of Boylston Street and a minor portion of its southern sidewalk.

At 3:00 PM, new shadow will be cast onto a minor portion of Arlington Street, and onto a minor portion of the eastern sidewalk of Arlington Street.

At 6:00 PM, new shadow is cast easterly across minor portions of Providence Street, its sidewalks, Park Plaza and Park Plaza's southern sidewalk.

Figures 4.2-4 through 4.2-7 show shadow impacts during the summer solstice.

proposed

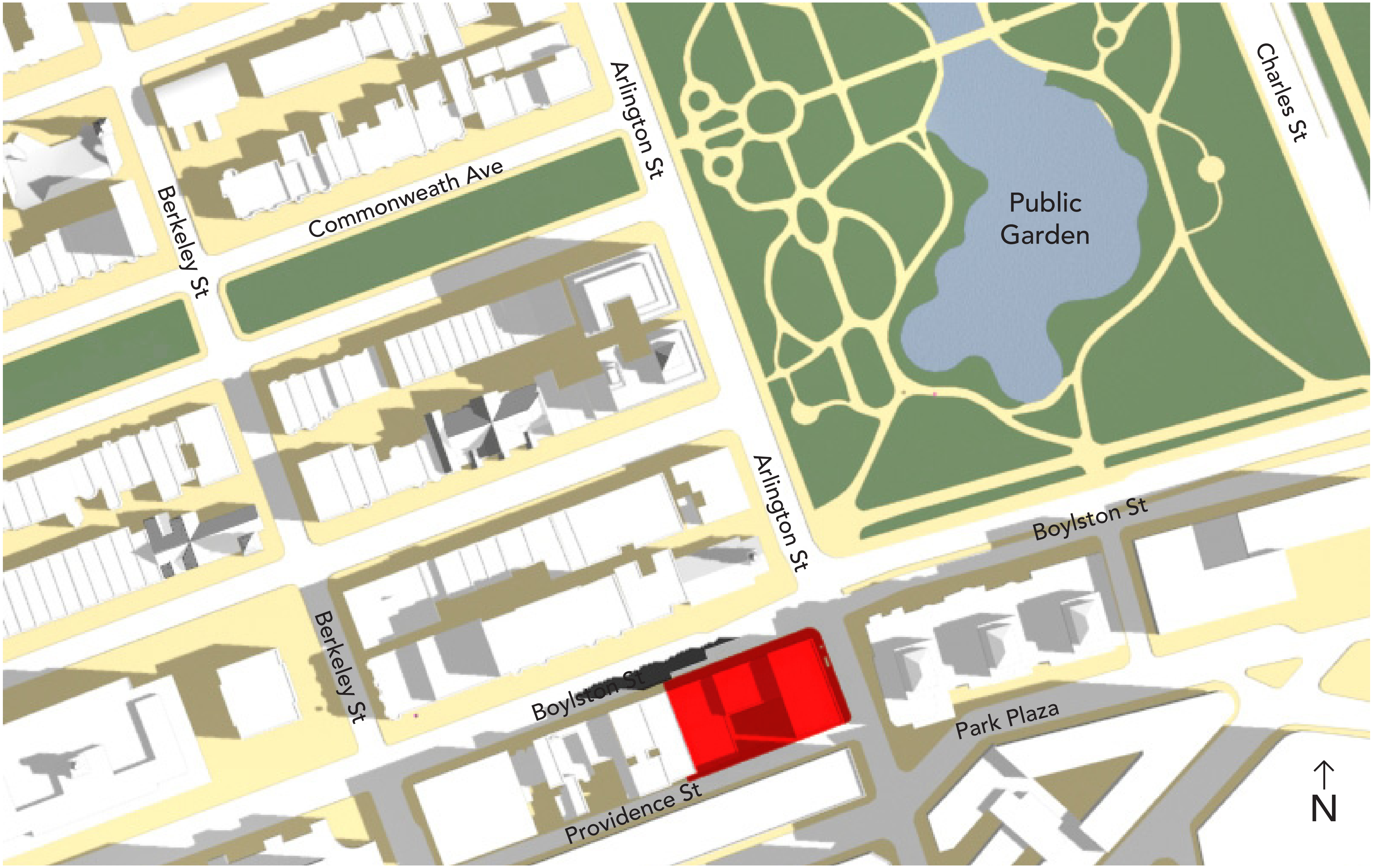


Figure 4.2-4

June 21, 2008
9:00am EDT

cbt

350 Boylston St
shadow analysis

proposed

Figure 4.2-5

June 21, 2008
12:00pm EDT

cbt

350 Boylston St
shadow analysis

proposed

Figure 4.2-6

June 21, 2008
3:00pm EDT

cbt

350 Boylston St
shadow analysis

proposed

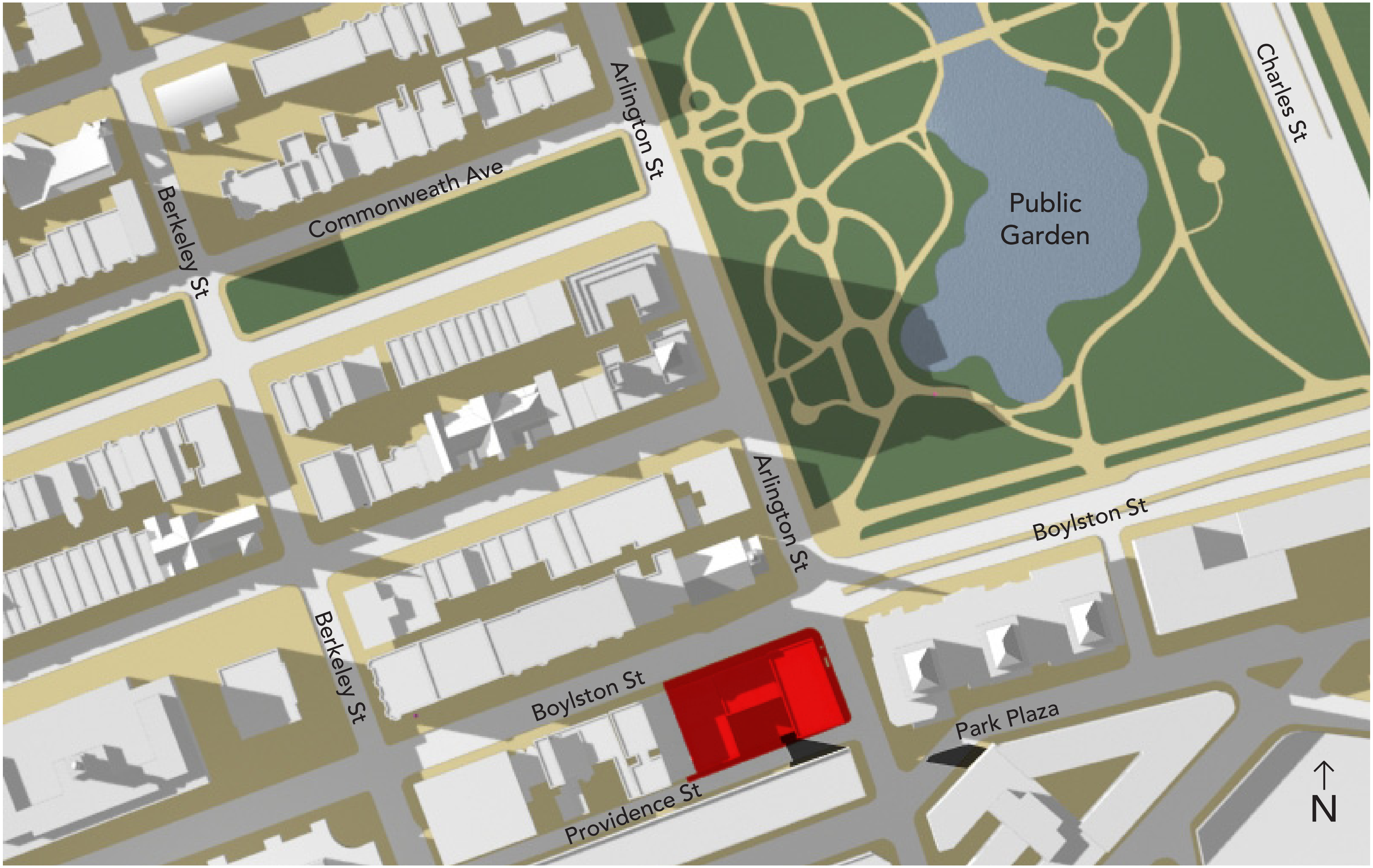


Figure 4.2-7

June 21, 2008
6:00pm EDT

cbt

350 Boylston St
shadow analysis

4.2.5 Autumnal Equinox (September 21)

No new shadow will be cast onto the Public Garden or the Arlington Street Church at 9:00 AM, 12:00 PM, 3:00 PM or 6:00 PM during the autumnal equinox.

At 9:00 AM during the autumnal equinox, shadow will be cast in a northwesterly direction across a minor portion of Boylston Street and a portion of Boylston Street's northern sidewalk.

At 12:00 PM, shadow will be cast northerly onto a portion of Boylston Street and its northern sidewalk.

At 3:00 PM, new shadow will be cast northeasterly across minor portions of Boylston Street and Arlington Street, and across a minor portion of the southern sidewalk of Boylston Street.

At 6:00 PM, most of the area is under existing shadow. New shadow will be cast easterly across a portion of the roof of The Heritage on the Garden and Park Plaza and its southern sidewalk.

Figures 4.2-8 through 4.2-11 show shadow impacts during the autumnal equinox.

proposed

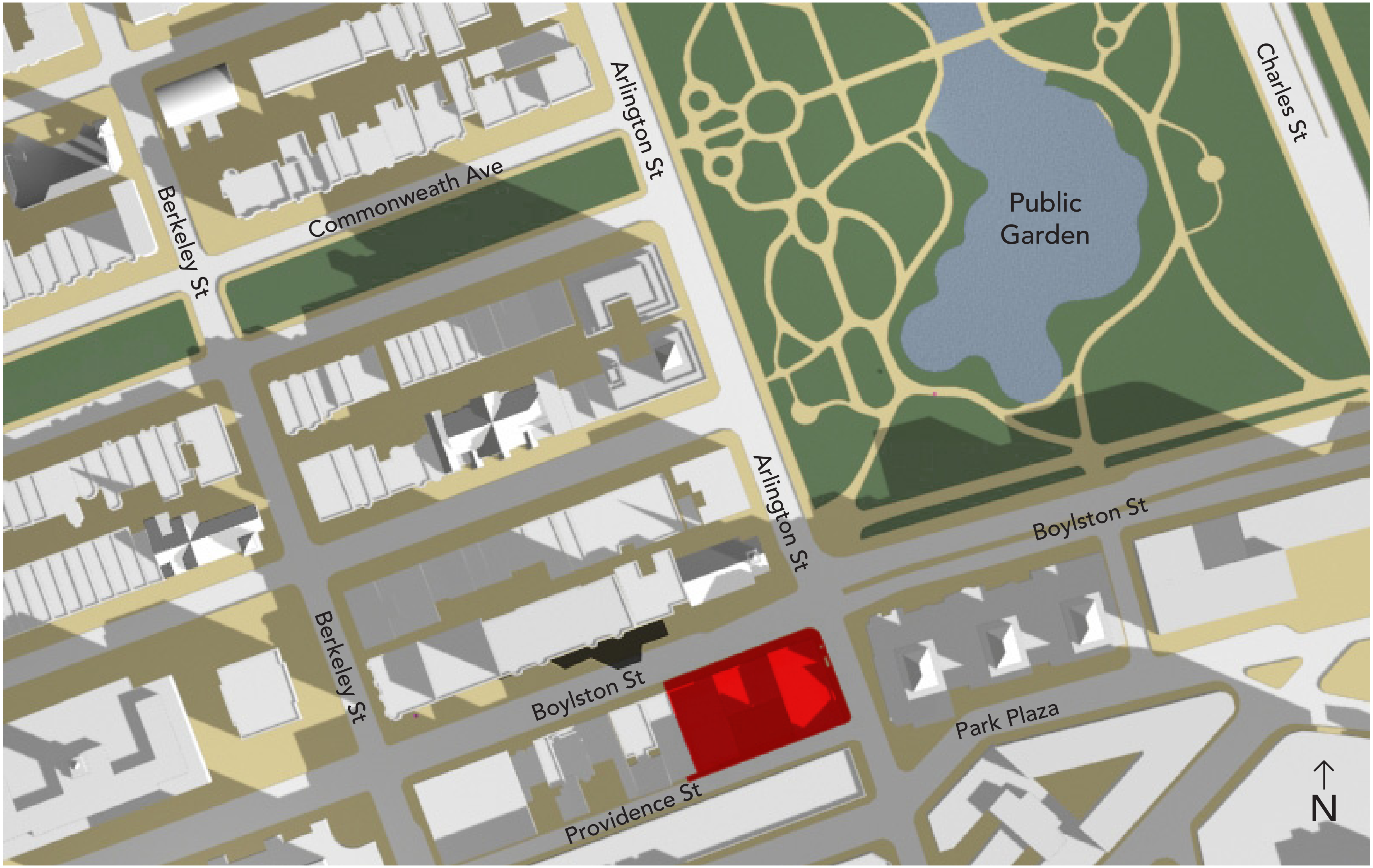


Figure 4.2-8

cbt

350 Boylston St
shadow analysis

September 21, 2008
9:00am EDT

proposed

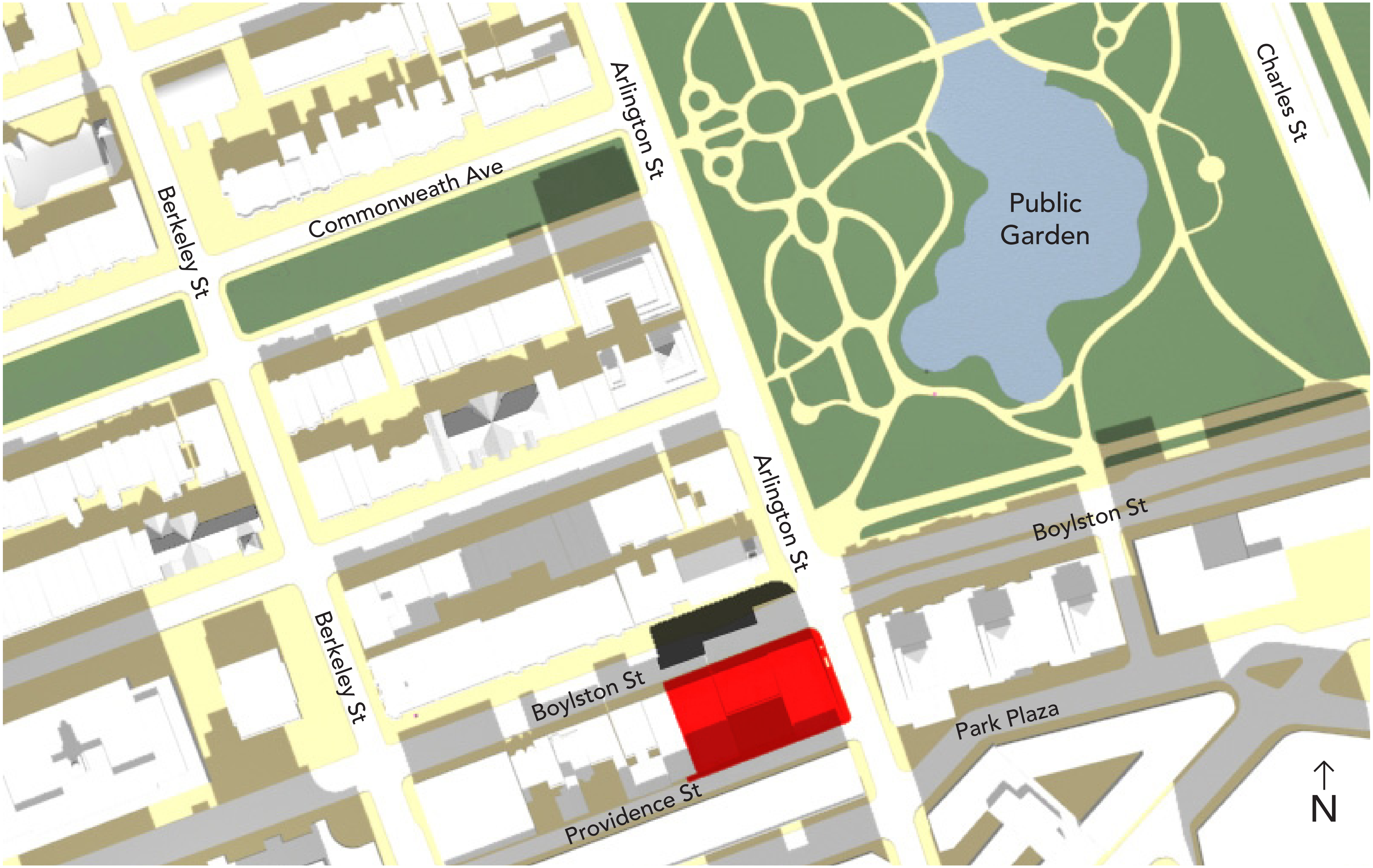


Figure 4.2-9

cbt

350 Boylston St
shadow analysis

September 21, 2008
12:00pm EDT

proposed

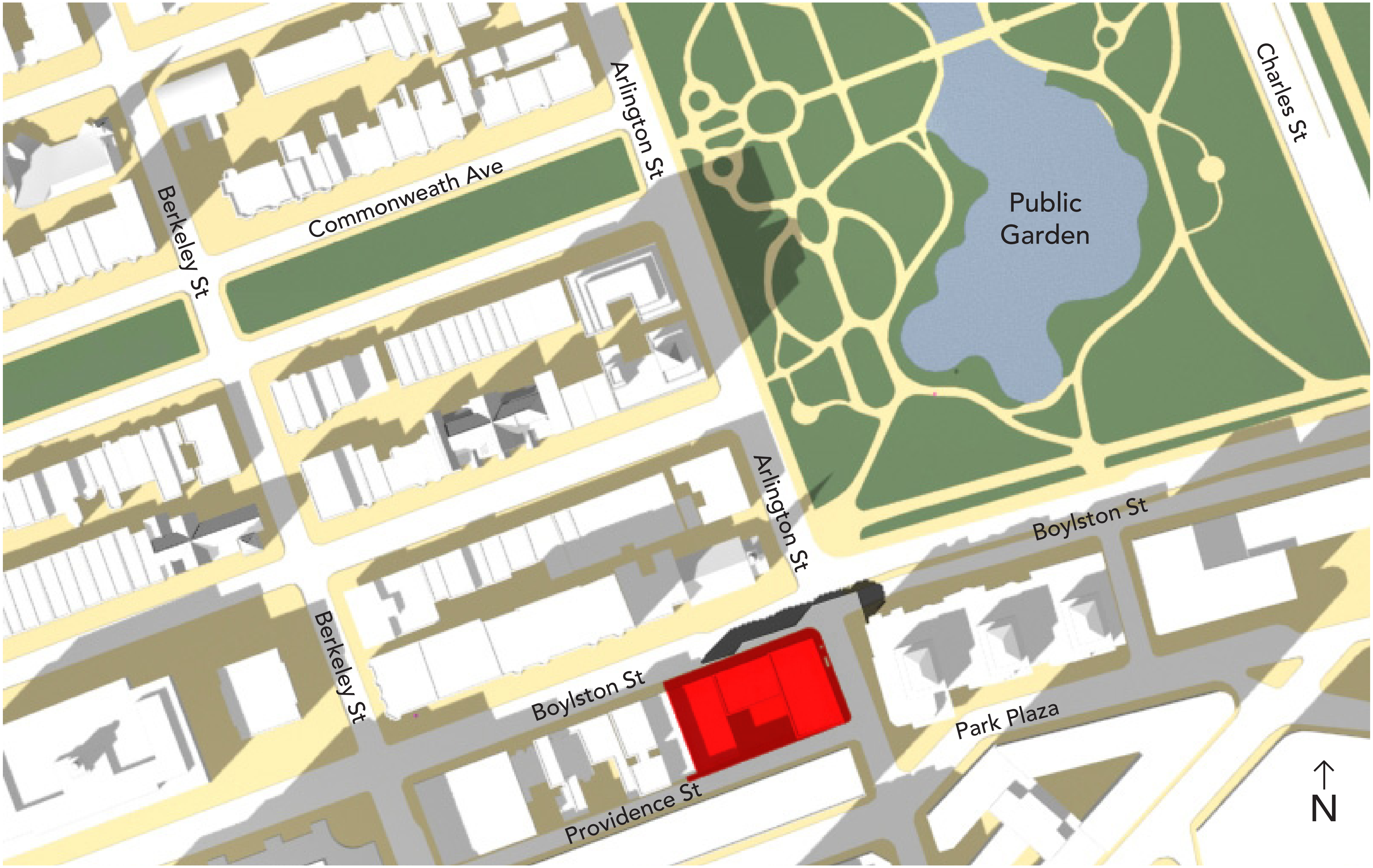


Figure 4.2-10

September 21, 2008
3:00pm EDT

cbt

350 Boylston St
shadow analysis

proposed

Figure 4.2-11

cbt

350 Boylston St
shadow analysis

September 21, 2008
6:00pm EDT

4.2.6 Winter Solstice (December 21)

The winter solstice creates the least favorable conditions for sunlight in New England. The sun angle during the winter is lower than in any other season, causing the shadows to elongate and create considerable shadow in the area.

At 9:00 AM during the winter solstice, new shadow will be cast in northwesterly direction across a portion of the Arlington Street Church roof and on rooftops of buildings on the south side of Newbury Street. Impacts to the Arlington Street Church will be limited to a portion of the south slope of the roof and the south elevation and will not impact the primary Arlington Street elevation or main portico entrance.

At 12:00 PM, new shadow will be cast northerly onto a minor portion of the Public Garden, onto a minor portion of Arlington Street and its eastern sidewalk, and onto a portion of the Arlington Street Church. As previously stated, the shadow is within the boundaries of a larger area which would be cast in shadow by a structure on the site conforming to the as-of-right height limit in effect on May 1, 1990. Accordingly, the Project does not cast "new shadow" as defined under the Public Garden Shadow Act..

At 3:00 PM,, most of the area will be under shadow and the Project will not create any new shadow

Figures 4.2-12 through 4.2-14 show shadow impacts during the winter solstice.

proposed

Figure 4.2-12

December 21, 2008
9:00am EST

cbt

350 Boylston St
shadow analysis

proposed

Stucture allowed by as of right height limits under Zoning Code as of May 1,1990

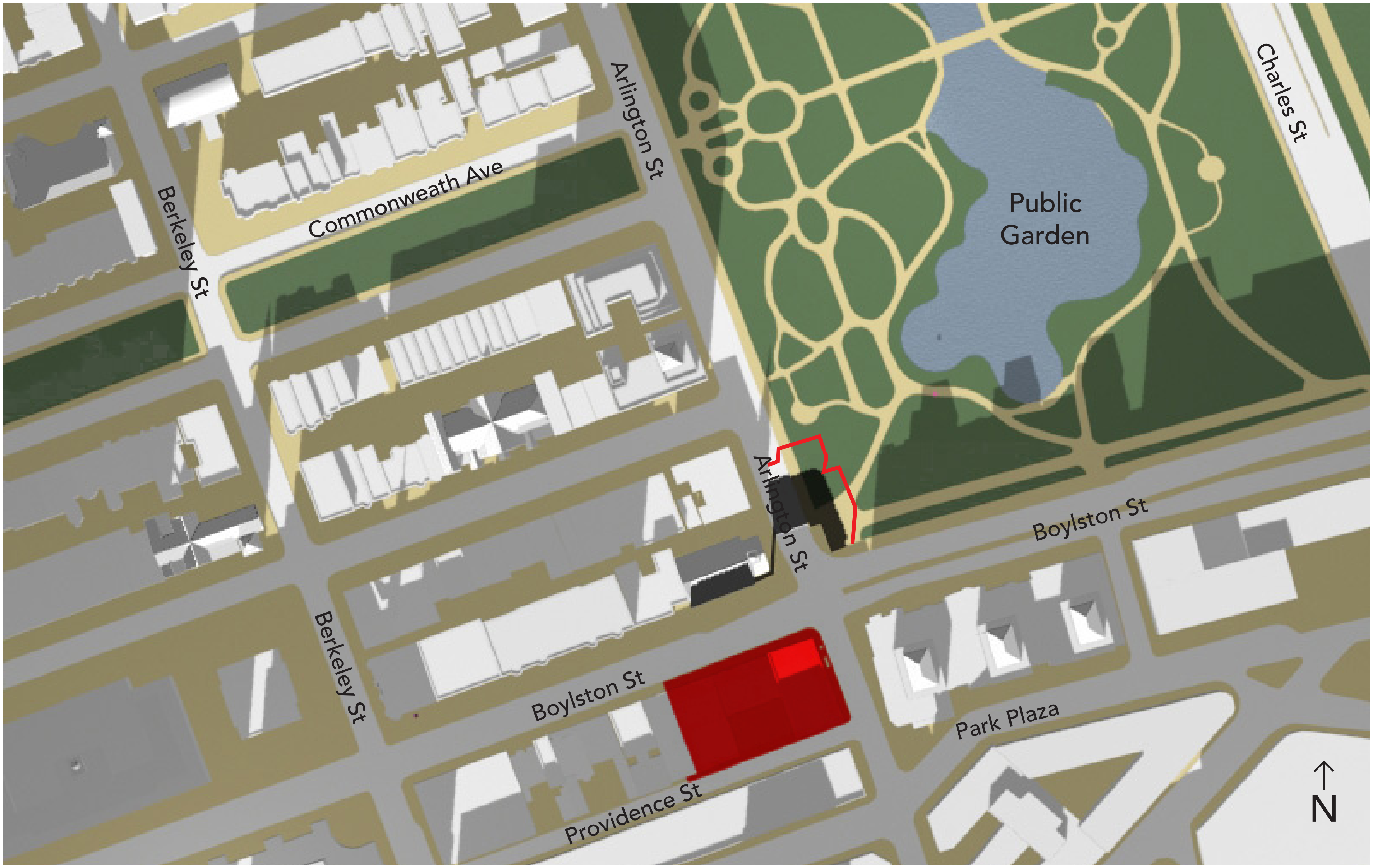


Figure 4.2-13

December 21, 2008
12:00pm EST

cbt

350 Boylston St
shadow analysis

proposed

Figure 4.2-14

December 21, 2008
3:00pm EST

cbt

350 Boylston St
shadow analysis

4.2.7 Conclusions

New shadow is limited to the immediate surroundings and will generally be cast across portions of Boylston Street and its sidewalks, Arlington Street and its sidewalks, and Park Plaza and its sidewalks. During 13 of the 14 time periods studied, no new shadow will be cast onto the Public Garden. Only at 12:00 PM during the winter solstice will shadow be cast onto a minor portion of the Public Garden. However, as previously stated, the shadow is within the boundaries of a larger area which would be cast in shadow by a structure on the site conforming to the as-of-right height limit in effect on May 1, 1990. Accordingly, the Project does not cast "new shadow" as defined under the Public Garden Shadow Act.

During 12 of the 14 time periods studied, no new shadow will be cast onto the Arlington Street Church. Only at 9:00 AM and 12:00 PM during the winter solstice will shadow be cast on the Church, however, these impacts are limited to a portion of the south slope of the roof and the south elevation and will not impact the primary Arlington Street elevation or main portico entrance.

4.3 Air Quality Analysis

4.3.1 Introduction

An air quality analysis was conducted to determine the impact of carbon monoxide (CO) emissions from combustion and mobile source emissions generated by the Project. A microscale analysis is typically performed to evaluate the potential air quality impacts due to traffic flow around the Project area. In addition, for stationary sources (i.e. combustion stacks, loading/unloading area, and garage vents), United States Environmental Protection Agency (EPA) approved air dispersion models were used to estimate ambient concentrations of nitrous oxide (NOx), particulate matter (PM), and sulfur dioxide (SO2).

The impacts were added to monitored background values and compared to the Federal National Ambient Air Quality Standards (NAAQS). The standards were developed by EPA to protect the human health against adverse health effects with a margin of safety.

The modeling methodology was developed in accordance with the latest Massachusetts Department of Environmental Protection (DEP) guidelines. The air quality analysis results show that CO, NOx, PM, and SO2 concentrations at all sensitive receptors studied are well under NAAQS thresholds.

Modeling assumptions and backup data for results presented in this section are provided in Appendix F.

4.3.2 Methodology

4.3.2.1 Microscale Analysis

The microscale analysis typically examines ground-level CO impacts due to traffic queues and parking garage exhaust systems in the immediate vicinity of a project. CO is used in microscale studies to indicate roadway pollutant levels since it is the most abundant pollutant emitted by motor vehicles and can result in so-called "hot spot" (high concentration) locations around congested intersections. NAAQS have been established by the EPA for CO to protect the public health (known as primary standards). These standards do not allow ambient CO concentrations to exceed 35 parts per million ("ppm") for a one-hour averaging period and nine ppm for an eight-hour averaging period, more than once per year at any location. The widespread use of CO catalysts on late-model vehicles has reduced the occurrences of CO hotspots. Air quality modeling techniques (computer simulation programs) are typically used to predict CO levels for both existing and future conditions to evaluate compliance of the roadways with the standards.

The microscale analysis has been conducted using the latest versions of EPA MOBILE6.2, CAL3QHC, and SCREEN3 to estimate CO concentrations at sidewalk and other sensitive locations.

Future build and no-build emissions data calculated from the MOBILE6.2 model, along with traffic data, were input into the CAL3QHC program to determine CO concentrations due to traffic flowing through the intersections. SCREEN3 was used to estimate potential ground-level impacts due to emissions from the parking garage, heating boilers, and the loading docks.

CAL3QHC and SCREEN3 results were then added to background CO values of 3 ppm (1-hour) and 1.8 ppm (8-hour), as provided by the DEP, to determine total air quality impacts due to the Project. This value was compared to the NAAQS for CO of 35 ppm (1-hour) and 9 ppm (8-hour).

Intersection Selection

Intersection selection criteria for a microscale analysis is typically based on a Level of Service (LOS) D where the project increases traffic volumes by ten percent or greater, or if the intersection operates at LOS E or F and the project degrades conditions at the location. An analysis of the intersections from the traffic study conducted by Vanasse Hangen, Brustlin, Inc. for the Build Condition was conducted (See Section 3.0, Transportation). There were four intersections that met the microscale analysis criteria:

1. Berkeley Street at Beacon Street

2. Arlington Street at Beacon Street/Storrow Drive Ramps

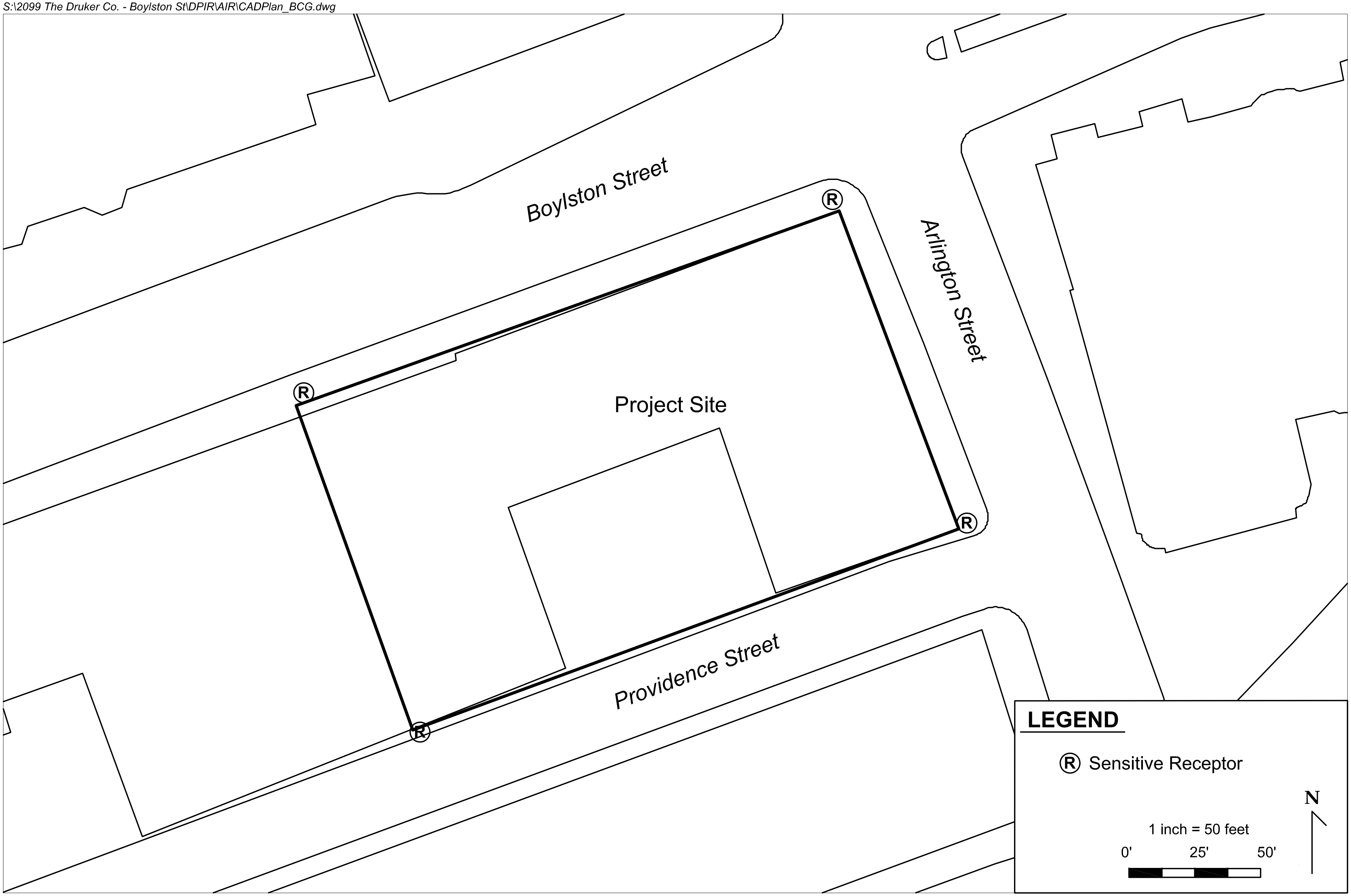
3. Arlington Street at Stuart Street/Columbus Avenue

4. Berkeley Street at Storrow Drive Ramps

The traffic volumes and LOS calculations provided in Section 3 and Appendix F form the basis of evaluating the traffic data versus the microscale thresholds.

Sensitive Receptors Evaluated

Receptors were placed in the vicinity of the Project area and at each intersection. The receptor locations are presented in Figures 4.3-1 through 4.3-5.



350 Boylston Street **Boston, Massachusetts**

Epsilon Associates Inc.

Figure 4.3-1

Project Site Sensitive Receptor Locations

S:\2099 The Druker Co. - Boylston St\DPIR\AIR\CADPlan_BCG.dwg

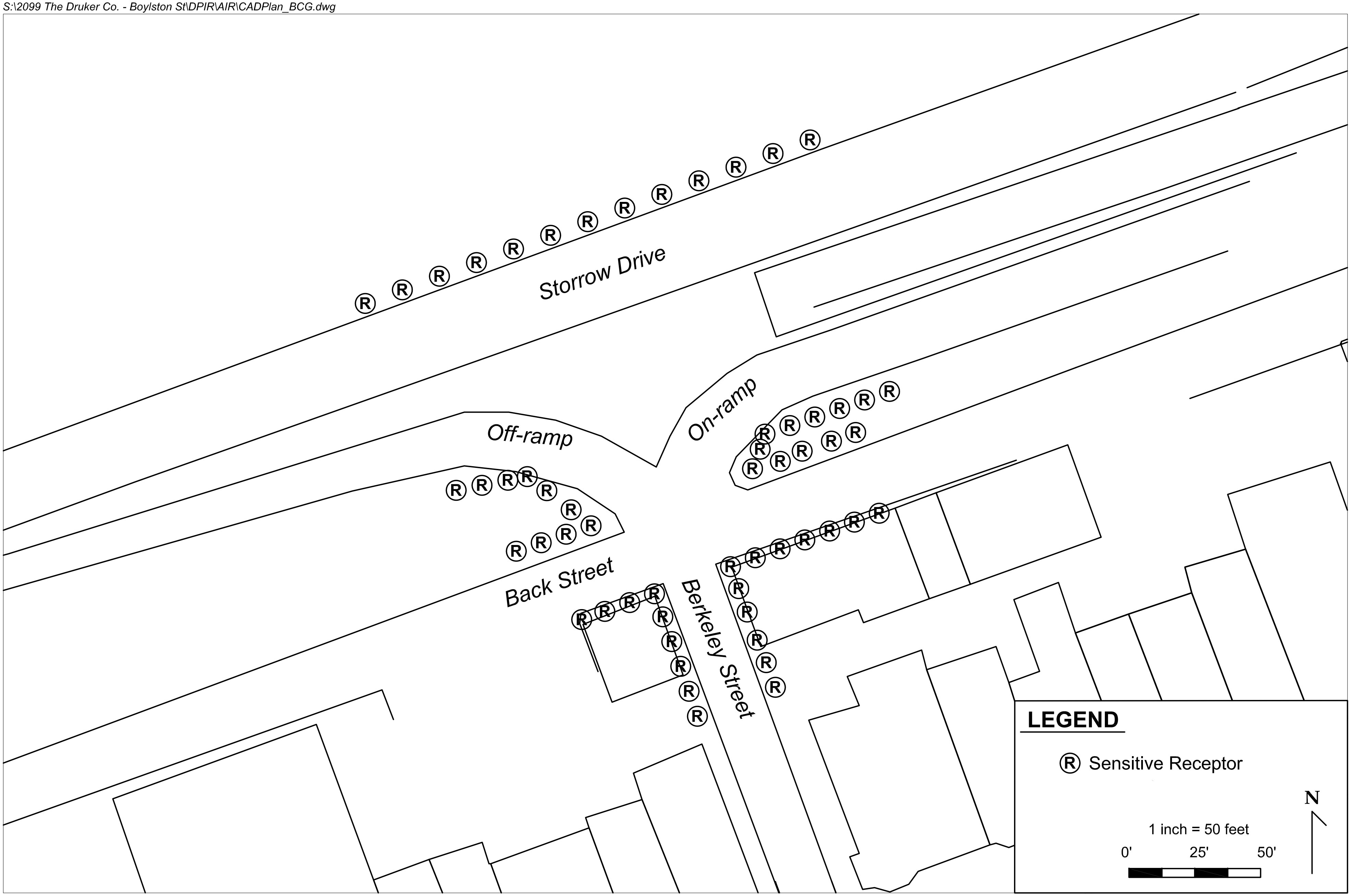
350 Boylston Street Boston, Massachusetts

Epsilon ASSOCIATES INC.

Figure 4.3-2

Berkeley St. / Beacon St. Intersection Receptor Locations

S:\2099 The Druker Co. - Boylston St\DPIR\AIR\CADPlan_BCG.dwg



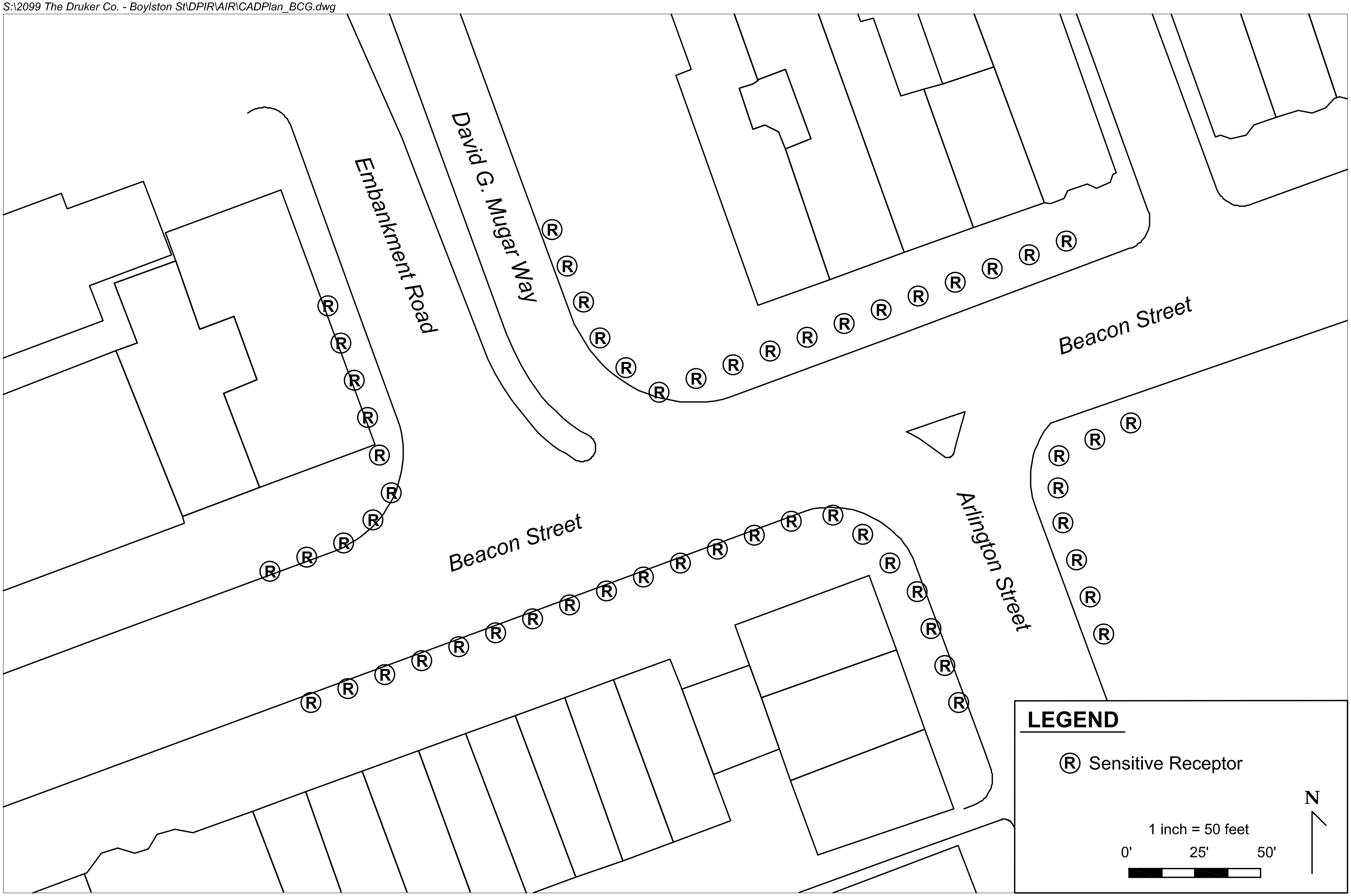
350 Boylston Street   Boston, Massachusetts

Epsilon Associates Inc.

Figure 4.3-3

Berkeley St. / Back St. / Storrow Dr. Ramps Intersection Receptor Locations

S:\2099 The Druker Co. - Boylston St\DPIR\AIR\CADPlan_BCG.dwg



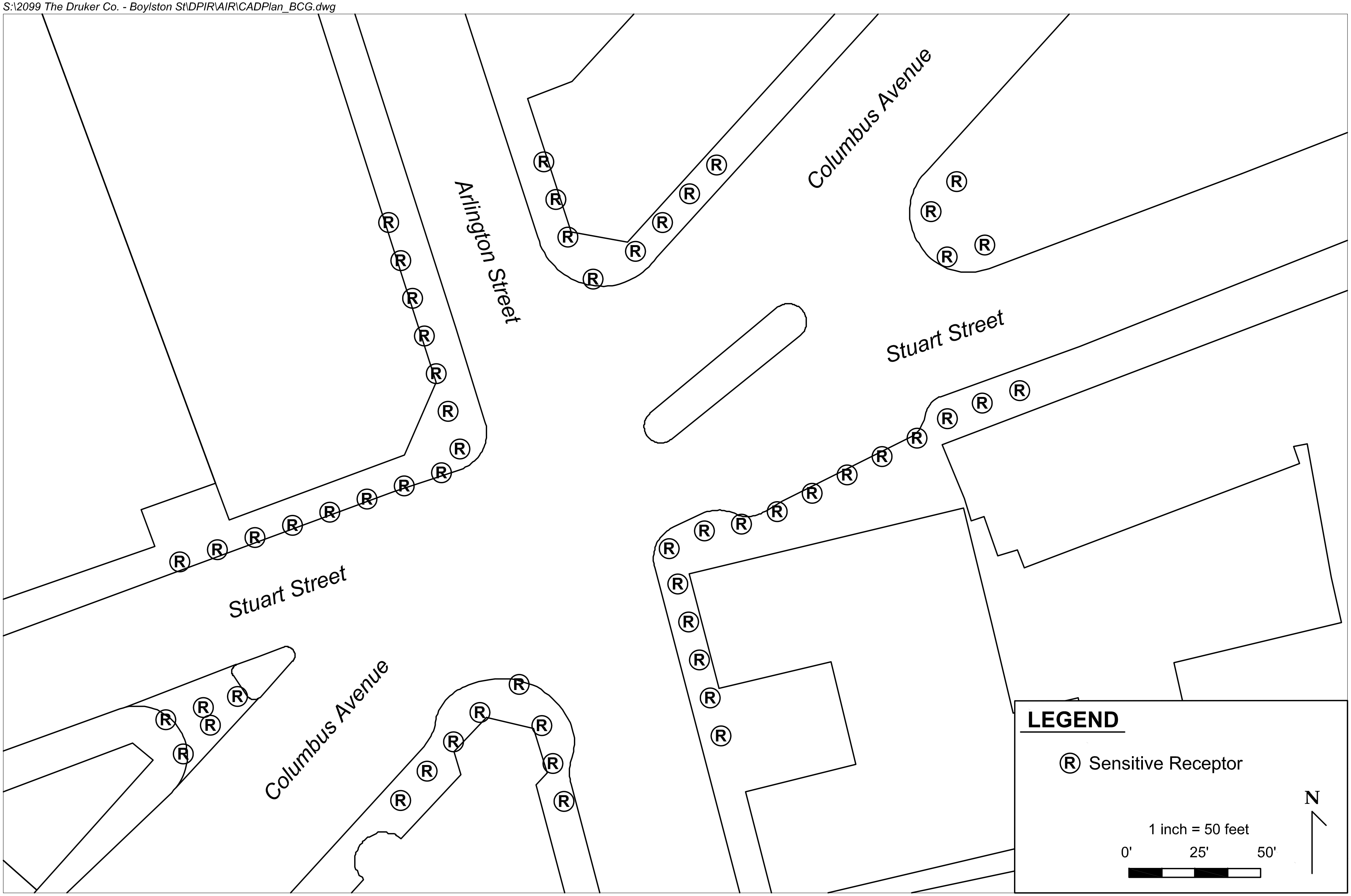
350 Boylston Street Boston, Massachusetts

Epsilon ASSOCIATES INC.

Figure 4.3-4

Arlington St. / Beacon St. / Storrow Dr. Ramps Intersection Receptor Locations

S:\2099 The Druker Co. - Boylston St\DPIR\AIR\CADPlan_BCG.dwg



350 Boylston Street Boston, Massachusetts

Epsilon Associates Inc.

Figure 4.3-5

Arlington St. / Stuart St. / Columbus Ave. Intersection Receptor Locations

Emissions Calculations (MOBILE6.2)

The MOBILE6.2 inputs are based on the latest guidance issued by DEP[2] regarding updated inputs to the model.

To estimate emissions from trucks in the loading dock area, idle emissions were calculated.

The current version of MOBILE6.2 does not explicitly calculate idle emissions. However, idle emissions can be obtained from a vehicle speed of 2.5 mph (the lowest speed MOBILE6 will model). The resulting emission rate given in (grams/mile) is then multiplied by 2.5 mph to estimate idle emissions (given in grams/hour). Moving emissions are calculated based on actual speeds at which free-flowing vehicles travel through the intersections.

Impact Calculations (CAL3QHC)

The CAL3QHC model predicts one-hour concentrations using queue-links at intersections based on worst-case meteorological conditions and traffic input data. The one-hour concentrations were scaled by a factor of 0.7 to estimate 8-hour concentrations. The CAL3QHC methodology was based on EPA CO modeling guidance. Signal timings were provided directly from the traffic modeling runs. Travel speeds were estimated based on field observations, traffic data, and queue links at the intersections. The CAL3QHC parameters are listed in Appendix F.

SCREEN3 Modeling

The EPA SCREEN3 model was used to estimate ground-level impacts due to emissions from the combustion sources. This model allows for the consideration of urban dispersion environments, building downwash, and cavity regions.

Parking Garage Exhaust Vents

The Project will include a below-grade parking garage consisting of three levels (B-1, B-2, and B-3) and have a capacity of up to 150 spaces. There are supply and exhaust vents located on Providence Street totaling approximately 86,000 CFM for the garage. Carbon monoxide monitors will be installed within the garage to measure the levels of CO. For the air quality analysis, it was conservatively assumed that the exhaust fans will discharge emissions from one of the two louvers beginning 10 feet above ground level at the closest sensitive receptor. Emissions from the parking garage were calculated using MOBILE6.2 and an estimate of the total miles traveled within the garage during the AM and PM peak hours. The total miles traveled are calculated by multiplying the average distance a car

---

2 DEP: February 12, 2003 memorandum for MOBILE6 inputs for performing indirect source air quality analysis and latest inputs supplied by BRA.

would travel in the garage by the number of cars entering and leaving the garage. It was estimated that each vehicle, on average, drives halfway into the garage and halfway out to park and leave.

The footprint of the garage is similar for the three levels. The largest footprint is approximately 221 feet by 125 feet. Assuming the cars entering and exiting the each level of the garage travel approximately 346 feet, a total trip of 3.3 miles is traveled on the third floor of the building (i.e. first garage level) (346 feet x 50 cars / 5,280 feet per mile). Therefore, if all of these spaces are either filled or vacated during the a.m. or p.m. peak hour, approximately 9.9 miles will be driven in the garage (3.3 miles x 3 floors).

To provide a conservative assumption for emissions from the garage, an emission rate from MOBILE6.2 of 2.5 miles per hour was assumed for the 2013 conditions.

Therefore, the emission rate from the garage can be calculated as follows:

<u>2013 Conditions</u>

19.42 grams/mile x 9.9 miles/hour x 1 hour/3600 seconds x 2.5 = 0.13 grams/second

The SCREEN3 model was run to determine ground level impacts. The following input parameters were used:

- The vent was placed 12 feet above ground level;
- Building dimensions of the mechanical roof height (using worst case conservative building dimensions) were used for downwash and cavity calculations (H= 145', Width= 125', L= 221); and
- Urban dispersion coefficients were used.

Heating Equipment

The building will be heated and cooled by electric power provided by NStar, therefore, there will be minimal emissions affiliated with the heating and cooling equipment.

Emergency Generator

The Project will contain one 650-kW standby generator designed to provide temporary power to the building in the case of a power interruption. The generator will be located in the mechanical penthouse and exhaust at a height of 144.5 feet above ground level, or 20 feet above the above the mechanical penthouse roof height (123.8 feet above ground level). Typically, the generator will operate for approximately one hour each month for testing and general maintenance. As of March 23, 2006, the MADEP new regulations for emergency generators became effective. The emergency generator ERP regulation applies to new generators greater than 37 kW. The regulation is similar to the boiler ERP in that new engines are subject to emission standards, recordkeeping, certification, and compliance with the DEP noise policy. Since the generator's maximum rating capacity is greater than the ERP limit of 37 kW, the unit will be subject to the new ERP program. Per the ERP, the generator owner will limit operation of the generator to less than 300 hours per year and submit a certification form to MADEP within 60 days of commencement.

Emissions were estimated for the emergency generator based on vendor supplied data and the new ERP limits for a 650-kW generator. Detailed calculations are presented in Appendix F.

Loading/Unloading Dock Vents

Loading and service are provided on the south side of the Project along Providence Street. Access and egress is provided from Providence Street. Preliminary estimates are for approximately 45 trips per day (tpd) from the loading areas servicing retail and office needs.

Emissions of particulate matter (PM) for an idling truck were estimated from the EPA MOBILE6.2 emission factor program. Concentrations were estimated for the Providence Street area from direct exhaust vents of the loading area. Emissions data for the exhaust stack were entered into the SCREEN3 model assuming a conservative release height of 12 feet above ground level at 10,000 cfm and ambient temperature. Idling at the loading/unloading area was assumed for five minutes.

Receptors were placed around the loading/unloading area of the Project site to determine maximum 24-hour and annual concentrations. Since SCREEN3 only calculates a 1-hour concentration, EPA approved emission factors were used to determine 24-hour and annual concentrations (0.4, and 0.1, respectively).

The SCREEN3 modeling results are presented in Table 4.4-2 for the loading/unloading area and compared to the NAAQS.

Methodology

The maximum concentrations from SCREEN3 for the loading dock vents and the emergency generator stacks were added together. This is conservative in that maximum impacts are added together regardless of space or time. Therefore, if maximum combined impacts from both sources are below the NAAQS at one receptor, then this is indicative of any receptor placed around the project.

4.3.3 Background CO Concentrations

An air quality analysis also requires an estimate of "background" air quality levels, representing the contribution of all sources in the Project area except the specific intersections. Background levels of future CO concentrations of 3 ppm (one-hour) and 1.8 ppm (eight-hour) were provided by DEP.

For the peak eight-hour period, SCREEN3 concentrations were calculated using an eight-hour to one-hour ratio (or persistence factor) of 0.70 as recommended by EPA. This persistence factor accounts for the variability in meteorology over an eight-hour period relative to one-hour conditions.

4.3.4 Air Quality Results

4.3.4.1 Mobile Source Analysis

The results of the one-hour build CO concentrations from CAL3QHC and SCREEN3 for the highest predicted receptor are provided in Table 4.3-1.

The results of the one-hour modeled CO ground-level concentrations from both models were added to DEP supplied background levels for comparison to the CO NAAQS. The one-hour values were then scaled by 0.7 to generate eight-hour values. These values represent the highest potential concentrations as they are predicted during the simultaneous occurrence of "defined" worst case meteorology.

The highest one-hour concentration predicted in the area of the Project for the future build conditions plus background 5.2 ppm at the intersections of Beacon Street and Berkeley Street and Stuart Street and Columbus Avenue. The total one-hour concentration includes the maximum predicted concentrations from SCREEN3 for the parking exhaust vent, and the emergency generators. This value is well below the one-hour NAAQS standard of 35 ppm.

The highest eight-hour concentration predicted in the area of the Project for the future build conditions plus background is 3.3 ppm at the same intersections as the one-hour. The total eight-hour concentrations include maximum predicted concentrations from SCREEN3 modeled sources. This value is well below the eight-hour NAAQS standard of nine ppm.

4.3.4.2 NAAQS Analysis

In addition to the microscale analysis, a cumulative impact analysis was also conducted for comparison to the NAAQS for SO2, NOx, and PM. This analysis addresses emissions from the Project's heating boilers, emergency generators, and the loading/unloading area (PM only). Similar to the microscale analysis, the one-hour predicted concentrations from SCREEN3 were scaled by EPA approved adjustment factors of 0.9, 0.4, and 0.08 to obtain three-hour, 24-hour, and annual concentrations.

Worst case maximum predicted impacts from these sources were added to monitored background values obtained from the MADEP website for 2005 to 2007 and compared to the NAAQS.

Table 4.3-2 presents the cumulative modeling results for the three sources and the loading docks. The total impacts when combined with the monitored background values are well below the NAAQS for all pollutants and averaging periods.

Table 4.3-1 Summary of Microscale Modeling Analysis

Summary of CAL3QHC Modeling Analysis

1-hr Back (ppm): 3

8-hr Back (ppm): 1.8

Intersection	Peak	1-hour Modeled CO Impacts (ppm)	Project Garage CO Modeled Impacts (ppm)	Project Emergency Generator Modeled Impacts (ppm)	Total Build CO Impacts (ppm)	1-hour Total CO Impacts (ppm)[1]	1-hour NAAQS (ppm)	8-hour Total CO Impact (ppm)[1]	8-hour NAAQS (ppm)
Beacon Street & Berkeley Street	AM	1.4	0.05	0.23	1.7	4.7	35	3.0	9
	PM	1.9	0.05	0.23	2.2	5.2	35	3.3	9
Stuart Street & Columbus Avenue	AM	1.9	0.05	0.23	2.2	5.2	35	3.3	9
	PM	1.9	0.05	0.23	2.2	5.2	35	3.3	9
Beacon Street & Storrow Drive Ramps	AM	1.8	0.05	0.23	2.1	5.1	35	3.3	9
	PM	1.8	0.05	0.23	2.1	5.1	35	3.3	9
Berkeley Street & Storrow Drive Ramps	AM	0.6	0.05	0.23	0.9	3.9	35	2.4	9
	PM	0.9	0.05	0.23	1.2	4.2	35	2.6	9
Sensitive Receptor 1	AM	0.1	0.05	0.23	0.4	3.4	35	2.1	9
	PM	0.2	0.05	0.23	0.5	3.5	35	2.1	9
Sensitive Receptor 2	AM	0.2	0.05	0.23	0.5	3.5	35	2.1	9
	PM	0.3	0.05	0.23	0.6	3.6	35	2.2	9
Sensitive Receptor 3	AM	0.2	0.05	0.23	0.5	3.5	35	2.1	9
	PM	0.2	0.05	0.23	0.5	3.5	35	2.1	9
Sensitive Receptor 4	AM	0.1	0.05	0.23	0.4	3.4	35	2.1	9
	PM	0.2	0.05	0.23	0.5	3.5	35	2.1	9
MAX		1.9	0.05	0.23	2.2	5.2	35	3.3	9

1) Total impacts include modeled impacts from the Project site (mobile source, Project Garage, Project Heating, Project Emergency Generator) plus monitored background values.

2) Sensitive Receptor 1 denotes the receptor located at the northeast corner of the Project site at the Boylston Street and Arlington Street intersection.

3) Sensitive Receptor 2 denotes the receptor located at the southeast corner of the Project site at the Providence Street and Arlington Street intersection.

4) Sensitive Receptor 3 denotes the receptor located at the southwest corner of the Project site on Providence Street.

5) Sensitive Receptor 4 denotes the receptor located at the northwest corner of the project site on Boylston Street.

Table 4.3-2 Summary of NAAQS Modeling Analysis

Pollutant	Period	Concentration (ug/m^3)	Loading/Unloading Area (ug/m3)	Monitored Background (ug/m^3)	Total Concentration (ug/m^3)	NAAQS (ug/m^3)
NOx	Annual	1.32		47	48	100
SO2	3-Hour	3.58		84	88	1300
	24-Hour	1.59		52	54	365
	Annual	0.011		11	11	80
PM	24-Hour	7.95	1.5	58	67.5	150
	Annual	0.05	0.04	29	29.1	50
CO	1-Hour	262.48		2552	2814.48	40000
	8-Hour	183.74		1740	1923.74	10000

Hrs of Operation E.G. 300 Hours per year
Notes:
Nox, PM, and SO2 background values based on the values in the Boston area per DEP Monitors for 2005 to 2007

4.3.5 Conclusion

Using conservative estimates, the CO concentrations at the nearest sensitive receptors for impacts from the four intersections, and the heating and emergency generator units, plus monitored background values, are well under the CO NAAQS thresholds. In addition, maximum cumulative impacts from the heating and emergency units, and the loading area plus monitored background values are also well below the NAAQS thresholds for SO2, NOx, and PM.

4.4 Solid and Hazardous Waste

4.4.1 Removal of Hazardous Materials

There are no documented hazardous waste conditions on the Project site. Prior to commencement of the work, investigations will be performed at the site and in the existing buildings to evaluate the presence of contaminated soils, groundwater, asbestos, lead paint, or other hazardous materials that may exist. If such materials are present, they will be characterized based on the type, composition and level of the contaminants. Work plans will be prepared by appropriately licensed professionals to identify the means and methods for safe removal and legal disposal or recycling of these materials.

Abatement and disposal of hazardous materials (or hazardous waste) discovered in the existing buildings will be performed prior to demolition of the buildings by specialty contractors experienced and licensed in removing and handling materials of this nature.

Excess soils generated from excavations on site and not reused on site will be legally transported off site and disposed of in accordance with the Massachusetts Contingency Plan and other applicable regulatory requirements. Disposal of excess excavated soil materials will be tracked via Bills of Lading or other methods, as required to ensure their proper and legal transport and disposal.

No site specific information has been obtained to date regarding site environmental conditions related to the presence of oil and hazardous materials. Based on the site location, excavated soils may contain levels of chemical constituents typically encountered in urban fill soils. An environmental site assessment will be conducted and specific testing of soil and groundwater will be performed prior to construction to evaluate conditions and requirements for special handling or transport of excavated materials from the site.

4.4.2 Operational Solid and Hazardous Wastes

The Project will generate a solid waste stream typical of other office projects due to the similar nature of the occupancies. Solid waste generated by the Project is projected to be approximately 375.35 tons per year, based on office space at a generation rate of 1.3 tons per 1,000 square feet per year, commercial, retail, and restaurant space proposed at a generation rate of 5.5 tons per 1,000 square feet per year, and fitness center space at a generation rate of three pounds per 100 square feet per day, as shown in Table 4.4-1.

Table 4.4-1 Solid Waste Generation

Unit Type	Program	Generation Rate	Solid Waste (tons per year)
Office	200,000 sf	1.3 tons/1,000 sf/year	260
Commercial/Retail/ Restaurant	15,000 sf	5.5 tons/1,000 sf/year	82.5
Fitness Center	6,000 sf	3 lbs/100 sf/day	32.85
Total Solid Waste Generation			375.35

4.4.2.1 Waste and Recycling Removal

Recycling by commercial and retail tenants will be encouraged and coordinated. To encourage recycling, the Proponent will implement a recycling program throughout the Project. The following is a proposed plan for waste and recycling removal for the Project for each of the proposed Project uses.

Retail

Retail waste has large bulky items such as damaged fixtures and displays which can be combined into one time 30 cubic yard roll-off containers for temporary service. Typically cardboard is a valuable recyclable when properly broken down. This material will allow for recycling rebate revenue and will also reduce the cost of waste removal as these items will no longer be part of the waste stream. Cardboard will be broken down and stacked in the recycling room located adjacent to the loading dock.

Office

Office waste consists of liquid waste and paper. The bulk of the waste volume will include items such as coffee, soda, salads and other lunch material. Offices with vending machines will need barrels for recycling bottles and cans. All other waste is perishable and will be bagged for removal. Paper is the largest recycling material found in an office's waste stream. Computer paper, white and colored paper, manila folders, junk mail, shred, newspapers, catalogs and magazines can be collected as sorted office paper and recycled together in the same barrels. All other waste will be bagged and removed separately.

In general, barrels or gaylord boxes will be swapped with empties or be tipped into a larger collection container on a regular basis. A self contained compactor designated for trash will be provided with a 24 hour/7 day a week on call service. The compactor will include pressure gauges that will indicate when waste removal is necessary.

4.4.2.2 Hazardous Wastes

No site specific information has been obtained to date regarding site environmental conditions related to the presence of oil and hazardous materials. Based on the site location, excavated soils may contain levels of chemical constituents typically encountered in urban fill soils. An environmental site assessment will be conducted and specific testing of soil and groundwater will be performed prior to construction to evaluate conditions and requirements for special handling or transport of excavated materials from the site.

4.5 Water Quality / Stormwater

In compliance with the City of Boston's Groundwater Conservation Overlay District Regulations, the Project will infiltrate 1-inch of stormwater runoff captured from the entire building rooftop. Due to the fact that this volume of stormwater runoff is infiltrated into the groundwater through a recharge system proposed in Providence Street, whereby pollutants will be filtered by the microorganisms in the soil, the Project will improve the water quality of runoff leaving the site. Since the existing site is generally composed of building roofs with roof drain systems that likely connect directly into the City's closed drainage system without any sort of treatment, the proposed design provides greater water quality treatment than is provided for in the existing condition.

More information on water quality and stormwater can be found in Chapter 7.

4.6 Flood Hazard Zones

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the Site located in the City of Boston - Community Panel Number 250286 0010 C indicates the FEMA Flood Zone Designations for the site area. The map shows that the Project is located in a Zone C, Area of Minimal Flooding.

The site is developed and does not contain wetlands.

4.7 Noise Impacts

4.7.1 Introduction

This section includes a noise analysis for the Project, including a noise-monitoring program to determine existing noise levels and an estimate of future noise levels when the Project is in operation.

The analysis indicates that predicted noise levels from Project mechanical equipment (with appropriate noise mitigation) will be below the most stringent City of Boston Noise Zoning requirements for nighttime and daytime residential zones, and well below existing measured baseline noise levels in the area.

4.7.2 Noise Terminology

There are several ways in which sound (noise) levels are measured and quantified. All of them use the logarithmic decibel (dB) scale. The following information defines the noise measurement terminology used in this analysis.

The decibel scale is logarithmic, to accommodate the wide range of sound intensities found in the environment. A property of the decibel scale is that the sound pressure levels of two separate sounds are not directly additive. For example, if a sound of 50 dB is added to another sound of 50 dB, the total is only a three-decibel increase (to 53 dB), not a doubling to 100 dB. Thus, every three dB change in sound levels represents a doubling or halving of sound energy. Related to this is the fact that a change in sound levels of less than three dB is imperceptible to the human ear.

Another property of decibels is that, if one source of noise is 10 dB (or more) louder than another source, then the total sound level is simply the sound level of the higher source. For example, a source of sound at 60 dB plus another source of sound at 47 dB is 60 dB.

The sound level meter used to measure noise is a standardized instrument. It contains "weighting networks" to adjust the frequency response of the instrument to approximate that of the human ear under various circumstances. One network is the A-weighting network (there are also B- and C-weighting networks). The A-weighted scale (dBA) most closely approximates how the human ear responds to sound at various frequencies. Sounds are frequently reported as detected with the A-weighting network of the sound level meter. A-weighted sound levels emphasize the middle frequency (*i.e.,* middle pitched – around 1,000 Hertz sounds), and de-emphasize lower and higher frequency sounds. A-weighted sound levels are reported in decibels designated as "dBA."

Because the sounds in our environment vary with time they cannot simply be described with a single number. Two methods are used for describing variable sounds. These are exceedance levels and the equivalent level, both of which are derived from a large number of moment-to-moment A-weighted sound level measurements. Exceedance levels are values from the cumulative amplitude distribution of all of the sound levels observed during a measurement period. Exceedance levels are designated L_n, where n can have a value of 0 to 100 percent. For example:

- L_{90} is the sound level in dBA exceeded 90 percent of the time during the measurement period. The L_{90} is close to the lowest sound level observed. It is essentially the same as the residual sound level, which is the sound level observed when there are no obvious nearby intermittent noise sources.

- L_{50} is the median sound level: the sound level in dBA exceeded 50 percent of the time during the measurement period.

- L_{10} is the sound level in dBA exceeded only 10 percent of the time. It is close to the maximum level observed during the measurement period. The L_{10} is sometimes called the intrusive sound level because it is caused by occasional louder noises like those from passing motor vehicles.

The equivalent level is the level of a hypothetical steady sound that would have the same energy (*i.e.,* the same time-averaged mean square sound pressure) as the actual fluctuating sound observed. The equivalent level is designated L_{eq} and is also A-weighted. The equivalent level represents the time average of the fluctuating sound pressure, but because sound is represented on a logarithmic scale and the averaging is done with linear mean square sound pressure values, the L_{eq} is mostly determined by occasional loud, intrusive noises.

By using various noise metrics it is possible to separate prevailing, steady sounds (the L_{90}) from occasional, louder sounds (L_{10}) in the noise environment or combined average levels (L_{eq}). This analysis of sounds expected from the Project treats all noises as though they will be steady and continuous and hence the L_{90} exceedance level was used. In the design of noise control treatments it is essential to know something about the frequency spectrum of the noise of interest. Noise control treatments do not function like the human ear, so simple A-weighted levels are not useful for noise-control design. The spectra of noises are usually stated in terms of octave band sound pressure levels, in dB, with the octave frequency bands being those established by standard. To facilitate the noise-control design process, the estimates of noise levels in this analysis are also presented in terms of octave band sound pressure levels.

Baseline noise levels were measured in the vicinity of the proposed buildings. Those baseline levels were then compared against the predicted noise levels from mechanical equipment operation. Sound levels for the equipment were based on information provided by the manufacturers. The predicted noise levels were compared to the City of Boston Zoning District Noise Standards.

4.7.3 Noise Regulations and Criteria

The primary set of regulations relating to the potential increase in noise levels is the City of Boston Zoning District Noise Standards (City of Boston Code – Ordinances: Section 16–26 Unreasonable Noise and City of Boston Air Pollution Control Commission Regulations for the Control of Noise in the City of Boston). Results of the baseline ambient noise level survey and the modeled noise levels were compared to the City of Boston Zoning District Noise Standards. Separate regulations within the Standard provide criteria to control different types of noise. Regulation 2 is applicable to the effects of the completed proposed buildings and was considered in this noise study. Table 4.7-1 includes the Zoning District Standards.

The Massachusetts DEP regulates community noise by its Noise Policy: DAQC Policy 90-001. The DEP policy limits source sound levels to a 10-dBA increase in the ambient measured noise level (L_{90}) at the Project property line and at the nearest residences. The policy further prohibits pure tone conditions – when any octave band center frequency sound pressure level exceeds the two adjacent center frequency sound pressure levels by three decibels or more.

Table 4.7-1 City of Boston Zoning District Noise Standards, Maximum Allowable Sound Pressure Levels

Octave Band Center Frequency (Hz)	Residential Zoning District Daytime (dB)	Residential Zoning District All Other Times (dB)	Residential-Industrial Zoning District Daytime (dB)	Residential-Industrial Zoning District All Other Times (dB)	Business Zoning District Anytime (dB)	Industrial Zoning District Anytime (dB)
31.5	75	68	79	72	79	83
63	76	67	78	71	78	82
125	69	61	73	65	73	77
250	62	52	68	57	68	73
500	56	45	62	51	62	67
1000	50	40	56	45	56	61
2000	45	33	51	39	51	57
4000	40	28	47	34	47	53
8000	38	26	44	32	44	50
A-Weighted (dBA)	60	50	65	55	65	70

Notes:
Noise standards are extracted from Regulation 2.5, City of Boston Air Pollution Control Commission, "Regulations for the Control of Noise in the City of Boston", adopted December 17, 1976.

- All standards apply at the property line of the receiving property.
- dB and dBA based on a reference pressure of 20 micropascals.
- Daytime refers to the period between 7:00 a.m. and 6:00 p.m. daily except Sunday.

4.7.4 Existing Conditions

4.7.4.1 Baseline Noise Environment

An ambient noise level survey was conducted to characterize the existing "baseline" acoustical environment in the vicinity of the Project. Existing noise sources in the vicinity of the Project include: vehicular traffic (including trucks) on the local roadways; nearby construction activity (daytime only); pedestrian traffic; mechanical equipment located on nearby buildings; church bells, and the general din of the city.

4.7.4.2 Noise Measurement Locations

The selection of the sound monitoring receptor locations was based upon a review of the current and anticipated land use in the area surrounding the Project. Three noise-monitoring locations were selected in representative locations to obtain a sampling of the ambient baseline noise environment. This area encompasses locations on Boylston Street, Arlington Street, St. James Street and Providence Street. The measurement locations are depicted on Figure 4.7-1 and are described below.

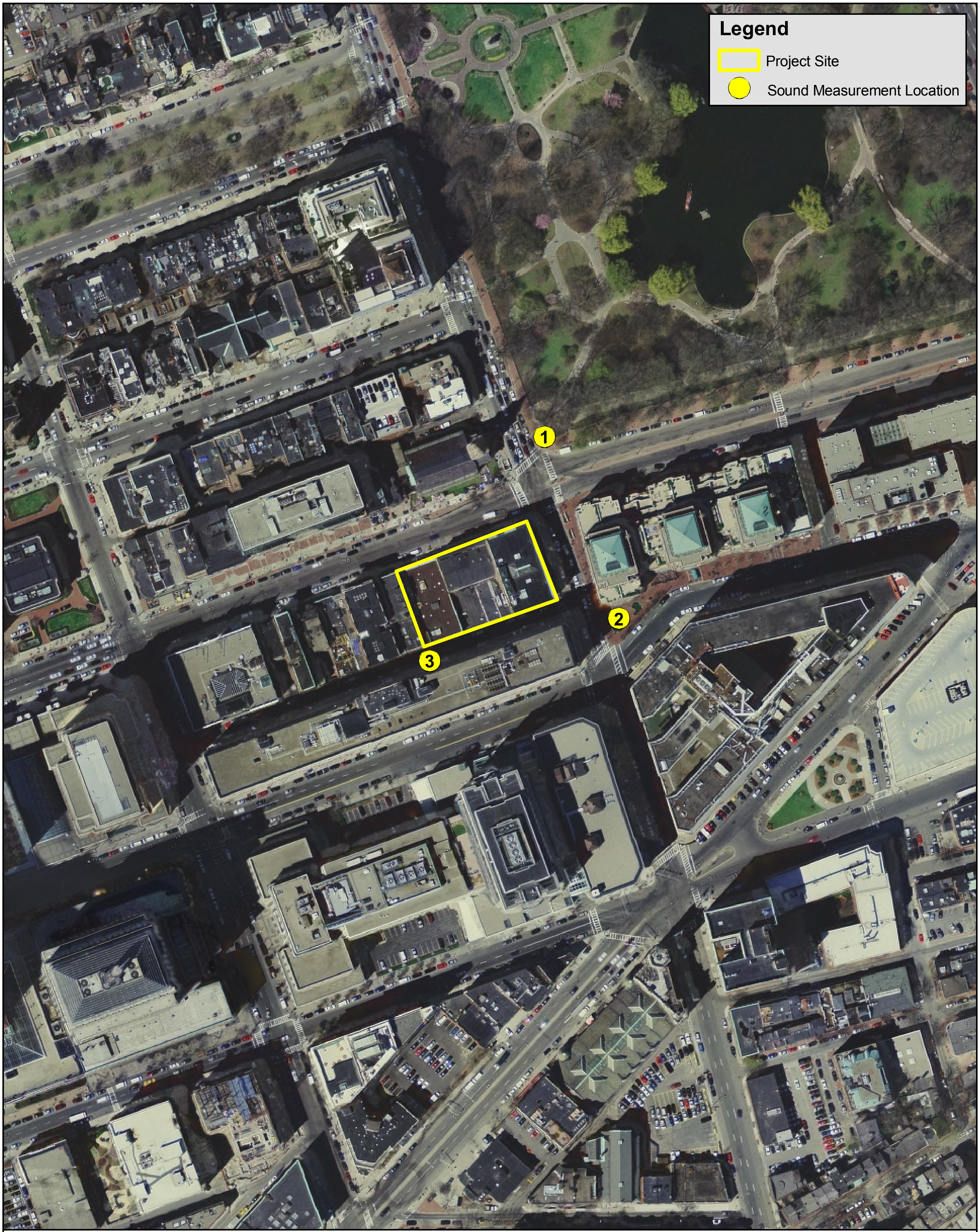
- Location 1 is at the extreme southwest corner of the Public Garden, at the intersection of Arlington Street and Boylston Street, across from the Arlington Street Church. Sound levels here were primarily reflective of vehicular traffic on Boylston and Arlington Streets.

- Location 2 is at the intersection of Providence Street and Arlington Street, directly across from the Boston Park Plaza Hotel. Vehicular traffic was the primary source of audible noise.

- Location 3 is on Providence Street, directly behind 350 Boylston Street. Vehicular traffic was more distant at this location, but it was still the primary source of audible noise.

4.7.4.3 Noise Measurement Methodology

Sound level measurements were conducted for 20 minutes per location during daytime (1:00 p.m. to 4:00 p.m.) on April 3, 2008 and during the nighttime (12:00 a.m. to 2:00 a.m.) on April 4, 2008. Since noise impacts are greatest at night when existing noise levels are lowest, the study was designed to measure community noise levels under conditions typical of a "quiet period" for the area. Daytime measurements were scheduled to exclude peak traffic conditions.



Scale 1:2,400
1 inch = 200 feet

100 0 100 200 Feet

Figure 4.7-1
Sound Measurement Locations

350 Boylston Street
Boston, Massachusetts

Basemap: 2003 Orthophotography, BWSC

Epsilon ASSOCIATES INC.

G:\Projects2\MA\Boston\2099\DPIR\sound_locations.mxd

The sound levels were measured at publicly accessible locations at a height of five feet above the ground and at locations where there were no large reflective surfaces to affect the measured levels. The measurements were made under low wind conditions and with dry roadway surfaces. Wind speed measurements were made with a Davis Instruments TurboMeter electronic wind speed indicator, and temperature and humidity measurements were made using a Mannix digital psychrometer. Unofficial observations about meteorology or land use in the community were made solely to characterize the existing sound levels in the area and to estimate the noise sensitivity at properties near the proposed Project.

4.7.4.4 Measurement Equipment

A CEL Instruments Model 593.C1 Precision Sound Level Analyzer equipped with a CEL-257 Type 1 Preamplifier, a CEL-250 half-inch microphone and a four-inch foam windscreen were used to collect broadband and octave band ambient sound pressure level data. The instrumentation meets the "Type 1 - Precision" requirements set forth in American National Standards Institute (ANSI) S1.4 for acoustical measuring devices. The meter was tripod-mounted at a height of five feet above ground. The meter was equipped with an internal octave band filter set along with data logging capabilities.

Statistical levels were calculated from the sound levels collected during each 20-minute sampling period. Octave band levels for this study correspond to the same data set processed for the broadband levels. The measurement equipment was calibrated in the field before and after the surveys with a CEL-284/2 acoustical calibrator, which meets the standards of IEC 942 Class 1L and ANSI S1.40-1984.

4.7.4.5 Baseline Ambient Noise Levels

The existing ambient noise environment is impacted by vehicular traffic, including trucks, construction activity, and by general human activity during the daytime. During the nighttime, vehicular traffic was still moderate while pedestrian traffic was lower, and construction activity was non-existent.

Baseline noise monitoring results are presented in Table 4.7-2, and summarized below.

- The daytime residual background (L_{90} dBA) measurements ranged from 60 to 67 dBA;
- The nighttime residual background (L_{90} dBA) measurements ranged from 54 to 58 dBA;
- The daytime equivalent level (L_{eq} dBA) measurements ranged from 64 to 74 dBA;
- The nighttime equivalent level (L_{eq} dBA) measurements ranged from 59 to 65 dBA;

Table 4.7-2 Baseline Ambient Noise Measurements – 350 Boylston Street, Boston, MA

						Octave Band Center Frequency: L_{90} Sound Levels								
Receptor I.D	Start	L_{10}	L_{50}	L_{90}	L_{eq}	32	63	125	250	500	1000	2000	4000	8000
	Time	(dBA)	(dBA)	(dBA)	(dBA)	L_{90} (dB)	L_{90} (dB)	L_{90} (dB)	L_{90} (dB)	L_{90} (dB)	L_{90} (dB)	L_{90} (dB)	L_{90} (dB)	L_{90} (dB)
Loc 1 Day	2:04 p.m.	75	68	67	73.9	67	73	67	66	61	63	59	50	44
Loc 1 Night	2:30 p.m.	69	64	60	66.5	68	68	63	60	57	56	51	43	35
Loc 2 Day	3:02 p.m.	65	61	61	63.7	65	64	66	62	59	55	49	40	30
Loc 2 Night	12:00 a.m.	64	59	54	61.2	62	62	58	54	51	50	45	34	25
Loc 3 Day	12:24 a.m.	67	62	57	64.5	63	63	60	57	54	53	47	37	26
Loc 3 Night	1:12 a.m.	60	59	58	59.3	61	58	56	56	55	55	50	40	23

Notes:

1. Daytime weather: Temperature = 52ºF, RH = 10%, winds 3 – 4 mph from the west
   Nighttime weather – Temperature = 43ºF, RH = 41%, winds light and variable
2. Road Surfaces were dry during all periods.
3. All sampling periods were approximately 20 minutes duration
4. Daytime measurements were collected on April 3, 2008
   Nighttime measurements were collected on April 4, 2008

During the ambient measurement period the existing background sound levels (L_{90}) for Locations 1 and 2 exceeded the City of Boston noise standards for a residential area (60 dBA daytime, 50 dBA Nighttime). Residential Zoning status should apply to Locations 1 and 2, because there is a large condominium building on the corner of Boylston Street and Arlington Street. The Location 1 L_{90} sound level during the measurement period was 67 dBA Daytime and 60 dBA Nighttime, while the L_{90} sound level at Location 2 was 61 dBA Daytime and 54 dBA Nighttime. Location 3, which is on a commercial side-street, has Business Zoning status (65 dBA limit at all times). Existing L_{90} sound levels during the Location 3 measurement were within City of Boston limits.

4.7.5 Overview of Potential Project Noise Sources

The primary outdoor sources of sound resulting from this Project include a cooling tower, emergency generators, and rooftop supply and exhaust fans. Indoor sources will include underground parking garage supply/exhaust fans and an electrical transformer (also located in the parking garage). Garage exhaust fans will be connected to louvers that will vent onto Providence Street.

The cooling tower is expected to be a 2-cell induced draft cooling tower with a low noise fan. The cooling tower will be located on the roof, which will be at an elevation of approximately 121 feet above ground level (AGL). Based on the dimensions of the cooling tower, it was assumed that the top of the cooling tower would be at an elevation of approximately 138 feet AGL. The unit modeled for this analysis is the Marley Model NC8307GL2. The 650 ekW emergency generator will also be located on the roof. The top of the generator will be at an elevation of approximately 138 feet AGL, and the exhaust stack for the generator will be at an elevation of 148 feet AGL. The rooftop will also have approximately eleven Greenheck centrifugal fans providing supply and exhaust air needs for the garage, vestibules, restrooms, office areas, and mechanical rooms. The elevations for these fans will range between approximately 121 and 139 feet AGL. Some of the fans will be located on the building roof (121 feet), while some will be located on the mechanical penthouse roof (138 feet).

At street level, discharge and intake louvers will be connected to fans within below-grade areas such as the parking garage, the fuel-oil tank room, and the recycling room. The louvers will be located on the side of the building facing Providence Street. Most of the fans will be located inside, between 35 and 15 feet underground, so mechanical noise due to fan operation will be significantly attenuated at street level. Airflow noise will also be significantly attenuated, because the fans will blow into large exhaust plenums designed to slow down the airflow velocity. This will reduce noise levels considerably. There will also be an electrical transformer in a below-grade vault near the parking garage.

A summary of the major mechanical equipment proposed for the Project is presented below in Table 4.7-3. A complete summary of noise emissions from the rooftop sources is presented in Table 4.7-4, which includes broadband (dBA) sound power levels and octave-band sound power levels. Sound levels for garage fans are shown for informative purposes.

Table 4.7-3 Expected Primary Noise Sources – 350 Boylston Street Rooftop and Parking Garage

Source	Quant	Location (elevations approximate)	Size/Capacity (per unit)
Cooling tower (elevation for top of tower)	2 cells	Roof - 138′ AGL	35 BHp
Emergency generator (elevation at top of generator)	1	Roof - 138′ AGL	650 ekW
Generator Exhaust Stack	1	Roof - 148′ AGL	-
Rooftop Vestibule Exhaust Fan	1	Roof - 121′ AGL	7,100 CFM
Rooftop Toilet Exhaust Fans	2	Roof - 138′ AGL	4,400 CFM (approx.)
General Rooftop Exhaust Fan	1	Roof - 138′ AGL	9,250 CFM
Commercial Kitchen Exhaust	1	Roof - 138′ AGL	9,000 CFM
Mechanical Room Ventilation	1	Roof Intake Louver - West Side of Penthouse - 123′ AGL	10,000 CFM
Office Floor Outside Intake Air	1	Roof Intake Louver - West Side of Penthouse - 123′ AGL	22,000 CFM
Stair Pressurization Supply Air	1	Roof Intake Louver - North Side of Penthouse - 123′ AGL	16,000 CFM
Vestibule Supply Air	1	Roof - 121′ AGL	5,500 CFM
Garage Supply Air	1	Roof - 121′ AGL	55,000 CFM
Garage Supply Air	1	Roof - 121′ AGL	30,000 CFM
Discharge and Intake Louvers on Providence Street: Interior Fans Associated with Louvers Discharge Louver "A" Near Garage Entrance - 12′ AGL Discharge Louver "B" Near Arlington Street - 12′ AGL Intake Louver on Providence Street between "A" and "B" – 12' AGL			
Level B-3 Parking Garage Exhaust Fans – Louver "A"	2	Fans: -35′ Below Ground	12,500 CFM per fan
Level B-3 Parking Garage Exhaust Fan – Louver "B"	1	Fan: -35′ Below Ground	9,000 CFM per fan
Level B-2 Parking Garage Exhaust Fans - Louver "A"	2	Fans: -25′ Below Ground	12,500 CFM per fan
Level B-2 Parking Garage Exhaust Fan - Louver "B"	1	Fans: -25′ Below Ground	9,000 CFM per fan
Level B-1 Parking Garage Exhaust Fans - Louver "A"	2	Fans: -15′ Below Ground	9,000 CFM per fan
Truck Dock Exhaust - Louver "A"	1	Fan: 12′ AGL	10,000 CFM
Level B-1Fuel Oil Tank Room Ventilation - Louver "A"	1	Fan: -15′ Below Ground	500 CFM
Transformer Vault Exhaust - Louver "B"	1	Fan: -15′ Below Ground	5,000 CFM
Recycling Room Exhaust –Louver "B"	1	Fan: 12′ AGL	1,200 CFM
Fuel Oil Tank Room Air Supply - Intake	1	Fan: -35′ Below Ground	500 CFM
Transformer Vault Air Supply - Intake	1	Fan: -15′ Below Ground	15,000 CFM
Recycling Room Air Supply - Intake	1	Fan: 12′ AGL	1,200 CFM

Table 4.7-4 Equipment Sound Power Levels – per unit

Source	Quant	Location (elevations approximate)		Octave-Band Center Frequency									Overall A-weighted Sound Level (dBA)
				31.5 (dB)	63 (dB)	125 (dB)	250 (dB)	500 (dB)	1000 (dB)	2000 (dB)	4000 (dB)	8000 (dB)	
Cooling Tower (Air Inlet Side)	2 cells	Roof - 138′ AGL	35 BHp	77	77	80	76	76	71	66	61	53	**76**
Cooling Tower (Cased Face Side)	2 cells	Roof - 138′ AGL	35 BHp	69	69	68	66	60	56	52	50	40	**63**
Cooling Tower (Fan Discharge Side)	2 cells	Roof - 138′ AGL	35 BHp	79	79	80	79	78	74	71	69	62	**80**
Emergency Generator[1] (elevation at top of generator)	1	Roof - 138′ AGL	650 ekW	116	116	113	104	98	98	99	100	96	**106**
Generator Exhaust Stack	1	Roof - 148′ AGL	-	120	120	127	124	125	122	124	124	121	**130**
Rooftop Vestibule Exhaust Fan	1	Roof - 121′ AGL	7,100 CFM	93	93	91	83	78	77	71	66	61	**82**
Rooftop Toilet Exhaust Fans	2	Roof - 138′ AGL	4,400 CFM (approx.)	99	99	91	90	82	80	75	67	61	**86**
General Rooftop Exhaust Fan	1	Roof - 138′ AGL	9,250 CFM	95	95	93	83	80	78	72	66	62	**84**
Commercial Kitchen Exhaust Fan	1	Roof - 138′ AGL	9,000 CFM	97	97	95	94	86	83	78	73	69	**90**

1. Although a 650 ekW CAT diesel generator will be installed, sound data for a Cummins Power 750 kW Model 750DQFAA was used for the predictive modeling. The CAT and the Cummins machines have very similar sound levels, but the Cummins sound data was more detailed

Table 4.7-4 Equipment Sound Power Levels – per unit (Continued)

				Octave-Band Center Frequency									
Source	Quant	Location (elevations approximate)		31.5 (dB)	63 (dB)	125 (dB)	250 (dB)	500 (dB)	1000 (dB)	2000 (dB)	4000 (dB)	8000 (dB)	Overall A-weighted Sound Level (dBA)
Mechanical Room Ventilation Fan	1	Roof Intake Louver - West Side of Penthouse - 123′ AGL	10,000 CFM	79	79	81	75	72	71	68	63	56	**76**
Office Floor Outside Intake Air Fan	1	Roof Intake Louver - West Side of Penthouse - 123′ AGL	22,000 CFM	97	97	94	98	90	88	85	80	77	**94**
Stair Pressurization Supply Air Fan	1	Roof Intake Louver - North Side of Penthouse - 123′ AGL	16,000 CFM	93	93	95	84	78	77	72	67	63	**84**
Vestibule Supply Air Fan	1	Roof - 121′ AGL	5,500 CFM	90	90	89	87	73	77	73	66	61	**83**
Garage Supply Air Fan	1	Roof - 121′ AGL	55,000 CFM	96	96	93	88	85	82	77	69	63	**87**
Garage Supply Air Fan	1	Roof - 121′ AGL	30,000 CFM	103	103	95	86	81	80	74	68	63	**86**
Parking Garage B-3 Fan	2	35 Feet Below Ground - Vents to Louver A	12,500 CFM	81	81	83	82	83	79	73	67	59	**84**
Parking Garage B-3 Fan	1	35 Feet Below Ground - Vents to Louver B	9,000 CFM	82	82	82	80	81	80	75	68	58	**83**

Table 4.7-4 Equipment Sound Power Levels – per unit (Continued)

Source	Quant	Location (elevations approximate)		Octave-Band Center Frequency 31.5 (dB)	63 (dB)	125 (dB)	250 (dB)	500 (dB)	1000 (dB)	2000 (dB)	4000 (dB)	8000 (dB)	Overall A-weighted Sound Level (dBA)
Parking Garage B-2 Fan	2	25 Feet Below Ground - Vents to Louver A	12,500 CFM	81	81	83	82	83	79	73	67	59	**84**
Parking Garage B-2 Fan	1	25 Feet Below Ground - Vents to Louver B	9,000 CFM	82	82	82	80	81	80	75	68	58	**83**
Parking Garage B-1 Fan	2	15 Feet Below Ground - Vents to Louver A	12,500 CFM	81	81	83	82	83	79	73	67	59	**84**
Truck Dock Exhaust Fan	1	12' AGL - Vents to Louver A	10,000 CFM	83	83	82	78	80	75	71	66	57	**80**
Fuel Oil Tank Room Exhaust Fan	1	15 Feet Below Ground - Vents to Louver A	500 CFM	80	80	86	79	83	71	66	65	63	**81**
Transformer Vault Exhaust Fan	1	15 Feet Below Ground - Vents to Louver B	5,000 CFM	78	78	82	77	77	77	72	67	61	**80**
Recycling Room Exhaust Fan	1	12' AGL (Inside) - Vents to Louver B	1,200 CFM	80	80	79	79	74	65	63	60	58	**75**
Fuel Oil Tank Room Intake Supply Fan	1	15 Feet Below Ground - Intake at Louver B	500 CFM	80	80	86	79	83	71	66	65	63	**81**

Table 4.7-4 Equipment Sound Power Levels – per unit (Continued)

				Octave-Band Center Frequency									
Source	Quant	Location (elevations approximate)		31.5 (dB)	63 (dB)	125 (dB)	250 (dB)	500 (dB)	1000 (dB)	2000 (dB)	4000 (dB)	8000 (dB)	Overall A-weighted Sound Level (dBA)
Transformer Vault Intake Supply Fan	1	15 Feet Below Ground - Intake at Louver B	15000 CFM	93	93	93	83	76	76	71	66	62	**82**
Recycling Room Intake Supply Fan	1	12' AGL - Intake at Louver B	1,200 CFM	80	80	79	79	74	65	63	60	58	**75**
Fitness Spa Intake Supply Fan	1	15 Feet Below Ground - Intake at Louver B	5,000 CFM	74	74	76	79	75	71	69	64	59	**77**

Mitigation will be applied to multiple sources, in order to ensure compliance with noise regulations. It is assumed that the cooling tower will be surrounded by a screen, which will be built to screen the mechanical equipment on the roof. The top of the cooling tower will be open to the air (there will be no roof on that section of the penthouse). However, the metal walls of the penthouse will act as a barrier, shielding the cooling tower considerably. The top of the penthouse wall was assumed to be at an elevation of approximately 144 feet AGL. The emergency generator will be controlled using an exhaust silencer and an acoustical enclosure. Table 4.7-5 shows the transmission loss values (dB) for the exhaust silencer used in the predictive sound modeling. Like the cooling tower, the generator will be open to the air, but it will be surrounded by the metal walls of the penthouse building. In order to further limit impacts, the required periodic routine testing of the generators will be during daytime hours when background sound levels are highest.

Table 4.7-5 Exhaust Silencer Transmission Loss Used for Sound Level Modeling (dB)

Noise Source	Form of Mitigation	Octave Band Center Frequency (Hz)							
		63	125	250	500	1k	2k	4k	8k
Emergency Generator – Exhaust[1]	Exhaust Silencer	20	30	36	34	28	25	23	25

[1] GT Exhaust Systems, Inc 211-5100 Series Critical Grade

4.7.6 Modeling Methodology

Anticipated noise impacts associated with the Project were predicted at the nearest residences around the Project using the CadnaA noise calculation model. This model uses the ISO 9613-2 industrial noise calculation methodology. This model allows for octave band calculation of noise from multiple noise sources, as well as for computation of diffraction around building edges and multiple reflections off parallel buildings and solid ground areas. In this manner, all significant noise sources and geometric propagation effects are accounted for in the noise modeling.

4.7.7 Future Sound Levels From Project

Rooftop Ventilation and HVAC Equipment

Predicted rooftop equipment noise levels from the Project at each street-level receptor location, taking into account attenuation due to distance, structures, and noise control measures, are all at least 10 dBA lower than the quietest nighttime sound levels. The predicted exterior sound levels with noise mitigation measures are expected to range from 31 dBA to 39 dBA at the street level modeling locations. The street level sound levels are well within the most stringent nighttime residential zoning limits for the City of Boston (50 dBA). The Project's rooftop mechanical equipment will not create any new pure tone conditions when combined with existing middle of the night background sound levels. The results of the modeling indicate that the Project will result in little to no perceptible change in noise. The modeling results, including mitigation, are shown in Table 4.7-6 (MA DEP criteria) and Table 4.7-7 (Boston criteria).

Note that the sound levels in Tables 4.7-6 and 4.7-7 do not reflect the contribution from exhaust or intake fan equipment connected to the Providence Street louvers. Sound emissions from the garage fans will be significantly attenuated from the building itself. This is discussed in detail below.

Table 4.7-6: Comparison of Future Predicted Nighttime Sound Levels Incorporating Appropriate Mitigation with Existing Background – MA DEP Criteria

Location	Lowest Existing Nighttime L_{90} (dBA)	Future Project L_{90} (dBA)[1]	Future L_{90} – Nighttime Total (dBA)	Increase (dBA)
Location 1 – Public Garden: Arlington and Boylston Streets	60	31	60	0
Location 2 – Providence and Arlington Streets	54	31	54	0
Location 3 – Providence Street	58	39	58	0

Notes: Calculations include rooftop ventilation equipment and cooling towers. The contribution of the emergency generator and the below-ground parking garage fans are not reflected in these results.

Table 4.7-7: Comparison of Future Predicted Nighttime Sound Levels Incorporating Appropriate Mitigation to City of Boston Criteria

Location	Future L_{90} -- Project (dBA)[1]	Boston Nighttime Limit (dBA)
Location 1 – Public Garden: Arlington and Boylston Streets (Condominiums Across Street)	31	50
Location 2 – Providence and Arlington Streets (At Condominiums)	31	50
Location 3 – Providence Street (Commercial Business Zone)	39	65

Notes: Calculations include rooftop ventilation equipment and cooling towers. The contribution of the emergency generator and the below-ground parking garage fans are not reflected in these results.

Emergency Generator

The emergency generator will only operate during the day for brief, routine testing when the background sound levels are high, or during an interruption of the electrical grid in which case the rooftop mechanical equipment will not be operating.

Sound levels from the emergency generator were calculated at the same receptors as the mechanical equipment, and the results are shown in Table 4.7-8. Expected worst-case sound levels will be well below the City of Boston daytime noise limit of 60 dBA, and the nighttime noise limit of 50 dBA. The sound level contribution from the emergency generator was not added to the mechanical equipment. This is because the emergency generator will only operate during the day for brief, routine testing when the background sound levels are high, or during an interruption of the electrical grid in which case the rooftop mechanical equipment will not be operating.

Table 4.7-8: Predicted Emergency Generator Noise Levels Incorporating Appropriate Mitigation

Receptor ID	One 650 kW Generator
Location 1 – Public Garden: Arlington and Boylston Streets (Condominiums Across Street)	31 dBA
Location 2 – Providence and Arlington Streets (At Condominiums)	32 dBA
Location 3 – Providence Street (Commercial Business Zone)	40 dBA
City of Boston Residential Zoning Criteria	60 dBA (day) 50 dBA (night)
City of Boston Business/Commercial Zoning Criteria	65 dBA (day) 65 dBA (night)

Notes: Calculations include rooftop ventilation equipment cooling towers AND the contribution of the emergency generator and its exhaust stack. The contribution of the below-ground parking garage fans are not reflected in these results.

Underground Parking Garage Fans

The underground parking garage will have three levels. Each level will have between two and three fans, which will only operate when sensors detect critical levels of vehicle exhaust. They will not operate continuously, and they will operate infrequently when vehicular traffic within the garage is minimal (nighttime). The fans will be located inside and below ground (at elevations 35 feet, 25 feet, and 15 feet below grade). Passers-by on Providence Street will be shielded from mechanical fan noise, due to the many layers of concrete. The fan exhaust will vent into large exhaust plenums specifically designed to slow down the air flow velocity. When airflow velocity slows, noise from air passing over obstacles decreases considerably. These plenums will then be connected to louvers located approximately 12 feet above ground level on Providence Street. If necessary, acoustical louvers can be installed in order to further minimize airflow noise. Also (if necessary) the plenums can be lined with acoustically-absorptive materials, which will further attenuate sound from airflow.

Detailed design-stage information regarding fan orientation and the plenums was not available in order to conduct a rigorous analysis. However, it is assumed that the fans, because they will be below ground and shielded by building materials (concrete, etc.) , will not serve to increase the ambient sound levels on Providence Street by more than a few decibels, if that. For a listener standing directly in front of the exhaust louvers, air flow from fan exhaust will likely be audible. However, properly designed plenums and (if necessary) acoustically-line ductwork will minimize the noise impact of the garage exhaust fans.

Underground Transformer Vault

There will be a 4,500 kVA electrical transformer located within a vault on the first parking garage level (15 feet below street level). It will be located on the side of the building closest to Providence Street. It is not expected that this transformer will be a major source of noise at street level. Recent outdoor measurements of a 4,600 kVA transformer yielded sound levels of approximately 60 dBA at a distance of 7 feet away. Since the transformer for 350 Boylston Street will be enclosed in a vault, the sound transmission loss from transformer-to-street level should be at least 25-30 dBA. The total noise contribution of the transformer is not expected to exceed 40 dBA (on Providence Street) during anytime of the day.

4.7.8 Conclusions

The above results indicate that noise levels due to the Project at the various receptor locations are below the most stringent City of Boston Noise Zoning requirements for a nighttime residential zone for street level receptors, and are well below existing measured nighttime baseline noise levels. Through the various forms of noise mitigation incorporated into this Project, the results of the analysis indicate that the proposed building can operate without significant impact on the existing acoustical environment.

4.8 Geotechnical/Groundwater Impacts

4.8.1 Introduction

This section describes existing site conditions, subsurface soil and groundwater conditions, planned below-grade construction activities for the Project, procedures for monitoring and protecting adjacent structures and maintaining groundwater levels in the Project area during excavation and foundation construction, and following construction completion.

4.8.2 Existing Site Conditions

The Project site is currently occupied by four buildings, ranging from two to five stories above ground and is situated on the south corner of Boylston Street at the Arlington Street/Boylston Street intersection. Boylston Street borders the site to the north, Arlington Street to the east, and Providence Street to the south; abutting the west side of the site is an existing five-story building registered as 364-368 Boylston Street. On the opposite (north) corner of Boylston Street at the Arlington Street/Boylston Street intersection is the historic Arlington Street Church. Beneath Boylston Street is the MBTA's Green Line subway tunnel, which passes through the Arlington Street passenger station – portions of which extend to the Project site's property line. Ground surface along the Boylston Street side of the Project is at about El. 18.5 Boston City Base (BCB), sloping down gently along Arlington Street to about El. 14 BCB at the Providence Street side.

Each existing building on the Project site has a below grade basement level that varies in elevation from about El. 8 to El. 13 BCB. The basement levels of the three westernmost buildings (336-342, 344-350, and 352-360 Boylston Street) extend out beyond the north façade of each building, beneath the Boylston Street sidewalk to the curb and are believed to have been originally used as vaults to receive and store coal needed to heat the buildings. All four existing buildings are supported on wood pile foundations that likely extend 25 to 35 ft below the basement levels into the underlying natural subsurface soils. The existing buildings will be demolished and removed in their entirety to accommodate the Project.

4.8.3 Subsurface Soil and Bedrock Conditions

Based on subsurface data obtained at the site during a test boring exploration program undertaken by the Proponent, and available subsurface data collected by others in the immediate Project area, the general subsurface profile is listed in Table 4-8.1 in order of increased depth below the ground surface:

Table 4.8-1 Subsurface Soil and Bedrock Conditions in Project Area

Generalized Subsurface Strata	Approximate Depth Below Ground Surface to Top of Stratum (ft)	Approximate Thickness (ft)
Miscellaneous (Urban) Fill	Not Applicable	15 to 18
Organic Deposits	15 to 18	8 to 15
Marine Deposits	25 to 30	100 +
Glacial Deposits and Bedrock	130+	Not Applicable

Generalized descriptions of the strata are described below:

- *Miscellaneous (Urban) Fill* – The Project site consists of filled land reclaimed from the former Back Bay tidal flats during the late 1800s. The composition of this material varies, but typically consists of loose to dense, brown to gray, poor to well graded SAND with silt and gravel or stiff to medium stiff SILT with gravel, with varying amounts of concrete, cinders, metal, brick, and other miscellaneous materials. Buried building demolition debris and rubble from pre-existing buildings may also be encountered within and beneath the footprint of the existing buildings which currently occupy the site.

- *Organic Deposits* – The organic deposits consist of medium stiff to very stiff grey ORGANIC SILT with trace shells and plant fibers to stiff brown PEAT.

- *Marine Deposits* – The Marine Deposits consist of interbedded layers of sand and clay. The sand portion of the marine deposits is generally described as dense to very dense gray poorly graded SAND with silt, or dense to very dense silty SAND. Some of the sand layers appear to contain lenses or pockets of clay. The clay portion of the marine deposits is generally described as stiff to hard gray lean CLAY to stiff to hard sandy CLAY with gravel.

- *Glacial Deposits and Bedrock* – Glacial deposits and Bedrock were not encountered within the recently completed test borings and are not anticipated to be encountered within the zone of excavation for the Project. However, based on data from test borings drilled at the Heritage on the Garden site (just east of the Project site), the depth below *ground* surface to the top of these subsurface strata is anticipated to exceed about 140 ft.

4.8.4 Existing Groundwater Conditions

The Project site is located in Boston's Groundwater Conservation Overlay District (GCOD), which includes those areas in Boston having wood pile supported buildings that are potentially susceptible to the possible effects of depressed groundwater levels. Groundwater levels need to be above the tops of the wood piles to keep the piles submerged and lessen the potential for the wood to decay. Groundwater levels in the vicinity of the Project site are monitored by the Boston Groundwater Trust (BGwT), an entity that tracks and reports groundwater levels in the GCOD.

In recent years (from 1999 to the present) groundwater level measurements by the BGwT in as many as seven (7) observation wells existing in close proximity to the Project site have been measured as low as El. 0 BCB and as high as El. 7.8 BCB; more typically during this approximately 10-yr period, measurements have been relatively stable, ranging from El. 3 to El.5 (BCB). The observed water levels are somewhat below those that would be considered "naturally-occurring". As occurs elsewhere in the City, groundwater levels at and near the site could be influenced by leakage into and out of sewers, storm drains, water utilities, and other below-grade structures, and environmental factors such as precipitation, season, and temperature. In addition to gravity utilities, there are other structures that extend below El. 5 near the Project site, including the MBTA's Green Line tunnel and station.

In March 2008, the Proponent supplemented the BGwT's network of water level measuring instruments and installed an observation well on Providence Street, behind the 324-334 Boylston Street building (Arlington Building). Also in March 2008, adjacent to existing BGwT observation well 23J-1981(OW), the Proponent drilled a deep borehole and installed instrumentation (vibrating wire piezometers – VWPZs) at multiple vertical locations within the deep borehole to measure subsurface water levels at key elevations within the organic soils and marine deposits.

The newly installed observation well, constructed to measure water levels in the near surface fill soils and the VWPZs, designed to measure water levels in the deeper subsurface strata will be maintained and monitored on a regular basis by the Proponent prior to and during construction. Following the construction, and in accordance with the terms and conditions of an Agreement executed by and between the Proponent and the BGwT, ownership, maintenance and monitoring responsibilities for the observation well will be transferred from the Proponent to the BGwT.

Since installing the new instruments, water levels have been measured by the Proponent on an approximate bi-weekly basis. Comparison of the observation well and VWPZ data collected through mid-May 2008 shows water levels are lower in the Organic soils (El. 4.5 BCB) and Marine deposits (El. 0.5 BCB) relative to the fill soils (El. 6 BCB), indicating a "perched" water table conditions exist at the Project site. Perched water tables are not unusual for these type subsurface soil profiles, where fill soils overlie relatively low permeability soils. Percolating precipitation and possibly leaking water and sewer utilities can cause accumulation of water on top of the low permeability soils, resulting in the "perched" condition.

Perched conditions can be quite variable, and are dependent on several factors, including but not limited to surface cover materials (paved vs. unpaved), fill soil conditions, seasonal variations, rainfall, temperature, and construction dewatering. Thus the benefit of multiple observation well instruments in close proximity to the Project site and in general throughout the GCOD.

Changes in water levels in the Organic and Marine Deposits tend to be most influenced by construction dewatering activities. Thus the primary purpose of the VWPZ instrumentation installed by the Proponent is to have an early warning system in place to assess the effectiveness of seepage cutoff achieved by the Contractor's excavation support wall system. Evidence of a positive seepage cutoff can be shown to occur by measurement of water levels in the Organic and Marine soils during the construction at levels that are consistent with measurement of water levels in these strata prior to construction.

4.8.5 Proposed Foundation and Below Ground Construction

The Project will include construction of an above-grade office building with three underground parking levels. Construction of the underground parking structure and building foundations will require an excavation extending to the limits of the property from current ground surface (El. 18 to El. 14) to El. -25 to El. -28, which corresponds to an average depth of about 43 ft below current ground surface. The bottom of the excavation is anticipated to terminate within the Marine deposits, the design bearing strata for the new building's foundation system. The foundation system selected for the new building will be comprised of a reinforced concrete strip footing foundation constructed around the inside perimeter of the new building footprint in combination with a reinforced concrete strip footing foundation within the central core area of the new building footprint.

In advance of the excavation and foundation construction, a lateral earth support system will be installed around the perimeter of the entire site to control the limits of the excavation, avoid adverse impacts to adjacent properties, control groundwater seepage, and maintain current groundwater levels outside the excavation. Although the wall system has not yet been selected, it will likely consist of a continuous reinforced concrete diaphragm wall ("slurry wall") installed from ground surface and sealed down into the relatively impervious clay soils below the bottom of excavation. The perimeter lateral earth support wall system shall also serve as the permanent below grade foundation walls for the underground parking garage.

Because of the nature of the near surface, man-placed fill soils and the below grade perimeter foundation walls of the new work in direct conflict with the below grade foundation walls of former site buildings, pre-excavation will be performed in advance of installing the lateral earth support wall. The intent of the pre-excavation is to remove foundations and other buried obstructions from former site buildings that could interfere with installation of the excavation support walls.

Due to the depth of excavation, which will be made using conventional open cut methods, lateral bracing of the walls will be required as the excavation is advanced down to foundation subgrade level. Lateral bracing of the excavation support wall will be by internal systems, likely comprised of up to three levels of steel beam struts spanning opposing walls; external bracing (tiebacks) will not be allowed.

The below-grade construction will also extend approximately 30 ft below water levels measured in the fill and organic soils and approximately 35 ft below water levels measured in the marine soils. Thus, a major design and construction consideration related to the underground portion of the 350 Boylston Street Project is the requirement to accommodate hydrostatic uplift pressures acting on the lowest garage floor slab. Hydrostatic pressures on deep underground space bottom floors can be resisted or relieved – either approach is technically feasible. The method selected for the Project is to fully relieve the pressures beneath the lowest garage slab by constructing a water seepage collection system comprised of perforated piping embedded in a layer of drainage stone.

Use of pressure relief in lieu of pressure resisting slabs provides several benefits, including:

- Pressure relief essentially eliminates the potential for water infiltration into the basement from below the slab, creating a drier space and avoiding the need for post-construction grouting/sealing of the floor slab. Further, any water seepage into the pressure-relief system (taken from the deep marine soils) will be recharged into the shallow groundwater where it could actually help preserve the wood piles.

- Reduction in excavation depth and the potentially shorter time required to install the slab helps to reduce the risk of adverse effects of the excavation on adjacent properties.

Accordingly, use of pressure relief in the manner in which it is being considered for the Project does not represent a risk to the shallow groundwater table. Relative to shallow groundwater levels, the Project would be essentially no different than if the slab were designed to be a waterproofed pressure-resisting slab.

4.8.6 Maintenance and Protection of Groundwater Levels

Following installation of the perimeter excavation support wall, and in advance of the underground garage excavation, the Project will construct an underground drainage gallery adjacent to and outside the south excavation support wall, beneath Providence Street. The drainage gallery will be designed to receive and discharge water (by gravity) into the near surface fill soils. Typically, this type of groundwater recharge system is not put into operation until construction is substantially complete. However, the Project recognizes the importance of protecting groundwater levels in this area of the city and is committed to maintaining groundwater levels in close proximity to the Project site during and following construction.

Thus, during the below ground construction, groundwater and stormwater that may accumulate during excavation and foundation construction will be collected and recharged back into the drainage gallery constructed along the Providence Street side of the site to allow re-injection into the ground. Sedimentation controls to filter the effluent will be conducted prior to discharge to the groundwater recharge gallery. In this manner, the below grade construction activities will not adversely affect (lower) current groundwater levels.

In the permanent condition, the substantially watertight excavation support walls, which also serve as the new building's below grade foundation walls will prevent any significant withdrawal of groundwater by the Project from outside and beneath the below grade limits of the Project and the drainage gallery will be incorporated into the new development's stormwater collection system. More specifically, in the permanent condition, groundwater seepage collected from the lowest parking slab pressure relief system will be combined with the infiltration generated from one inch of rainwater captured across the surface area of the Project site and will be pumped into the drainage gallery to recharge water into the ground and lessen the volume of flow contributed by the new development to the city stormwater system.

4.8.7 Potential Impacts During Excavation and Foundation Construction

Potential impacts during excavation and foundation construction include impacts to area groundwater levels and ground and building movements due to excavation. Additionally, construction activities will generate ground vibrations, dust, and noise. The excavation support wall and foundation design and construction will be conducted to limit potential adverse impacts, especially to adjacent structures and to groundwater levels.

4.8.8 Mitigation Measures

Provisions will be incorporated into the design and construction procedures to limit potential adverse impacts, including the following:

♦ The design team will conduct studies, prepare designs and specifications, and review contractor's submittals for conformance to the Project contract documents with specific attention to protection of nearby structures and facilities and to maintaining existing groundwater levels. In particular, selection of building foundation systems and excavation support systems and their details will be made taking into consideration mitigation of adverse temporary and long-term effects outside the site.

♦ Performance criteria will be established in the Project specifications for the lateral excavation support systems with respect to movements, water-tightness and the construction sequence of the below-grade portion of the work. The contractor will be required to employ, and modify as necessary, construction methods and take necessary steps during the work to protect nearby buildings and other facilities.

♦ Performance criteria will be established for protection of groundwater levels in the vicinity of the Project. The contractor will be required to modify construction methods and take necessary steps during the work to not lower groundwater levels outside the limits of the site.

♦ Geotechnical instrumentation will be installed and monitored during the below-grade portion of the work to observe the performance of the excavation, adjacent buildings and structures, and area groundwater levels. Groundwater observation wells will be monitored prior to and during construction activities. When construction begins, groundwater observation wells will be monitored regularly for the duration of the below-grade construction period.

4.9 Construction Impacts

4.9.1 Introduction

A Construction Management Plan ("CMP") in compliance with the City's Construction Management Program will be submitted to the Boston Transportation Department ("BTD") once final plans are developed and the construction schedule is fixed. The construction contractor will be required to comply with the details and conditions of the approved CMP.

Proper pre-planning with the City and neighborhood will be essential to the successful construction of the Project. Construction methodologies, which ensure public safety and protect nearby residences, will be employed. Techniques such as barricades, walkways, and signage will be used. The CMP will include routing plans for trucking and deliveries, plans for the protection of existing utilities, and control of noise and dust.

Periodic meetings will also be held with neighborhood representatives to describe the ongoing work and to discuss measures that will be taken to minimize impacts on the community. The Project superintendent will contact abutters and close neighbors on a regular basis during the work.

During the construction phase of the Project, the Proponent will provide the name, telephone number and address of a contact person to communicate with on issues related to the construction. The construction contact will be a person whose responsibility it will be to respond to the questions/comments/complaints of the residents of the neighborhoods.

The Proponent intends to follow the guidelines of the City of Boston and the Massachusetts Department of Environmental Protection, which direct the evaluation and mitigation of construction impacts. As part of this process, the Proponent and its construction team will evaluate the mitigation methods as recommended by the Commonwealth's Clean Air Construction Initiative.

4.9.2 Demolition

The Project will require the demolition of four existing structures. Lead-based paint and asbestos surveys will be performed prior to demolition and any required abatement will be conducted in accordance with applicable regulatory procedures.

In addition, with respect to the demolition of the buildings, the demolition debris will be disposed of at a properly licensed solid waste disposal facility. During demolition, provisions will be made for the use of water spray, or other means of containment for interior work, to control the generation of dust.

4.9.3 Construction Methodology

Construction methodologies that ensure public safety and protect nearby tenants will be employed. Techniques such as barricades and signage will be used. Construction management and scheduling will minimize impacts on the surrounding environment and will include plans for construction worker commuting and parking, routing plans for trucking and deliveries, and control of noise and dust. Construction staging methodology is further described below.

As the design of the Project progresses, the Proponent and its construction team will meet with the BTD to discuss the specific location of barricades, the need for lane closures, pedestrian walkways, and truck queuing areas. This will be incorporated into the Construction Management Plan which will be submitted to BTD for approval prior to the commencement of the new construction work.

4.9.4 Proposed Foundation Construction

The new construction portions of the Project will be founded on the bearing strata below the lowest level of parking and/or a lower bearing strata dependant on the individual loads now being finalized. Additional information on the Project's geotechnical impacts is presented in Section 4.8, Geotechnical/Groundwater Impacts.

4.9.5 Construction Schedule

Construction of the Project is expected to take approximately 24 months, and is anticipated to commence in the spring/summer of 2009 and be complete in the spring/summer of 2011.

Typical construction hours during construction will be from 7:00 AM to 6:00 PM, Monday through Friday. Construction outside of those hours requires a permit. Typical construction hours for the Project will be in compliance with the City's regulations with limited work anticipated on the weekends. Certain interior demolition and abatement work will require off hours activity early in the Project while some of the existing tenants are in the building.

The Proponent plans to retain the services of a General Contractor who will be responsible for coordinating construction activities during all phases of construction with the City of Boston agencies in order to minimize potential scheduling and construction conflicts.

4.9.6 Construction Staging

The proposed construction staging plan will be designed to isolate the construction while providing safe access for pedestrians and vehicles during normal day-to-day activity and emergencies. The staging areas will be secured by chain-link fencing to protect pedestrians from entering these areas.

Although specific construction and staging details have not been finalized, the Proponent will work with the construction contractor and the City of Boston to ensure that staging areas will be located to minimize impact to pedestrian and vehicular flow. Secure fencing and barricades will be used to isolate construction areas from pedestrian traffic. In addition, public safety for pedestrians on abutting sidewalks will also include covered pedestrian walkways when appropriate and, as required, the suspension of the use of certain sidewalks during the most hazardous periods of overhead work activity during the construction of the superstructure. As required by the Boston Transportation Department and the Boston Police Department, police details will be provided to facilitate traffic flow. All construction procedures will be designed to meet all OSHA safety standards for specific site construction activities.

4.9.7 Construction Employment and Worker Transportation

The number of workers required during the construction period will vary, dependant on the stage of construction. The estimated average daily work force will be approximately 25 to 50 during the demolition and preparatory phases, increasing to 150 workers during typical periods, and up to approximately 300 workers during the peak period of construction. The Proponent will make reasonable good-faith efforts to have at least 50% of the total employee work hours be allocated for Boston residents, at least 25% of total employee work hours be allocated for minorities and at least 10% of the total employee work hours be allocated for women.

Because the construction workers will arrive and depart prior to peak traffic periods, the construction trips are not expected to impact local traffic conditions. To reduce vehicle trips to and from the construction Site, no construction worker parking will be permitted on the Site and all workers will be strongly encouraged to use public transportation. The building is being constructed close to the existing MBTA subway directly adjacent to the Project. The contractor will establish a designated drop-off area for workers, tools, and equipment. The established time frame for the drop-off area will be 6:00 AM to 7:00 AM. The drop-off area will include posted "No Idling" signs.

It is anticipated that trucks will approach the Site from Arlington Street. Unloading and loading areas will be set up on Providence Street for the demolition and new construction work.

4.9.8 Construction Noise

Intermittent increases in noise levels will occur in the short-term during the demolition and construction period. Construction work will comply with the requirements of the City of Boston noise ordinance. Every reasonable effort will be made to minimize the noise impact of construction activities. Mitigation measures are expected to include:

- Using appropriate mufflers on all equipment and providing ongoing maintenance of intake and exhaust mufflers;
- Muffling enclosures on continuously operating equipment, such as air compressors and welding generators with outdoor exposure;
- Replacing specific construction operations and techniques by less noisy ones where feasible;
- Selecting the quietest of alternate items of equipment;
- Scheduling equipment operations to keep average levels low, to synchronize noisiest operations with times of highest ambient levels, and to maintain relatively uniform noise levels; and
- Locating noisy equipment at locations that protect sensitive locations by shielding or distance.

4.9.9 Construction Air Quality

Short-term air quality impacts from fugitive dust may be expected, however, the construction management plan will include plans for controlling fugitive dust during demolition and construction. The construction contract will provide for a number of strictly enforced measures to be utilized by contractors to reduce potential emissions and minimize impacts. These will include:

- Using wetting agents where needed on a scheduled basis;
- Using covered trucks;
- Minimizing exposed storage debris on-site; and
- Cleaning of streets and sidewalks on a regular basis to minimize dust accumulations.

4.9.10 Construction Waste

The Proponent will take an active role with regard to the reprocessing and recycling of construction and building demolition waste. All demolition materials from buildings and site materials will be removed from the Site.

The disposal contract will include specific requirements that will ensure that construction procedures allow for the necessary segregation, reprocessing, reuse and recycling of materials when possible. For those materials that cannot be recycled, solid waste will be transported in covered trucks to an approved solid waste facility, per DEP Regulations for Solid Waste Facilities, 310 CMR 16.00. This requirement will be specified in the disposal contract. Construction will be conducted so that materials that may be recycled are segregated from those materials not recyclable to enable disposal at an approved solid waste facility.

4.9.11 Rodent Control

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

4.9.12 Construction Vibration

A pre-construction survey of all surrounding buildings and structures, including the Arlington Street Church, the William Ellery Channing statue at the corner of the Public Garden, The Heritage on the Garden, and the neighboring building at 364 Boylston Street will be conducted and the existing conditions shall be documented. See Section 4.5.8 for additional detail.

During the initial stages of any potentially significant vibration generating activity, vibration monitoring shall be placed in key locations to record vibration readings until a baseline is set.

The installation of the foundation work for the new portions of the Project shall be accomplished with low-impact deep foundation methods. No driven piles are proposed for the foundation systems.

During the excavation process, a set of Deformation Monitoring Points will be established and a monitoring program will be implemented.

4.10 Sustainable Design

4.10.1 Article 37 – LEED Core & Shell Credit (LEED-CS) Narratives

The 350 Boylston Street LEED-CS checklist highlights the 28 points that are currently in the 'yes' column of the 61 points possible within the rating system, which currently places the Project at a LEED Silver level. Also of the four Appendix A – Boston Credits, the Project is currently placing the Ground Water Recharge credit in the 'yes' column for a total of 29 points overall, which exceeds the Article 37 requirement of 23 points. In addition the checklist identifies which credits shape the 19 points that are in the 'maybe yes' column, which the team is actively investigating to assess the feasibility of including based on performance, cost, and aesthetics. A copy of the draft LEED checklist for the Project can be found in Appendix C.

The following information provides the narratives outlining the current compliance approach for each of the prerequisites and credits that are shown on the checklist in the 'yes' column. The Project is pursuing LEED certification from the US Green Building Council and is currently developing the pre-certification submission to the USGBC for review. Within the discussion of each prerequisite and credit, the LEED reference standard (if applicable) has been identified, as well as the credit compliance path within the narrative versus including all of the LEED requirements for each credit.

Sustainable Sites

- SSp1 - Construction Activity Pollution Prevention (PREREQUISITE)

Narrative:

The Project is being constructed on a previously developed site, and therefore based on the existing context will not be disturbing any topsoil on the site because the building footprint primarily serves as the site boundary. The Project does conform to the referenced LEED standard requirements of the Environmental Protection Agency (EPA) as well as the local codes and standards.

Referenced Standard: Construction General Permit (GCP) National Pollutant Discharge Elimination System (NPDES) program, Phase I and II.

- SSc1 – Site Selection

Narrative:

The previously developed site location for the Project satisfies the relevant requirements for credit compliance which include:

- The land has not been identified as habitat for any species on the threatened or endangered list (State or Federal).
- The site is not within 100 feet of any wetlands (US Code of Federal Regulations 40 CFR, Parts 230-233 and Part 22), nor is within any setbacks for wetlands.
- The site is not on land that prior to acquisition was public parkland.
- SSc2 - Development Density and Community Connectivity.

Narrative:

The approach to meeting the credit intent is through Option 2 – Community Connectivity. The Project is located at the corner of Boylston and Arlington streets, which is in a dense urban environment of commercial and residential buildings. The Project addresses the three key requirement areas as follows:

1. The Project is on a previously developed site.

2. The image below shows that the Project is located within a ½ mile of a residential zone or neighborhood with average density of 10 units/acre.

3. The Project easily exceeds the requirement of proximity within a ½ mile to 10 basic services. The services in this area are too numerous to list or display (Figure shows ½ mile extents), but 10 of the business types in this area include: Restaurants, Gym, Bank, Place of Worship, Convenience Grocery, Park, Post Office, Fire Station, Commercial Office, Cleaners, and numerous more.

♦ SSc3 – Brownfield Redevelopment

Narrative:

The site is assumed to be a Brownfield based on its location in the urban fabric and the history of sites and projects in the area. A majority of projects in the greater Boston area are required to perform some level remediation, and although specific quantities have not be identified, it is assumed that asbestos abatement will be required during the demolition of the existing buildings.

Referenced Standard: ASTM E1903-97 Phase II Environmental Assessment or local Voluntary Clean-up Program.

♦ SSc4.1 - Alternative Transportation – Public Transportation Access

Narrative:

The Project easily exceeds the requirements of this credit based on its proximity to the Arlington T-station and the other five t-stations (indicated on the image below) that are within a ½ mile radius of the Project site. (refer to figure 3)

♦ SSc4.2 - Alternative Transportation – Bicycle Storage & Changing Rooms

Narrative:

The 350 Boylston St. Project will have bicycle racks located on the first level of the parking garage, which exceeds the number required based on the accepted occupant density of 250 sf/person (Appendix 1, p. 441 – USGBC's LEED Core and Shell Reference Guide). In addition the accommodation for the required number of showers and changing rooms will be provided by stipulating within the tenants lease requirements (Tenant Design & Construction Guidelines – SSc9) that tenants will provide the opportunity for cycling commuters to have use of the facilities at the fitness center located on the first level of the parking garage.

♦ SSc6.2 - Stormwater Design – Quality Control

Narrative:

The "Stormwater Management Plan" that is being refined by the civil engineer developed for the Project outlines how the stormwater (90% of the average annual rainfall) is being treated through acceptable Best Management Practices (BMPs) (ex. Specifications identifying requirements for stormceptors, etc.) are treating the run-off to exceed the required 80% average annual post development total suspended solids (TSS).

Referenced Standard: state or local BMPs program OR Technology Acceptance Reciprocity Partnership (TARP), Washington State Dept. of Ecology

♦ SSc7.1 – Heat Island Effect – Non Roof

Narrative:

100% of the on-site parking for the Project will be located underground. As expressed in the narrative description in SSc7.2, the strategies (light colored membrane and vegetative roof) on the roof area exceed the credit requirements, which therefore make this compliance path possible. In addition, since 100% of the parking meets this requirement the Project is pursuing an innovation credit (see IDc1.3)

Referenced Standard - Solar Reflectance Index (SRI) calculated according to ASTM E 1980-01

♦ SSc7.2 – Heat Island Effect – Roof

Narrative:

The final roof area (top floor and floors 8 and 9) design will be comprised of a combination of light colored roof membrane, exceeding a Solar Reflectance Index (SRI) value of 78 (flat roof), and vegetated roof areas (extensive green roof). The combination of these two strategies will substantially exceed the required area as determined by the equation which weights the factors for the two individual requirements of:

♦ Roof membrane with SRI > 78 for 75% of roof area *(not including HVAC equip. area).*

♦ Vegetated Roof > 50% of roof area *(not including HVAC equip. area).*

Referenced Standard - Solar Reflectance Index (SRI) calculated according to ASTM E 1980-01

♦ SSc9 - Tenant Design and Construction Guidelines

Narrative:

The Tenant Design & Construction Guidelines for the Project are being developed to include criteria, strategies and information to assist tenants to realize the potential of the strategies incorporated in the LEED Core and Shell framework. In addition they provide a roadmap for the tenants to design and build sustainable interiors and adopt green building practices. The document will contain information about the LEED Commercial Interiors rating system and will identify which LEED Core and Shell credits were obtained and how they can potentially provide benefits to the tenants in terms of quantitative measures, such as reduced energy consumption, and qualitative measures, such as increased indoor air quality. The strategies the document will provide detailed information will include, but is not limited to:

- Water Use Reduction
- Optimize Energy Performance
- Energy Use and Metering
- Ventilation and Outdoor Air Delivery
- Construction IAQ Management
- Indoor Chemical & Pollutant Source Control
- Thermal Comfort
- Daylight and Views
- Commissioning
- The Elimination of Environmental Tobacco Smoke

4.10.2 Water Efficiency

- ♦ WEc1.1 & 1.2 - Water Efficient Landscaping – Reduce by 50% & No Potable Use or Irrigation

Narrative:

The Project achieves both of the water efficient landscaping credits because no permanent irrigation system is being installed on the Project.

- ♦ WEc3.1 - Water Use Reduction – 20%

To exceed the 20% % water use reduction credit requirement for the five flow and flush fixture types identified in the referenced standard (water closets, urinals, lavatory sinks, showers, and other sinks), the Project team has specified low-flow fixtures to be included in the Project. Based on the LEED-CS allowable density of 250 sf/person for office space, 550 sf/person for retail space, and transient visitors to the space (Appendix 1, p. 441 – USGBC's LEED Core and Shell Reference Guide), the current Full Time Equivalents (FTE) for the Project is 987 FTEs occupying the building on a daily basis, however, the Proponent anticipates less water usage as a result of fewer building occupants (approximately 880). It is assumed that the gender split is 50% female, 50% male. Current calculations demonstrate more than 20% water use reduction is being achieved by the Project.

Referenced Standard -1992 Energy Policy Act

4.10.3 Energy & Atmosphere

- ♦ EAp1 - Fundamental Building Systems Commissioning of the Building Energy Systems

(PREREQUISITE)

Narrative:

The intent of the prerequisite has been satisfied by the owner contracting a commissioning agent to complete the scope requirements as outlined by the prerequisite for the relevant systems that will be commissioned.

What will be done during the design phase and/or construction phase:

- Prior to issuing 100% CD documents the commissioning agent will conduct a design review and submit comments to the design team for inclusion.

- The commissioning agent will develop and implement a commissioning plan.

- During construction the commissioning agent will work with the on-site team (contractors and mechanical system sub-contractors) to verify the installation and performance of the commissioned systems.

- After the installation and performance checks are complete the commissioning agent will complete a summary commissioning report and submit it to the owner.

♦ EAp2 - Minimum Energy Performance (PREREQUISITE)

Narrative:

The building envelope, lighting, and HVAC systems in the building have been designed to comply with the mandatory provisions and the prescriptive requirements of ASHRAE 90.1-2004, which include:

♦ ASHRAE 90.1-2004 (without addenda) – sections 5.4, 6.4, 7.4, 8.4, 9.4 & 10.4

- Building Envelope
- Heating, Ventilating and Air Conditioning
- Service Water Heating
- Power
- Lighting
- Other Equipment
- ASHRAE 90.1-2004 (without addenda) – sections 5.5, 6.5, 7.5 & 9.5

Referenced Standard - ASHRAE/ IESNA Standard 90.1-2004 (mandatory provisions and prescriptive requirements)

♦ EAp3 - Fundamental Refrigerant Management (PREREQUISITE)

Narrative:

The Project is new construction and none of the HVAC equipment within the current design will contain CFC-based refrigerants. The Project specifications include specific criteria stipulating this requirement as well.

♦ EAc1 - Optimize Energy Performance

Narrative:

The Project is pursuing quantifying the impact of the current energy efficiency measures listed below (in addition to others) by developing an energy model to pursue Option 1 – Whole Building Energy Simulation. The energy modeling effort is being done with tools meeting the simulation tool requirements (ASHRAE 90.1-2004 – G2 Simulation General Requirements, ASHRAE 140), and in alignment with the modeling methodology outlined in Appendix G of the standard. The Project is currently targeting achieving two of the eight points available by this approach which equate to 14% savings compared to the baseline that was developed in accordance with ASHRAE 90.1-2004, Appendix G.

The energy efficiency measures being pursued include, but are not limited to:

- High Efficiency Glazing
- High Performance Building Envelope
- Reduced internal loads in relevant spaces *(Project team evaluating)*
- High Efficiency HVAC system equipment
- Premium efficiency motors
- Appropriate ventilation levels
- Daylight Sensors and automated dimming controls *(Project team evaluating)*

Referenced Standard - ASHRAE/ IESNA Standard 90.1-2004 OR ASHRAE Advanced Energy Design Guide for Small Office Buildings 2004 OR Advanced Buildings Benchmark Version 1.1

♦ EAc4 – Enhanced Refrigerant Management

Narrative:

The Project is new construction and therefore will incorporate all new HVAC&R systems that are compliant with the requirements of reducing ozone depletion and supporting early compliance with the Montreal Protocol while minimizing direct contributions to global warming. The final specifications will include criteria outlining that the refrigerants that will be utilized within the base building equipment (equipment $<$ 0.5 lbs of refrigerant are not required to be included) and fire suppression systems are required to be below the maximum threshold for contributions to ozone depletion and global warming potential.

4.10.4 Materials & Resources

- MRp1 - Storage & Collection of Recyclables (PREREQUISITE)

Narrative:

The "Recycling Management Plan" that is being refined for the building, which outlines the process for collection and recycling of the five materials that the prerequisite targets (paper, cardboard, plastics, metals, glass). A central trash/recyclable collection and separation area will be located on the first floor of the underground parking for collection of the different levels within the building and the location where pick-up will occur. In addition a copy of the "Recycling Management Plan" will be included in the "Tenant Design and Construction Guidelines" (SS credit 9) so that the tenants are informed of the process and the opportunity to increase the amount of recycling the building will be able to achieve.

- MRc2.1 & c2.2 - Construction Waste Management, divert 50% & 75% from disposal

Narrative:

A "Construction Waste Management Plan" is being developed by the contractor outlining the compliance approach to exceed the LEED credit requirement of diverting 50% & 75% of construction waste from landfills. The Project is currently being analyzed for the most appropriate approach for sorting the waste materials (on-site separation or collecting co-mingled loads that will be taken to a transfer station for separation), however the documentation requirements for the LEED submission are outlined in the Project specifications.

- MRc4.1 - Recycled Content, Specify 10%

Narrative:

The Project is being designed and specified to include a minimum of 10% of materials that contain post-consumer and pre-consumer (defined below) recycled content as calculated in accordance with the referenced standard (listed below). The "10% of materials with recycled content" is determined by calculating the isolated material cost (subtracting equipment and labor) for the permanent materials that are part of the Project, which does not include the mechanical, electrical and plumbing systems. For all assemblies the contribution of each component is determined first by the "% weight", and then by multiplying that amount by the line item cost and the percentage of recycled content (post-consumer and/or pre-consumer).

Since the credit requirements are based on cost, the Project team's strategy is to identify the high cost items and determine if it is feasible and cost effective to specify these materials to include recycled content. A few of the materials contributing to achieving this credit are:

- Structural Steel.
- Gypsum Wall Board (containing both pre-consumer and post-consumer).
- Acoustical Ceiling Tiles.
- Fly Ash – incorporating a percentage of fly ash (pre-consumer) within the concrete mix design to partially replace the use of the high embodied energy material, Portland cement.

What will be done during the design phase &/or construction phase:

- The Project team is researching recycled content material options and incorporating them into the Project specifications where appropriate.
- As the Project pricing updates are received, the Project team will assess the % impact of the 'significant driver' recycled content materials to assess feasibility of exceeding 10% target (ex. Concrete) and to identify if other materials need to be considered as well.
- Criteria for targeted recycled content materials will be incorporated into the Project specifications.
- When the Project reaches final pricing the LEED material cost baseline will be determined and the final % Recycled Content established.
- The contractor will oversee that the bids incorporate materials satisfying the recycled content criteria.
- The architects will review the material selections and alignment with credit requirements during the submittal process.
- The contractor will oversee that the specified recycled content materials are installed.

Referenced Standard - ISO 14021- Environmental Labels and Declarations- Self-declared environmental claims (Type II)

Post consumer material is defined as waste material generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose.

Pre-consumer material is defined as material diverted from the waste stream during the manufacturing process. Excluded is reutilization of materials such as rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it.

4.10.5 Indoor Environmental Quality

♦ EQp1 - Minimum IAQ Performance (PREREQUISITE)

Narrative:

To establish minimum indoor air quality performance the mechanical ventilation system is being designed and incorporates specification requirements to meet the minimum requirements of Sections 4 through 7 of ASHRAE 62.1-2004, Ventilation for Acceptable Indoor Air Quality. The mechanical ventilation systems are being designed using the Ventilation Rate Procedure.

Referenced Standard - ASHRAE 62.1-2004, Ventilation for Acceptable Indoor Air Quality

♦ EQp2 - Environmental Tobacco Smoke Control (PREREQUISITE)

Narrative:

The Druker Company (developer) has made the commitment to have the building be a smoke-free environment, and therefore have prohibited smoking throughout the building. Currently, there are not exterior designated smoking areas for the Project, but if they are to be included they will be at least 25 feet away from entries, outdoor air intakes and operable windows, in line with the prerequisite requirements.

Referenced Standard - ANSI/ASTM-779-03, Standard Test Methods for Determining Air Leakage Rate by Fan Pressurization AND Chapter 4 of Residential Manual for Compliance with California's 2001 Energy Efficiency Standards

♦ EQc1 – Outdoor Air Delivery Monitoring

Narrative:

All of the spaces within the building are mechanically ventilated, and the mechanical system has been designed and the Project specifications outline the requirements for the following:

- Permanent monitoring systems that provide feedback on ventilation system performance to ensure that ventilation systems maintain design minimum ventilation requirements.
- Configure all monitoring equipment to generate an alarm when the conditions vary by 10% or more from setpoint, via either a building automation system alarm to the building operator or via a visual or audible alert to the building occupants.

- Each mechanical ventilation system will have a direct outdoor airflow measurement device capable of measuring the minimum outdoor airflow rate with an accuracy of plus or minus

Referenced Standard - ASHRAE 62.1-2004, Ventilation for Acceptable Indoor Air Quality

♦ EQc3 – Construction IAQ Management Plan, During Construction

Narrative:

As a measure to eliminate or reduce the amount of indoor pollutants, an Indoor Air Quality (IAQ) Management Plan for the construction and pre-occupancy phases of the building is being developed, and will be included as an appendix in the Project specifications that outlines the following:

- During construction meet or exceed the recommended Control Measures of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guidelines for Occupied Buildings under Construction, 1995, Chapter 3.

- Protect stored on-site or installed absorptive materials from moisture damage.

- If permanently installed air handlers are used during construction, filtration media with a Minimum Efficiency Reporting Value (MERV) of 8 shall be used at each return air grille, as determined by ASHRAE 52.2-1999. Replace all filtration media immediately prior to occupancy.

Referenced Standard - Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guideline for Occupied Buildings under Construction, 1995, Chapter 3; AND ASHRAE 52.2-1999.

Please Note: The LEED Core & Shell rating system awards points for four of the credits EQ c4.1 – 4.4 in the following manner:

- 1 Point for Achievement of 2 (4.1, 4.2, 4.3 or 4.4)

- 2 Points for Achievement of 3 (4.1, 4.2, 4.3 or 4.4)

- 3 Points for Achievement of 4 (4.1, 4.2, 4.3 or 4.4)

The proposed Project is targeting 3 points, and the information below outlines how all 4 credits will be achieved.

♦ EQc4.1 -Low-Emitting Materials – Adhesives & Sealants

Narrative:

As one of the numerous pollutant source reduction approaches that will positively influence the indoor spaces within the Project, the specification outline detailed perspective requirements that all adhesives and sealants used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) will comply with the referenced standard, the South Coast Air Quality Management District (SCAQMD) Rule #1168. The Project specifications include tables outlining the Volatile Organic Compound (VOC) limits for different sealant and adhesive types.

What will be done during the design phase &/or construction phase:

- The Project team has written the Project specifications to require ALL sealants and adhesives to comply with the requirements of the South Coast Air Quality Management District (SCAQMD) Rule #1168.
- The LEED coordinator will provide a technical review of the Project specifications to confirm compliance with the requirements.
- During the submittal process the architects will review the submittals to confirm the products to be used comply with the requirements.
- Prior to the design submission the architect will document the sealant and adhesive material details within the LEED Letter Template.
- The contractor will monitor product installation to confirm no non-conforming materials are used.

Referenced Standard – South Coast Air Quality Management District (SCAQMD) Rule #1168, Jan. 2003, amended Oct. 2003; AND Green Seal Standard for Commercial Adhesives GS-36, Oct. 2000

- EQc4.2 - Low-Emitting Materials - Paints

Narrative:

As part of the pollutant source reduction approach, the Project specifications include the following requirements, established by Green Seal Standard GS-11, for the paints and coatings that will be used on the interior of the building (defined as inside of the weatherproofing system and applied on-site):

- Architectural paints, coatings and primers applied to interior walls and ceilings: Do not exceed the VOC content limits established in Green Seal Standard GS-11, Paints, First Edition, May 20, 1993.

- Flats: 50 g/L
- Non-Flats: 150 g/L
- Anti-corrosive and anti-rust paints applied to interior ferrous metal substrates: Do not exceed the VOC content limit of 250 g/L established in Green Seal Standard GC-03, Anti-Corrosive Paints, Second Edition, January 7, 1997.
- Clear wood finishes, floor coatings, stains, and shellacs applied to interior elements: Do not exceed the VOC content limits established in South Coast Air Quality Management District (SCAQMD) Rule 1113, Architectural Coatings, rules in effect on January 1, 2004.
- Clear wood finishes: varnish 350 g/L; lacquer 550 g/L
- Floor coatings: 100 g/L
- Sealers: waterproofing sealers 250 g/L; sanding sealers 275 g/L; all other sealers 200 g/L
- Shellacs: Clear 730 g/L; pigmented 550 g/L
- Stains: 250 g/L

What will be done during the design phase &/or construction phase:

- The Project team has written the Project specifications to require ALL paints to comply with the requirements of the Green Seal Standard GS-11.
- The remainder of the steps are similar to those provided in the description for EQc 4.1 – Sealants and Adhesives.

Referenced Standard – Green Seal Standard GS-11, Paints, May 1993; AND Green Seal Standard GC-03, January 1997; AND South Coast Air Quality Management District (SCAQMD) Rule #1113, January 2004

♦ EQc4.3 - Low-Emitting Materials – Carpet Systems

Narrative:

Continuing the theme of indoor pollutant source reduction the Project specifications dictate that all carpet systems will meet the following requirements for the three key components (carpet, carpet cushion, and carpet adhesive:

- **All** carpet installed in the building interior shall meet the testing and product requirements of the Carpet and Rug Institute's Green Label Plus program.

- All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute Green Label program.

- All carpet adhesive shall meet the requirements of EQ Credit 4.1: VOC limit of 50 g/L.

What will be done during the design phase &/or construction phase:

- The Project team has written the Project specifications to require ALL carpets to comply with the requirements of the Carpet and Rug Institute Green Label Plus program, and all carpet cushions meet the requirements of the Carpet and Rug Institute Green Label Program.

- The remainder of the steps are similar to those provided in the description for EQc 4.1 – Sealants and Adhesives.

Referenced Standard – Carpet and Rug Institute Green Label Plus program, 2004

♦ EQc4.4 - Low-Emitting Materials - Low-Emitting Materials: Composite Wood & Agrifiber Products

Narrative:

The final indoor pollutant source reduction strategy in this sequence of credits targets composite wood and agrifiber products used on the interior of the building (defined as inside of the weatherproofing system). The Project specifications dictate that ALL of these materials:

- Shall contain no added urea-formaldehyde resins.

- Laminating adhesives used to fabricate on-site and shop-applied composite wood and agrifiber assemblies shall contain no added urea-formaldehyde resins.

Composite wood and agrifiber products are defined as: particleboard, medium density fiberboard (MDF), plywood, wheatboard, strawboard, panel substrates and door cores.

Note: Materials considered fit-out are not considered base building elements and are not included.

What will be done during the design phase &/or construction phase:

- The Project team has written the Project specifications to require ALL composite wood and agrifiber products will contain no added urea-formaldehyde.

- The remainder of the steps are similar to those provided in the description for EQc 4.1 – Sealants and Adhesives

♦ EQc5 - Indoor Chemical & Pollutant Source Control

Narrative:

The previous set of credits focused on indoor pollutant source reduction through material selection, while this credit targets source reduction by addressing the paths where pollutants can be brought into the building. The credit focuses on the three main areas of:

- **Project Entrances** – at the main entries the project specifications dictate that a recessed entry mat with a minimum of a six-foot length will be installed.

- **Chemical Storage** – Although no chemical storage is currently perceived to be a component of the project, if as the project progresses it is deemed a requirement, each space will have a separate exhaust to sufficiently create negative pressure with respect to adjacent spaces with the doors to the room closed. In addition, the Tenant Design and Construction Guidelines provide recommended approaches for tenants if they will be storing chemicals within the fit-out spaces.

- **Air Handing Unit Filtration** – The Project specification outline prior to occupancy each of the air handling units will have the air filtration media replaced with a Minimum Efficiency Reporting Value (MERV) of 13 at both the return and where outside air is drawn in to be supply air.

♦ EQc7 - Thermal Comfort, Design

Narrative:

The HVAC systems and the building envelope have been designed to meet the requirements of ASHRAE Standard 55-2004, Thermal Comfort Conditions for Human Occupancy, and the Project specifications require that design compliance is in accordance with the Section 6.1.1 Documentation. The occupancy utilized in the calculations is based on the allowable occupancies for retail and office space as outlined in Appendix 1 of the LEED Core and Shell reference guide.

Referenced Standard – ASHRAE Standard 55-2004, Thermal Comfort Conditions for Human Occupancy

♦ EQc8.1 - Daylight & Views, Daylight 75% of Spaces

Narrative:

As shown on the perspective views included, the Project has a high degree of glazing on the exposed facades of the building, and daylight penetration has been a consideration and focus of the design. Although the final calculations are yet to be completed, the preliminary assessment is that for different potential typical floor plan layouts, which will be included in the Tenant Design and Construction Guidelines (SSc9), the amount and type of glazing per floor area of the floor plates provide the framework to easily achieve the requirement of 75% daylit of the overall "regularly occupied" floor area for the Project.

4.10.6 Innovation & Design

- Innovation in Design – Green Housekeeping Program

Narrative:

The Project will pursue the following requirements for the green housekeeping program that have been previously accepted by the USGBC on numerous other projects:

USGBC REQUIREMENTS FOR COMMERCIAL BUILDINGS:

To receive an innovation point, the Project team will need to demonstrate that a comprehensive green cleaning/housekeeping program is in place with clear performance goals, including:

1. A statement of purpose describing what the policy is trying to achieve from a health and environmental standpoint, focusing on cleaning chemicals and custodial training at a minimum.

2. A contractual or procedural requirement for operations staff to comply with the guidelines, including a written program for training and implementation.

3. A clear set of acceptable performance level standards by which to measure progress or achievement, such as Green Seal standard GS-37 (see www.greenseal.org) or California Code of Regulations, Title 17 Section 94509, VOC standards for cleaning products (go to www.calregs.com , click on California Code of Regulations and perform a keyword search for **94509**).

4. Documentation of the program's housekeeping policies and environmental cleaning solution specifications, including a list of approved and prohibited chemicals and practices.

- LEED Accredited Professional

The Project team contains a significant number of LEED Accredited Professionals and Kevin Settlemyre will be the designated LEED AP to demonstrate compliance with the credit requirements.

5.0 URBAN DESIGN

5.1 Introduction

350 Boylston is a mixed use office and retail project at the southwest corner of Arlington and Boylston Streets, diagonally across from Boston's beloved Public Garden. This corner is also shared with the historically significant Arlington Street Church to the North and The Heritage on The Garden, a residential, office and retail complex to the East. With such prestigious neighbors, the design of 350 Boylston will reinforce the texture and scale of Boston's Back Bay as a contemporary building at this important corner.

Designed by internationally renowned architect Cesar Pelli, the building creates a new commercial structure for the 21st century that is respectful of Back Bay's rich architectural traditions. The building massing, fenestration, materials and texture have all been carefully crafted to create a clearly contemporary building, while being sympathetic and compatible with the adjacent context. Pelli has approached the project design as a wonderful opportunity to create a new landmark for the City of Boston.

Over the last three decades, Cesar Pelli has designed some of the world's most recognizable buildings, including the World Financial Center in New York (1988), the Petronas Towers in Kuala Lumpur (1998), the International Finance Centre in Hong Kong (2003), the Carnival Center for the Performing Arts in Miami (2006), and in Boston, the proposed tower over South Station.

Pelli believes that a firm must not be constrained by a signature style, but rather, great design arises out of sincere collaboration with clients and a deep appreciation for a project's environmental, economic and social contexts. Pelli strives to make architecture that is contemporary but broadly resonant and optimistic. In designing projects, Pelli draws on architecture's rich history, on evolving technologies, and on the partnerships built with clients. The firm has been honored with critical acclaim and over 200 design awards, including the American Institute of Architects' two most prestigious awards, the 1989 Firm Award and the 1995 Gold Medal, for Cesar Pelli. In 2004, the firm was awarded the Aga Khan Award for Architecture for the design of the Petronas Towers.

5.2 Project Massing and Design

The building's overall massing strategy is two-fold. The primary horizontal massing is designed to create a rich fabric of elements which reinforce the street wall along Arlington and Boylston Streets with an important accent at the intersection of these two streets. This interweaving of a stone wall with punched windows and articulate metal and glass bays recalls the rhythm of Back Bay's townhouse module while simultaneously being detailed in a very contemporary way.

The second massing strategy embraces the classical tripartite vertical organization of the building which clearly defines a two-story base, a five-story shaft or body to the building, and a distinctive two-story top which steps back from both Arlington and Boylston Streets. By stepping the top floors back and increasing the glass and metal of these upper facades the overall building height and mass is diminished as exterior balconies are created that energize the urban nature of this corner. The bay windows transform through the façade vertically tying the ground, middle and building top into a unified structure, breaking the horizontality of the mass as well.

The ground floor on Arlington and Boylston Streets has large, delicately detailed wood and glass retail storefronts set into an articulated granite base which undulates in and out as the upper building bays extend to the street. Richly colored awnings and custom building lighting bring an exciting retail experience to these streets, similar to the successful Heritage on The Garden retail across the Arlington Street. At the corner of Boylston and Arlington, the expressive oval glass bay extends to the ground, reinforcing the significance of this intersection and marking a likely retail entry while it eases and widens this vibrant sidewalk.

The office entry is centered on the building's Boylston Street façade and is emphasized by extending the ground level granite treatment up through the second floor and marking the entry with a modest canopy and decorative flags. A wood and glass entryway gives a distinctly residential scale to the office lobby. The South facing façade along Providence Street and the party wall façade facing West are articulated with punched metal and glass windows in masonry typical in the Back Bay for secondary facades. The corners of the walls are accented with broader bay windows defining the perimeter of the design and the transition to the primary street façades.

The Boylston Street sidewalk will follow the design guidelines established by the Boylston Street Improvements Master Plan. In addition, five street trees will be planted from the building entry to the western edge of the site to enliven the street and initiate a tree planting program on this side of Boylston.

With the development of this new building, all loading and parking will be accessed from Providence Street and located in the building, eliminating the on-street loading that exists today for this building. The loading dock and garage entry are located on the western end of the project on Providence Street, so the retail character at Providence and Arlington Street is extended on this important corner which is quite visible from Park Square.

Project plans, elevations, sections, renderings and perspective views are included in Appendix B.

5.3 Project Materials

The Building is a mixture of rich materials which are derived from buildings in Back Bay yet are distinctly modern in their detail.

The body of the building is hand laid cast stone/limestone with deeply recessed metal framed punched windows which provide an overall pattern to the façades. The bay windows create a larger vertical rhythm to the façade and are glass and metal with custom rolled curved glass corners and horizontal stone bands which weave the bays into primary stone elevations. The main oval bay at the corner of Arlington and Boylston Streets is also metal, stone and glass with its faceted expression springing from the rolled glass corners.

The terraced set back upper floors consist of clear glass in metal frames to lighten the upper floors' visual expression. At each terrace, painted metal rails articulate the edge of each setback. The terrace pavers and all roofing material are proposed as light in color to enliven the surroundings and improve energy efficiency.

The retail experience at the street has large storefront glazing in a rich wood frame that is set into a two-story articulated granite wall. Custom designed building lighting, canvas awnings and retail signage will add shade, shadow, color, and detail to these dynamic retailer's interior displays.

The second level windows are larger and are more expressive to transition the granite base into the building's five-story cast stone/limestone shaft. A dated cornerstone will be featured at the base of the building identity its construction date.

5.4 Changes in the Project Design from the PNF

In response to comments received from the BRA, the BCDC and other interested parties since filing the PNF, the project team has made a number of refinements in several key areas:

Tripartite façade: There is greater clarity in the massing and articulation of the base, middle and top of the building. The base is clearly a granite two-story base with distinct window systems. The middle of the building is now a planar stone wall with punched windows where there was previously a mixture of stone, pier and panel articulation and window openings. The glass bays in this middle portion of the building have also become more refined and delicate with the elimination of the black metal bands and where they were previously equally balanced with the stone wall, are now distinctly a minor articulation on the broader stone façade.

The top which had been a mixture of stone with metal and glass bays now is uniformly articulating the top in a horizontal expression of metal and glass. This expression is completed with a stone cornice to clearly identify the top of the building reflecting back to the building's main material.

Boylston-Arlington hierarchy: Where the previous design treated the Boylston and Arlington façades as equally balanced patterns, the current scheme makes a distinct difference between the two. Boylston is treated with three expanses of stone with three punched windows between the bay windows, while Arlington has two expanses of stone with two punched windows in its stone wall. The terrace setbacks on Arlington are also 2′ smaller in depth than the Boylston Street terraces, which in combination with the broader stone walls on Boylston, clarifies Boylston Street as the more major of the two street facades.

The oval corner bay handsomely marks this intersection and gracefully transitions the Boylston Street façade to Arlington Street such that each street is distinct, yet the building is able to be read as a whole around this corner bay. The streetscape on Boylston which follows the Boylston Street Master Plan Guidelines also reinforces the primacy of the Boylston Street façade.

Lower Floor Detail: The current design has clarified and enriched the retail pedestrian experience by extending the bays down to the ground level, which enlarges the sidewalk between each bay. The previous one-story base of granite is now a two-story articulated granite base. The design has also been advanced to include dimensional wood and glass retail storefronts with custom designed lighting. The building's office entry has also become more clearly detailed with a wood storefront and a metal canopy set into the two-story granite façade to highlight the entry in the Boylston Street elevation.

Boylston Street Master Plan: The Project will follow the Boylston Street Master Plan Improvement Guidelines for sidewalk treatment on Boylston Street, which requires a granite curb at the sidewalk edge, a carriageway band of granite pavers inside the curb line, granite sidewalk, and a granite transition strip at the building. The Project also provides five trees along Boylston Street to begin the tree planting program along this important east-west artery. The sidewalk Master Plan extends around the oval corner and includes the entry to the MBTA Green Line.

6.0 HISTORIC AND ARCHAEOLOGICAL RESOURCES

6.1 Historic Resources

6.1.1 Buildings on the Project Site

The Project site contains four existing buildings, 330-334 Boylston Street (the Arlington Building), 336-342 Boylston Street, 344-350 Boylston Street, and 352-360 Boylston Street. The Project site is located within the boundaries of the Back Bay Historic District, which is listed on the National Register of Historic Places, but is outside the boundaries of the Back Bay Architectural District established by the state legislature in 1966. The National Register nomination for the Back Bay Historic District does not specifically call out any of the four buildings on the Project site as possessing exceptional architectural or historical significance. The nomination indicates that generally "the district contains along Boylston and Newbury Streets a significant collection of early 20th century commercial buildings which reflect a variety of architectural modes." The nomination specifically mentions only the Berkeley Building (a Boston Landmark) at 416-426 Boylston Street, Boylston Chambers at 739 Boylston Street, 885-889 Boylston Street, 651-655 Boylston Street, and 400-402 Boylston Street as architecturally prominent buildings within this section of the historic district; no reference is made to 324-334 Boylston Street (the Arlington Building), 336-342 Boylston Street, 344-350 Boylston Street, or 352-360 Boylston Street. The following provides more detailed information on each of the four buildings which currently occupy the Project site.

Arlington Building, 330 - 334 Boylston Street

Constructed in 1904, the five-story Arlington Building was constructed according to designs by Boston architect William Gibbons Rantoul (1867-1945). Rantoul, a Harvard-trained architect operated a practice at 8 Beacon Street from 1897 to 1942. Rantoul is known primarily for his residential commissions on Boston's North Shore. A Salem resident, Rantoul designed numerous single family dwellings, a golf clubhouse, and country estates in Beverly, Ipswich, Newburyport, Salem, and Topsfield. His other Boston projects include the 1901 Fur Merchant's Warehouse at 717-719 Atlantic Avenue (located within the National Register-listed Leather District) and the 1905 Emily Mandell House at 247 Commonwealth Avenue.

William Gibbons Rantoul's Beaux Arts Style design for the Arlington Building employs a two-story base which gives rise to three upper stories topped by a copper cornice. Three vertical window bays on the Boylston Street elevation and seven vertical window bays on the Arlington Street elevation terminate at the top floor in broad segmental arches. The brick building is ornamented with granite and limestone elements.

In the 1910s, commercial tenants included the Bryant & Stratton Commercial School, a business school which occupied the building until 1950 before relocating to Newbury Street. In 1930, the Arlington Building's first floor storefronts were remodeled in the Art Deco Style by Boston architect William T. Aldrich (1880-1966) for the new home of the Shreve, Crump & Low Company. The Boston jewelry store established in Downtown Crossing in 1796, occupied the first two floors of the building until 2005, before relocating to their current location at 440 Boylston Street.

Since its initial 1904 construction, numerous alterations have occurred to the Arlington Building. At the time of the building's construction, Arlington Street terminated at Boylston Street. The extension of Arlington Street through the block transformed the Arlington Building into a prominent corner building and required the addition of an entirely new Arlington Street façade where previously only a party wall existed. Today, a comparison of the Boylston Street and Arlington Street facades indicates subtle differences in detailing around the windows and cornice which reflect the differing construction dates.

The 1930 remodeling by Aldrich in the Art Deco Style is limited on the exterior to infilling the original storefronts with ornamented limestone panels and the creation of bronze and glass storefronts (portions of which have been replaced or altered).

In 1984, when the Arlington Building was initially surveyed by Boston Landmarks Commission (BLC) staff the building was ranked as a "Group III" building out of the following five group ranking system used by the BLC for the purposes of consideration for designation as a Boston Landmark: Group I ("Highest Significance"), Group II ("Major Significance"), Group III ("Significant"), Group IV ("Notable"), and Group V ("Minor"). Only buildings with a ranking of I, II, or III are considered eligible by the BLC for Landmark designation. There are a large number of buildings in Group III, therefore, those Group III buildings which may meet criteria for designation as Boston Landmarks are subcategorized as "Group III, Further Study".

In response to written requests that the BLC reevaluate the 1984 ratings for all the buildings on the south side of Boylston Street between Arlington Street and Berkeley Street, including the four existing buildings on the project site, the BLC voted to upgrade the rating of the Arlington Building from a rating of "III" to a rating of "III F.S." (Further Study) in April 2006. Subsequent to the upgrading of the building to a rating of "III F.S." a petition was filed with the BLC to designate the Arlington Building a Boston Landmark.

At an October 2006 hearing, the BLC voted not to accept the landmark petition to further study the Arlington Building for designation as a Boston Landmark. The BLC decision was based on historical research presented by the Owner, and concurred with by BLC staff, which demonstrated that the Arlington Building does not meet the criteria for designation as a Boston Landmark.

336 – 342 Boylston Street

The narrow, four-story commercial block at 336-342 Boylston Street was constructed by 1898 with George Abbot listed as architect. Floors two and three of the storefront feature large, three-part plate glass windows; the fourth floor contains five round arched window openings separated by columns with Corinthian capitals. At the upper levels, the simple pier and spandrel building is ornamented with Renaissance Revival Style terra cotta details in the form of egg and dart molding, floral swags, putti, and cartouches.

Throughout the 20th century the building housed stores at the ground floor and offices on the upper floors. In the late 1920s, a restaurant occupied the ground floor. The storefront has been extensively altered through repeated remodeling, thereby diminishing the building's overall architectural integrity. A 1919 photograph depicts the original storefront as having a recessed centered entry with large, flanking plate glass display windows, none of which is extant.

When surveyed in 1984, the building at 336–342 Boylston was ranked a Group IV ("Notable") building. In response to the written requests mentioned above that the BLC reevaluate the 1984 ratings for all the buildings on the south side of Boylston Street between Arlington Street and Berkeley Street, the BLC voted to not to change the "IV" rating of the building. The decision not to change the rating of the building was based on a BLC staff recommendation.

344 - 350 Boylston Street

This four-story commercial building was completed in 1897 as two separate buildings. The architect was Warren A. Rodman. The pier and spandrel building is nine bays in width. Cast metal piers at floors three and four exhibit a simplified pilaster motif. The building is capped by a Classical Style cornice.

Similar to its neighbors, this building housed first floor commercial uses and upper floor office tenants throughout the 20th century; the New England Trust Company maintained offices in the building from the early 1930s into the mid-1940s.

When surveyed in 1984, the building at 344–350 Boylston was ranked a Group IV ("Notable") building. In response to the written requests mentioned above that the BLC reevaluate the 1984 ratings for all the buildings on the south side of Boylston Street between Arlington Street and Berkeley Street, the BLC voted to not to change the "IV" rating of the building. The decision not to change the rating of the building was based on a BLC staff recommendation.

352 - 360 Boylston Street

The building was constructed in 1906 according to designs by the Boston architectural firm of Parker & Thomas. The two-story commercial building has a limestone veneer facade with a strong horizontal emphasis created by cornices above the storefronts and second story windows. At the second story, the horizontality is further emphasized by a window band of ten single large sash divided by narrow piers employing a rope motif. At the ground level, the outer two storefronts have been drastically altered; the central storefront retains a highly ornamented cast metal arched entry with flanking display windows, all with gold-highlighted bas relief designs, with marble veneer base. The arched entry is recessed and ornamented with a fanlight and grille transom.

The architects, John Harleston Parker (1873-1930) and Douglas H. Thomas, Jr. (1872-1915), were in partnership from 1901 to 1907 and with Arthur Wallace Rice (1869-1938) from 1908 to 1936. Parker & Thomas had a diverse practice in Boston and Baltimore which included the design of banks, hotels, educational facilities, office buildings, private residences, and a group of exposition buildings. They were responsible for many of Boston's early 20th century buildings, including the Tennis and Racquet Club at 929 Boylston Street, Fenway Studios (a Boston Landmark) on Ipswich Street, the R.H. Stearns Department Store on Tremont Street, the John Hancock Building, and the United Shoe Machinery Building (also a Boston Landmark).

Throughout the 20th century, the building was occupied by ground floor commercial tenants (including Schrafft's Restaurant in the 1940s) and office uses on the second floor. The Women's Educational and Industrial Union was a tenant in the building from 1975 to 2005.

When surveyed in 1984, the building was ranked a Group IV ("Notable") building. In response to the written requests mentioned above that the BLC reevaluate the 1984 ratings for all the buildings on the south side of Boylston Street between Arlington Street and Berkeley Street, the BLC voted to not to change the "IV" rating of the building. The decision not to change the rating of the building was based on a BLC staff recommendation.

6.1.2 Historic Resources in the Project vicinity

Numerous historic resources and historic districts exist within the Project's vicinity. Notable resources include: Arlington Street Church across the street from the Project site at the corner of Arlington and Boylston Street, the Berkeley Building at 416-426 Boylston Street, the Paine Furniture Building at 75-81 Arlington Street, the Back Bay Historic District, the Boston Common and The Public Garden, and the Bay Village Historic District, all of which are listed on the State and National Registers of Historic Places. The project site is also within close proximity to the Park Square – Stuart Street Historic District, which has been determined eligible for, and is in the process of being nominated to, the National

Register. These resources are described below, Table 3-4 contains a complete listing of State and National Register-listed properties located within a quarter mile radius of the Project site.

Arlington Street Church was the first building completed in the newly created Back Bay in 1861. Based on the Gibbs' St. Martins-in-the-Field, a 190 foot multi-staged tower with steeple sits above an enclosed three bay pedimented portico. The church is located on the opposite side of Boylston Street, at the corner of Arlington and Boylston streets. Designed by architect Arthur Gilman for the Unitarian Church, this Italianate inspired Georgian church is listed in the National Register and is a Boston Landmark.

The **Back Bay Historic District** is located between Arlington Street and Massachusetts Avenue to the west, and includes the Project site. 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 in-filled. The result was the creation of over four hundred and fifty acres of dry, developable land.

The development of the Back Bay was governed by a cohesive plan that incorporated zoning and building restrictions such as mandatory building setbacks of 20 – 25 feet from the street curb, limiting of building heights, and confining of building materials to stone or brick. These restrictions assisted in unifying the large array of architectural styles present in the area including Italianate, Gothic Revival, French Academic, Panel Brick, Queen Anne, Richardson Romanesque, Renaissance Revival, Beaux Arts, Chateauesque, Georgian Revival, and combinations thereof.

The original planning considerations for the Back Bay also attempted to keep the area predominately residential by excluding almost all commercial and business facilities. In addition, specific building lots within the Back Bay were reserved for use as parkland or by public institutions; hence the large number of churches, public buildings, hotels, schools, and clubhouses constructed. Most of the original structures survive, although many of the large-scale townhouse residences and mansions have been converted to apartments, condominiums, schools, and commercial space.

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 project site or other buildings on the south side of Boylston Street.

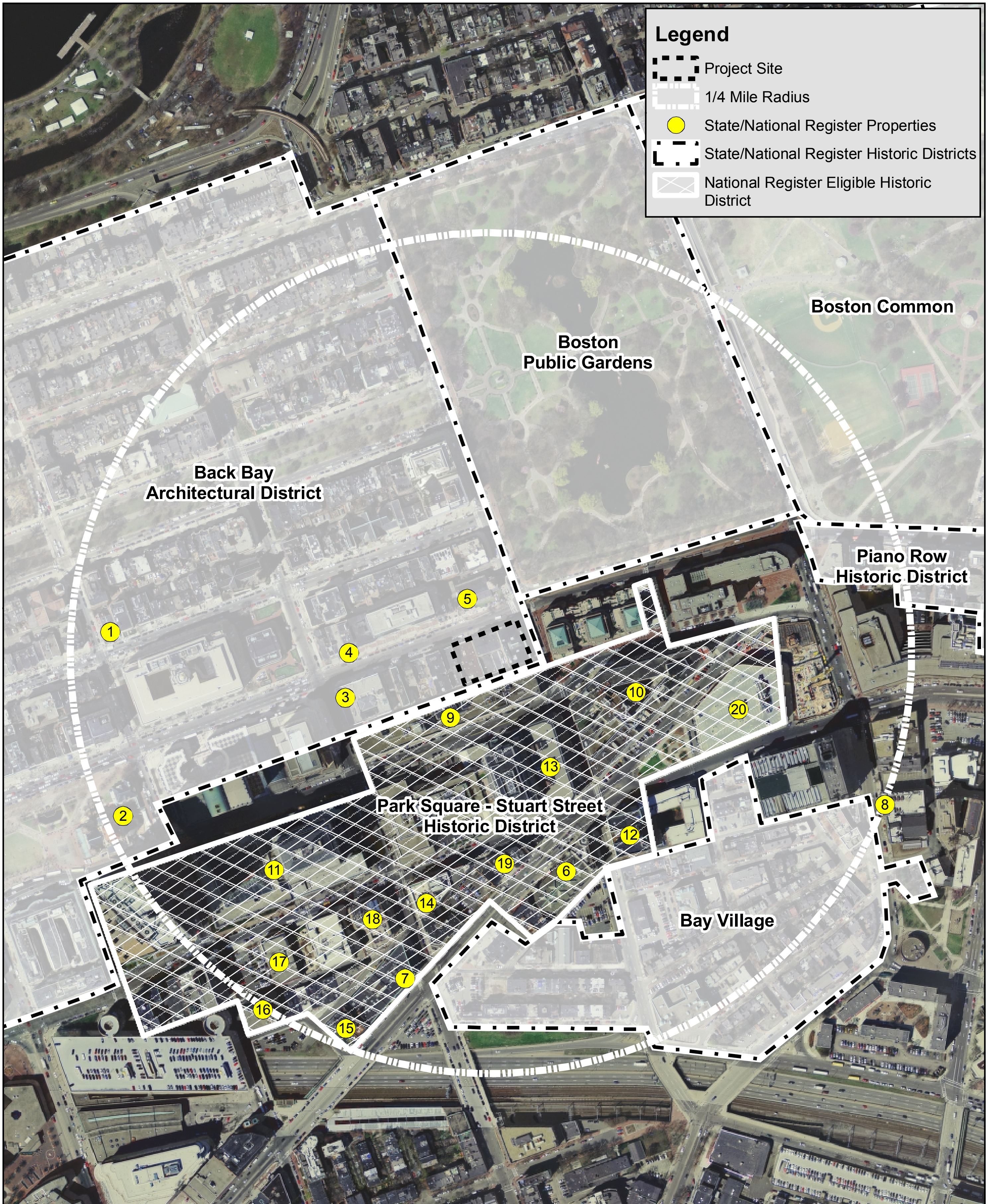
The **Berkeley Building** (416-426 Boylston Street) is a major Beaux Arts style building by the architectural team of Constant Desire Despradelle and Stephen Codman. Constructed in 1905, the Berkeley Building is located at the opposite end of the block from the project site, at the corner of Boylston and Berkeley streets. The early 20th century steel frame office building allows for wide expanses of glass surrounded by thin terra cotta cladding. Rising five stories above a ground floor retail level, the white terra cotta and transparent glass building is a striking Boston Landmark.

The **Paine Furniture Building** (75-81 Arlington Street) was constructed in 1914 to house the Paine Furniture Company showroom, office, and manufacturing operations, which served a nationwide clientele. The company was founded in Boston in 1835 and is one of the oldest and largest furniture manufacturing companies in New England. At the time of its construction, the Classical Revival style building was described as the largest furniture headquarters in the world. The new building was a marvel of centralized organization with showrooms, offices, manufacturing, upholstery, repair, and shipping activities all located in one structure. The building is individually listed in the National Register.

The **Bay Village Historic District**, a local historic district which is also listed in the State Register. Bay Village is a cohesive residential enclave of modest row houses built on former mud flats that were filled in the 1820s and 1830s. The houses are chiefly in the Greek Revival style. In the 19th century the neighborhood was home to many craftsmen who worked out of their homes.

The **Park Square – Stuart Street Historic District** has been determined eligible for listing in the National Register. Roughly bounded roughly by St. James, Clarendon, Boylston, and Stuart Streets, Columbus Avenue, and Park Plaza, the Park Square – Stuart Street Historic District is significant for development associated with the former sixteen-acre Boston & Providence Railroad yard. The district has further significance as an early 20th century extension of Boston's downtown business district, when relocation of the railroad terminus in 1900 and subsequent redevelopment of the railroad property led to the construction of Stuart Street and adjacent business and institutional buildings. The district was nominated to the National Register, however, as a result of objections by property owners the district was not listed.

Table 6-1 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 the map in Figure 6-1. Figure 6-1 also identifies the locations of the State and National Register-listed and eligible historic districts with a quarter mile of the Project site.



Scale 1:4,800
1 inch = 400 feet
200 0 200 400
Feet

Figure 6-1
Historic Resources

350 Boylston Street
Boston, Massachusetts

Basemap: 2003 Orthophotography, BWSC

Epsilon ASSOCIATES INC.

Table 6-1 State and National Register-Listed Properties and Historic Districts

Historic Resource	Address
Back Bay Historic District	Roughly bounded by Arlington, Providence, St. James, Exeter, and Boylston Streets, Charlesgate East, and the Charles River
Back Bay Architectural District	Roughly bounded by Back St., Embankment Rd. and Arlington St., Boylston St. and Charlesgate East
Bay Village Historic District	Bounded by Piedmont, Winchester, Melrose, Fayette, and Tremont Streets
Boston Common	Bounded by Beacon, Park, Tremont, Boylston and Charles Streets
Boston Public Gardens	Bounded by Beacon, Charles, Arlington and Boylston Streets
Piano Row Historic District	Bounded by Boylston, Tremont, Avery, Tamworth, and La Grange Streets, Park Square, Haymarket Place, Allens Alley, and Head Place
1. Trinity Church Rectory	Clarendon Street and Newbury Street
2. Trinity Church	Boylston Street at Copley Square
3. Berkeley Building	416-426 Boylston Street
4. Street Clock	439 Boylston Street
5. Arlington Street Church	Corner of Arlington Street and Boylston Street
6. First Corps of Cadets Building	97-105 Arlington Street and 130 Columbus Avenue
7. Youth Companion Building	140-144 Berkeley Street & 195-217 Columbus Avenue
8. Charles Playhouse	74-78 Warrenton Street
9. Park Square Office Building	1-59 Saint James Avenue
10. Statler (Park Plaza) Hotel / Office Building	54-78 Arlington Street

Table 6-1 State and National Register-Listed Properties and Historic Districts (Continued)

Historic Resource	Address
11. John Hancock Building	190-200 Berkeley Street
12. Consolidated Building	100 Arlington Street
13. Paine Furniture Company Building	75-81 Arlington Street
14. Salada Tea Building	330 Stuart Street
15. Pope / Cahner's Building	219-223 Columbus Avenue
16. Publisher's Building	131 Clarendon Street
17. U.S. Post Office, Back Bay Branch	390 Stuart Street
18. Boston Police Headquarters	154 Berkeley Street
19. Commercial Building	129-133 Columbus Avenue and 304-306 Stuart Street
20. Motor Mart Garage	60-72 Eliot Street

6.2 Archaeological Resources

The Project site consists of previously developed urban parcels. Due to previous development activities and disturbances, it is not anticipated that the site contains significant archaeological resources.

6.3 Impacts to Historic Resources

6.3.1 Design and Visual Impacts

As discussed in greater detail in Section 5.0 Urban Design, the new building will continue the Arlington and Boylston Streets/ Back Bay building massing and height relating to the existing buildings across Arlington Street and west of the Project site along Boylston as well as across Providence Street. The new building will utilize a two story base, consistent with older, existing commercial buildings in the Back Bay. Projecting bays, inspired by the rowhouses of the Back Bay, will articulate and lend scale to the upper floors along the Boylston and Arlington street facades.

6.3.2 Shadow Impacts

As discussed in greater detail in Section 4.2, the Project will result in some new shadow. However, new shadow will generally be cast across portions of Boylston Street and its sidewalks, Arlington Street and its sidewalks, and Park Plaza and its sidewalks. During 13 of the 14 time periods studied, no new shadow will be cast onto the Public Garden. Only at 12:00 PM during the winter solstice will shadow be cast onto a minor portion of the Public Garden. As depicted in the shadow studies found in Section 4.2, the minor portion of the Public Garden that will be in shadow cast by the proposed Project is within the boundaries of a larger area which would be cast in shadow by a structure on the site conforming to the as-of-right height limit in effect on May 1, 1990. Accordingly, the Project does not cast "new shadow" as defined under the Public Garden Shadow Act, and the Project is in compliance with the Act.

During 12 of the 14 time periods studied, no new shadow will be cast on the Arlington Street Church. Only at 9:00 AM and 12:00 PM during the winter solstice will shadow be cast on the Church, and these impacts are limited to a portion of the south slope of the roof and the south elevation and will not impact the primary Arlington Street elevation or main portico entrance. .

6.4 Alternatives Considered

While the National Register nomination for the Back Bay Historic District does not call out any of the four buildings on the Project site as possessing exceptional architectural or historical significance, they are considered by many to contribute to the architectural character of the Back Bay. Therefore, the Proponent has explored and considered alternatives to their proposed demolition. Specifically, the renovation and reuse of all the existing structures, renovation and reuse of only the Arlington Building, and retention of only the Arlington Building's street façades were considered.

As discussed below, all of these alternatives yielded buildings with significantly less floor area and parking than the proposal which was developed within the existing zoning FAR constraints, which in combination with greater construction costs incurred to work with and around existing buildings and foundations, make these reuse alternatives architecturally inappropriate and economically infeasible in all cases. In addition, the retention of only the street facades of the Arlington Street Building is technologically infeasible. The following are summaries of the three alternatives considered. Appendix D contains the massing diagrams of the three alternatives described below.

<u>Alternative 1</u>: Retain and Renovate Existing Buildings

This alternative includes retaining the existing four buildings on the site and upgrading them to meet the Americans with Disabilities Act (ADA), life safety, energy, seismic and other codes and requirements that would be triggered by a substantial renovation of these structures.

The four existing buildings are currently used for ground level retail with office use above and one basement level housing heating and electrical equipment and storage. All of the buildings are masonry veneer facades with wood framed structural systems supported by wood pile foundations. Individual buildings are separated from each other by fire-rated bearing walls which results in small floor areas on per floor and floor elevations that do not align between buildings. Heating equipment is antiquated; central cooling does not exist; electrical systems are undersized for contemporary office use; telecomm systems are not centralized and are inadequate for new office use. Building entries, elevators and toilet rooms are not handicapped accessible. No off-street loading or parking is available at any of the buildings.

Renovation of the existing buildings would require structural upgrading to comply with building code required seismic and wind load provisions resulting in costly and invasive construction. The existing wood floor framing prohibits heavier floor loading capacity required by Class A office tenants for compact storage capability and other contemporary uses. Bearing walls existing between buildings must be kept for the structural integrity of the buildings; however, retaining the bearing walls will not allow the buildings to be combined into the larger floor areas desired by contemporary office users. The differing floor levels in the existing buildings will also inhibit the buildings from being combined into larger floor areas. Existing heating, cooling, electrical, sprinkler, plumbing and telecomm systems would have to be removed in their entirety and replaced to provide service capacities for Class A office tenants together with structural modifications to the existing wood framing required to provide vertical chases throughout the building for these new systems. Elevators would have to be replaced and the size and number of elevators increased to provide adequate capacity and handicapped access at significant cost and intrusion into the existing building fabric to construct new larger code-compliant elevator shafts and pits. Building entries and entry lobbies would have to be removed and replaced to allow handicapped entry to the buildings, and thereby likely reducing leasable building space. Off-street loading is not feasible due to the small floor area of each individual building's ground floor. On-site parking is also not feasible due to the small ground floor area of each building and their shallow basements and wood pile foundations.

The significant and costly renovations required to bring the existing buildings up to Class A office standards and to comply with building and accessibility codes would yield only approximately 82,473 gross square feet of area above grade which is well below the development allowed within the existing zoning FAR constraints and of such a small area to make renovation economically infeasible. In addition, the alternative of retaining and renovating the existing buildings would result in no on-site parking or on-site loading

In summary, Alternative 1 would yield only 82,473 gross square feet of area no on-site loading and no on-site parking compared to the 221,230 gross square feet of area which can be developed within the FAR constraints of the existing zoning with on-site loading and approximately 150 on-site parking spaces. In combination, the alternative of retaining and renovating the existing buildings is economically infeasible and does not achieve the program goals for a Class A office building.

Alternative 2: Retain and Renovate 324-334 Boylston Street (the Arlington Building) with Balance as New Construction.

This alternative includes retaining and renovating 324-334 Boylston Street, removing the three buildings at 336-342, 344-350 and 352-360 Boylston Street, and constructing a new building on the site of the three removed buildings.

Renovation of 324-334 Boylston Street would require the costly structural, heating, cooling, electrical, sprinkler, plumbing, telecomm, elevators, accessibility modifications and seismic and other code related requirements noted in Alternative 1 above. In addition, the existing building foundation along its westerly bearing wall would have to be underpinned at great expense to allow the new building's depth to provide below grade parking. The floor levels of the new construction are optimized for contemporary office use and therefore would not align with the existing building's floors. This would create relatively small and inefficient office floor plates in both the existing and new office buildings separated from each other by the existing building's fire-wall. Additional marketing challenges would result from the "mid-block" location of the new building and the majority of leasable floor space, as opposed to the prominent corner location as proposed.

The significant and costly renovations to 324-334 Boylston Street and the new building at 338-360 Boylston would result in 183,804 gross square feet above ground of inefficient, discontinuous floor area with only 98 parking spaces below ground (less than two-thirds of the proposed parking) and rendering approximately 2,000 square feet, or approximately 20% of the retail space, as unusable. In summary, Alternative 2 would yield 183,804 gross square feet of area; limited on-site loading; and only 98 on-site parking spaces compared to the as-of-right 221,230 gross square feet of area which can be developed within the FAR constraints of the existing zoning with on-site loading and approximately 150 on-site parking spaces. In combination, the alternative of retaining and renovating 324-334 Boylston Street with the balance as new construction is economically infeasible especially considering the small and inefficient floor plates, the "mid-block" rather than corner space, and the significantly reduced parking.

Alternative 3: Arlington Building Facadecotomy with New Construction

This alternative explored the feasibility of retaining only the Boylston and Arlington street facades of the Arlington Building and constructing a new building behind and adjacent to the Boylston Street facade on the site of the three removed buildings.

Retaining the existing Boylston and Arlington Street facades of the Arlington Building presents technical challenges and cannot be achieved on this site. Consultants have advised that supporting the existing facades with bracing external would not be possible due to the existing MBTA Green Line subway tunnel and Arlington Street station and an existing steam main supply line that is extremely close to the existing foundation and only approximately 10 feet below the sidewalk (see attached Haley & Aldrich letter,

Appendix E). Both of these existing conditions below the sidewalk and street preclude bearing the weight of the façade on them, even temporarily, during construction of the new building. Further, the erection of internal bracing to support these facades would not be possible as the bracing would be in conflict with the new construction on this small site. These facades would likely have to be dismantled, which, in view of their masonry construction, would be destructive of their architectural integrity so as to make re-assembly infeasible. In addition, as mentioned in Alternative 2 above, the existing facades' window openings would not align with the new building's optimized floor heights, precluding the façade re-use. Further, retaining the facades would require underpinning the façade's foundation as the new building would be deeper than the existing to provide below grade on-site parking, further complicating the construction of the new building and incurring significant costs to retain the facades. In addition, this alternative would lack architectural integrity and good urban design..

In summary, Alternative 3 is not technically feasible. If it were feasible, Alternative 3 would yield 204,200 gross square feet of area; on-site loading; and 98 on-site parking spaces compared to the 221,230 gross square feet of area which can be developed within the FAR constraints of the existing zoning with on-site loading and approximately 150 on-site parking spaces. In combination, the alternative of the Arlington Building Facadectomy with the balance as new construction is technically not possible and in addition lacks architectural integrity that this location deserves.

Conclusion

Technical complications due to the existing buildings' bearing and fire wall locations and differing floor levels would not allow for large unencumbered floor plates necessary for a feasible contemporary office building in any of the options that involved reuse of the existing buildings. Reuse of the existing facades would not be possible due to the inability to use temporary external support of the façade because of the limited weight that can be placed on the existing MBTA Green line tunnel and station, utilities, and steam main located below the sidewalks on Boylston and Arlington streets. Lastly, retaining only façade portions of the existing buildings by dismantling and reconstruction, even if possible, is generally not considered acceptable means of preservation or good urban design, particularly for this location.

Even taking into account the potential availability of state and federal historic rehabilitation tax credits, the costs associated with renovating the existing buildings to bring them up to current code requirements would still be prohibitive. The option of dismantling and reconstructing the exterior walls, even if feasible, would not qualify for historic tax credits as dismantling and reconstruction activities are generally not considered acceptable means of preservation. Furthermore, retaining any of the existing buildings on the site would not provide the desired, amount of floor area for the Project permitted within the FAR constraints of the existing zoning and would result in limited, or no, on-site parking. Lastly, the Proponent strongly believes that possible alternatives that would retain only the façades of the existing buildings lack the appropriate architectural integrity that this important location deserves and requires.

6.5 Status of Project Review with Historical Agencies

In addition to consulting with the Boston Civic Design Commission and neighborhood and community groups, the Project Proponent has had numerous meetings over the past nine months with the Boston Landmarks Commission staff and the Boston Preservation Alliance to review, discuss and seek input on the Project's evolving design. The Proponent is committed to continuing to seek input from these and other concerned groups as the Project design advances.

Concurrent with the filing of the Draft PIR, an Article 85 has been filed with the BLC for the demolition of the four buildings on the Project site.

7.0 INFRASTRUCTURE

The existing infrastructure surrounding the site of the 350 Boylston Street development is of adequate capacity to service the needs of the Project. The following sections describe the existing sewer, drainage, and water systems surrounding the site and explain how these systems will service the proposed development.

7.1 Sewage System

The 350 Boylston Street development will not significantly increase the effluent entering the existing Boston Water and Sewer Commission (BWSC) sewer system. As noted, the site is currently occupied by four existing buildings which generate sewage flow. Applying Massachusetts Department of Environmental Protection (DEP) Title V standards, the aggregate sewer burden for both the existing building and the proposed development is described below in Tables 7-1 and 7-2, with breakdowns noted by type of use and corresponding design amounts for anticipated flows. The total daily discharge for the proposed Project is estimated as 20,200 gallons per day (gpd), which represents a net increase/decrease of approximately 16,711 gpd from the existing conditions.

Table 7-1 Existing Estimated Daily Sewage Discharges for 324-360 Boylston Street

Type of Uses	Units	Design Load per Title V Standards	Daily Flow (GPD)
Office Space	44,983 sq ft	75 GPD / 1,000 sq ft	3,374
Retail Space	42,300 sq ft	50 GPD / 1,000 sq ft	2,115
Total			**5,489**

Table 7-2 Proposed Estimated Daily Sewage Discharges for 350 Boylston Street Project

Type of Uses	Units	Design Load per Title V Standards	Daily Flow (GPD)
Office Space	200,000 sq ft	75 GPD / 1,000 sq ft	15,000
Retail	15,000 sq ft	50 GPD / 1,000 sq ft	750
Restaurant	150 seats	35 GPD / seat	5,250
Fitness and Spa	60 lockers	20 GPD / locker	1,200
Total			**22,200**

The building is bordered by an adjoining building at 364-368 Boylston Street on its southwest side, Arlington Street on its northeast side. The back of 350 Boylston is connected to Providence Street. Providence Street contains sewer lines owned and operated by the BWSC by which the Project will be serviced. According to BWSC record mapping for sewer and drain systems available as sheet 23J, the following is a general description of the sewer system in the vicinity of the site (Refer to Figure 7-1, Existing Sewer/Storm Drain System for all sewer line locations):

♦ Providence Street contains a 15-inch sewer main that flows in a southwesterly direction adjacent to the site beginning at BWSC manhole #158 at invert elevation 6.15. Sewage from the Project would likely be discharged between BWSC manhole #158 and BWSC manhole #156. The sewer main continues southwesterly until it connects to a BWSC manhole at the intersection of Providence Street and Berkley Street. The main then continues southeasterly until it connects to BWSC manhole #394 and enters a 36-inch sewer main that flows southwesterly down St. James Avenue. The sewer system ultimately discharges to the MWRA's Deer Island Treatment Plant.

Any new sewer service connections for the Project will need to connect directly to the existing sewer main located within Providence Street. The parking garage sewer service will connect to the existing BWSC sewer main. The wastewater from the parking garage will be routed through oil and grit separators prior to discharging to the BWSC sewer mains. The restaurant kitchen waste will be pre-treated with a grease trap prior to discharging to the BWSC sewer mains. The location of the new service connections will be coordinated with the BWSC. Preliminary analysis of the existing BWSC infrastructure indicates that the existing system is adequate for this development.

The capacity of the sewer in Providence Street is summarized below in Table 7-3. Pipe diameters and inverts were obtained from BWSC map 23J. Flow capacity of existing sanitary sewers were calculated in cubic feet per second (cfs) and million gallons per day (MGD) using the Manning equations.

Table 7-3 Sewer Hydraulic Capacity Analysis Table – Providence Street

Manhole (BWSC Number)	Distance (feet)	Invert Elevation (up)	Invert Elevation (down)	Slope (%)	Diameter (inches)	Manning's Number	Flow Capacity (cfs)	Flow Capacity (MGD)
Providence Street – Sanitary Sewer								
157 to 156	190	5.52	4.92	0.3%	15	0.015	3.07	1.98
156 to 351	238	4.92	4.07	0.4%	15	0.015	3.54	2.29
351 to 153	76	4.07	3.8 ±	0.4%	15	0.015	3.54	2.29

Note: 1. Information from BWSC Plan 23J

2. Flow Calculations based on Manning Equation

7.2 Stormwater System

Stormwater runoff generated from the streets that bound the existing site is collected in separated storm drainage systems owned and operated by the BWSC. (See Figure 7-1, Existing Sewer/Storm Drain System) These systems are described below:

- Arlington Street contains a 12-inch storm drain that flows in a southeasterly direction adjacent to the site. It then connects to a 12-inch storm drain that flows southwesterly on Providence Street. This storm drain continues southwesterly and becomes a 15-inch storm drain, and eventually, an 18-inch storm drain before leaving Providence Street. This storm drain then connects to a 72 x 76–inch combined sewer and storm drain, and flows northwesterly down Berkley Street. In addition to the storm drain main within Providence Street, BWSC infrastructure includes CBs on both sides of Providence Street that direct surface runoff into the storm drain system.

The capacity of the storm drain in Providence Street is summarized below in Table 7-4. Pipe diameters and inverts were obtained from BWSC map 23J. Flow capacity of existing storm drains were calculated in cubic feet per second (cfs) using the Manning equations.

Table 7-4 Storm Drain Hydraulic Capacity Analysis Table – Providence Street

Manhole (BWSC Number)	Distance (feet)	Invert Elevation (up)	Invert Elevation (down)	Slope (%)	Diameter (inches)	Manning's Number	Flow Capacity (cfs)
162 to 409	92	7.55	7.32	0.3%	12	0.015	1.69
409 to 163	131	7.32	6.62	0.5%	15	0.015	3.96
163 to 408	42	6.62	6.38	0.6%	15	0.015	4.34
408 to 164	136	6.38	6.14	0.2%	18	0.015	4.07

Note: 1. Information from BWSC Plan 23J
2. Flow Calculations based on Manning Equation

The schematic stormwater management design proposed for the Project collects runoff from the roof in a closed roof drainage system, discharges the runoff to the proposed groundwater recharge system within the basement and under the sidewalk in Providence Street and overflows, in the case of an extreme storm or in an emergency, the recharge system into an existing storm drain system in Providence Street, at a point to be determined after consultation with BWSC.

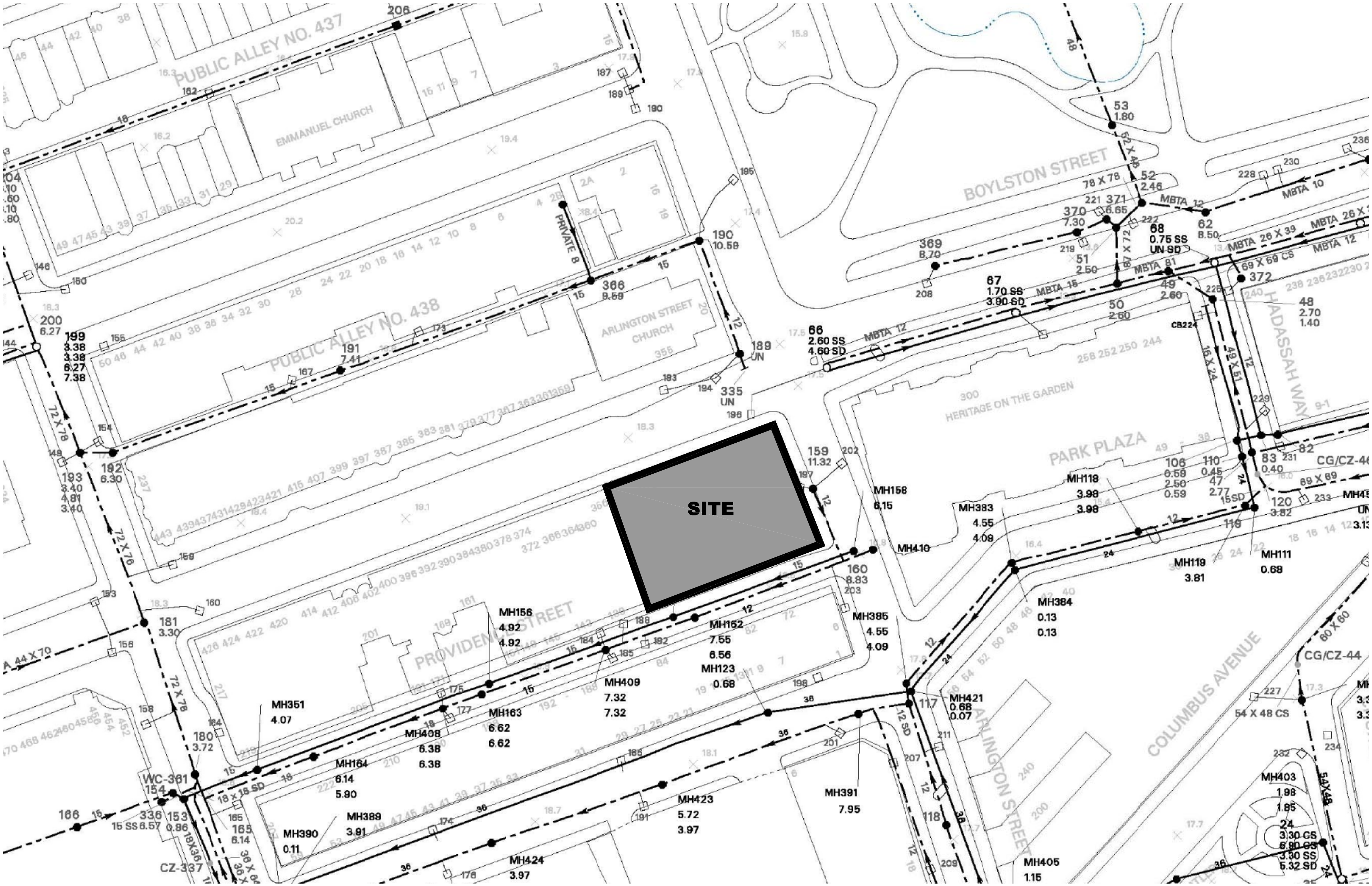


Figure 7-1
Existing Sewer/Storm Drain System

350 Boylston Street Development
Boston, Massachusetts

Nitsch Engineering

Due to the fact that the building footprint will not be significantly changing from the existing conditions and there is virtually no additional site work, the Project will not increase the impervious area on site. As a result, the peak rate of stormwater discharge from the site will not increase from the pre- to post- development conditions. Additionally, the stormwater design will improve the existing conditions by including a stormwater infiltration system (i.e., surface or buried pond) to recharge a portion of the stormwater runoff from the building roofs as required by the Groundwater Conservation Overlay District regulations, and will likely decrease the net runoff from the site during storm events and improve stormwater water quality leaving the site.

The requirement to recharge stormwater, or rainfall, into the ground has established by the BRA through the Groundwater Conservation Overlay Districts, within which the Site is included (GCODs). These districts have been established in areas of the City where groundwater levels have been significantly depleted from historic levels and lowered groundwater tables have been causing problems for property owners. Since the Project site is situated within a GCOD, an additional requirement to recharge 1-inch of rain over the site will be required. To meet the requirements of the GCOD, the Project "must promote the infiltration of rainwater into the ground by capturing, within a suitably-designed infiltration system, a volume of rainfall on the lot equivalent to no less than 1.0 inches across the impervious surface area of the lot to be occupied by the proposed Project (or, in the case of a proposed project for a substantial rehabilitation, the lot area occupied by the structure to be substantially rehabilitated). This system shall be designed so that no negative impact occurs on neighboring sites." (Source: Groundwater District Requirements. [Online] Available www.bwsc.org February 8, 2007). The Proponent has met with the BGWT and will continue to coordinate with them throughout the design review process.

A preliminary analysis was conducted to size the rainwater recharge system per the requirements stated above and estimates that the proposed expansion and renovation Project will require a storage system capable of recharging 2,300 cf (17,225 gallons) of rainfall. The storm water recharge system is proposed to be a combination of internal storage tanks within the building sized to capture 1-inch of roof runoff and an external recharge trench under the Providence Street sidewalk that would recharge water from the tank into the ground water.

The Proponent has met with the Boston Groundwater Trust and will continue to consult with them as the Project moves forward.

7.3 Water Supply System

The 350 Boylston Street development will not significantly increase the water demands at the site. As noted, the site is currently occupied by four existing buildings which utilize water. The Project's existing water consumption is estimated as 6,038 gallons per day (gpd), based on the estimated sewer generation. Similarly, water consumption on the proposed site is expected to be 24,420 gpd. To achieve these estimates of water demand, a factor of 1.1 (conservative) was applied to the average daily wastewater flows to estimate average water use on a daily basis. During the summer months, the estimated maximum cooling tower make-up water demand will be an additional 25,000 gpd. The proposed Project expects to increase the overall water consumption by approximately 18,382 gpd, not taking into account the increase in demand during summer months when the cooling towers are operating under peak conditions.

BWSC owns and operates water mains adjacent to the Project. (See Figure 7-2 - Existing Water System). According to BWSC record mapping for water systems available as sheet 23J, the following is a general description of the high service and low service water system in the vicinity of the site:

- Boylston Street contains a 20-inch high service water main.
- Boylston Street contains a 12-inch low service water main.
- Providence Street contains an 8-inch low service water main at its western limits. The 8-inch water main increases midway down Providence Street to a 10-inch which is directly adjacent to the site. At the very southeastern corner of the site near the Providence Street intersection with Arlington Street, the main is increased again to 12-inches.
- Providence Street contains an 8-inch high service water main.
- Arlington Street contains a 12-inch low service water main.
- Arlington Street contains a 10-inch high service water main which begins near the southeast corner of the site and runs southerly down Arlington Street. This main does not immediately border the site to the east.

Hydrant flow tests were performed on the 10″ low service water main in Providence Street and the 8″ high service water main in Providence Street by the BWSC on January 31, 2008. The results are in Table 7-5 below.

Table 7-5 Hydrant Flow Test Results

Hydrants (Static, Flow 1, Flow 2)	Static Pressure	Residual Pressure	Total Flow	Flow at 20 psi	Service Line Tested
H82, H162	108 psi	104 psi	3,652 gpm	14,076 gpm	HSL
H118, H84, H120	76 psi	58 psi	3,002 gpm	5,541 gpm	LSL

In order to service the building, new water services will be connected to the above-mentioned public water mains. The location of any necessary connections will be determined in consultation with the BWSC. Preliminary analysis of the existing BWSC infrastructure indicates that the existing system is adequate for this development.

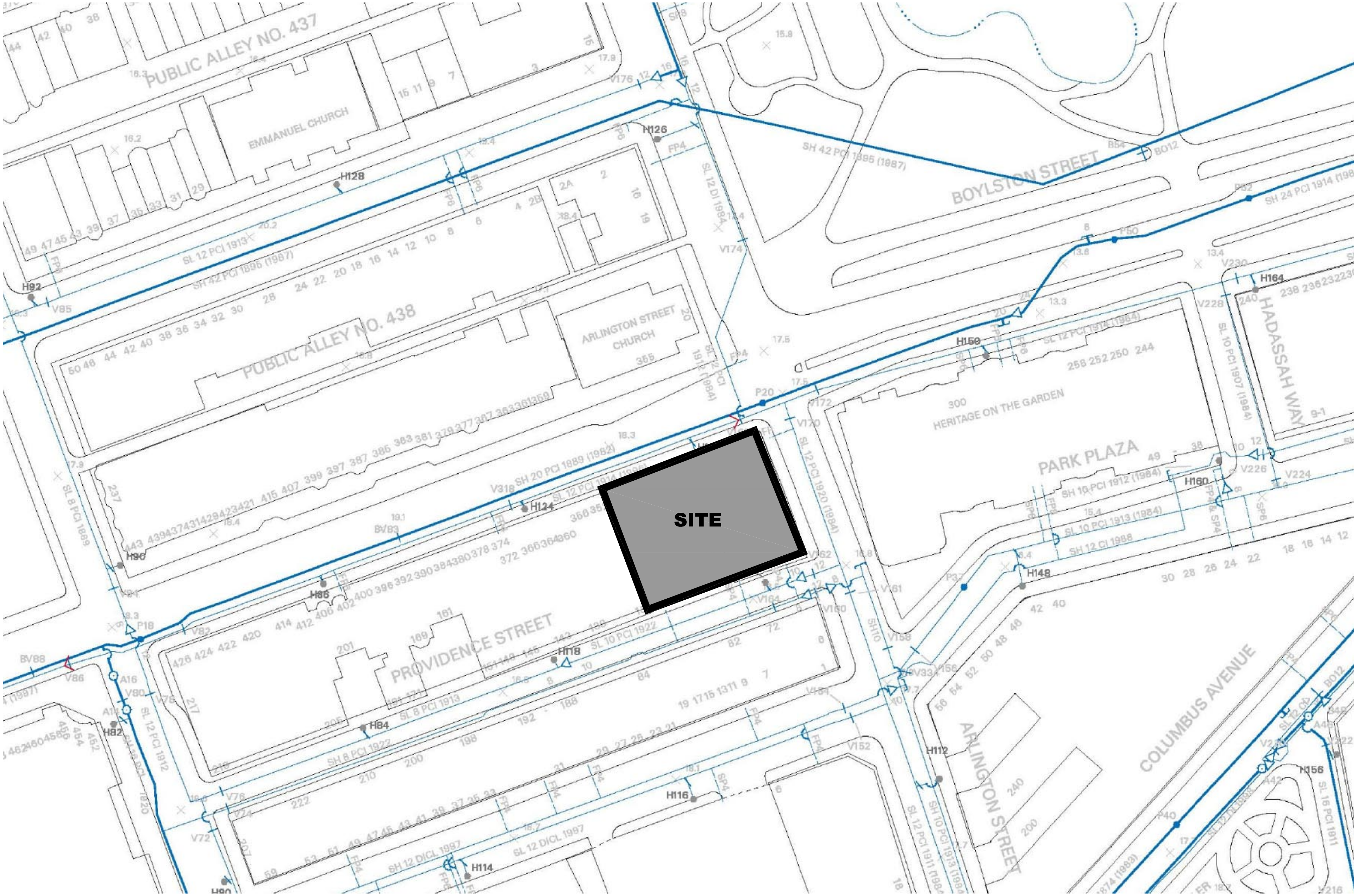


Figure 7-2
Existing Water System

350 Boylston Street
Boston, Massachusetts

Nitsch Engineering

7.4 Water Quality / Stormwater

Stormwater runoff from the proposed building will be collected in a closed roof drainage system and conveyed to the groundwater recharge system, as described in Section 7.2, Stormwater System. Stormwater overflow from the roof/groundwater recharge system will be conveyed into the BWSC's closed drainage system within Providence Street.

The Project will incorporate best stormwater management practices (BMPs) recommended by the Department of Environmental Protection (DEP) Stormwater Management Standards and Policy. Due to the fact that the proposed development will occur at a location of existing development, and the proposed impervious area will not increase from pre- to post-development conditions, as well as the fact that the Project will incorporate a rainwater recharge system capable of recharging one inch of runoff from all roof surfaces, peak rates of stormwater runoff will remain at or below the rates of the existing conditions. There will be no increase in rate of runoff from the 2-, 10-, 25- and 100-year storm events.

The design objective for the proposed Stormwater Management System is to meet the Massachusetts Stormwater Management Standards to the greatest extent possible. These standards have been specifically addressed in the Project design in the following manner:

Standard #1: No untreated stormwater will discharge into, or cause erosion to, wetlands or waters.

Compliance: The proposed design will comply with this standard. There will be no untreated stormwater discharge. All discharges will be treated prior to connection to the BWSC system.

Standard #2: Post-Development peak discharge rates do no exceed pre-development rates on the site either at the point of discharge or down-gradient of the property boundary for the 2- year and 10-year 24-hour design storms. The project's stormwater design will not increase flooding impacts offsite for the 100-year design storm.

Compliance: The proposed design will comply with this standard. The proposed design will not increase peak discharge rates from the 2- and 10-year 24-hour and the 100-year design storms.

Standard #3: The annual groundwater recharge for the post-development site must approximate the annual recharge from existing site conditions, based on soil type.

Compliance: The proposed design will comply with this standard. Since the site is highly urbanized, there is little to no area for natural infiltration and the annual groundwater recharge for the predevelopment site is likely minimal. Additionally, the proposed site will recharge to the groundwater a minimum of one inch of the stormwater runoff from roof areas to meet City of Boston Groundwater Conservation Overlay District requirements.

Although the proposed development does not intend to alter existing surface features, the annual groundwater recharge is expected to increase from pre- to post- development conditions with the addition of the recharge system.

Standard #4: For new development, the proposed stormwater management system must achieve an 80 percent removal rate for the Site's average annual load of TSS.

Compliance: The proposed design will comply with this standard. Additionally, the Project is a redevelopment and under proposed conditions, runoff from the site's roof areas will be routed through an infiltration system capable of recharging a volume equal to one inch over the roof area. The remainder of runoff associated with the proposed redevelopment (non-roof runoff) will be consistent with existing conditions.

Standard #5: If the Site contains an area with Higher Potential Pollutant Loads (as prescribed by the Policy), BMPs must be used to prevent the recharge of stormwater.

Compliance: The proposed design will comply with this standard. The Project is not associated with Higher Potential Pollutant Loads (per the Policy, Volume 1, Chapter 1, page 12).

Standard #6: If the Site contains areas of Sensitive Resources (as prescribed by the Policy), such as rare/endangered wildlife habitats, ACECs, etc., a larger volume of runoff from the "first flush" must be treated (1 inch of runoff from impervious area vs. the standard ½ inch).

Compliance: The proposed design will comply with this standard. The Project will not discharge untreated stormwater to any area designated as a Sensitive Resource.

Standard #7: Redevelopment of previously developed sites must meet the Stormwater Management Standards to the maximum extent practicable.

Compliance: The proposed design will comply with this standard. The Project will meet or exceed Stormwater Management Standards as applicable.

Standard #8: Erosion and sediment controls must be designated into the project to minimize adverse environmental effects.

Compliance: The proposed design will comply with this standard. Sedimentation and erosion controls will be incorporated as part of the design of this Project and employed during site construction.

Standard #9: A long-term BMP operation and maintenance plan is required to ensure proper maintenance and functioning of the Stormwater Management System.

Compliance: The proposed design will comply with this standard. An Operations and Maintenance Plan including long-term BMP operation requirements will be prepared and will ensure proper maintenance and functioning of the system. The Operations and Maintenance Plan will be implemented for this facility in order to ensure that this facility adequately provides preventative maintenance to minimize damage to the drainage infrastructure and makes necessary repairs accordingly during and after construction.

Standard #10: All illicit discharges from the project site to the stormwater management systems are prohibited.

Compliance: The proposed design will comply with this standard. No illicit discharge connections from the site will be made to the proposed or existing stormwater management systems.

7.4.1 Stormwater Management

The schematic stormwater management design proposed for the Project strives to meet both LEED Core and Shell credit goals and the requirements of the GCOD. A summary of the strategy and the proposed system is below.

The proposed Stormwater Management system has three (3) general components:

1) Storage area below the basement to capture and hold 1-inch of runoff (to meet GCOD requirements and strive for meeting LEED credits).

2) Means to get the stored 1-inch of runoff from the storage area in the basement into the groundwater (to meet GCOD requirements and strive for meeting LEED credits).

3) Means to divert storms larger than the two-year, 24-hour storm directly into the City's drain in Providence Street, with larger storms bypassing the storage area below the basement.

8.0 RESPONSE TO COMMENTS

8.1 Introduction

This section addresses the comment letters received on the Project Notification Form during the BRA comment period. Roughly half of the comment letters submitted were supportive of the Project as proposed. In general, the other half of the comments received fall within one of the following categories: transportation, shadow, groundwater and geotechnical, other environmental issues, design and historic resources. The following responses are intended to address each of the six comment topics. Tables 8-1 – 8-6, identify the specific comments.

8.1.1 Transportation

Table 8-1 identifies specific transportation related comments that were received. As described in detail in Section 3, a comprehensive transportation study has been completed as part of the preparation of the Draft PIR. The study includes detailed analysis of vehicular traffic, parking, loading/servicing, transit, bicycle and pedestrian conditions for both existing and future conditions, with and without the Project. In addition, a Transportation Demand Management (TDM) plan is presented, along with an outline of goals for a Construction Management Plan (CMP).

The transportation analysis concludes that there will be no significant traffic impact as a result of the Project. The Project does not represent a total new addition to the site, but rather replaces four existing buildings that already generate travel demand today.

The site is well located with regard to both the local and regional roadway networks, and vehicular trips are distributed in multiple directions. Even in the vicinity of the Project site itself, where the greatest concentration of project trips is expected, there would be no significant impacts as a result of the Project.

In addition to its immediate adjacency to the Green Line, a wide variety of MBTA services support the Project site, These include Orange Line and Commuter Rail service at Back Bay, as well as a variety of bus routes. The pedestrian environment and accessibility of the site is excellent, and the Project will provide facilities in the building for bicycles, including showers, that will encourage bicycling as choice of travel mode.

There is currently no parking on the Project site, and the Project will provide approximately 150 parking spaces, exempt from the Parking Freeze. The parking garage will provide adequate supply for the additional parking demand of the Project, consistent with the needs of a Class A office building in this location. Finally, the Project will eliminate the site's current reliance on on-street servicing by the inclusion of an internal loading dock accessed on Providence Street.

Table 8-1 identifies specific transportation related comments that were received. Section 3 provides more detail information on the transportation studies that were completed as part of the preparation of the Draft PIR.

8.1.2 Shadow

Several of the comment letters expressed concerns about the Project's potential to create new shadows. As discussed in Section 4.2, new shadow is limited to the immediate surroundings and will generally be cast across portions of Boylston Street and its sidewalks, Arlington Street and its sidewalks, and Park Plaza and its sidewalks. During 13 of the 14 time periods studied, no new shadow will be cast onto the Public Garden. Only at 12:00 PM during the winter solstice will shadow be cast onto a minor portion of the Public Garden. However, as discussed in Section 4.2, the shadow is within the boundaries of a larger area which would be cast in shadow by a structure on the site conforming to the as-of-right height limit in effect on May 1, 1990. Accordingly, the Project does not cast "new shadow" as defined under the Public Garden Shadow Act.

During 12 of the 14 time periods studied, no new shadow will be cast onto the Arlington Street Church. At 9:00 AM and 12:00 PM during the winter solstice shadow will be cast on portions of the south slope of the Church's roof, however, these impacts are limited to a portion of the south slope of the roof and the south elevation and will not impact the Arlington Street façade or main portico entrance.

Table 8-2 identifies specific shadow comments that were received. Section 4.2 includes more detailed information about the shadow study results.

8.1.3 Geotechnical/ Groundwater Impacts

Many of the comment letters included statements about the importance of monitoring and protecting groundwater levels at the Project and in the vicinity. As stated in Section 4.8 Geotechnical/Groundwater Impacts, the Project will comply with the Groundwater Conservation Overlay District (GCOD) regulations.

A watertight excavation support system (slurry wall) will prevent withdrawal of groundwater into the below-grade structure during construction and following construction completion. Investigations are being undertaken to determine anticipated site-specific subsurface soil conditions that will aid in the design of the slurry wall, including the depth of slurry wall below the excavation bottom needed to minimize long term seepage beneath the lowest level parking slab.

Any dewatering effluent generated by the Project during construction will be discharged to a new drainage gallery constructed by the Project along the south side of the site. No direct discharge of construction generated dewatering effluent to a storm and/or sewer utility will be allowed.

The Proponent has and will continue to work with the Boston Groundwater Trust and the community in general, to monitor, maintain, protect, and improve (where possible) groundwater levels at and adjacent to the site.

The Proponent will seek a license from the adjacent owners to enter the adjoining properties for the purpose of documenting and assessing the current condition of the adjoining properties in advance of the construction. Additionally, the Proponent will request a license from owners to allow instrumentation to be established at/on the adjoining properties for the purpose of monitoring the adjoining properties during the construction. The data obtained from the instrumentation monitoring will be used to evaluate the Contractor's work relative to performance requirements established in the Contract Documents that pertain to movements of the temporary lateral support wall, changes in groundwater levels, and movements measured at adjoining properties. Should it be determined that movements of adjoining properties can be attributed to the Project, measures will be implemented by the Proponent to mitigate the movements and prevent damage to the adjoining properties.

Table 8-3 identifies specific groundwater and geotechnical comments that were received. Section 4.8 provides more detailed information on site subsurface conditions, procedures to limit potential adverse impacts to existing adjacent structures, and the measures to monitor, maintain and protect groundwater levels.

8.1.4 Environmental

In addition to shadow and groundwater/geotechnical comments, additional comments regarding other potential environmental issues, including wind, air quality, solid and hazardous waste, water quality/stormwater, noise and construction, were also submitted.

Wind

In preparation of the Draft PIR, a qualitative assessment was made to determine the effect of the proposed Project on pedestrian level winds (PLWs) in its vicinity. All of the 39 locations considered for both the existing and build conditions are estimated to have PLWs within the Boston Redevelopment Authority guidelines for acceptable wind speed not exceeding 31 mph more often than once in 100 hours. In fact, all locations for existing and build conditions have an estimated PLW Category 3 (Comfortable for walking) or better, and most are in Category 2 (Comfortable for short periods of sitting or standing).

Air Quality

An air quality analysis was conducted to determine the impact of carbon monoxide (CO) emissions from combustion and mobile source emissions generated by the Project. The air quality analysis results show that CO, NOx, PM, and SO2 concentrations at all sensitive receptors studied are well under NAAQS thresholds.

Waste

There are no documented hazardous waste conditions on the Project site. Prior to commencement of the work, investigations will be performed at the site and in the existing buildings to evaluate the presence of contaminated soils, groundwater, asbestos, lead paint, or other hazardous materials that may exist. If such materials are present, work plans will be prepared by appropriately licensed professionals to identify the means and methods for safe removal and legal disposal or recycling of these materials.

Stormwater

Stormwater runoff will be captured from the entire building rooftop and infiltrated into the groundwater through a recharge system proposed in Providence Street, whereby pollutants will be filtered by the microorganisms in the soil, thereby improving the water quality of runoff leaving the site. Since the existing site is generally composed of building roofs with roof drain systems that likely connect directly into the City's closed drainage system without any sort of treatment, the proposed design provides greater water quality treatment than is provided for in the existing condition.

Noise

The noise analysis conducted for the Project included a noise-monitoring program to determine existing noise levels and an estimate of future noise levels when the Project is in operation. The analysis indicates that predicted noise levels from Project mechanical equipment (with appropriate noise mitigation) will be below the most stringent City of Boston Noise Zoning requirements for nighttime and daytime residential zones, and well below existing measured baseline noise levels in the area.

Construction

A Construction Management Plan ("CMP") in compliance with the City's Construction Management Program will be submitted to the Boston Transportation Department ("BTD") once final plans are developed and the construction schedule is fixed. The construction contractor will be required to comply with the details and conditions of the approved CMP.

Proper pre-planning with the City and neighborhood will be essential to the successful construction of the Project. Construction methodologies, which ensure public safety and protect nearby residences, will be employed. Techniques such as barricades, walkways, and signage will be used. The CMP will include routing plans for trucking and deliveries, plans for the protection of existing utilities, and control of noise and dust.

Table 8-4 identifies environmental related comments that were received. Section 4 provides more detail information on the various environmental studies that were conducted including wind, shadow, air quality, solid and hazardous waste, water quality/stormwater, noise and construction.

8.1.5 Design

Several comment letters focused on the design of the Project. As discussed in greater detail in Section 5: Urban Design, the Project design has advanced in several major areas including the tri-partite façade, the Boylston-Arlington Streets hierarchy; detailing of the base or lower two floors; and consistency with the Boylston Street Master Plan.

The current design provides greater clarity in the massing and articulation of the base, middle and top of the building. The base is clearly a granite two-story base with distinct window systems. The middle of the building is now a planar stone wall with punched windows where there was previously a mixture of stone, pier and panel articulation and window openings. The glass bays in this middle portion of the building have also become more refined and delicate with the elimination of the black metal bands and where they were previously equally balanced with the stone wall, are now distinctly a minor articulation on the broader stone façade.

The top which had been a mixture of stone with metal and glass bays now is uniformly articulating the top in a horizontal expression of metal and glass. This expression is completed with a stone cornice to clearly identify the top of the building reflecting back to the building's main material.

Where the previous design treated the Boylston and Arlington façades as equally balanced patterns, the current scheme makes a distinct difference between the two. Boylston is treated with three expanses of stone with three punched windows between the bay windows, while Arlington has two expanses of stone with two punched windows in its stone wall. The terrace setbacks on Arlington are also two feet smaller in depth than the Boylston Street terraces, which in combination with the broader stone walls on Boylston, clarifies Boylston Street as the more major of the two street facades.

The oval corner bay handsomely marks this intersection and gracefully transitions the Boylston Street façade to Arlington Street such that each street is distinct, yet the building is able to be read as a whole around this corner bay. The streetscape on Boylston which follows the Boylston Street Master Improvement Plan Guidelines also reinforces the primacy of the Boylston Street façade.

The current design has clarified and enriched the retail pedestrian experience by extending the bays down to the ground level, which enlarges the sidewalk between each bay. The previous one-story base of granite is now a two-story articulated granite base. The design has also been advanced to include dimensional wood and glass retail storefronts with custom designed lighting. The building's office entry has also become more clearly detailed with a wood storefront and a metal canopy set into the two-story granite façade to highlight the entry in the Boylston Street elevation.

The project will follow the Boylston Street Master Plan Guidelines for sidewalk treatment on Boylston Street, which requires a granite curb at the sidewalk edge, a carriageway band of granite pavers inside the curb line, granite sidewalk, and a granite transition strip at the building. We are able to provide five trees along Boylston Street to begin the tree planting program along this important east-west artery.

350 Boylston Street is registered in the USGBC LEED Core and Shell (LEED-CS) rating system and will be submitting for pre-certification in the near term, targeting LEED Silver. The Project will be in compliance with Article 37 of the Boston Zoning Code.

Table 8-5 identifies specific design related comments that were received. Section 5.0 provides more detail information on the Project's design and its contribution to the surrounding area.

8.1.6 Historic Resources

Many of the comment letters included statements about the proposed demolition of the four buildings on the Project site. As outlined in Chapter 6: Historic Resources, alternatives that included renovation and reuse of all the existing structures, renovation and reuse of only the Arlington Building, and retention of only the Arlington Building's street façades were considered.

As outlined in greater detail in Section 6.4, all of these alternatives yielded buildings with significantly less floor area and parking than the proposal which was developed within the existing zoning FAR constraints, which in combination with greater construction costs incurred to work with and around existing buildings and foundations, make these reuse alternatives architecturally inappropriate and economically infeasible. In addition, the retention of only the street facades of the Arlington Street Building is technologically infeasible.

Table 8-6 identifies specific comments about historic resources that were received. Section 6.3 provides more detail information about potential impacts to historic resources and Section 6.4 provides more information about project alternatives that were explored and considered.

The BRA Scoping Determination and copies of the individual comment letters are included in Appendix G.

Table 8-1 Transportation

Letter	Comment	Response
City Agencies		
Boston Environment Department		
	A comprehensive Transportation Demand Management plan should be established for all construction workers	See Section 3.8.3
	The proponent is strongly encouraged to require tenants to join the A Better City Transportation Management Association and to implement a variety of options for their employees	See Section 3.8.2
	BED suggest devoting one of two parking spaces to a car-sharing service such as Zipcar	Given that this is not a public garage, this is not feasible
	It is suggested that public bicycle racks be provided in the parking garage for visitors and messengers. Signage should be posted outside of the garage indicating the availability of the racks	Given that this is not a public garage, this is not feasible
	The proponent is encouraged to participate in the City's Bike Friendly Business Program. Contact Nicole Freedman, Director of the Bicycle Program, at 627-429-8440	Proponent will consider
Boston Public Works Department		
	Developer will be responsible for the reconstruction of roadway sections abutting the property and to insure ADA/AAB guidelines compliance	Proponent will comply
	Coordinate construction activities and scheduling with adjacent MBTA Green Line project	See Section 3.8.3
Boston Fire Department		
	Address emergency vehicle access to new and existing buildings	Proponent will coordinate with BFD on emergency vehicle access.

Table 8-1 Transportation - Cont.

Letter	Comment - Cont.	Response
Imapct Advisory Group (IAG)		
	Provide more details on how the proposed location for loading /parking entrance and exit functions would make the project more attractive than today	See Section 5.2
	Provide an itemization of on-street parking spaces that will be removed so that impact could be evaluated	See Section 3.7.3
	Provide more detail regarding traffic generation and how valet parking would fit in	See Section 3.4 - 3.7
	Extend intersection study to understand the impacts of new traffic	See Section 3.4 - 3.7
	Boylston Street Improvement Plan should be implemented	See Section 5.2
	Explore opportunities to improve the right corner turning radius from Boylston to Arlington Street	See Section 3.4 - 3.7
	Truck access to Providence Street loading dock should be confirmed	See Section 3.7.7
	Seek creative solutions toward improving Arlington Street sidewalk narrowness	See Figure 2-3
	Provide more information about construction management plans, especially regarding to the impacts of demolition and on traffic	See Section 3.8.3
	Public	
Park Plaza CAC		
	Pedestrian and vehicular traffic throughout Park Plaza urban renewal area from Washington St. to Arlington St. should be more fully studied	See Section 3.4 - 3.7
Rep. Martha Walz		
	Provide detailed renderings of Province Street showing the sidewalk area and the length and location of proposed curb cuts for the loading docks and parking garage	See Appendix B
	Loading dock operations should be described in more detail	See Section 3.7.7
	Identify the number and location of metered parking spaces proposed for removal	See Section 3.7.3
	The drop-off pick-up zone should be moved from Boylston Street to Providence Street	The drop-off/pick-up zone is located near the main entry
	The incorporation of a smaller parking garage and of no parking at all should be studied	See Section 3.7.3
	The proponent should study whether unoccupied parking spaces could be used as valet parking	Proponent will consider
	Parking freeze impacts should be identified	See Section 3.7.3

Table 8-1 Transportation - Cont.

Letter	Comment - Cont.	Response
	Provide additional detail with respect to the pedestrian experience on Providence Street (e.g., sidewalk width, lighting, etc.)	See Section 5.0
	Explore pulling the building back from the property line so that sidewalks can be widened on Providence Street	See Section 3.6.6
Neighborhood Association of the Back Bay		
	Comprehensive studies of traffic impacts on area streets and intersections area are needed	See Section 3.4 3.7
	Impact of parking provision must be studied, as well as options with lower parking capacity, based on the BTD-recommended ratios	See Section 3.7.3
	Provide number and location of metered parking that will be lost to accommodate loading dock access and a drop-off/pick-up zone	See Section 3.7.3
	The functionality of the off-street loading dock concept and specific layout features must be clearly presented and evaluated	See Section 3.7.7
	Pedestrian traffic counts are needed as a basis for evaluation of pedestrian movement-space and potential impacts	See Section 3.6.6
	Sidewalk capacity for Boylston and Arlington streets should be studied	See Section 3.6.6
	The Arlington sidewalk seems inadequate for increased pedestrian traffic anticipated. Explore ways to modify ground floor building perimeter to provide more comfortable pedestrian passage	See Figure 2-3 and Appendix B
	Providence Street loading docks, garage entries and service and delivery movements will interrupt the sidewalk and interfere with pedestrian use of this street. Explore alternative plan layouts and design solutions	See Section 3.7.7
	Discuss remedies envisioned to alleviate potential pedestrian-vehicular conflicts at the corner of Boylston and Arlington Streets	See Section 3.6.6
	It seems untenable for the operation of this intersection to have both the proposed project and the MBTA reconstruction under construction simultaneously	See Section 3.8.3
	How does the garage construction interface with the MBTA facilities and construction?	See Section 3.8.3
	What constraints will be placed on construction vehicle access and operations	See Section 3.8.3

Table 8-1 Transportation - Cont.

Letter	Comment - Cont.	Response
Susan Ashbrook		
	The addition of 150 parking spaces to the site will have a negative impact which should be further studied	See Section 3.7.3
	Explore possible remedies, including modifications to the ground floor design, to allow more space for pedestrian flow on Arlington Street	See Figure 2-3 and Appendix B
Dorothy Bowmer		
	Reduction of traffic should be a top priority. The parking garage should be eliminated, or at the very list, made much smaller	See Section 3.0
Shirley Kressel		
	There should be no vehicular openings on the building on the main streets	None proposed
	The DPIR should evaluate a zero-parking alternative	See Section 3.7.3
Susan Prindle		
	A thorough traffic study should be done, including Park Square as well as the connectors to Storrow Drive and the Pike	See Section 3.4 - 3.7
	Explore ways of encouraging commuting by means other than automobiles. Reduce the number of parking spaces and provide adequate bicycle parking	See Section 3.8.2
	The sidewalks and street crossings at Arlington and Boylston Streets will need the capacity to accommodate the increased foot traffic. This is particularly an issue in the area of the MBTA headhouses on Arlington Street	See Section 3.6.6

Table 8-2 Shadow

Letter	Comment	Response
City Agencies		
Boston Redevelopment Authority - Env.		
	Conduct a shadow impacts analysis for existing and build conditions. Particular attention should be given to the Public Garden and any other existing or proposed open spaces and pedestrian areas	See Section 4.2
Boston Environment Department		
	Shadow studies should be provided in the DPIR	See Section 4.2
Imapct Advisory Group (IAG)		
	Provide clarification of zoning issues including height specs, public garden proximity rules, and "special exception"	See Section 4.2.2
	Developer should follow legislation regarding shadow on the Public Garden	See Section 4.2.2
Public		
Park Plaza CAC		
	Provide detailed shadow studies from daylight to sunset throughout the year	See Section 4.2
Rep. Martha Walz		
	The size, height, visibility and shadow impact of the mechanical penthouse should be presented in the DPIR	See Section 4.2 Mechanical penthouses were included in analysis.
Neighborhood Association of the Back Bay		
	Complete and accurate shadow studies must be submitted and evaluated	See Section 4.2
	The project must comply with Parks Frontage Ordinance regulations	See Section 4.2.2

Table 8-2 Shadow - Cont.

Letter	Comment - Cont.	Response
Susan Ashbrook		
	Detailed shadow studies must be carried out	See Section 4.2
Dorothy Bowmer		
	Detailed shadow studies must be carried out	See Section 4.2
Shirley Kressel		
	Shadow protections on the Public Garden should be explained and impacts shown	See Section 4.2.2
	The DPIR should include a daylight obstruction analysis	Daylight obstriction values expected to be similar to dalylight obstructionfrom surrounding buildings
	Parks Frontage Ordinance regulations should be explained and addressed	See Section 4.2.2
Friends of the Public Garden		
	The DPIR should include detailed shadow studies	See Section 4.2
	Would like to be informed if any changes in the building's size and height are proposed during the approval process	See Section 6.5
	The project site may be within 100 feet of the Public Garden and hence subject to Parks Commission review	The Project is more than 100' from the Public Garden
Susan Prindle		
	Any "exception" should be granted only after exhaustive shadow studies have corroborated the developer's statement that the buildings conforms to the terms of the Public Garden Shadow Act	See Section 4.2.2

Table 8-3 Groundwater and Geotechnical

Letter	Comment	Response
City Agencies		
Boston Redevelopment Authority - Env.		
	The Project is located within a GCOD and thus required to demonstrate compliance with Article 32 of the Boston Zoning Code; install observation wells and provide all monitoring data to the BGwT upon construction completion	See Section 4.8.4 through 4.8.8 and Section 8.1.3
	The DPIR should include a geotechnical impacts analysis	See Section 4.8.3 and 4.8.5
Boston Public Works Department		
	Install groundwater-monitoring wells and convey the wells to BGwT after completion of the project	See Section 4.8.4
Boston Groundwater Trust		
	Pinpointing potential causes to low groundwater readings in the project area could help	See Section 4.8.4 through 4.8.8
	It should be assured that the project cannot cause a reduction in groundwater levels on the site or on adjacent lots	See Sections 4.8.5 through 4.8.8 and Section 8.1.3
	The DPIR should detail the steps to be taken to make sure the project will not create a path for groundwater from the upper trapped aquifer to penetrate to the aquifer located below the organic soil	See Section 4.8.4 through 4.8.8 and 8.1.3
	Monitor and report groundwater levels	See Section 4.8.4
	New observation wells should be constructed to Trust standards and should be located in the public way and turned over to the Trust after completion of the project	See Section 4.8.4 and 8.1.3
Imapct Advisory Group (IAG)		
	The developer is encouraged to meet the recommendations outlined by BGwT	See Section 4.8.4 and Responses to BGwT Comments above

Table 8-3 Groundwater and Geotechnical - Cont.

Letter	Comment - Cont.	Response
Public		
Neighborhood Association of the Back Bay		
	If any of the adjoining buildings are on rotting piles, how will the development prevent damage during construction?	See Section 4.8.4 through 4.8.8
	Will the developer seek solution to groundwater depletion? What impact will parking garage have on groundwater seepage and equalization? Discuss mitigation measures	See Section 4.8.6 and 8.1.3
	Location of construction staging areas should be provided and construction period impact on area businesses should be studied	See Section 4.9.6
Frederick Gleason		
	All GCOD requirements should be met and all monitoring wells should be constructed to BGwT standards and be located in cooperation with BGwT	See Sections 4.8.4 and 8.1.3
	The three-story parking garage which will be below the groundwater levels will act as a dam and will require special monitoring. Therefore, it shouldn't be included in the public benefits section	Comment noted
	Same as BGwT comments	See Section 4.8.4
	Perhaps geotechnical engineering should be required to ensure that the abutters inner party wall pilings are adequately protected by groundwater	See Section 4.8.7 and 4.8.8
	Where will the construction staging area for the project be located	See Section 4.9.6
Shirley Kressel		
	Impacts on groundwater should be detailed	See Section 4.8.7 and 4.8.8
Friends of the Public Garden		
	We strongly support the commentary and requests contained in Mr. Laffer's letter from January 18, 2008	See Section 4.8.4

Table 8-4 Environmental

Letter	Comment	Response
City Agencies		
Boston Redevelopment Authority - Env.		
	The proponent should conduct a quantitative analysis of pedestrian level winds	See Section 4.1
	Conduct an air quality analysis to determine the impact of Carbon Monoxide emissions from combustion and mobile source emissions generated by the project	See Section 4.3
	Illustrate the existing and future drainage patterns from the project site and describe and quantify existing and future stormwater runoff from the project site and the project's impact on drainage; provide a description of the project's stormwater management system; demonstrate compliance with the Commonwealth's Stormwater Management Policies; and describe the project's area's stormwater drainage system to which the proposed project will connect	See Section 7.4
	Solid and hazardous waste - provide a list of any known or potential contaminants on site with a description of remediation measures; identify any potential hazardous wastes to be generated by the project; estimate waste generation; indicate disposal plans; and identify measures to comply with the city's recycling program	See Section 4.4
Boston Environment Department		
	The proponent should conduct a quantitative analysis of pedestrian level winds	See Section 4.1
	Information on DEP's Clean Air Construction Initiative can be obtained from Christine Kirby of Mass DEP at 617-292-550	Comment noted
	The proponent must ensure compliance with the construction-related limits as outlined in the Regulations for the Control of Noise in the City of Boston	See Section 4.9.8
	No sound generating activity is allowed to occur at the site prior to 7:00am	Proponent will comply
	Regular vacuum cleaning of streets and sidewalks in the project area should be employed to ensure that they remain free of dust and debris	Proponent will comply

Table 8-4 Environmental - Cont.

Letter	Comment - Cont.	Response
Boston Fire Department		
	Impact on availability and accessibility of hydrant locations that may be affected should be addressed	Proponent will consult with BFD and BWSC to ensure compliance
	Impact on availability and accessibility to siamese connection locations that may be affected	Proponent will consult with BFD and BWSC to ensure compliance
	Impact of a transformer vault fire or an explosion on building fire safety	Proponent will consult with BFD to ensure compliance
	Address need for BFD permit requirements as outlined in the Boston Fire Prevention Code	Proponent will seek Fire Prevention permits from the BFD
	Consider providing BFD with rooftop access for communications equipment	Proponent will consider
Imapct Advisory Group (IAG)		
	Provide clarification of zoning issues including height specs, public garden proximity rules, and "special exception"	See Section 2.5
	Provide an updated construction schedule	See Section 2.3.3
Public		
Neighborhood Association of the Back Bay		
	Provide legal clarification of special exception and explain review process	See Section 2.5.3
Friends of the Public Garden		
	It should be assured that it [staging] will not impede access, physical or visual, to the Garden or damage to plantings on its periphery	Proponent will comply

Table 8-5 Urban Design

Letter	Comment	Response
City/State Agencies		
Massachusetts Historical Commission		
	New design will have adverse visual effect on Back Bay Historic District character	See Sections 6.3.1 and 5.0
Boston Redevelopment Authority - Env.		
	Sustainable Design/Green Buildings - demonstrate Article 37 compliance and demonstrate that the project will meet the requirements of the article with appropriate supporting documentation and by certification from a LEED Accredited Professional	See Section 4.10
Boston Environment Department		
	The expression of the building as it turns the corner of Boylston and Arlington Streets does not distinguish itself as a strong presence at such an important site	See Section 5.0
	The base of the building does not clearly articulate in a hierarchical manner the main entry to the office building versus the expression of the retail spaces. A more finely detailed expression at street level would more successfully relate to the character of the surrounding historic context	See Section 5.0
	The way which the building steps back at the top should be carefully considered in how the main body of the building is terminated and how the setback portions may take on a distinct character	See Section 5.0
	BLC staff finds the proposed new construction to be acceptable in its massing, but the ultimate success of the design will rely upon the finer points of materials and detailing	See Section 5.3
	Dated cornerstones should be incorporated into all new construction	See Section 5.3
	Projects should be constructed with traditional building materials and techniques rather than synthetic composite materials	See Section 5.3
Boston Public Works Department		
	Provide an engineer's site plan showing curb functionality	See Figures 2-3 and 3-21

Table 8-5 Design - Cont.

Letter	Comment - Cont.	Response
	Sidewalk reconstruction must meet ADA/AAB guidelines	Proponent will comply
	Street lighting elements must be consisted with area lighting and urban design	See Section 5.0
	Sidewalk reconstruction including the resetting of existing curbing is developer's responsibility	See Section 5.0
	Sidewalk reconstruction effort may constitute a LM&I agreement with PIC	Proponent will comply
	Discontinuances within public right-of-way must be processed through PIC	Proponent will comply
	Landscape elements will require approval from Parks and Recreation Dept.	Proponent will comply
	Developer is responsible for purchasing solar powered trash compactors to be used in public space	Proponent will comply
	Contact Sarah Hutt, Boston Arts Commission, to participate with the city's public arts program	Proponent will comply
Boston Fire Department		
	For projects involving air-supported structures, it is critical that the impact of the design has on fire safety relative to the interaction of the underneath the structure to the structure as well as to the interaction of the structure to the area underneath the structure	No air-supported structures are proposed
Imapct Advisory Group (IAG)		
	Provide realistic renderings of the project in context surrounding architecturally detailed buildings, viewed from all directions	See Appendix B
	Provide more details on the west façade of the building and on the Providence Street side	See Section 5.0 and Appendix B
	A stronger visual impact should be articulated at the corner of Arlington/Boylston Streets	See Section 5.0 and Appendix B
	Provide comparison of total sf for existing and proposed conditions	See Section 6.4
	Provide additional information regarding the detailing and materials chosen (e.g., limestone/cast stone samples)	See Section 5.0
	Provide more information on the massing, screening and detailing of the mechanical penthouse and whether new shadow would be, cast as result, outside of what is permitted under zoning	See Section 4.2

Table 8-5 Design - Cont.

Letter	Comment - Cont.	Response
Public		
Rep. Martha Walz		
	The DPIR should show in detail the Providence Street façade, and how the loading dock and parking garage will be treated	See Section 5.0
	The west façade requires improvement and should be attractive as the others	See Section 5.0
	Detailed renderings of all four sides of the building, including the mechanical penthouse should be presented	See Appendix B
	The DPIR should include a site plan that labels zoning heights; an explanation of the special exception required for the project should be included as well	See Section 2.5.3
	Commit to indoor storage of trash so that no dumpsters will be placed on Providence Street	See Section 3.0
	Explore alternative designs that would result in a wider sidewalk on Arlington Street	See Section 5.0
	The proponent should commit that it will not narrow the Boylston Street sidewalk	See Section 5.0
	The proponent should explain in detail how it intends to implement the Boylston Street Improvement Plan	See Section 5.4
Neighborhood Association of the Back Bay		
	Explore alternative exterior façade treatment concepts to create a stronger design, of memorable landmark stature, equivalent to the richness of the existing Arlington Building	See Secion 5.0
	The corner bay should stand out more uniquely than in the proposed design. Create a special, richer presence for this corner	See Section 5.0
	The south façade design makes Providence Street an uncomfortable canyon, and reinforces an impression of this street as a back alley	See Section 5.0
	Design of the west façade must be consistent with the prime quality expected on Boylston	See Section 5.0
	Provide colored renderings showing the project photo-realistically to better understand the project's impact and the compatibility of its design and scale in this environment	See Appendix B
	A building of this quality and prominence deserves real limestone rather than cast stone	See Section 5.0
	The project renderings and elevations seem confusing about the size, height, visibility and impact of the mechanical penthouse. Accurately show the dimensions, location, exterior shielding treatment, exposure of mechanical equipment and visibility from street and public garden	See Appendix B
	The BRA should closely review exterior detailing and materials samples	See Section 5.0
	Provide a plan detailing the height limits and zoning regulations for each part of the site to better understand project compliance	See Section 2.5.3

Table 8-5 Design - Cont.

Letter	Comment - Cont.	Response
	What is the increased total built square footage on the site compared with that of the existing buildings?	See Section 6.4
Clydia Davenport		
	The existing buildings should be preserved and made the most energy efficient green restoration in Boston	See Section 6.4
Frederick Gleason		
	The project architect can design a building of merit with quality materials, details and execution which is worthy of this notable location	See Section 5.0
	New development at this corner should provide design elements to create a transition between the project and other structures in the area, and ease the constricted pedestrian circulation at this busy corner	See Section 5.0
	Many of the Shreve's building's elements (e.g., windows, copper cornice, etc.) are significant and should guide the proposed project design	See Section 5.0
	There is neither a graphic scale nor dimensions shown on plans, sections, elevations or adjacent building heights	See Appendix B
	The Heritage on the Garden complex is missing in plans	See Appendix B
	The project should have a defined cornice which respects a height similar to the seven-story adjacent Heritage building	See Section 5.0
	Particular attention must be paid to the integration of the Province Street elevation to that on Arlington Street	See Section 5.0
	The site plan does not show the property line or outline of the existing buildings such that comparison can be made to the proposed	See Figure 2-3
	There is no information as to the materials and details on the west façade. Further attention must be given to how this corner is turned and whether the building should extend to the west property line	See Section 5.0
	Further design development should address creating a distinctive base which integrates street level elements with the façade	See Section 5.0
	It is necessary to note the location of glazed projecting bays in relation to the property line	See Figure 2-3
	Design objectives stated are inconsistent with renderings and plans	See Section 5.0
	The proposed continuation of the massing along Boylston Street is misleading when presented in the context of the provided section	See Section 5.0
	Design development should look to creating a cornice datum at a more compatible contextual height which is lower than the proposed	See Section 5.0

Table 8-5 Design - Cont.

Letter	Comment - Cont.	Response
	The rounded form is not typically associated with ashlar masonry	See Section 5.0
	Ground floor wooden storefronts are not mentioned or shown elsewhere and are inappropriate to the high tech curtain wall schematic	See Section 5.0
	The entry to an office building on this site and of the proposed scale should have more prominence	See Section 5.0
	Further design development should address the prominence of the façade in a manner more appropriate and consistent with the context, especially if the bays are to remain part of the design	See Section 5.0
	Particular attention must be paid to the detailing of the curved glass/spandrel glass element in relation to the rest of the bay and façade	See Section 5.0
	The proposed width and materials of the bays would be a significant departure from the primarily masonry vernacular of the district	See Section 5.0
	The building's appearance and its impact must be considered and studied as looks at night and with different glass	See Section 5.0
	There is no cornice or terminus to the primary facades	See Section 5.0
	The top two stories step back from the main façade and show the identical cladding materials without any differentiation in form or character typically associated with a penthouse structure	See Section 5.0
	The mechanical penthouse appearance and impact must be minimized and integrated into the whole composition	See Section 5.0
	The building's coloring will be at variance with the predominate coloring in the Back Bay	See Section 5.0
	The streetscape should continue with the Boylston Street paving and street furniture standards which include granite pavers	See Section 5.0
	The composition of the primary facades departs from practically all of the predominant architectural characteristics in the district	See Section 5.0
	The glass or new masonry expression creates a repetition which could continue down the block and is the same whether 1 module or 10 modules. It lacks hierarchy within itself and a sense of wholeness, completeness and containment	See Section 5.0
	The current schematic design can and should be improved in the context of the setting for adjacent landmarks such as the Arlington St. Church, views to and from the Public Garden, etc.	See Section 5.0
	The project design seems to be an unresolved hybrid with a gesture to the masonry vernacular on a primarily glass façade	See Section 5.0
	The building stands out as a singular architectural statement and not one of complementary design in the urban fabric	See Section 5.0

Table 8-5 Design - Cont.

Letter	Comment - Cont.	Response
Leigh Cochran		
	I strongly protest the plan to replace the existing Shreve's building with yet another steel and glass affair, which in no way fits the feel of Back Bay	See Section 5.0
Boston Preservation Alliance		
	BPA request further study of the relationship of glazed projecting bays to the existing rhythm of the existing facades along the street to ensure that the undulation of the new building compliments its historic context to the greatest extent possible	See Section 5.0
	Explore design alternatives that would permit the building to read less as a monolithic structure	See Section 5.0
	It is critical that a building that is significantly more massive than the existing buildings on this block be designed in such a way that it doesn't overwhelm its context	See Section 5.0 and Appendix B
Susan Ashbrook		
	The proposed design looks generic and blend, especially on the Providence Street side. The site is of great prominence and deserves the highest quality of urban design	See Section 5.0
	The massing of the entire building, especially on Boylston Street, should be more irregular and varied, in keeping with the character of the remainder of the block	See Section 5.0
Dorothy Bowmer		
	The building, as presently shown, will read more as a contemporary glass building than as a traditional masonry building that would be much more fitting for the surrounding neighborhood	See Section 5.0
Frances Lessin Duffy		
	The proposed design is out of scale with other structures at this prominent corner	See Section 5.0
	The materials chosen are cold and unrelieved by detailing. The design fails to complement the design of the Berkeley Building at the opposite end of the block	See Section 5.0
	Buildings torn down should be replaced with something better. Cesar Pelli has done better and it is time to send this back to the drawing board	See Section 5.0
Benjamin Stanley		
	The project design is no different from anything in a Rt. 128 office park	See Section 5.0

Table 8-5 Design - Cont.

Letter	Comment - Cont.	Response
Shirley Kressel		
	The DPIR should explain the existing and proposed height, FAR, setbacks, and other zoning controls for all parts of the site	See Section 2.5.3
	The building design is massive, monolithic, and inconsistent with the scale and grain of the architectural context. It is not sensitive response to the historic architecture. The development team is capable of a more sophisticated interpretation of the historic vocabulary, and should reconceptualize the design	See Section 5.0
	Facades should be clearly shown as they relate to adjoining buildings and streets	See Appendix B
Susan Prindle		
	The developer has not shown his proposal in the context of other Boylston Street buildings. The proportion of the bays may not fit well with the building's neighbors. A greater effort to break up the façade would be welcome	See Appendix B
	Show the building from the western and southern approaches, with the mechanical penthouse clearly delineated	See Appendix B
Nicholas DiPersio		
	Consider incorporating these buildings into any new development on the adjacent properties at all costs	See Section 6.4
Paul Carlson		
	Demolishing these very aesthetically attractive buildings situated on relatively small footprints and replacing them with a monolithic structure with a large footprint will homogenize and degenerate the visual diversity of this section of Boylston Street	See Section 5.0
	Perhaps the Shreve's building's façade could be incorporated into a larger modern structure	See Section 6.4
David Friend		
	Unlike the Heritage, which blends pretty well because of the brick façade and ample setback from the street, the proposed design just sticks out like a sore thumb	See Section 5.0
	The existing richness and variety at the street level will be totally lost with this new building. And with extra height, Boylston Street continues to become more and more cavernous and of inhuman scale	See Section 5.0

Table 8-6 Historic Resources

Letter	Comment	Response
City/State Agencies		
Massachusetts Historical Commission		
	Alternatives to demolition should be considered	See Section 6.4
	Buildings would qualify for Federal and State historic tax credits	See Section 6.4
Boston Redevelopment Authority - Env.		
	Demonstrate compliance with Article 85 of the Code and demonstrate that the project will not create adverse impact to any of the historic structures in the surrounding area	See Section 6.3 and 6.5
Boston Environment Department		
	BLC staff strongly encourages a thorough study of alternatives that would rehabilitate or incorporate historic buildings into proposed development plans, rather than demolish them	See Section 6.4
	The proposed demolition of the four buildings requires an Article 85 Demolition Review by BLC	See Section 6.5
	In addition to establishing a program to protect nearby buildings from construction related vibration, a plan must be devised to protect the statue of Ellery Channing in the Public Garden at the corner of Arlington and Boylston Streets	See Section 4.9.12
Imapct Advisory Group (IAG)		
	Any archaeological findings should be donated to the city	See Section 6.2
Public		
Park Plaza CAC		
	How will the design of the proposed project fit into its historic context	See Section 5.0
Neighborhood Association of the Back Bay		
	Potential archaeological issues should be addressed	See Section 6.2

Table 8-6 Historic Resources - Cont.

Letter	Comment - Cont.	Response
Frederick Gleason		
	What will be the procedure to address potential impacts to archaeological findings?	See Section 6.2
Boston Preservation Alliance		
	BPA supports MHC's recommendation that alternatives to demolition of the four existing buildings be considered	See Section 6.4
	We request active involvement in consultations concerning both the existing buildings on the site and mitigation of potentially adverse impacts on the historic context of Boylston Street and the Back Bay	See Section 6.5
Cathleen Hoelscher		
	If the buildings cannot be saved, I hope that everyone can find a way to preserve them as much as possible, perhaps thru reusing elements in the buildings or donating items to other projects	See Section 6.4
Benjamin Stanley		
	Tearing down the finite number of century-old buildings that work well in the city's grid and have interesting stories threatens everything that makes Boston special	See Section 6.4
Shirley Kressel		
	The DPIR should describe the existing buildings in detail, and provide any recommendations issued by BLC and MHC for minimizing adverse effects	See Sections 6.1.1 - 6.1.3
Susan Prindle		
	I hope that it will be possible to preserve some of the building's history, either physically or in an historic record available to the public, or both	Proponent will consider
Norman Morrill		
	Keep the Shreve's building. Tear down the rest of the block if you must. Buildings like this help make Boston special	See Section 6.4
Dan Shea		
	Destruction of the historic, unique Arlington Building should be denied	See Section 6.4
	Adaptive reuse of the Arlington Building would be a compromise that would leave the city with its architectural heritage and tenants with a comfortable, modern space	See Section 6.4

Table 8-6 Historic Resources - Cont.

Letter	Comment - Cont.	Response
Michael Parise		
	Reconsider the tearing down of the Shreve's building. Its Architecture is irreplaceable and should be preserved in such highly sensitive area of the city	See Section 6.4
Nicholas DiPersio		
	The Shreve's and WEIU buildings should be preserved. They have a unique character that differentiates Boston from more generic cities, and to do without them is to make Boston common.	See Section 6.4
Jonathan Fox		
	It would be a shame to lose the façade of the Shreve's building for the proposed glass box	See Sections 5.0 and 6.4
	The facades should be preserved (a la Russia Wharf) to maintain the pedestrian friendly effect that these facades have	See Section 6.4
Paul Carlson		
	Destroying Boston's very unique historic and engaging urban fabric will leave Boston a less desirable place in the long run	See Section 6.4
Brian Davis		
	The developer should be required to incorporate the façade into the new development	See Section 6.4
Michael McQuade		
	The Shreve's building, or at least its façade, should be preserved. That building could not be replaced today. The artistry is beyond contemporary craftsmen's abilities. Boston differentiates itself from other cities by keeping the best of its past	See Section 6.4
David Friend		
	The facades of the existing buildings (at least the Shreve building) should be preserved to maintain the character of the street	See Section 6.4

Appendix A

Existing Conditions Photos


OFFICE / RETAIL SPACE FOR LEASE - 617-357-5700

324-334 Boylston Street
Arlington Street Facade

336 Boylston Street (Left)
344-350 Boylston Street (Right)


WOMEN'S EDUCATIONAL AND INDUSTRIAL UNION
WELCOME to BOSTON
THE BIRTHPLACE of AMERICAN HISTORY
OFFICE & RETAIL SPACE for LEASE
617.357.5700

Appendix B

Project Plans Elevations Sections and Renderings

Perspective View from the Public Garden

Perspective View from Boylston Street Level

Perspective View from Arlington Street Level

Current Arlington Street View Looking South

Proposed Arlington Street View Looking South

Current Boylston Street View Looking West

Proposed Boylston Street View Looking West

Current Boylston Street View Looking East

Proposed Boylston Street View Looking East

Current Arlington Street View Looking North

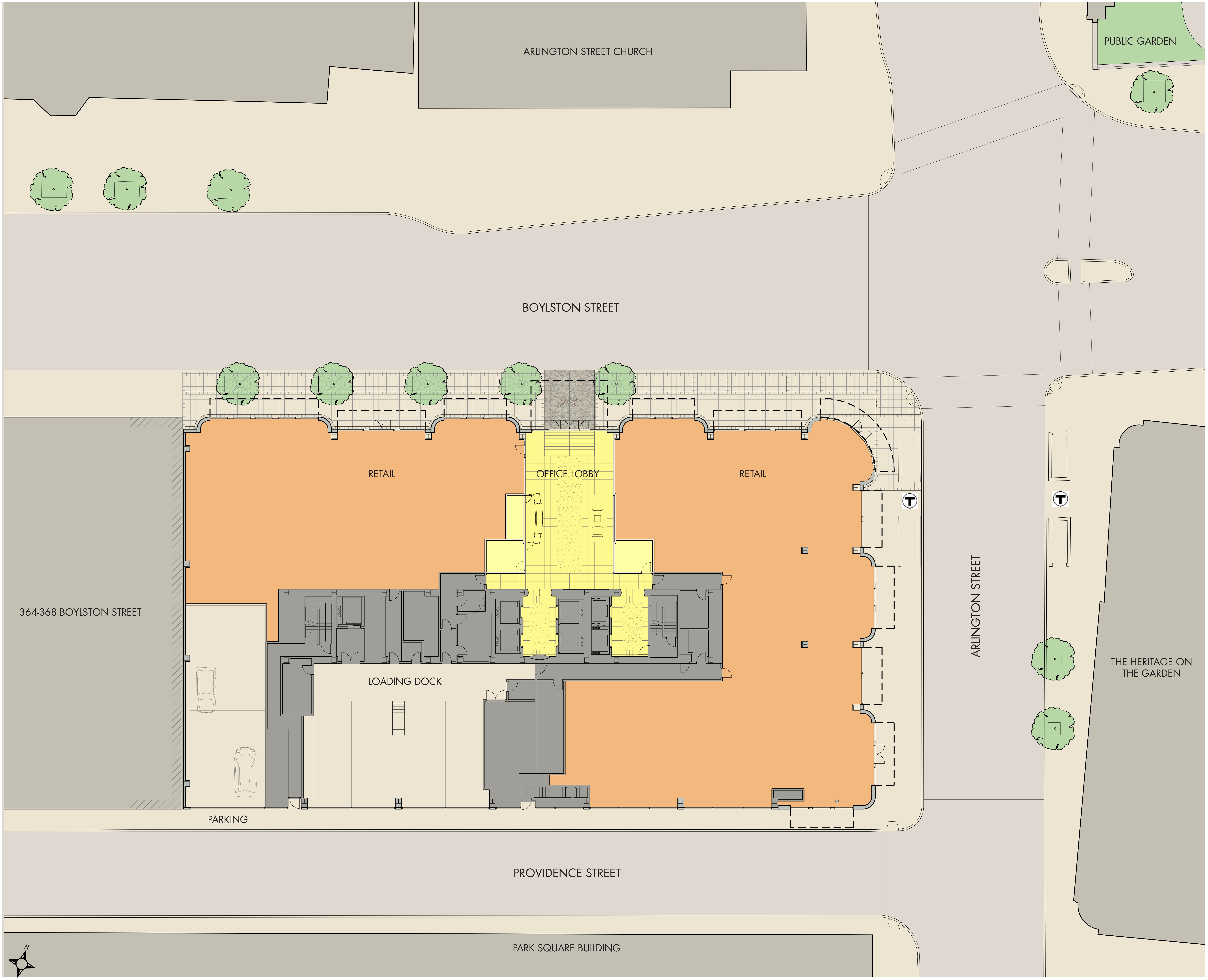
350 BOYLSTON STREET

Proposed Arlington Street View Looking North


Current Providence Street View Looking West

Proposed Providence Street View Looking West

- LOBBY
- RETAIL
- OFFICE
- OFFICE TERRACE
- FITNESS / SPA
- PARKING / LOADING DOCK
- BUILDING SUPPORT / MECHANICAL



Ground Floor Plan

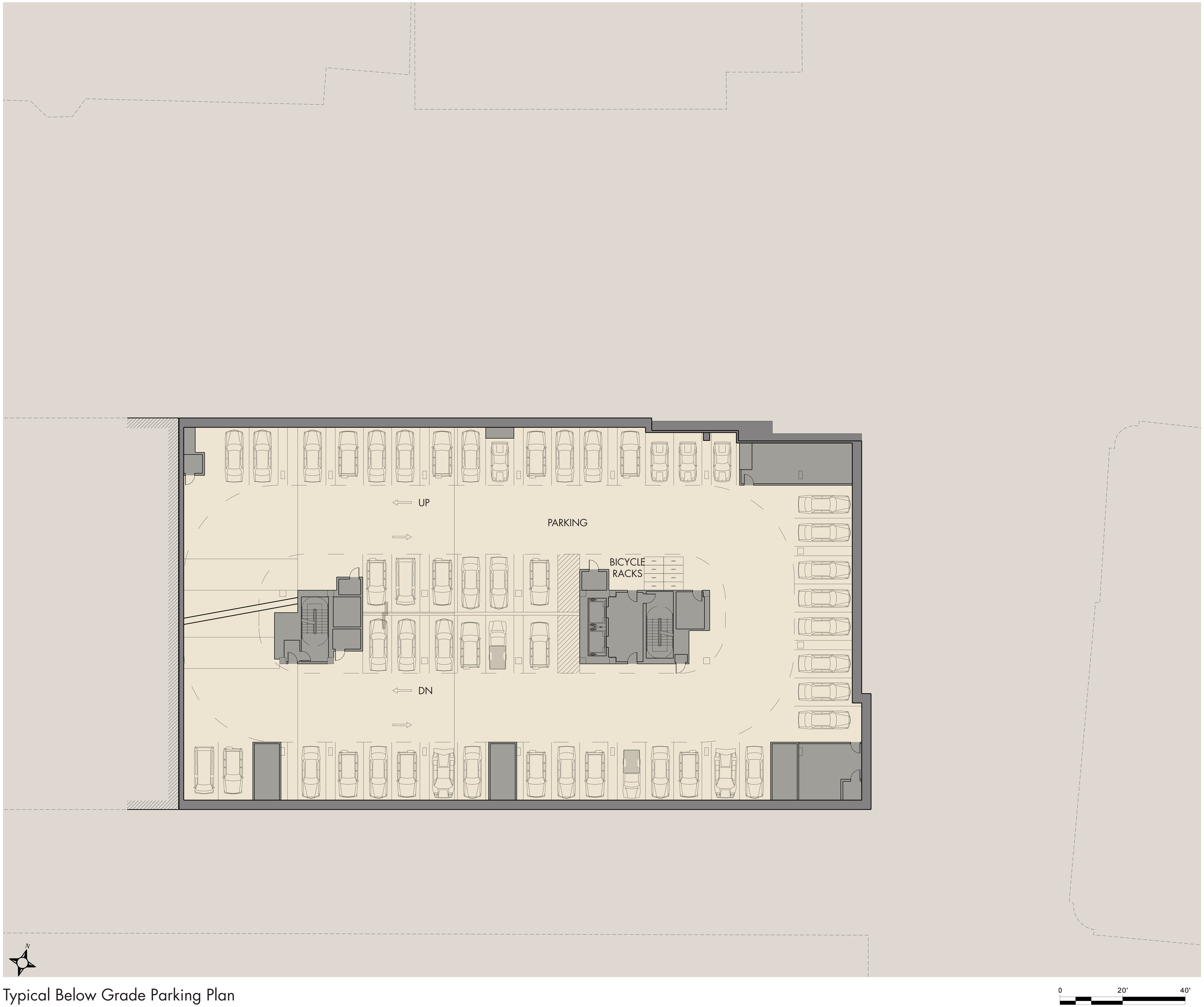
0 20' 40'

350 BOYLSTON STREET

THE DRUKER COMPANY, LTD

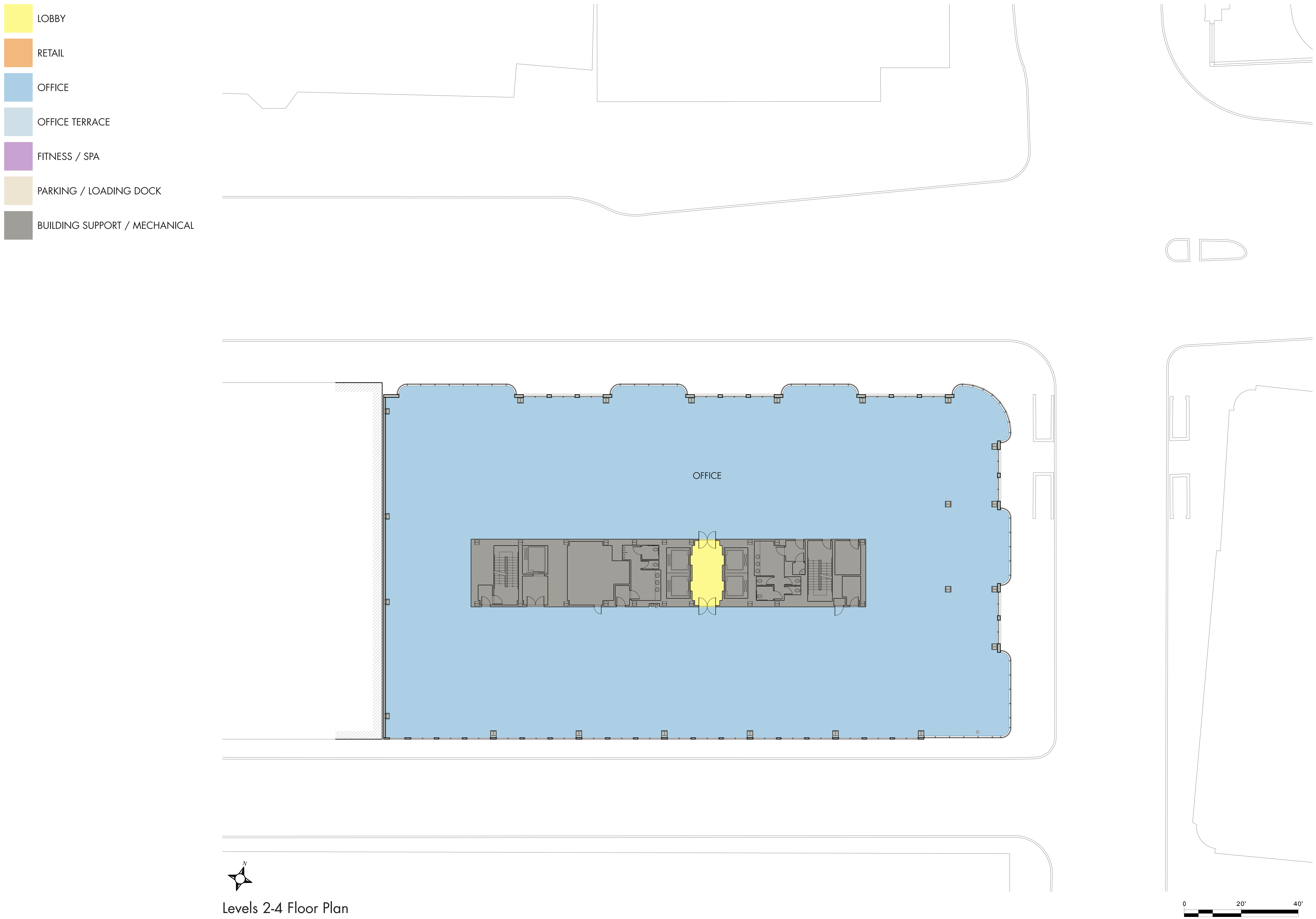
PELLI CLARKE PELLI ARCHITECTS | CBT ARCHITECTS

LOBBY
RETAIL
OFFICE
OFFICE TERRACE
FITNESS / SPA
PARKING / LOADING DOCK
BUILDING SUPPORT / MECHANICAL



Typical Below Grade Parking Plan

350 BOYLSTON STREET

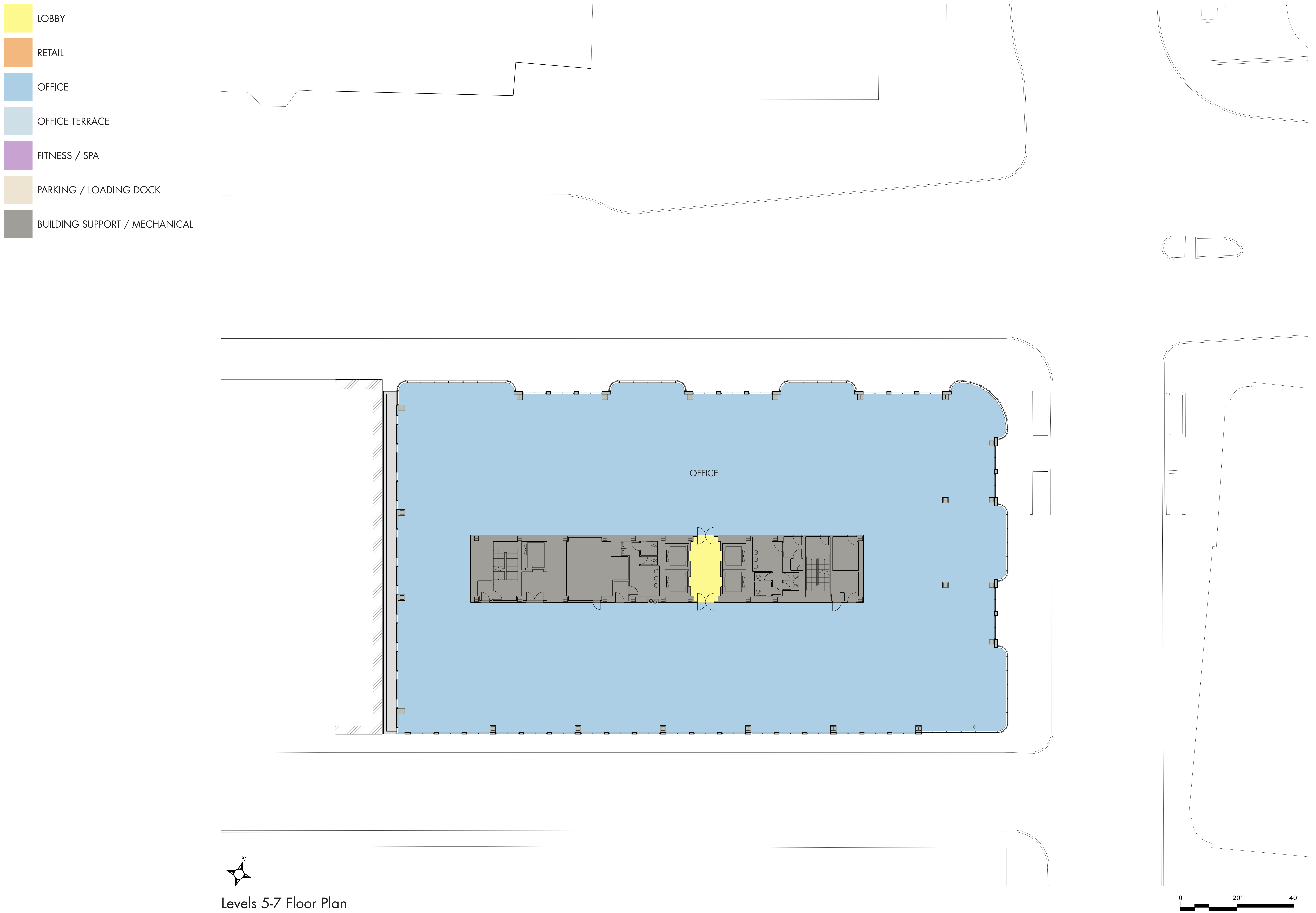


Levels 2-4 Floor Plan

350 BOYLSTON STREET

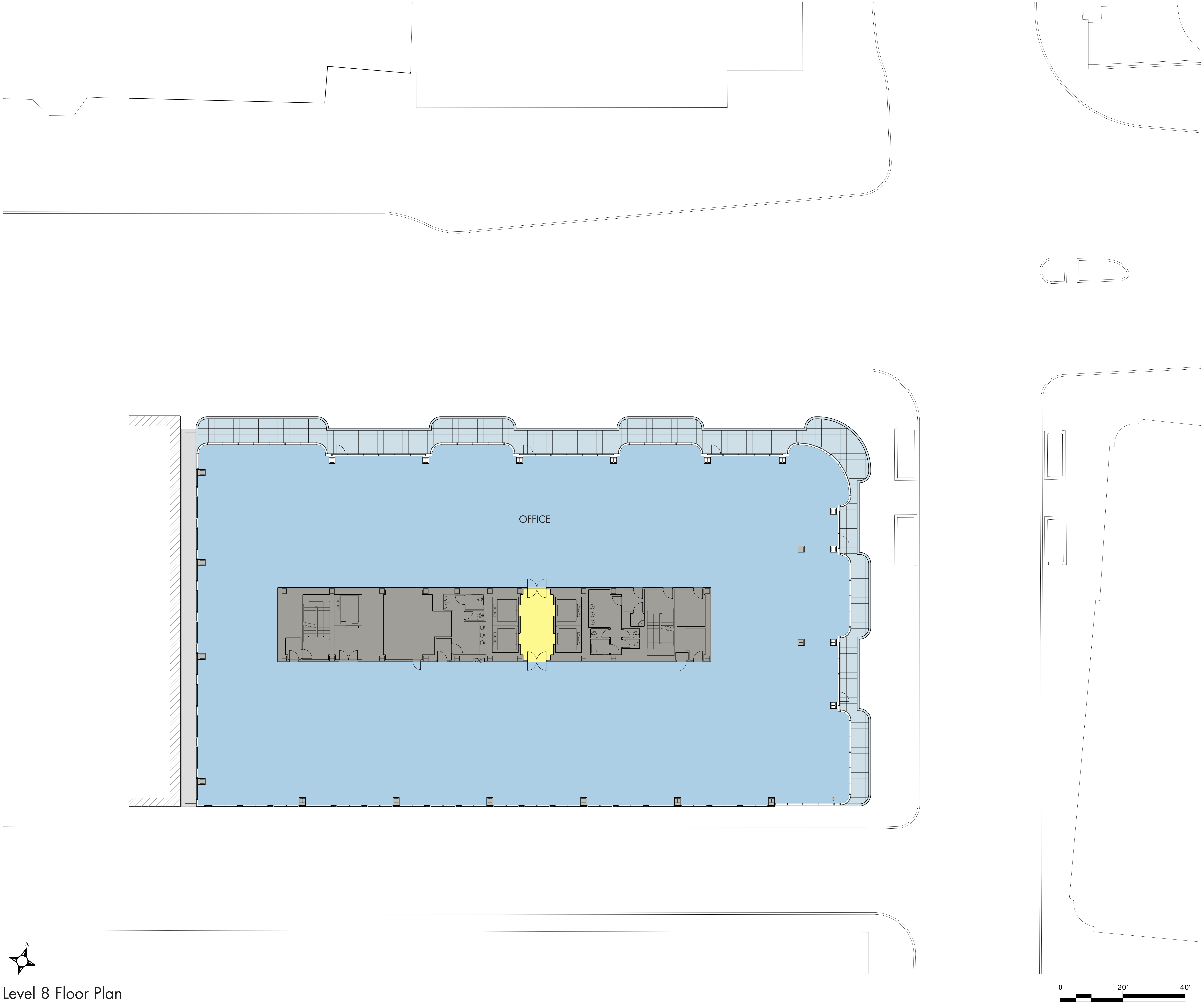
THE DRUKER COMPANY, LTD

PELLI CLARKE PELLI ARCHITECTS | CBT ARCHITECTS



Levels 5-7 Floor Plan

LOBBY
RETAIL
OFFICE
OFFICE TERRACE
FITNESS / SPA
PARKING / LOADING DOCK
BUILDING SUPPORT / MECHANICAL



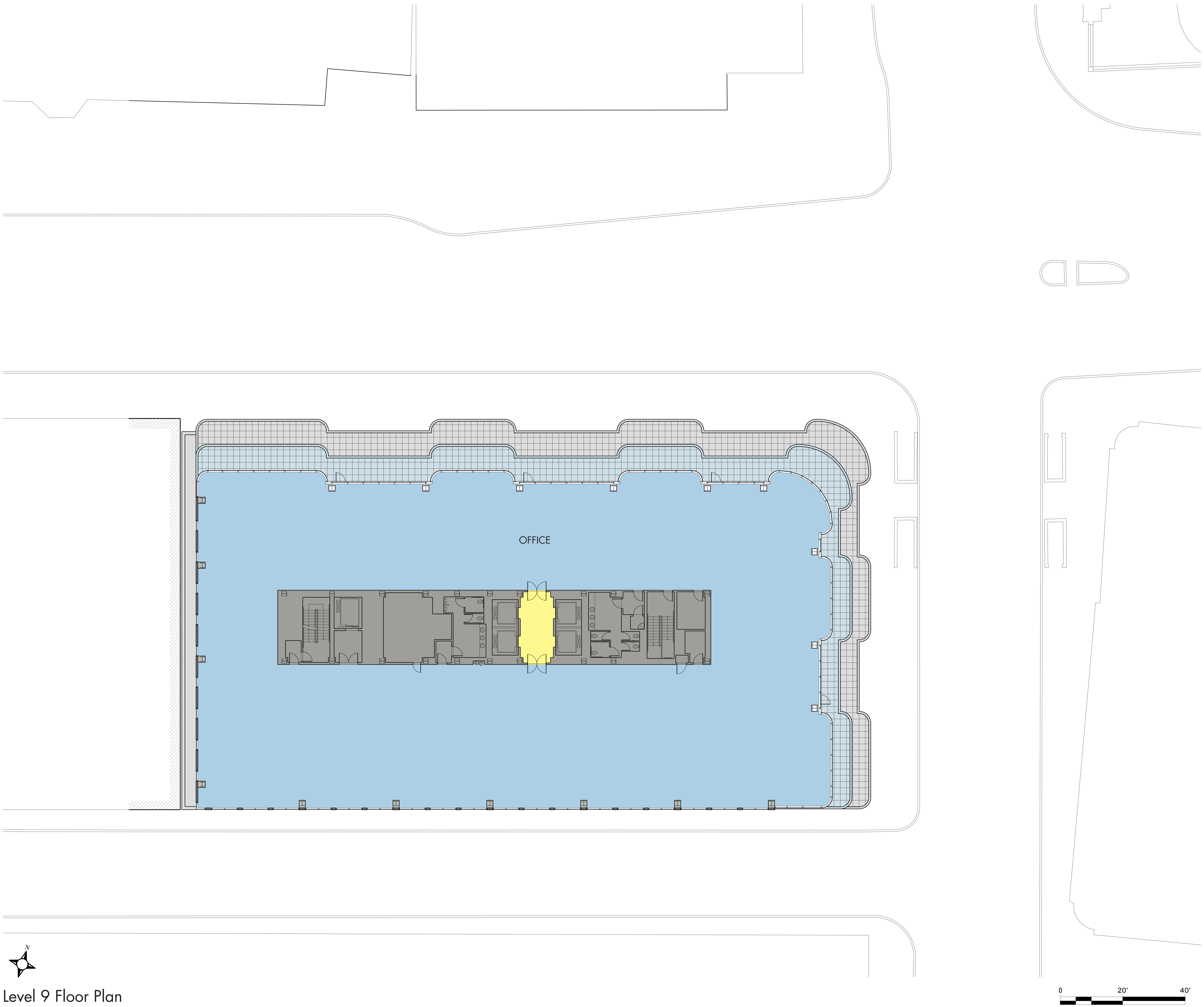
Level 8 Floor Plan

350 BOYLSTON STREET

THE DRUKER COMPANY, LTD

PELLI CLARKE PELLI ARCHITECTS | CBT ARCHITECTS

LOBBY
RETAIL
OFFICE
OFFICE TERRACE
FITNESS / SPA
PARKING / LOADING DOCK
BUILDING SUPPORT / MECHANICAL



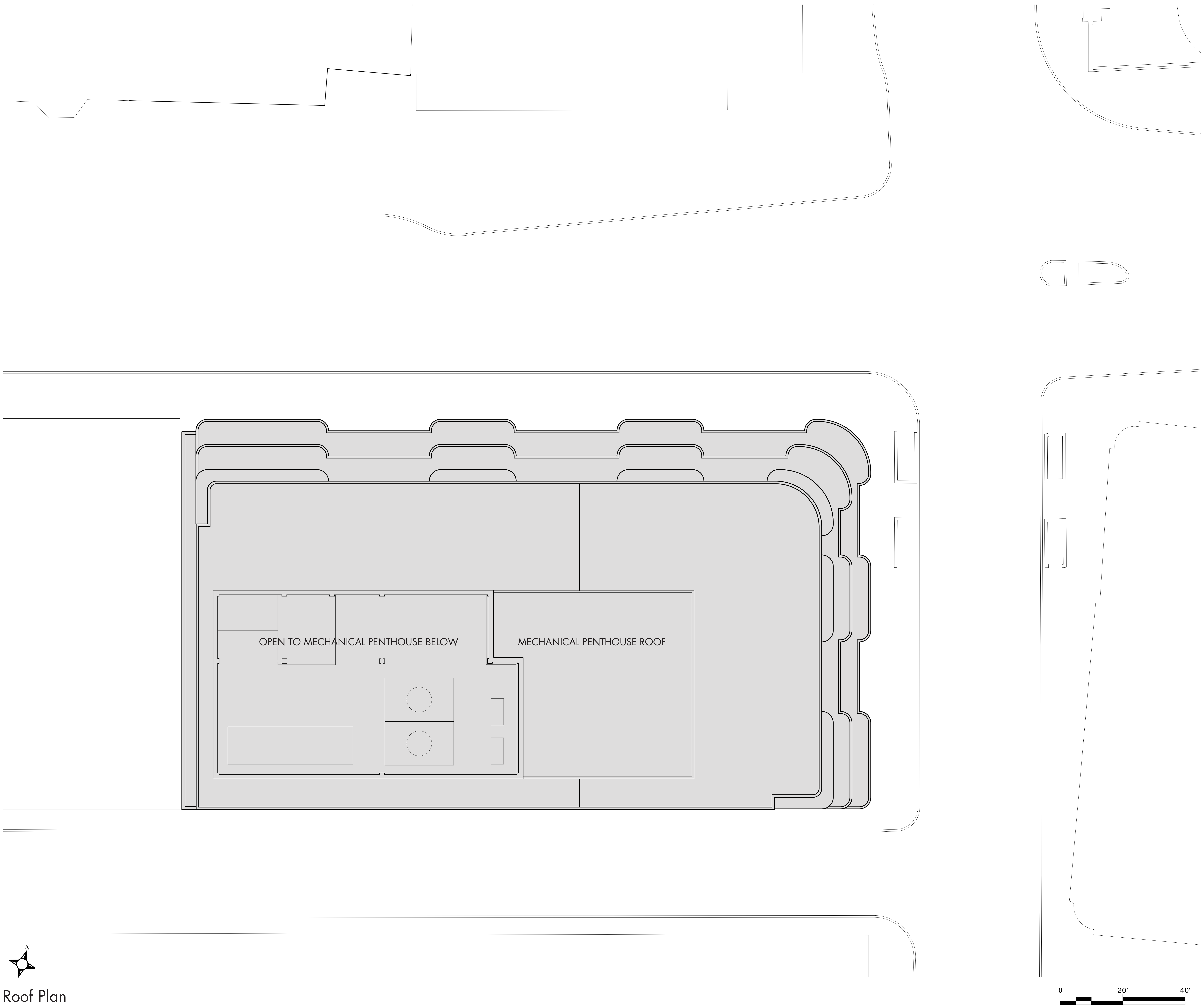
Level 9 Floor Plan

350 BOYLSTON STREET

THE DRUKER COMPANY, LTD

PELLI CLARKE PELLI ARCHITECTS | CBT ARCHITECTS

	LOBBY
	RETAIL
	OFFICE
	OFFICE TERRACE
	FITNESS / SPA
	PARKING / LOADING DOCK
	BUILDING SUPPORT / MECHANICAL

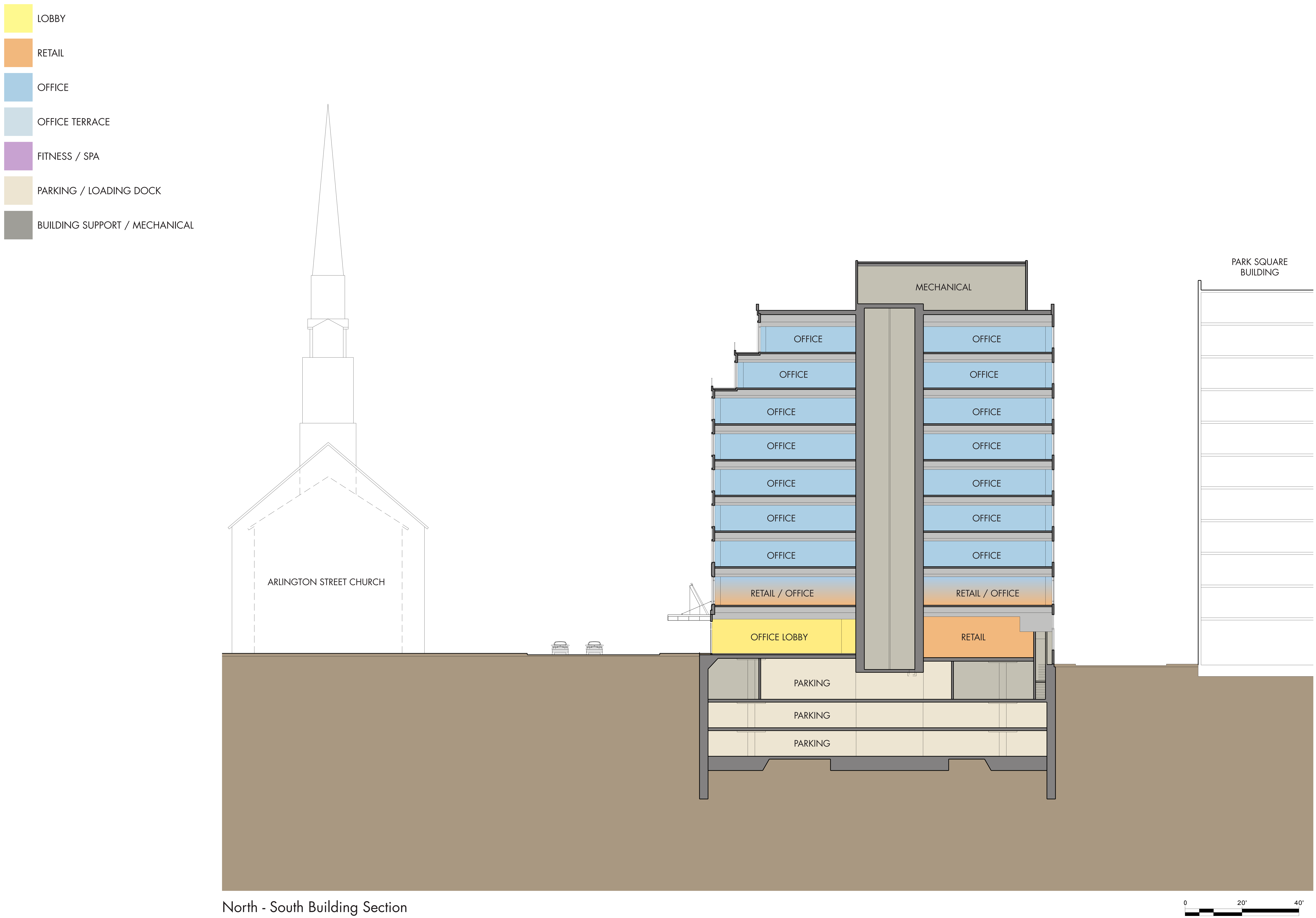


Roof Plan

350 BOYLSTON STREET

THE DRUKER COMPANY, LTD

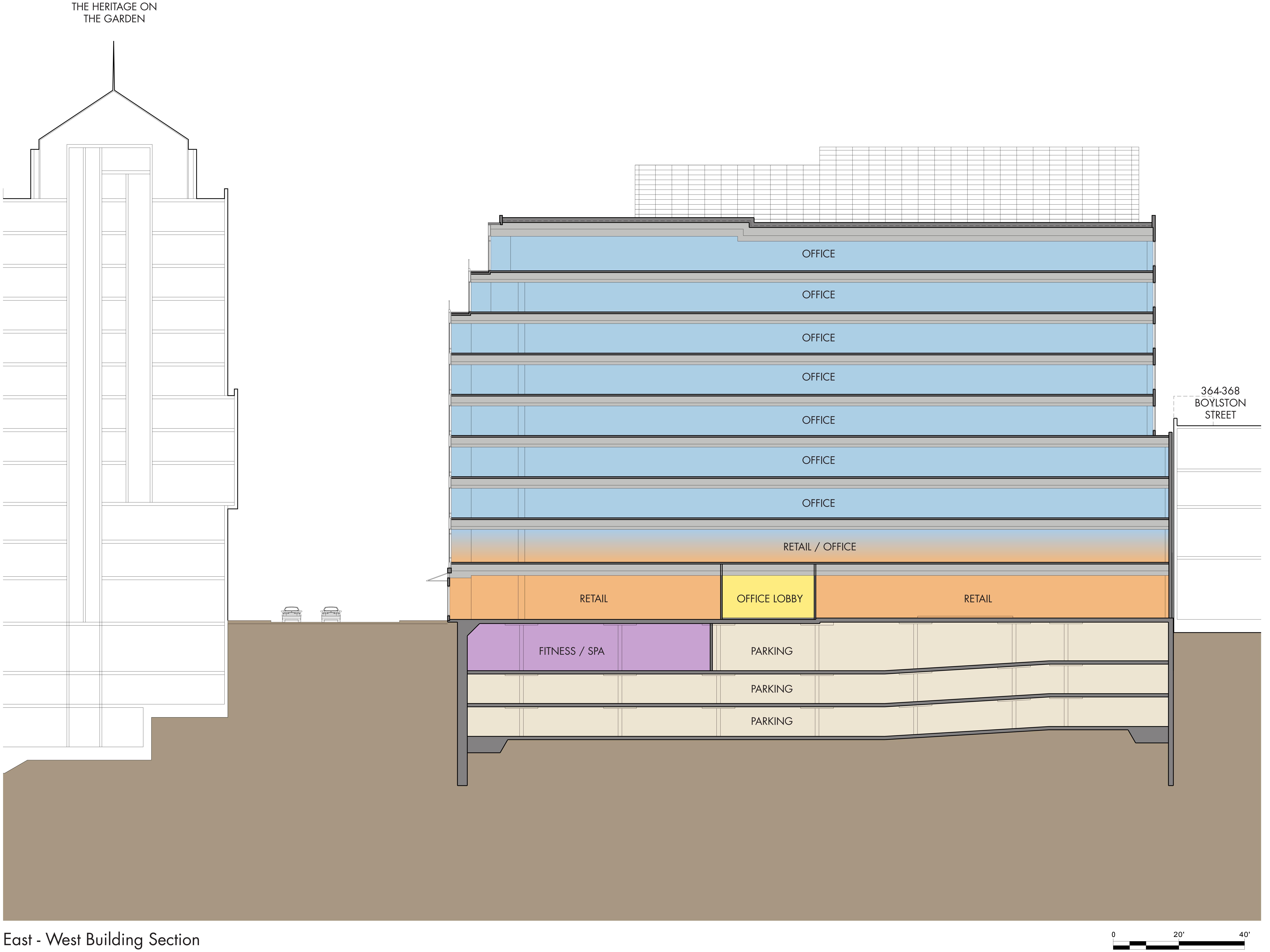
PELLI CLARKE PELLI ARCHITECTS | CBT ARCHITECTS



North - South Building Section

350 BOYLSTON STREET

LOBBY
RETAIL
OFFICE
OFFICE TERRACE
FITNESS / SPA
PARKING / LOADING DOCK
BUILDING SUPPORT / MECHANICAL



East - West Building Section

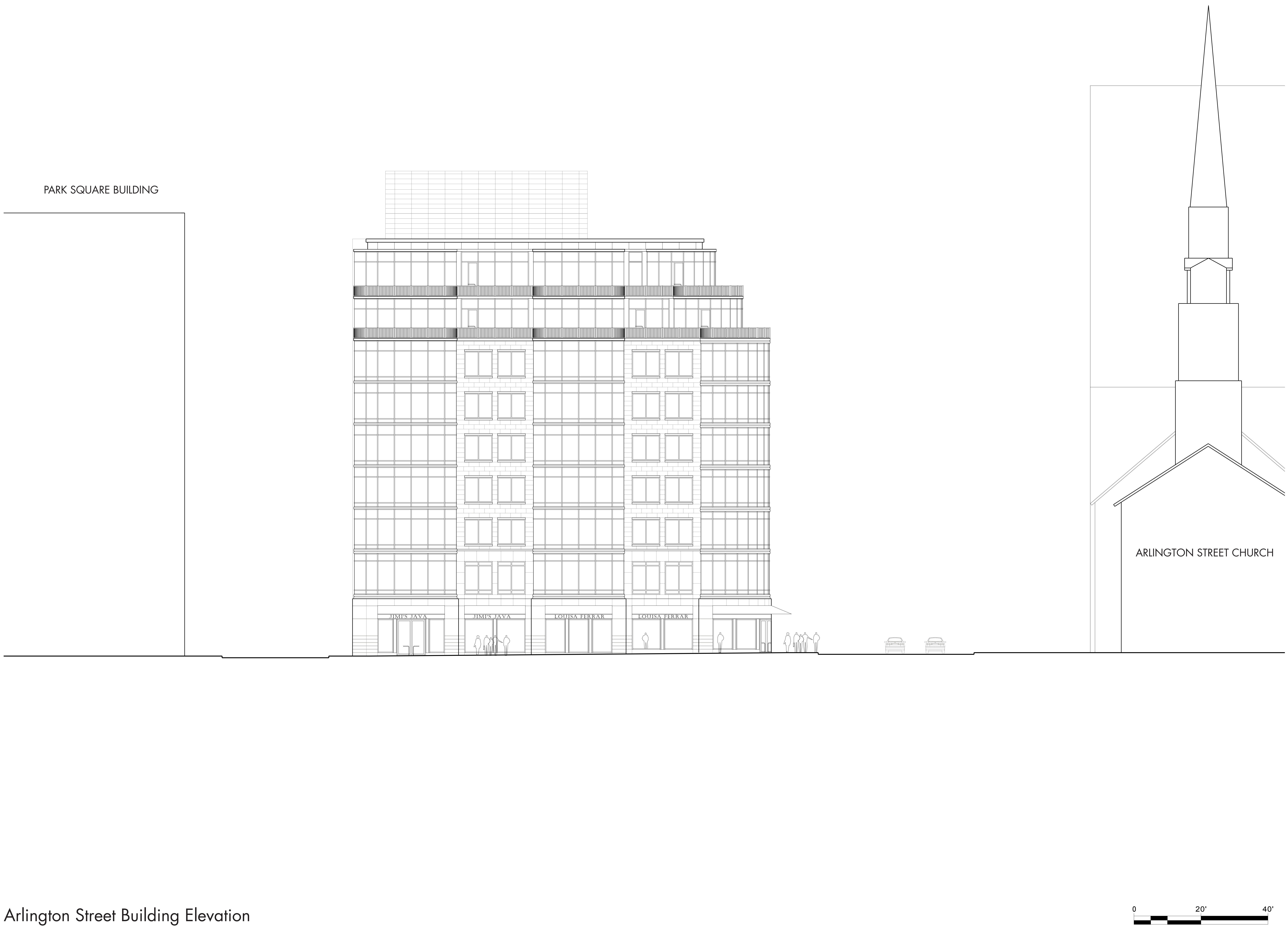
350 BOYLSTON STREET

THE DRUKER COMPANY, LTD

PELLI CLARKE PELLI ARCHITECTS | CBT ARCHITECTS

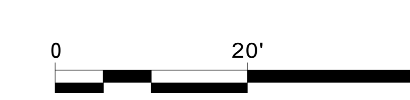
Boylston Street Building Elevation

350 BOYLSTON STREET

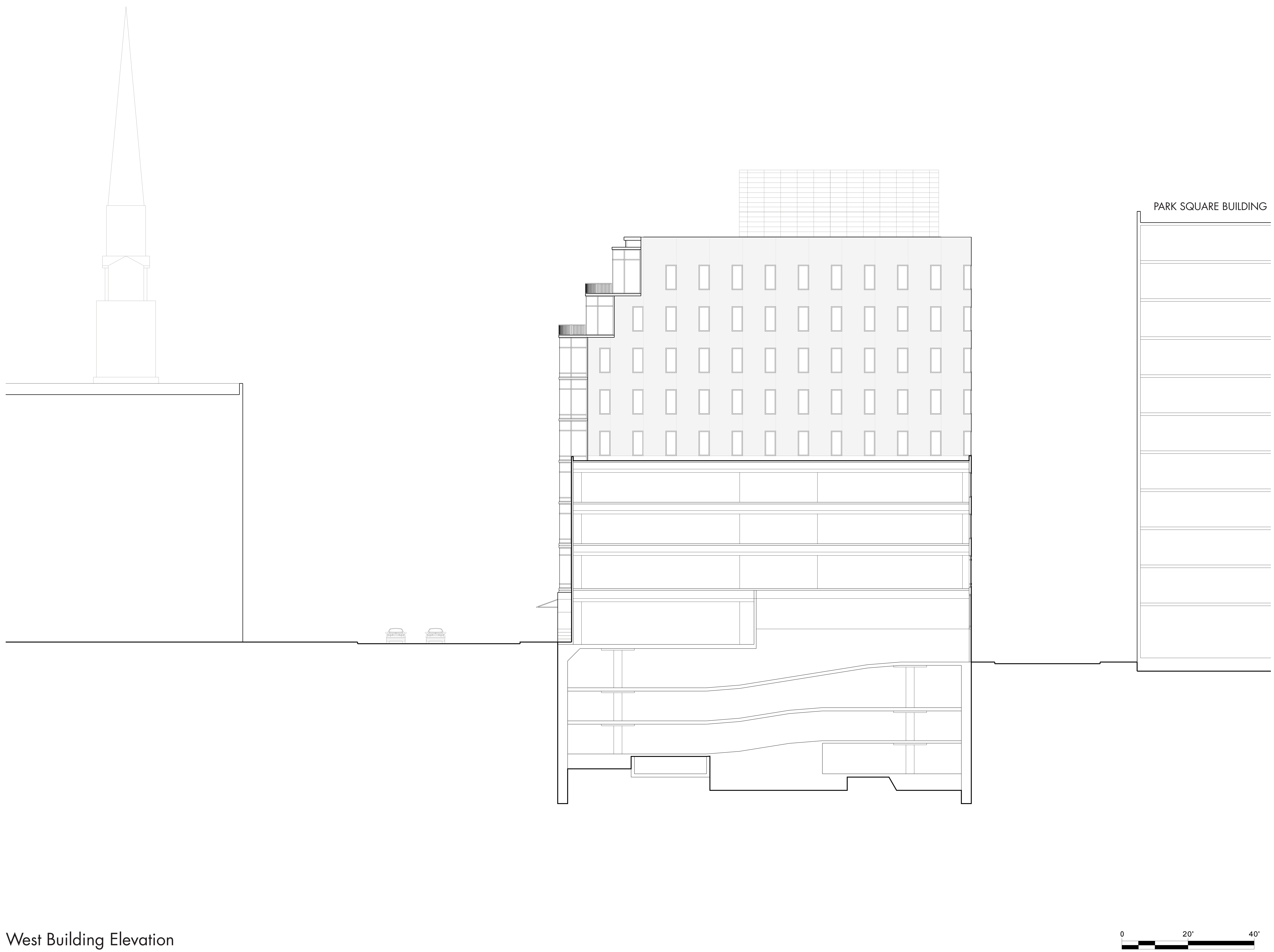


Arlington Street Building Elevation

Providence Street Building Elevation



350 BOYLSTON STREET



West Building Elevation

350 BOYLSTON STREET

THE DRUKER COMPANY, LTD

PELLI CLARKE PELLI ARCHITECTS | CBT ARCHITECTS

Proposed Building Materials

Appendix C

LEED Checklist and Narrative

350 Boylston Street

The Druker Company

Article 37 LEED Narrative

One Memorial Drive
Suite 1220
Cambridge
MA 02142
USA

Tel: +1 617 621 1689
Fax: +1 617 621 3036
Website: www.iesve.com
Email: usa@iesve.com

Article 37 – LEED Core & Shell Credit (LEED-CS) Narratives
The 350 Boylston Street LEED-CS checklist highlighted the 28 points that are currently in the 'yes' column of the 61 points possible within the rating system, which currently places the project at a LEED Silver level. Also of the four Appendix A – Boston Credits, the project is currently placing the Ground Water Recharge credit in the 'yes' column for a total of 29 points overall, which exceeds the Article 37 requirement of 23 points. In addition the checklist identifies which credits shape the 19 points that are in the 'maybe yes' column, which the team is actively investigating to assess the feasibility of including based on performance, first cost, aesthetics, and potential payback period.

The following information provides the narratives outlining the current compliance approach for each of the prerequisites and credits that are shown on the checklist in the 'yes' column. The project is pursing LEED certification from the US Green Building Council and is currently developing the pre-certification submission to the USGBC for review. Within the discussion of each prerequisite and credit we have identified the LEED reference standard (if applicable), and have identified the credit compliance path within the narrative versus including all of the LEED requirements for each credit.

Sustainable Sites

- **SSp1 - Construction Activity Pollution Prevention (PREREQUISITE)**
  Narrative:
  350 Boylston is being constructed on a previously developed site, and therefore based on the existing context will not be disturbing any topsoil on the site because the building footprint primarily serves as the site boundary. The project does conform to the referenced LEED standard requirement s of the Environmental Protection Agency (EPA) as well as the local codes and standards.

  Referenced Standard: *Construction General Permit (GCP) National Pollutant Dischage Elimination System (NPDES) program, Phase I and II.*

- **SSc1 – Site Selection**
  Narrative:
  The previously developed site location for 350 Boylston satisfies the relevant requirements for credit compliance which include:
  - The land has not been identified as habitat for any species on the threatened or endangered list (State or Federal)
  - The site is not within 100 feet of any wetlands (US Code of Federal Regulations 40 CFR, Pasrts 230-233 and Part 22), nor is within any setbacks for wetlands
  - The site is not on land that prior to acquisition was public parkland.

  The aerial image (figure 1) below provides additional context to support the statements above.

- **SSc2 - Development Density and Community Connectivity**
  Narrative
  The approach to meeting the credit intent is through Option 2 – Community Connectivity. The project is located at the corner of Boylston and Arlington streets, which is in a dense urban environment of commercial and residential buildings. The project addresses the three key requirement areas as follows:
  1. The project is on a previously developed site
  2. The image below shows that the project is located within a ½ mile of a residential zone or neighborhood with average density of 10 units/acre.

3. The project easily exceeds the requirement of proximity within a ½ mile to 10 basic services. The services in this area are too numerous to list or display (Figure shows ½ mile extents), but 10 of the business types in this area include:
    - Restaurants, Gym, Bank, Place of Worship, Convenience Grocery, Park, Post Office, Fire Station, Commercial Office, Cleaners, and numerous more.

Figure 1 – Site Selection Location

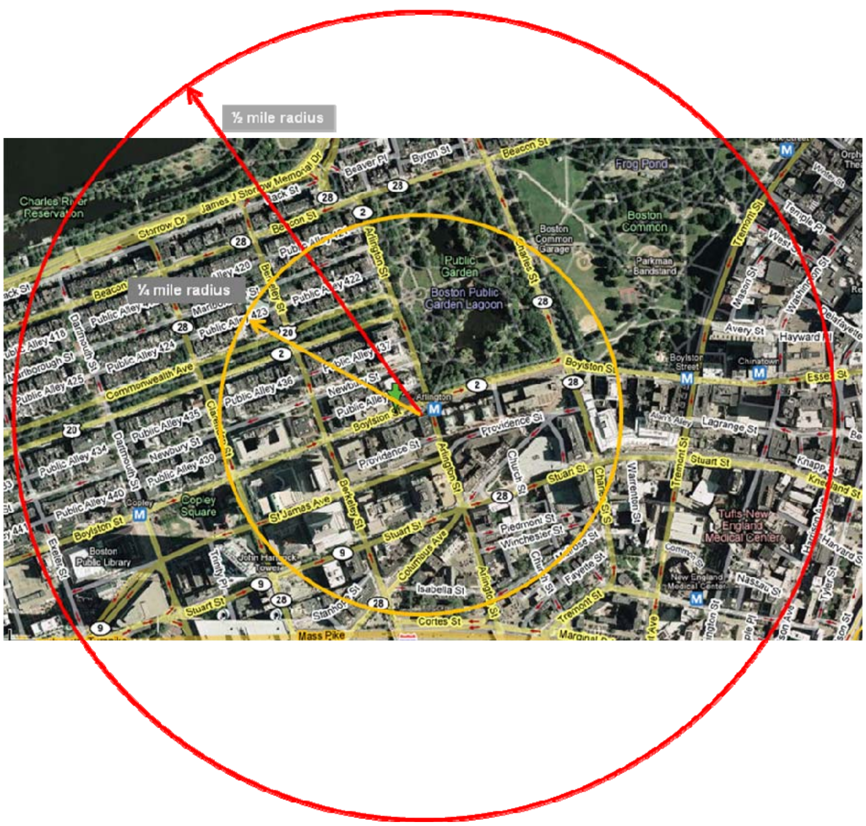


Figure 2 – Establishing ½ mile radius

- **SSc3 – Brownfield Redevelopment**
  Narrative
  The site is assumed to be a Brownfield based on its location in the urban fabric and the history of sites and projects in the area. A majority of projects in the greater Boston area are required to perform some level remediation, and although specific quantities have not be identified, it is assumed that asbestos abatement will be required during the demolition of the existing buildings.
  Referenced Standard: *ASTM E1903-97 Phase II Environmental Assessment or local Voluntary Clean-up Program.*

- **SSc4.1 - Alternative Transportation – Public Transportation Access**
  Narrative:
  The project easily exceeds the requirements of this credit based on its proximity to the Arlington T-station and the other five t-stations (indicated on the image below) that are within a ½ mile radius of the project site. (refer to figure 3)

Figure 3 – Six Subway ("T") stations within a ½ mile radius of project site

- **SSc4.2 - Alternative Transportation – Bicycle Storage & Changing Rooms**
  Narrative:
  The 350 Boylston St. project will have # bicycle racks located on the first level of the parking garage, which exceeds the number required based on the accepted occupant density of 250 sf/person (Appendix 1, p. 441 – USGBC's LEED Core and Shell Reference Guide). In addition the accommodation for the required number of showers and changing rooms will be provided by stipulating within the tenants lease requirements (Tenant Design & Construction Guidelines – SSc9) that tenants will provide the opportunity for cycling commuters to have use of the facilities at the fitness center located on the first level of the parking garage

- **SSc6.2 - Stormwater Design – Quality Control**
  Narrative:
  The "Stormwater Management Plan" that is being refined by the civil engineer developed for the project outlines how the stormwater (90% of the average annual rainfall) is being treated through acceptable Best Management Practices (BMPs) (ex. Specifications identifying

One Memorial Drive
Suite 1220
Cambridge
MA 02142
USA

Tel: +1 617 621 1689
Fax: +1 617 621 3036
Website: www.iesve.com
Email: usa@iesve.com

requirements for stormceptors, etc.) are treating the run-off to exceed the required 80% average annual post development total suspended solids (TSS).
Referenced Standard: *state or local BMPs program OR Technology Acceptance Reciprocity Partnership (TARP), Washington State Dept. of Ecology*

- **SSc7.1 – Heat Island Effect – Non Roof**
  Narrative:
  100% of the on-site parking for the 350 Boylston Street project will be located underground. As expressed in the narrative description in SSc7.2, the strategies (light colored membrane and vegetative roof) on the roof area exceed the credit requirements, which therefore make this compliance path possible. In addition, since 100% of the parking meets this requirement the project is pursuing an innovation credit (see IDc1.3)
  Referenced Standard - *Solar Reflectance Index (SRI) calculated according to ASTM E 1980-01*

- **SSc7.2 – Heat Island Effect – Roof**
  Narrative:
  The final roof area (top floor and floors 8 and 9) design will be comprised of a combination of light colored roof membrane, exceeding a Solar Reflectance Index (SRI) value of 78 (flat roof), and vegetated roof areas (extensive green roof). The combination of these two strategies will substantially exceed the required area as determined by the equation which weights the factors for the two individual requirements of:
    - Roof membrane with SRI > 78 for 75% of roof area *(not including HVAC equip. area)*
    - Vegetated Roof > 50% of roof area *(not including HVAC equip. area)*

  Referenced Standard - *Solar Reflectance Index (SRI) calculated according to ASTM E 1980-01*

- **SSc9 - Tenant Design and Construction Guidelines**
  Narrative:
  The Tenant Design & Construction Guidelines for the project are being developed to include criteria, strategies and information to assist tenants to realize the potential of the strategies incorporated in the LEED Core and Shell framework. In addition they provide a roadmap for the tenants to design and build sustainable interiors and adopt green building practices. The document will contain information about the LEED Commercial Interiors rating system and will identify which LEED Core and Shell credits were obtained and how they can potentially provide benefits to the tenants in terms of quantitative measures, such as reduced energy consumption, and qualitative measures, such as increased indoor air quality. The strategies the document will provide detailed information will include, but is not limited to:
    - Water Use Reduction
    - Optimize Energy Performance
    - Energy Use and Metering
    - Ventilation and Outdoor Air Delivery
    - Construction IAQ Management
    - Indoor Chemical & Pollutant Source Control
    - Thermal Comfort
    - Daylight and Views
    - Commissioning
    - The Elimination of Environmental Tobacco Smoke

Water Efficiency

- **WEc1.1 & 1.2 - Water Efficient Landscaping – Reduce by 50% & No Potable Use or Irrigation**
  Narrative:

The project achieves both of the water efficient landscaping credits because no permanent irrigation system is being installed on the project.

- **WEc3.1 - Water Use Reduction – 20%**
  To exceed the 20% % water use reduction credit requirement for the five flow and flush fixture types identified in the referenced standard (water closets, urinals, lavatory sinks, showers, and other sinks), the project team has specified low-flow fixtures to be included in the project. Based on the LEED-CS allowable density of 250 sf/person for office space, 550 sf/person for retail space, and transient visitors to the space (Appendix 1, p. 441 – USGBC's LEED Core and Shell Reference Guide), the current Full Time Equivalents (FTE) for the project is 987 FTEs occupying the building on a daily basis. It is assumed that the gender split is 50% female, 50% male. Current calculations demonstrate more than 20% water use reduction is being achieved by the project.

  Referenced Standard *- 1992 Energy Policy Act*

Energy & Atmosphere

- **EAp1 - Fundamental Building Systems Commissioning of the Building Energy Systems (PREREQUISITE)**
  Narrative:
  The intent of the prerequisite has been satisfied by the owner contracting a commissioning agent to complete the scope requirements as outlined by the prerequisite for the relevant systems that will be commissioned.

  What will be done during the design phase &/or construction phase:
  - Prior to issuing 100% CD documents the commissioning agent will conduct a design review and submit comments to the design team for inclusion
  - The commissioning agent will develop and implement a commissioning plan
  - During construction the commissioning agent will work with the on-site team (contractors and mechanical system sub-contractors) to verify the installation and performance of the commissioned systems.
  - After the installation and performance checks are complete the commissioning agent will complete a summary commissioning report and submit it to the owner.

- **EAp2 - Minimum Energy Performance (PREREQUISITE)**
  Narrative:
  The building envelope, lighting, and HVAC systems in the building have been designed to comply with the mandatory provisions and the prescriptive requirements of ASHRAE 90.1-2004, which include:
  - ASHRAE 90.1-2004 (without addenda) – sections 5.4, 6.4, 7.4, 8.4, 9.4 & 10.4
    Building Envelope
    Heating, Ventilating and Air Conditioning
    Service Water Heating
    Power
    Lighting
    Other Equipment
  - ASHRAE 90.1-2004 (without addenda) – sections 5.5, 6.5, 7.5 & 9.5

  Referenced standard - *ASHRAE/ IESNA Standard 90.1-2004 (mandatory provisions and prescriptive requirements)*

- **EAp3 - Fundamental Refrigerant Management (PREREQUISITE)**
  Narrative:
  The project is new construction and none of the HVAC equipment within the current design will contain CFC-based refrigerants. The project specifications include specific criteria stipulating this requirement as well.

- **EAc1 - Optimize Energy Performance**
  Narrative:
  The project is pursuing quantifying the impact of the current energy efficiency measures listed below (in addition to others) by developing an energy model to pursue Option 1 – Whole Building Energy Simulation. The energy modeling effort is being done with tools meeting the simulation tool requirements (ASHRAE 90.1-2004 – G2 Simulation General Requirements, ASHRAE 140), and in alignment with the modeling methodology outlined in Appendix G of the standard. The project is currently targeting achieving two of the eight points available by this approach which equate to 14% savings compared to the baseline that was developed in accordance with ASHRAE 90.1-2004, Appendix G.

  The energy efficiency measures being pursued include, but are not limited to:
  - High Efficiency Glazing
  - High Performance Building Envelope
  - Reduced internal loads in relevant spaces *(project team evaluating)*
  - High Efficiency HVAC system equipment
  - Premium efficiency motors
  - Appropriate ventilation levels
  - Daylight Sensors and automated dimming controls *(project team evaluating)*

  Referenced Standard *- ASHRAE/ IESNA Standard 90.1-2004 OR ASHRAE Advanced Energy Design Guide for Small Office Buildings 2004 OR Advanced Buildings Benchmark Version 1.1*

- **EAc4 – Enhanced Refrigerant Management**
  Narrative:
  The project is new construction and therefore will incorporate all new HVAC&R systems that are compliant with the requirements of reducing ozone depletion and supporting early compliance with the Montreal Protocol while minimizing direct contributions to global warming. The final specifications will include criteria outlining that the refrigerants that will be utilized within the base building equipment (equipment < 0.5 lbs of refrigerant are not required to be included) and fire suppression systems are required to be below the maximum threshold for contributions to ozone depletion and global warming potential.

Materials & Resources

- **MRp1 - Storage & Collection of Recyclables (PREREQUISITE)**
  Narrative:
  The “Recycling Management Plan” that is being refined for the building, which outlines the process for collection and recycling of the five materials that the prerequisite targets (paper, cardboard, plastics, metals, glass). A central trash/recyclable collection and separation area will be located on the first floor of the underground parking for collection of the different levels within the building and the location where pick-up will occur. In addition a copy of the “Recycling Management Plan” will be included in the “Tenant Design and Construction Guidelines” (SS credit 9) so that the tenants are informed of the process and the opportunity to increase the amount of recycling the building will be able to achieve.

- **MRc2.1 & c2.2 - Construction Waste Management, divert 50% & 75% from disposal**
  Narrative:
  A "Construction Waste Management Plan" is being developed by the contractor outlining the compliance approach to exceed the LEED credit requirement of diverting 50% & 75% of construction waste from landfills. The project is currently being analyzed for the most appropriate approach for sorting the waste materials (on-site separation or collecting co-mingled loads that will be taken to a transfer station for separation), however the documentation requirements for the LEED submission are outlined in the project specifications

- **MRc4.1 - Recycled Content, Specify 10%**
  Narrative:
  The project is being designed and specified to include a minimum of 10% of materials that contain post-consumer and pre-consumer (defined below) recycled content as calculated in accordance with the referenced standard (listed below). The "10% of materials with recycled content" is determined by calculating the isolated material cost (subtracting equipment and labor) for the permanent materials that are part of the project, which does not include the mechanical, electrical and plumbing systems. For all assemblies the contribution of each component is determined first by the "% weight", and then by multiplying that amount by the line item cost and the percentage of recycled content (post-consumer and/or pre-consumer).

  Since the credit requirements are based on cost, the project team's strategy is to identify the high cost items and determine if it is feasible and cost effective to specify these materials to include recycled content. A few of the materials contributing to achieving this credit are:
    - Structural Steel
    - Gypsum Wall Board (containing both pre-consumer and post-consumer)
    - Acoustical Ceiling Tiles
    - Fly Ash – incorporating a percentage of fly ash (pre-consumer) within the concrete mix design to partially replace the use of the high embodied energy material, Portland cement.

  What will be done during the design phase &/or construction phase:
    - The project team is researching recycled content material options and incorporating them into the project specifications where appropriate.
    - As the project pricing updates are received, the project team will assess the % impact of the 'significant driver' recycled content materials to assess feasibility of exceeding 10% target (ex. Concrete) and to identify if other materials need to be considered as well.
    - Criteria for targeted recycled content materials will be incorporated into the project specifications.
    - When the project reaches final pricing the LEED material cost baseline will be determined and the final % Recycled Content established
    - The contractor will oversee that the bids incorporate materials satisfying the recycled content criteria
    - The architects will review the material selections and alignment with credit requirements during the submittal process
    - The contractor will oversee that the specified recycled content materials are installed.

  Referenced Standard *- ISO 14021- Environmental Labels and Declarations- Self-declared environmental claims (Type II)*

Post consumer material is defined as waste material generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose.

Pre-consumer material is defined as material diverted from the waste stream during the manufacturing process. Excluded is reutilization of materials such as rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it.

Indoor Environmental Quality

- **EQp1 - Minimum IAQ Performance (PREREQUISITE)**
  Narrative:
  To establish minimum indoor air quality performance the mechanical ventilation system is being designed and incorporates specification requirements to meet the minimum requirements of Sections 4 through 7 of ASHRAE 62.1-2004, Ventilation for Acceptable Indoor Air Quality. The mechanical ventilation systems are being designed using the Ventilation Rate Procedure.

  Referenced Standard - *ASHRAE 62.1-2004, Ventilation for Acceptable Indoor Air Quality*

- **EQp2 - Environmental Tobacco Smoke Control (PREREQUISITE)**
  Narrative:
  The Druker Company (developer) has made the commitment to have the building be a smoke-free environment, and therefore have prohibited smoking throughout the building. Currently there are not exterior designated smoking areas for the project, but if they are to be included they will be at least 25 feet away from entries, outdoor air intakes and operable windows, in line with the prerequisite requirements.

  Referenced Standard - *ANSI/ASTM-779-03, Standard Test Methods for Determining Air Leakage Rate By Fan Pressurization AND Chapter 4 of Residential Manual for Compliance with California's 2001 Energy Efficiency Standards*

- **EQc1 – Outdoor Air Delivery Monitoring**
  Narrative:
  All of the spaces within the building are mechanically ventilated, and the mechanical system has been designed and the project specifications outline the requirements for the following:
  - Permanent monitoring systems that provide feedback on ventilation system performance to ensure that ventilation systems maintain design minimum ventilation requirements.
  - Configure all monitoring equipment to generate an alarm when the conditions vary by 10% or more from setpoint, via either a building automation system alarm to the building operator or via a visual or audible alert to the building occupants.
  - Each mechanical ventilation system will have a direct outdoor airflow measurement device capable of measuring the minimum outdoor airflow rate with an accuracy of plus or minus

  Referenced Standard - *ASHRAE 62.1-2004, Ventilation for Acceptable Indoor Air Quality*

- **EQc3 – Construction IAQ Management Plan, During Construction**
  Narrative:
  As a measure to eliminate or reduce the amount of indoor pollutants, an Indoor Air Quality (IAQ) Management Plan for the construction and pre-occupancy phases of the building is being

developed, and will be included as an appendix in the project specifications that outlines the following:

- During construction meet or exceed the recommended Control Measures of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guidelines for Occupied Buildings under Construction, 1995, Chapter 3.
- Protect stored on-site or installed absorptive materials from moisture damage.
- If permanently installed air handlers are used during construction, filtration media with a Minimum Efficiency Reporting Value (MERV) of 8 shall be used at each return air grille, as determined by ASHRAE 52.2-1999. Replace all filtration media immediately prior to occupancy.

Referenced Standard - *Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guideline for Occupied Buildings under Construction, 1995, Chapter 3; AND ASHRAE 52.2-1999*

Please Note: The LEED Core & Shell rating system awards points for four of the credits EQ c4.1 – 4.4 in the following manner:

- ***1 Point for Achievement of 2 (4.1, 4.2, 4.3 or 4.4)***
- ***2 Points for Achievement of 3 (4.1, 4.2, 4.3 or 4.4)***
- ***3 Points for Achievement of 4 (4.1, 4.2, 4.3 or 4.4)***

The Druker Company project is targeting 3 points, and the information below outlines how all 4 credits will be achieved

- **EQc4.1 -Low-Emitting Materials – Adhesives & Sealants**

Narrative:

As one of the numerous pollutant source reduction approaches that will positively influence the indoor spaces within the project, the specification outline detailed perspective requirements that all adhesives and sealants used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) will comply with the referenced standard, the South Coast Air Quality Management District (SCAQMD) Rule #1168.. The project specifications include tables outlining the Volatile Organic Compound (VOC) limits for different sealant and adhesive types.

What will be done during the design phase &/or construction phase:

- The project team has written the project specifications to require **ALL** sealants and adhesives to comply with the requirements of the South Coast Air Quality Management District (SCAQMD) Rule #1168.
- The LEED coordinator will provide a technical review of the project specifications to confirm compliance with the requirements
- During the submittal process the architects will review the submittals to confirm the products to be used comply with the requirements.
- Prior to the design submission the architect will document the sealant and adhesive material details within the LEED Letter Template
- The contractor will monitor product installation to confirm no non-conforming materials are used.

Referenced Standard – *South Coast Air Quality Management District (SCAQMD) Rule #1168, Jan. 2003, ammended Oct. 2003; AND Green Seal Standard for Commercial Adhesives GS-36, Oct. 2000*

One Memorial Drive
Suite 1220
Cambridge
MA 02142
USA

Tel: +1 617 621 1689
Fax: +1 617 621 3036
Website: www.iesve.com
Email: usa@iesve.com

- **EQc4.2 - Low-Emitting Materials - Paints**
  Narrative:
  As part of the pollutant source reduction approach, the project specifications include the following requirements, established by Green Seal Standard GS-11, for the paints and coatings that will be used on the interior of the building (defined as inside of the weatherproofing system and applied on-site):

  - Architectural paints, coatings and primers applied to interior walls and ceilings: Do not exceed the VOC content limits established in Green Seal Standard GS-11, Paints, First Edition, May 20, 1993.
    - o Flats: 50 g/L
    - o Non-Flats: 150 g/L

  - Anti-corrosive and anti-rust paints applied to interior ferrous metal substrates: Do not exceed the VOC content limit of 250 g/L established in Green Seal Standard GC-03, Anti-Corrosive Paints, Second Edition, January 7, 1997.
  - Clear wood finishes, floor coatings, stains, and shellacs applied to interior elements: Do not exceed the VOC content limits established in South Coast Air Quality Management District (SCAQMD) Rule 1113, Architectural Coatings, rules in effect on January 1, 2004.

    - o Clear wood finishes: varnish 350 g/L; lacquer 550 g/L
    - o Floor coatings: 100 g/L
    - o Sealers: waterproofing sealers 250 g/L; sanding sealers 275 g/L; all other sealers 200 g/L
    - o Shellacs: Clear 730 g/L; pigmented 550 g/L
    - o Stains: 250 g/L

  What will be done during the design phase &/or construction phase:
  - The project team has written the project specifications to require ALL paints to comply with the requirements of the Green Seal Standard GS-11.
  - *The reminder of the steps are similar to those provided in the description for EQc 4.1 – Sealants and Adhesives*

  Referenced Standard – *Green Seal Standard GS-11, Paints, May 1993; AND Green Seal Standard GC-03, January 1997; AND South Coast Air Quality Management District (SCAQMD) Rule #1113, January 2004*

- **EQc4.3 - Low-Emitting Materials – Carpet Systems**
  Narrative:
  Continuing the theme of indoor pollutant source reduction the project specifications dictate that all carpet systems will meet the following requirements for the three key components (carpet, carpet cushion, and carpet adhesive:

  - **All** carpet installed in the building interior shall meet the testing and product requirements of the Carpet and Rug Institute's Green Label Plus program.
  - **All** carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute Green Label program.
  - **All** carpet adhesive shall meet the requirements of EQ Credit 4.1: VOC limit of 50 g/L.

  What will be done during the design phase &/or construction phase:

- The project team has written the project specifications to require ALL carpets to comply with the requirements of the Carpet and Rug Institute Green Label Plus program, and all carpet cushions meet the requirements of the Carpet and Rug Institute Green Label Program.
- *The reminder of the steps are similar to those provided in the description for EQc 4.1 – Sealants and Adhesives*

Referenced Standard – *Carpet and Rug Institute Green Label Plus program, 2004*

- **EQc4.4 - Low-Emitting Materials - Low-Emitting Materials: Composite Wood & Agrifiber Products**

Narrative:

The final indoor pollutant source reduction strategy in this sequence of credits targets composite wood and agrifiber products used on the interior of the building (defined as inside of the weatherproofing system). The project specifications dictate that ALL of these materials:

- Shall contain no added urea-formaldehyde resins.
- Laminating adhesives used to fabricate on-site and shop-applied composite wood and agrifiber assemblies shall contain no added urea-formaldehyde resins.

Composite wood and agrifiber products are defined as: particleboard, medium density fiberboard (MDF), plywood, wheatboard, strawboard, panel substrates and door cores.

Note: Materials considered fit-out are not considered base building elements and are not included.

What will be done during the design phase &/or construction phase:

- The project team has written the project specifications to require ALL composite wood and agrifiber products will contain no added urea-formaldehyde.
- *The reminder of the steps are similar to those provided in the description for EQc 4.1 – Sealants and Adhesives*

- **EQc5 - Indoor Chemical & Pollutant Source Control**

Narrative:

The previous set of credits focused on indoor pollutant source reduction through material selection, while this credit targets source reduction by addressing the paths where pollutants can be brought into the building. The credit focuses on the three main areas of:

- **Project Entrances** – at the main entries the project specifications dictate that a recessed entry mat with a minimum of a six-foot length will be installed.
- **Chemical Storage** – Although no chemical storage is currently perceived to be a component of the project, if as the project progresses it is deemed a requirement, each space will have a separate exhaust to sufficiently create negative pressure with respect to adjacent spaces with the doors to the room closed. In addition, the Tenant Design and Construction Guidelines provide recommended approaches for tenants if they will be storing chemicals within the fit-out spaces.
- **Air Handing Unit Filtration** – The project specification outline that prior to occupancy each of the air handling units will have the air filtration media replaced with a Minimum Efficiency Reporting Value (MERV) of 13 at both the return and where outside air is drawn in to be supply air.

- **EQc7 - Thermal Comfort, Design**

Narrative:

The HVAC systems and the building envelope have been designed to meet the requirements of ASHRAE Standard 55-2004, Thermal Comfort Conditions for Human Occupancy, and the project specifications require that design compliance is in accordance with the Section 6.1.1 Documentation. The occupancy utilized in the calculations is based on the allowable occupancies for retail and office space as outlined in Appendix 1 of the LEED Core and Shell reference guide.

Referenced Standard – *ASHRAE Standard 55-2004, Thermal Comfort Conditions for Human Occupancy*

- **EQc8.1 - Daylight & Views, Daylight 75% of Spaces**
  Narrative:
  As shown on the perspective views included, the 350 Boylston project has a high degree of glazing on the exposed facades of the building, and daylight penetration has been a consideration and focus of the design. Although the final calculations are yet to be completed, the preliminary assessment is that for different potential typical floor plan layouts, which will be included in the Tenant Design and Construction Guidelines (SSc9), the amount and type of glazing per floor area of the floor plates provide the framework to easily achieve the requirement of 75% daylit of the overall "regularly occupied" floor area for the project.

Innovation & Design

- **Innovation in Design – Green Housekeeping Program**
  Narrative:
  The project will pursue the following requirements for the green housekeeping program that have been previously accepted by the USGBC on numerous other projects:

  USGBC REQUIREMENTS FOR COMMERCIAL BUILDINGS:
  To receive an innovation point, the project team will need to demonstrate that a comprehensive green cleaning/housekeeping program is in place with clear performance goals, including:
  1. A statement of purpose describing what the policy is trying to achieve from a health and environmental standpoint, focusing on cleaning chemicals and custodial training at a minimum.
  2. A contractual or procedural requirement for operations staff to comply with the guidelines, including a written program for training and implementation.
  3. A clear set of acceptable performance level standards by which to measure progress or achievement, such as Green Seal standard GS-37 (see www.greenseal.org) or California Code of Regulations, Title 17 Section 94509, VOC standards for cleaning products (go to www.calregs.com , click on California Code of Regulations and perform a keyword search for **94509**).
  4. Documentation of the program's housekeeping policies and environmental cleaning solution specifications, including a list of approved and prohibited chemicals and practices.

- **LEED Accredited Professional**
  The ADFC project team contains a significant number of LEED Accredited Professionals and Kevin Settlemyre will be the designated LEED AP to demonstrate compliance with the credit requirements.

City of Boston

LEED-CS v2.0 Checklist

The Druker Company - 350 Boylston

Yes	?+	?(-)	No				Current Responsibility
9	4	1	1		**Sustainable Sites**	15	
Y				p 1	**Construction Activity Pollution Prevention**	Req	Contractor
1				c 1	**Site Selection**	1	Arch
1				c 2	**Development Density & Community Connectivity**	1	Arch
1				c 3	**Brownfield Redevelopment**	1	Owner
1				c 4.1	**Alternative Transportation**, Public Transportation Access	1	Arch
1				c 4.2	**Alternative Transportation**, Bicycle Storage & Changing Rooms	1	Arch
	1			c 4.3	**Alternative Transportation**, Low emitting & Fuel efficient Vehicles	1	Arch
	1			c 4.4	**Alternative Transportation**, Parking Capacity and Carsharing	1	Arch
			1	c 5.1	**Site Development**, Protect or Restore Habitat	1	
		1		c 5.2	**Site Development**, Maximize Open Space	1	Civil/Lscpe
	1			c 6.1	**Stormwater Design**, Quantity Control	1	Civil Eng.
1				c 6.2	**Stormwater Design**, Quality Control	1	Civil Eng.
1				c 7.1	**Heat Island Effect**, Non-Roof	1	Sust. Cnslt.
1				c 7.2	**Heat Island Effect**, Roof	1	Sust. Cnslt.
	1			c 8	**Light Pollution Reduction**	1	E-Eng
1				c 9	**Tenant Design & Construction Guidelines**	1	Owner/Arch Sust. Cnslt.

Yes	?+	?(-)	No				
3	1	1	0		**Water Efficiency**	5	
1				c 1.1	**Water Efficient Landscaping**, Reduce by 50%	1	Lscpe/P-eng
1				c 1.2	**Water Efficient Landscaping**, No Potable Use or No Irrigation	1	P-eng
		1		c 2	**Innovative Wastewater Technologies**	1	Sust. Cnslt.
1				c 3.1	**Water Use Reduction**, 20% Reduction	1	P-eng
	1			c 3.2	**Water Use Reduction**, 30% Reduction	1	P-eng

Yes	?+	?(-)	No				
3	4	0	7		**Energy & Atmosphere**	14	
Y				p 1	**Fundamental Building Systems Commissioning of the Buidling Energy Systems**	Req	Comsh Agent
Y				p 2	**Minimum Energy Performance**	Req	Mech. Eng
Y				p 3	**Fundamental Refrigerant Management**	Req	Mech. Eng
2	2		4	c 1	**Optimize Energy Performance** (new-starts at 10.5%)	1 to 8	Mech. Eng/ Team
			1	c 2	**On-Site Renewable Energy**	1	
	1			c 3	**Enhanced Commissioning**	1	Comsh Agent
1				c 4	**Enhanced Refrigerant Management**	1	Mech. Eng
			1	c 5.1	**Measurement & Verification,** Base Building	1	
			1	c 5.2	**Measurement & Verification,** Tenant Sub-metering	1	
	1			c 6	**Green Power** (35%)	1	Sust. Cnslt.

Yes	?+	?(-)	No				
3	4	0	4		**Materials & Resources**	11	
Y				p 1	**Storage & Collection of Recyclables**	Req	Arch
			1	c 1.1	**Building Reuse**, Maintain 25% of Existing Walls, Floors & Roof	1	
			1	c 1.2	**Building Reuse**, Maintain 50% of Existing Walls, Floors & Roof	1	
			1	c 1.3	**Building Reuse**, Maintain 75% of Existing Walls, Floors & Roof	1	
1				c 2.1	**Construction Waste Management**, Divert 50% from disposal	1	Contractor
1				c 2.2	**Construction Waste Management**, Divert 75% from disposal	1	Contractor
			1	c 3.1	**Material Reuse**, Specify 1%	1	
1				c 4.1	**Recycled Content**, Specify 10% (post-consumer + ½ pre-consumer)	1	Arch/Sust. Cnslt.
	1			c 4.2	**Recycled Content**, Specify 20% (post-consumer + ½ pre-consumer)	1	Arch/Sust. Cnslt.
	1			c 5.1	**Regional Materials**, 10% Extracted, Processed & Manuf. Regionally	1	Arch/Sust. Cnslt. (contractor)
	1			c 5.2	**Regional Materials**, 20% Extracted, Processed & Manuf. Regionally	1	Arch/Sust. Cnslt. (contractor)
	1			c 6	**Certified Wood** (50% of overall wood use)	1	Arch/Sust. Cnslt. (contractor)

Yes	?+	?(-)	No				
8	3	0	0		**Indoor Environmental Quality**	11	
Y				p 1	**Minimum IAQ Performance**	Req	Mech. Eng
Y				p 2	**Environmental Tobacco Smoke** (ETS) **Control**	Req	Owner
1				c 1	**Outdoor Air Delivery Monitoring**	1	Mech. Eng
	1			c 2	**Increased Ventilation**	1	Mech. Eng
1				c 3	**Construction IAQ Management Plan**, During Construction	1	Contractor
Y				c 4.1	**Low-Emitting Materials**, Adhesives & Sealants	1	Arch
1 for 2: 1				c 4.2	**Low-Emitting Materials**, Paints	1	Arch
2 for 3: 1				c 4.3	**Low-Emitting Materials**, Carpet	1	Arch
3 for 4: 1				c 4.4	**Low-Emitting Materials**, Composite Wood & Agrifiber Products	1	Arch
1				c 5	**Indoor Chemical & Pollutant Source Control**	1	Arch/M Eng
	1			c 6	**Controllability of Systems**, Thermal Comfort	1	Mech. Eng
1				c 7	**Thermal Comfort**, Design	1	Mech. Eng
1				c 8.1	**Daylight & Views**, Daylight 75% of Spaces	1	Arch/Sust. Cnslt.
	1			c 8.2	**Daylight & Views**, Views for 90% of Spaces	1	Arch/Sust. Cnslt.

Yes	?+	?(-)	No				
2	3	0	0		**Innovation & Design Process**	5	
	1			c 1.1	**Innovation in Design**: Education	1	Owner/Arch
1				c 1.2	**Innovation in Design**: Green Housekeeping	1	Owner/Arch
	1			c 1.3	**Innovation in Design**: >40% water efficiency	1	Owner/Arch
	1			c 1.4	**Innovation in Design**: Green Power 70%	1	Owner/Arch
1				c 2	**LEED™ Accredited Professional**	1	Team

Yes	?+	?(-)	No			
28	19	2	12	61	**Project Totals** (pre-certification estimates)	61

Certified 23-27 points **Silver** 28-33 points **Gold** 34-44 points **Platinum** 45-61 points

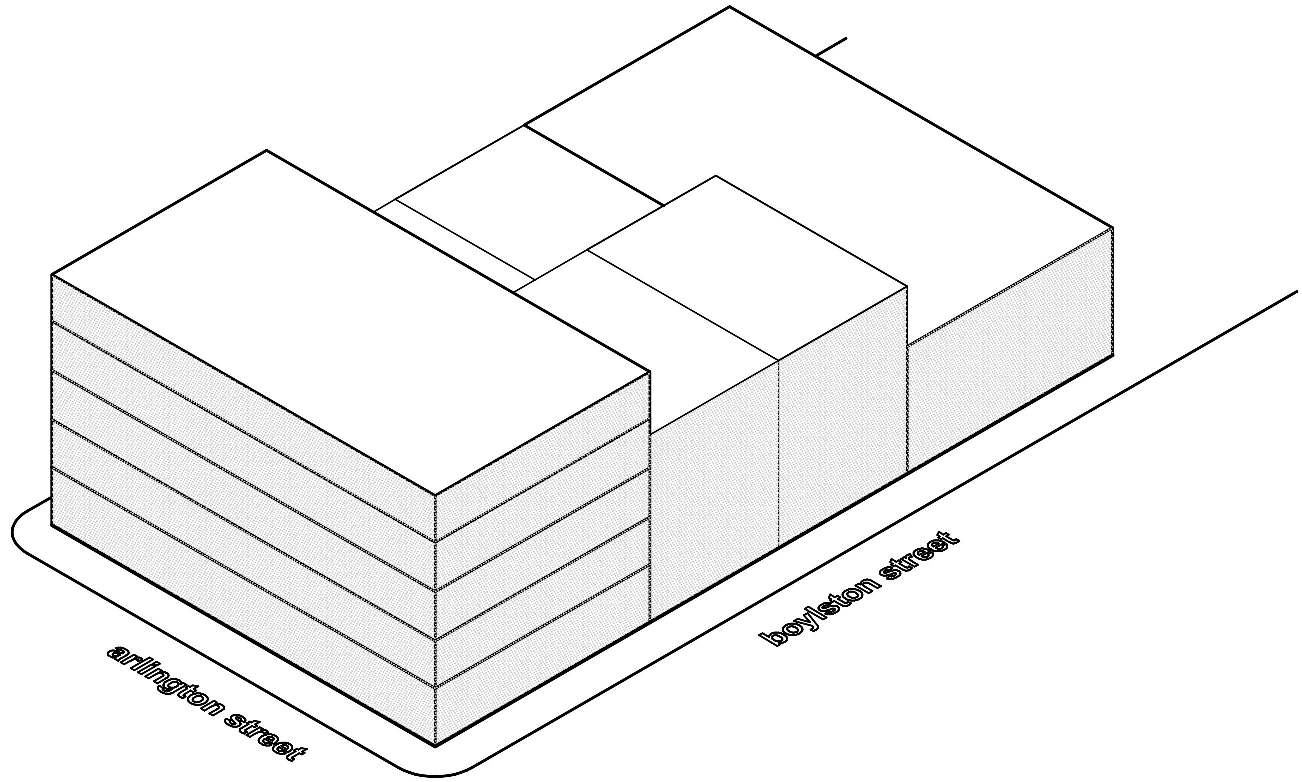
compliance

Article 37 - Appendix A - - Boston Credits

			1	b1	**Modern Grid**
			1	b2	**Historic Preservation**
1				b3	**Ground water recharge**
	1			b4	**Modern Mobility**
29	1	0	0		
23					**credits required by City of Boston for "certifiable" for LEED_CS**

Appendix D

Reuse Studies

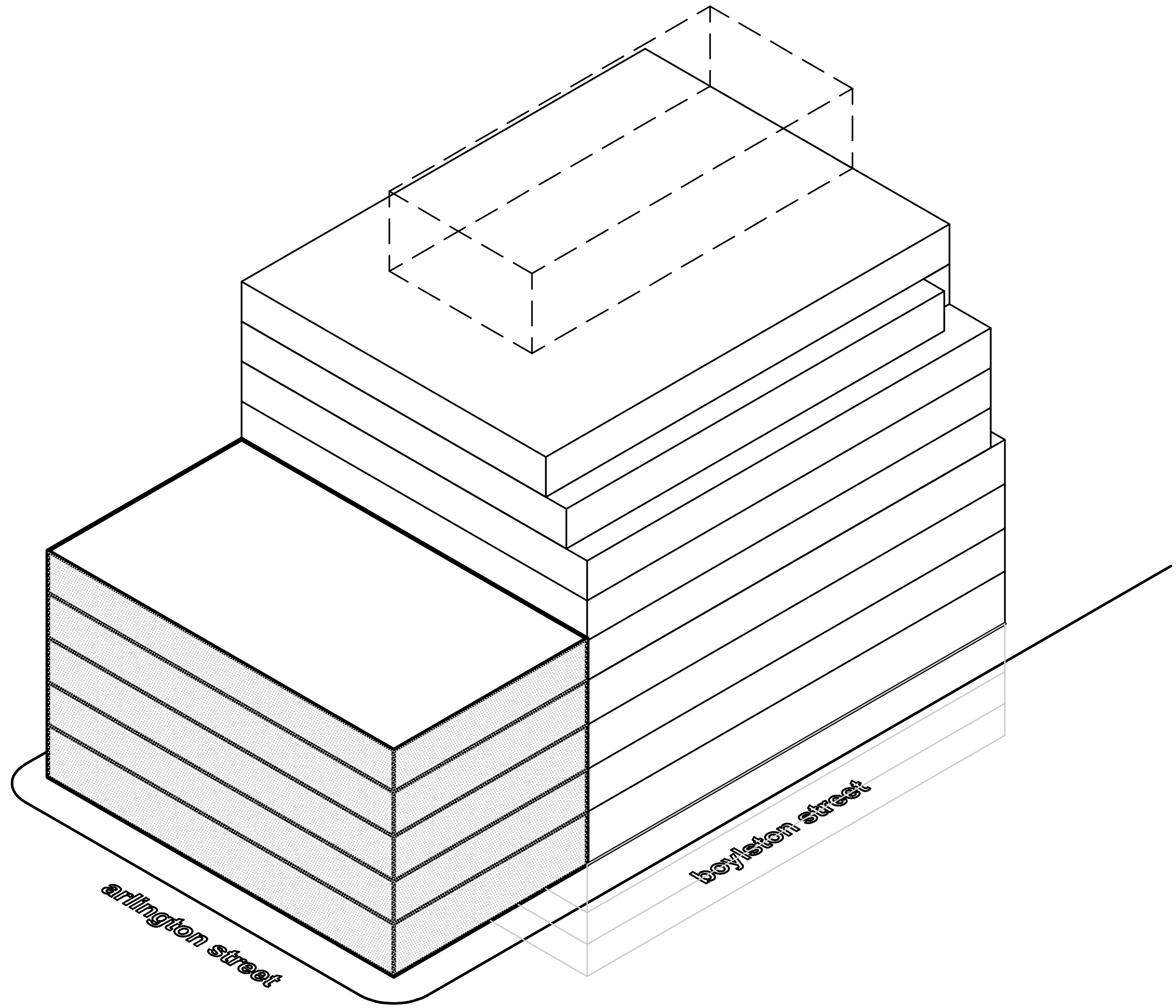


cbt

350 Boylston Street

reuse study - alternative 1
retain and renovate existing

The Druker Company, Ltd.

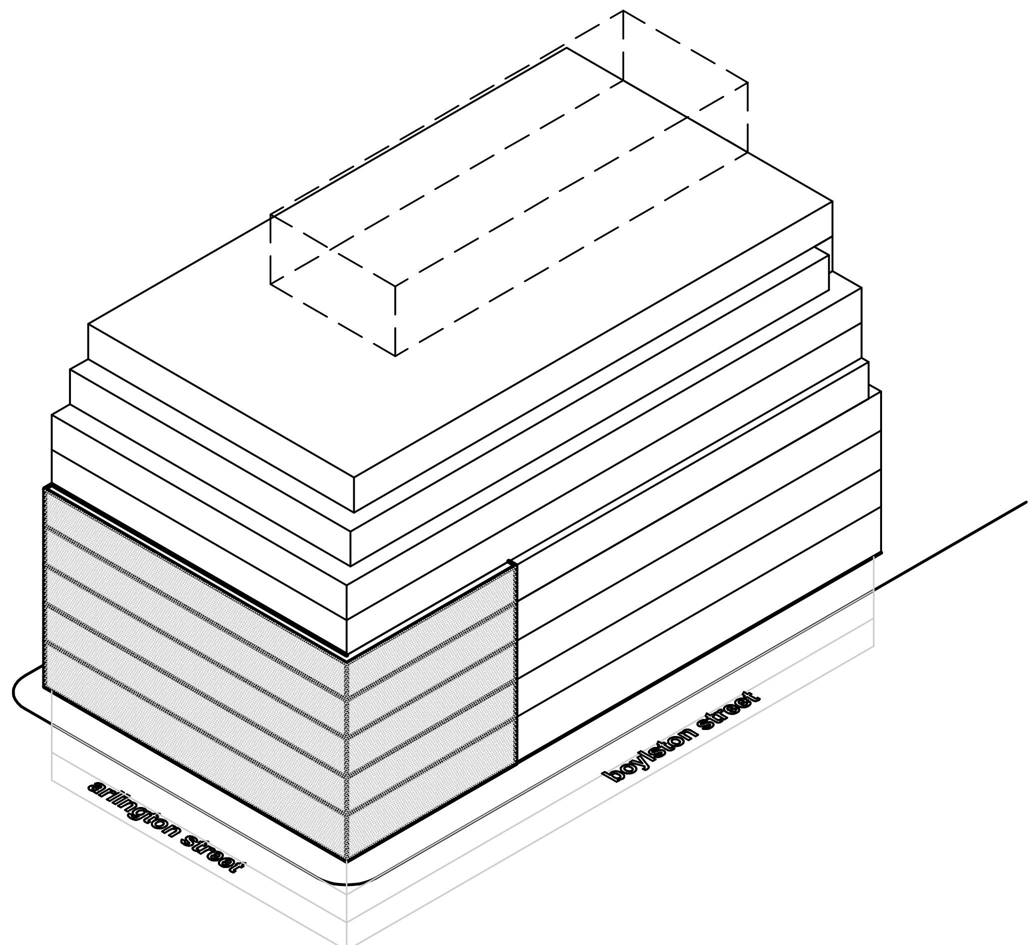


cbt

350 Boylston Street

reuse study - alternative 2
renovation 324-360 Boylston Street
replace 336-360 Boylston Street

The Druker Company, Ltd.



cbt

350 Boylston Street

reuse study - alternative 3
facade renovation 324-334 Boylston Street
replace 336-360 Boylston Street

The Druker Company, Ltd.

Appendix E

Haley & Aldrich Letter

Haley & Aldrich, Inc.
465 Medford St.
Suite 2200
Boston, MA 02129-1400

Tel: 617.886.7400
Fax: 617.886.7600
HaleyAldrich.com

HALEY & ALDRICH

8 May 2008
File No. 34144-100

Arlington-Boylston Realty Trust
c/o The Druker Company, Ltd.
50 Federal Street
Boston, Massachusetts 02110

Attention: Mr. Harold Dennis

Subject: 350 Boylston Street Development
Boston, Massachusetts

Dear Mr. Dennis:

As requested, we have studied the design alternative of retaining the Boylston Street (north) and Arlington Street (east) facades of the Arlington Building at 324 to 334 Boylston Street, and incorporating those facades into the 350 Boylston Street Development. The purpose of this letter is to comment on the technical challenges presented by this "facadectomy" alternative that, in our opinion, make this alternative inappropriate for this site.

Design Challenges

To properly assess the feasibility of the facadectomy alternative, it is important to first define the important criteria of an effective, practical facadectomy design that will (a) safely support (laterally and vertically) the Arlington Building facades to remain during the new construction, (b) maintain the proposed massing program of nine stories above grade with three below grade levels, and (c) allow for unproblematic inclusion of the façade into the new construction, including mutual long-term performance of the façade relative to the new construction.

In concept, to satisfy the criteria above, the recommended temporary façade support system would need to consist of a series of connected steel trusses spanning the full height of the facades to remain, and supported by foundation elements installed entirely outboard of the proposed development footprint. Such a foundation design would require a series of paired (or more) drilled-in circular shaft elements sized and located in plan in such a way that the foundations provide the necessary vertical and lateral capacity to resist gravity loads and minimize lateral façade movements caused from wind loads.

Existing Conditions

Existing conditions along the north and east sides of the Arlington Building are complicated by the presence of an underground steam utility and the MBTA's Green Line Arlington Street Station. The presence of these buried structures, which cannot be relocated, prevent installing foundations outboard of the site without directly impacting these structures as described below:

- MBTA Arlington Street Station and Tunnel: Starting at the NE corner of the Arlington Building to a distance of about (a) 35 to 40 ft west along Boylston Street and (b) 35 to 40 ft south along Arlington Street, the below grade limits of the existing MBTA Arlington Street Station are within about 4 to 5 ft of the building and in some locations have been built directly against the Arlington building's existing below grade foundations. Within these zones, it is not possible to install new foundations without drilling through the MBTA structure, thereby requiring the facade support design to consider deriving its support from the roof of the MBTA structure. This alternative is not only not desirable, but technically not feasible without structural modifications being made to the tunnel and station structure.

- Steam Utility: Starting at the NE corner of the Arlington Building to a distance of about (a) 75 ft west along Boylston Street and (b) 75 ft south along Arlington Street, exists a 12-in. diameter steam supply pipeline.

  Based on drawings obtained from the steam utility's owner/operator (Trigen), the 12-in. diameter supply pipe is insulated in asbestos and set inside a 24-in. diameter sleeve/carrier pipe, which is concrete encased; the total cross-section of the utility is estimated to be about 3 ft by 3 ft. The drawing shows the depth below ground surface to the top of the concrete encasement is about 10 ft, and the pipeline alignment is no more than a few feet outboard of the Arlington Building's below grade footprint. Relocation of the steam supply line has been considered, and determined to not be feasible due to vertical and lateral restrictions presented by the proximity of the steam line to the MBTA structures.

  Additionally, the steam line alignment prevents installing the inner row of new foundations any closer than about 5 ft offset from the building, thereby shifting the entire truss system further away from the facades and into the street. For obvious reasons, foundation installations beneath the street right-of-way should be avoided.

  Further still, any foundation installations that are attempted in close proximity to the existing steam line risks potential damage to the steam line and a potential safety hazard, as this "asbestos-wrapped, concrete encased utility has been in place for almost 75 years; and the condition of which is not even known by its owner–Trigen.

Design Compatibility

If, as described above, existing conditions prohibit constructing the façade support system (foundations and truss) entirely outboard of the site footprint, a portion, if not all of the façade support system would need to be constructed within the site footprint. Complications that arise from this scenario include as follows:

- Reduced below grade footprint: The Arlington Building's existing foundation system consists of a 5-ft thick concrete mat slab supported by wood piles; interior column bays generally follow a 20 ft by 20 ft grid. To construct a façade support system inboard of the north and east facades would require reducing the footprint of the new underground garage construction by almost 15%. The reduction in garage footprint causes an undesirable compromise to the garage efficiency, increasing the minimum slope needed to access and egress the three below grade levels. To recover the lost efficiencies it is likely that a fourth underground parking level would be needed. Re-designing the below ground garage structure to include a fourth parking level is not recommended as it would require excavation deeper into the Marine deposits, which generally decrease in strength with depth, thereby increasing the potential for excavation support system instability during the construction and consequently increasing the potential for damage to adjacent existing structures.

- Different permanent foundation support systems: The Arlington Building's facades are wood pile supported; the new development building has been designed to be supported by footing foundations. While both foundation types derive support from the marine deposits, the load transfer through the foundations to the Marine Deposits differs. Thus the potential for long-term differential movements between the two foundation types poses risk for possible damage (aesthetic and/or structural) in areas near the transition between the wood pile supported facades and the footing foundations planned to support new building.

- Depressed groundwater levels: The wood piles supporting the Arlington Building's facades are untreated, and thus susceptible to rot caused by aerobic bacteria that grow and thrive on those portions of the wood piles that are not submerged in water. The project site (and thus the Arlington Building) is located in the Groundwater Conservation Overlay District - an area designated by the BRA as "historically known for depressed groundwater levels". Data from nearby groundwater observation wells measured by the Boston Groundwater Trust (BGwT) over the past 7 to 8 years and published on their web site indicates groundwater levels have fluctuated between El. 0 and El. 7.8 BCB. The tops of the wood piles supporting the Arlington Building are estimated to be at El. 3 BCB. The range in BGwT water level measurements indicates that the Arlington Building's wood piles have at one time or another not been submerged.

Thus the current condition and integrity of all the wood piles beneath the north and east facades is potentially suspect and reliance on the wood piles as a permanent foundation is not recommended without undertaking one of the following: (a) lowering the tops of the wood piles below the lowest measured groundwater level or (b) replacing the wood pile foundations in their entirety with new, small diameter drilled-in piles (DMPs) installed either side of the façade.

Both options, while technically feasible, are considered logistically impossible due to the underground obstructions such as the MBTA structures, steam line, and drilled-in foundations installed to support the facades during the construction.

Opinion

In closing, and as stated in the beginning of this letter, it is our opinion that existing site conditions and long-term foundation compatibility issues render the facadectomy alternative as being not feasible–technically, practically, and economically.

Please contact us if you have any questions or require additional information.

Sincerely yours,
HALEY & ALDRICH, INC.

Michael J. Atwood, P.E.
Vice President

G:\34144\Permitting\Demo Article 85\8May08_350Boylston_Article85_backup.doc

Appendix F

Air Quality

MOBILE6.2 Output

```
**************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                             *
* Input file: MA13_BYP.INP (file 1, run 1).                              *
**************************************************************************

* # # # # # # # # # # # # # # # # # # # # # # # # #
* PM 10 - Idle Scenario - Summer (multiply g/mi by 2.5 mph to get g/hr)
* File 1, Run 1, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # #

                          Calendar Year:  2013
                                  Month:  July
              Gasoline Fuel Sulfur Content:   30. ppm
                Diesel Fuel Sulfur Content:   15. ppm
                    Particle Size Cutoff: 10.00 Microns
                        Reformulated Gas:  Yes

      Vehicle Type:     LDGV   LDGT12   LDGT34     LDGT     HDGV     LDDV     LDDT     HDDV       MC  All Veh
              GVWR:             <6000    >6000    (All)
                      ------   ------   ------   ------   ------   ------   ------   ------   ------   ------
  VMT Distribution:   0.2983   0.4117   0.1620            0.0369   0.0001   0.0015   0.0857   0.0038   1.0000
  -----------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
              Lead:   0.0000   0.0000   0.0000   0.0000   0.0000   ------   ------   ------   0.0000   0.0000
             GASPM:   0.0038   0.0037   0.0037   0.0037   0.0190   ------   ------   ------   0.0205   0.0040
           ECARBON:   ------   ------   ------   ------   ------   0.0751   0.0093   0.0527   ------   0.0045
           OCARBON:   ------   ------   ------   ------   ------   0.0212   0.0134   0.0265   ------   0.0023
               SO4:   0.0005   0.0006   0.0006   0.0006   0.0013   0.0002   0.0003   0.0009   0.0002   0.0006
  Total Exhaust PM:   0.0043   0.0043   0.0043   0.0043   0.0203   0.0965   0.0230   0.0801   0.0207   0.0115
             Brake:   0.0125   0.0125   0.0125   0.0125   0.0125   0.0125   0.0125   0.0125   0.0125   0.0125
              Tire:   0.0080   0.0080   0.0080   0.0080   0.0085   0.0080   0.0080   0.0248   0.0040   0.0094
          Total PM:   0.0248   0.0248   0.0248   0.0248   0.0414   0.1170   0.0435   0.1174   0.0372   0.0335
               SO2:   0.0066   0.0087   0.0115   0.0095   0.0163   0.0029   0.0052   0.0130   0.0033   0.0092
               NH3:   0.1010   0.1015   0.1017   0.1016   0.0451   0.0068   0.0068   0.0270   0.0113   0.0924
  -----------------------------------------------------------------------------------------------------------

* # # # # # # # # # # # # # # # # # # # # # # # # #
* PM 10 - Summer 25 mph
* File 1, Run 1, Scenario 2.
* # # # # # # # # # # # # # # # # # # # # # # # # #

                          Calendar Year:  2013
                                  Month:  July
              Gasoline Fuel Sulfur Content:   30. ppm
                Diesel Fuel Sulfur Content:   15. ppm
                    Particle Size Cutoff: 10.00 Microns
                        Reformulated Gas:  Yes

      Vehicle Type:     LDGV   LDGT12   LDGT34     LDGT     HDGV     LDDV     LDDT     HDDV       MC  All Veh
              GVWR:             <6000    >6000    (All)
                      ------   ------   ------   ------   ------   ------   ------   ------   ------   ------
  VMT Distribution:   0.2983   0.4117   0.1620            0.0369   0.0001   0.0015   0.0857   0.0038   1.0000
  -----------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
              Lead:   0.0000   0.0000   0.0000   0.0000   0.0000   ------   ------   ------   0.0000   0.0000
```

GASPM:	0.0039	0.0037	0.0037	0.0037	0.0188	------	------	------	0.0205	0.0041
ECARBON:	------	------	------	------	------	0.0751	0.0093	0.0527	------	0.0045
OCARBON:	------	------	------	------	------	0.0212	0.0134	0.0265	------	0.0023
SO4:	0.0004	0.0005	0.0005	0.0005	0.0015	0.0002	0.0003	0.0009	0.0001	0.0006
Total Exhaust PM:	0.0043	0.0043	0.0043	0.0043	0.0203	0.0965	0.0230	0.0801	0.0206	0.0115
Brake:	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125
Tire:	0.0080	0.0080	0.0080	0.0080	0.0085	0.0080	0.0080	0.0248	0.0040	0.0094
Total PM:	0.0248	0.0248	0.0248	0.0248	0.0414	0.1170	0.0435	0.1174	0.0372	0.0335
SO2:	0.0067	0.0088	0.0115	0.0095	0.0163	0.0029	0.0052	0.0130	0.0033	0.0092
NH3:	0.1010	0.1015	0.1017	0.1016	0.0451	0.0068	0.0068	0.0270	0.0113	0.0924

* #
* PM 10 - Summer 30 mph
* File 1, Run 1, Scenario 3.
* #

Calendar Year: 2013
Month: July
Gasoline Fuel Sulfur Content: 30. ppm
Diesel Fuel Sulfur Content: 15. ppm
Particle Size Cutoff: 10.00 Microns
Reformulated Gas: Yes

Vehicle Type: GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2983	0.4117	0.1620		0.0369	0.0001	0.0015	0.0857	0.0038	1.0000
Composite Emission Factors (g/mi):										
Lead:	0.0000	0.0000	0.0000	0.0000	0.0000	------	------	------	0.0000	0.0000
GASPM:	0.0039	0.0038	0.0038	0.0038	0.0186	------	------	------	0.0205	0.0041
ECARBON:	------	------	------	------	------	0.0751	0.0093	0.0527	------	0.0045
OCARBON:	------	------	------	------	------	0.0212	0.0134	0.0265	------	0.0023
SO4:	0.0003	0.0005	0.0005	0.0005	0.0018	0.0002	0.0003	0.0009	0.0001	0.0005
Total Exhaust PM:	0.0043	0.0043	0.0043	0.0043	0.0204	0.0965	0.0230	0.0801	0.0206	0.0115
Brake:	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125
Tire:	0.0080	0.0080	0.0080	0.0080	0.0085	0.0080	0.0080	0.0248	0.0040	0.0094
Total PM:	0.0248	0.0248	0.0248	0.0248	0.0414	0.1170	0.0435	0.1174	0.0371	0.0334
SO2:	0.0067	0.0088	0.0115	0.0096	0.0162	0.0029	0.0052	0.0130	0.0033	0.0092
NH3:	0.1010	0.1015	0.1017	0.1016	0.0451	0.0068	0.0068	0.0270	0.0113	0.0924

* #
* PM 10 - Summer 35 mph
* File 1, Run 1, Scenario 4.
* #

Calendar Year: 2013
Month: July
Gasoline Fuel Sulfur Content: 30. ppm
Diesel Fuel Sulfur Content: 15. ppm
Particle Size Cutoff: 10.00 Microns
Reformulated Gas: Yes

```
      Vehicle Type:     LDGV    LDGT12    LDGT34     LDGT      HDGV      LDDV      LDDT      HDDV        MC   All Veh
              GVWR:              <6000     >6000    (All)
                      ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
  VMT Distribution:   0.2983    0.4117    0.1620              0.0369    0.0001    0.0015    0.0857    0.0038    1.0000
 -----------------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
              Lead:   0.0000    0.0000    0.0000    0.0000    0.0000    ------    ------    ------    0.0000    0.0000
             GASPM:   0.0040    0.0038    0.0038    0.0038    0.0184    ------    ------    ------    0.0205    0.0041
           ECARBON:   ------    ------    ------    ------    ------    0.0751    0.0093    0.0527    ------    0.0045
           OCARBON:   ------    ------    ------    ------    ------    0.0212    0.0134    0.0265    ------    0.0023
               SO4:   0.0002    0.0004    0.0004    0.0004    0.0020    0.0002    0.0003    0.0009    0.0001    0.0005
  Total Exhaust PM:   0.0042    0.0043    0.0043    0.0043    0.0204    0.0965    0.0230    0.0801    0.0206    0.0114
             Brake:   0.0125    0.0125    0.0125    0.0125    0.0125    0.0125    0.0125    0.0125    0.0125    0.0125
              Tire:   0.0080    0.0080    0.0080    0.0080    0.0085    0.0080    0.0080    0.0248    0.0040    0.0094
          Total PM:   0.0248    0.0248    0.0248    0.0248    0.0415    0.1170    0.0435    0.1174    0.0371    0.0334
               SO2:   0.0067    0.0088    0.0115    0.0096    0.0162    0.0029    0.0052    0.0130    0.0033    0.0092
               NH3:   0.1010    0.1015    0.1017    0.1016    0.0451    0.0068    0.0068    0.0270    0.0113    0.0924
 -----------------------------------------------------------------------------------------------------------------------

****************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                               *
* Input file: MA13_BYP.INP (file 1, run 2).                                *
****************************************************************************

* # # # # # # # # # # # # # # # # # # # # # # # # #
* PM 10 - Idle Scenario - Winter (multiply g/mi by 2.5 mph to get g/hr)
* File 1, Run 2, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # #

                            Calendar Year:  2013
                                    Month:  Jan.
            Gasoline Fuel Sulfur Content:    30. ppm
              Diesel Fuel Sulfur Content:    15. ppm
                    Particle Size Cutoff: 10.00 Microns
                        Reformulated Gas:  Yes

      Vehicle Type:     LDGV    LDGT12    LDGT34     LDGT      HDGV      LDDV      LDDT      HDDV        MC   All Veh
              GVWR:              <6000     >6000    (All)
                      ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
  VMT Distribution:   0.3031    0.4092    0.1608              0.0365    0.0002    0.0015    0.0851    0.0037    1.0000
 -----------------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
              Lead:   0.0000    0.0000    0.0000    0.0000    0.0000    ------    ------    ------    0.0000    0.0000
             GASPM:   0.0038    0.0037    0.0037    0.0037    0.0203    ------    ------    ------    0.0205    0.0041
           ECARBON:   ------    ------    ------    ------    ------    0.0751    0.0098    0.0570    ------    0.0049
           OCARBON:   ------    ------    ------    ------    ------    0.0212    0.0142    0.0286    ------    0.0025
               SO4:   0.0005    0.0006    0.0006    0.0006    0.0013    0.0002    0.0003    0.0009    0.0002    0.0006
  Total Exhaust PM:   0.0043    0.0043    0.0043    0.0043    0.0216    0.0965    0.0243    0.0865    0.0207    0.0120
             Brake:   0.0125    0.0125    0.0125    0.0125    0.0125    0.0125    0.0125    0.0125    0.0125    0.0125
              Tire:   0.0080    0.0080    0.0080    0.0080    0.0085    0.0080    0.0080    0.0248    0.0040    0.0094
          Total PM:   0.0248    0.0248    0.0248    0.0248    0.0427    0.1170    0.0448    0.1239    0.0372    0.0340
               SO2:   0.0066    0.0087    0.0115    0.0095    0.0164    0.0029    0.0052    0.0131    0.0033    0.0092
               NH3:   0.1010    0.1015    0.1017    0.1016    0.0451    0.0068    0.0068    0.0270    0.0113    0.0925
 -----------------------------------------------------------------------------------------------------------------------

* # # # # # # # # # # # # # # # # # # # # # # # # #
```

```
* PM 10 - Winter 25 mph
* File 1, Run 2, Scenario 2.
* # # # # # # # # # # # # # # # # # # # # # # # # #

                    Calendar Year:  2013
                            Month:  Jan.
      Gasoline Fuel Sulfur Content:   30. ppm
        Diesel Fuel Sulfur Content:   15. ppm
           Particle Size Cutoff: 10.00 Microns
               Reformulated Gas:  Yes

     Vehicle Type:     LDGV    LDGT12    LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC   All Veh
             GVWR:              <6000     >6000     (All)
                     ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
 VMT Distribution:   0.3031    0.4092    0.1608              0.0365    0.0002    0.0015    0.0851    0.0037    1.0000
------------------------------------------------------------------------------------------------------------------------
Composite Emission Factors (g/mi):
             Lead:   0.0000    0.0000    0.0000    0.0000    0.0000    ------    ------    ------    0.0000    0.0000
            GASPM:   0.0039    0.0037    0.0037    0.0037    0.0201    ------    ------    ------    0.0205    0.0041
          ECARBON:   ------    ------    ------    ------    ------    0.0751    0.0098    0.0570    ------    0.0049
          OCARBON:   ------    ------    ------    ------    ------    0.0212    0.0142    0.0286    ------    0.0025
              SO4:   0.0004    0.0005    0.0005    0.0005    0.0015    0.0002    0.0003    0.0009    0.0001    0.0006
 Total Exhaust PM:   0.0043    0.0043    0.0043    0.0043    0.0217    0.0965    0.0243    0.0865    0.0206    0.0120
            Brake:   0.0125    0.0125    0.0125    0.0125    0.0125    0.0125    0.0125    0.0125    0.0125    0.0125
             Tire:   0.0080    0.0080    0.0080    0.0080    0.0085    0.0080    0.0080    0.0248    0.0040    0.0094
         Total PM:   0.0248    0.0248    0.0248    0.0248    0.0427    0.1170    0.0448    0.1239    0.0372    0.0340
              SO2:   0.0067    0.0088    0.0115    0.0095    0.0163    0.0029    0.0052    0.0131    0.0033    0.0092
              NH3:   0.1010    0.1015    0.1017    0.1016    0.0451    0.0068    0.0068    0.0270    0.0113    0.0925
------------------------------------------------------------------------------------------------------------------------

* # # # # # # # # # # # # # # # # # # # # # # # # #
* PM 10 - Winter 30 mph
* File 1, Run 2, Scenario 3.
* # # # # # # # # # # # # # # # # # # # # # # # # #

                    Calendar Year:  2013
                            Month:  Jan.
      Gasoline Fuel Sulfur Content:   30. ppm
        Diesel Fuel Sulfur Content:   15. ppm
           Particle Size Cutoff: 10.00 Microns
               Reformulated Gas:  Yes

     Vehicle Type:     LDGV    LDGT12    LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC   All Veh
             GVWR:              <6000     >6000     (All)
                     ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
 VMT Distribution:   0.3031    0.4092    0.1608              0.0365    0.0002    0.0015    0.0851    0.0037    1.0000
------------------------------------------------------------------------------------------------------------------------
Composite Emission Factors (g/mi):
             Lead:   0.0000    0.0000    0.0000    0.0000    0.0000    ------    ------    ------    0.0000    0.0000
            GASPM:   0.0039    0.0038    0.0038    0.0038    0.0199    ------    ------    ------    0.0205    0.0042
          ECARBON:   ------    ------    ------    ------    ------    0.0751    0.0098    0.0570    ------    0.0049
          OCARBON:   ------    ------    ------    ------    ------    0.0212    0.0142    0.0286    ------    0.0025
              SO4:   0.0003    0.0005    0.0005    0.0005    0.0018    0.0002    0.0003    0.0009    0.0001    0.0005
 Total Exhaust PM:   0.0043    0.0043    0.0043    0.0043    0.0217    0.0965    0.0243    0.0865    0.0206    0.0120
            Brake:   0.0125    0.0125    0.0125    0.0125    0.0125    0.0125    0.0125    0.0125    0.0125    0.0125
```

Tire:	0.0080	0.0080	0.0080	0.0080	0.0085	0.0080	0.0080	0.0248	0.0040	0.0094
Total PM:	0.0248	0.0248	0.0248	0.0248	0.0428	0.1170	0.0448	0.1239	0.0371	0.0340
SO2:	0.0067	0.0088	0.0115	0.0096	0.0162	0.0029	0.0052	0.0131	0.0033	0.0092
NH3:	0.1010	0.1015	0.1017	0.1016	0.0451	0.0068	0.0068	0.0270	0.0113	0.0925

* #
* PM 10 - Winter 35 mph
* File 1, Run 2, Scenario 4.
* #

Calendar Year: 2013
Month: Jan.
Gasoline Fuel Sulfur Content: 30. ppm
Diesel Fuel Sulfur Content: 15. ppm
Particle Size Cutoff: 10.00 Microns
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3031	0.4092	0.1608		0.0365	0.0002	0.0015	0.0851	0.0037	1.0000
Composite Emission Factors (g/mi):										
Lead:	0.0000	0.0000	0.0000	0.0000	0.0000	------	------	------	0.0000	0.0000
GASPM:	0.0040	0.0038	0.0038	0.0038	0.0198	------	------	------	0.0205	0.0042
ECARBON:	------	------	------	------	------	0.0751	0.0098	0.0570	------	0.0049
OCARBON:	------	------	------	------	------	0.0212	0.0142	0.0286	------	0.0025
SO4:	0.0002	0.0004	0.0004	0.0004	0.0020	0.0002	0.0003	0.0009	0.0001	0.0005
Total Exhaust PM:	0.0042	0.0043	0.0043	0.0043	0.0217	0.0965	0.0243	0.0865	0.0206	0.0120
Brake:	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125
Tire:	0.0080	0.0080	0.0080	0.0080	0.0085	0.0080	0.0080	0.0248	0.0040	0.0094
Total PM:	0.0248	0.0248	0.0248	0.0248	0.0428	0.1170	0.0448	0.1239	0.0371	0.0340
SO2:	0.0067	0.0088	0.0115	0.0096	0.0162	0.0029	0.0052	0.0131	0.0033	0.0092
NH3:	0.1010	0.1015	0.1017	0.1016	0.0451	0.0068	0.0068	0.0270	0.0113	0.0925

```
*****************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                                *
* Input file: MA13_BOY.INP (file 1, run 1).                                 *
*****************************************************************************
* *** Summer 2013 ***

* Reading Registration Distributions from the following external
* data file: 2005_REG.D
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                0.998     MYR sum not = 1. (will normalize)
  M 49 Warning:
                0.998     MYR sum not = 1. (will normalize)
  M 49 Warning:
                0.998     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                0.999     MYR sum not = 1. (will normalize)
  M 49 Warning:
                0.998     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                0.999     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                 1.00     MYR sum not = 1. (will normalize)

* Reading I/M program description records from the following external
* data file: MA13_IM.D
* I/M program inputs for 2013 calendar year model run
* MA31 Exhaust I/M program for Light Duty pre-1996 MY vehicles <=10,0000 lb GVWR

* Reading non-default I/M CUTPOINTS from the following external
* data file: MA13_CUT.D
* Two-Speed Idle Exhaust I/M program for Heavy Duty vehicles >10,000 lb GVWR
* OBD Exhaust I/M program for Light Duty MY 1996+ vehicles <=10,000 lb GVWR
* Gas Cap Evap I/M program thru CY 2003 for all Light Duty vehicles <=8,500 lb GVWR
* Gas Cap Evap I/M program for all MY Heavy Duty vehicles >8,500 lb GVWR
* OBD + Gas Cap Evap I/M program for MY 1996 - 2003 Light Duty vehicles <=8,500 lb GVWR starting 2004
* OBD Evap I/M program for MY 2004+
  M601 Comment:
             User has enabled STAGE II REFUELING.
```

```
* Reading 94+ LEV IMPLEMENTATION SCHEDULE from the following external
* data file: MA_LEV2.D

  Reading User Supplied Tier2 Exhaust bin phase-in fractions

     Data read from file: LEV2EXH.D


  Reading User Supplied Tier2 EVAP phase-in fractions

     Data read from file: LEV2EVAP.D


  Reading User Supplied Tier2 50K certification standards

     Data read from file: LEV2CERT.D

  M616 Comment:
               User has supplied post-1999 sulfur levels.
  M614 Comment:
               User supplied diesel sale fractions.

* # # # # # # # # # # # # # # # # # # # # # # # # #
* 2013 DEFAULT SPEED - Summer

* File 1, Run 1, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # #
*** I/M credits for Tech1&2 vehicles were read from the following external
    data file: TECH12.D
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
 HDDV DEFEAT DEVICE EFFECTS ARE PRESENT. THE REBUILD FRACTION IS 0.10.

 LEV phase-in data read from file MA_LEV2.D
                    Calendar Year:  2013
                            Month:  July
                         Altitude:  Low
            Minimum Temperature:  68.0 (F)
            Maximum Temperature:  94.0 (F)
              Absolute Humidity:   75. grains/lb
            Fuel Sulfur Content:   30. ppm

            Exhaust I/M Program:  Yes
               Evap I/M Program:  Yes
                    ATP Program:  Yes
               Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2983	0.4117	0.1620		0.0369	0.0001	0.0015	0.0857	0.0038	1.0000

```
Composite Emission Factors (g/mi):
   Composite CO  :      4.51      4.48      4.83      4.58      6.36     1.413     0.424     0.929     17.09     4.350
 ------------------------------------------------------------------------------------------------------------------------

* # # # # # # # # # # # # # # # # # # # # # # # # #
* 2013 Idle Scenario - Summer (multiply g/mi by 2.5 mph to get g/hr)

* File 1, Run 1, Scenario 2.
* # # # # # # # # # # # # # # # # # # # # # # # # #
 M583 Warning:
          The user supplied arterial average speed of  2.5
          will be used for all hours of the day.  100% of VMT
          has been assigned to the arterial/collector roadway
          type for all hours of the day and all vehicle types.
 M 48 Warning:
            there are no sales for vehicle class HDGV8b

 LEV phase-in data read from file MA_LEV2.D
                     Calendar Year:  2013
                             Month:  July
                          Altitude:  Low
            Minimum Temperature:  68.0 (F)
            Maximum Temperature:  94.0 (F)
              Absolute Humidity:   75. grains/lb
            Fuel Sulfur Content:   30. ppm

            Exhaust I/M Program:  Yes
               Evap I/M Program:  Yes
                    ATP Program:  Yes
               Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2983	0.4117	0.1620		0.0369	0.0001	0.0015	0.0857	0.0038	1.0000
Composite Emission Factors (g/mi):										
Composite CO :	12.84	11.20	12.11	11.46	29.47	4.148	1.357	4.120	119.90	12.298

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* 2013 25 MPH Scenario - Summer

* File 1, Run 1, Scenario 3.
* # # # # # # # # # # # # # # # # # # # # # # # # #
 M583 Warning:
          The user supplied arterial average speed of 25.0
          will be used for all hours of the day.  100% of VMT
          has been assigned to the arterial/collector roadway
          type for all hours of the day and all vehicle types.
 M 48 Warning:
            there are no sales for vehicle class HDGV8b
```

```
LEV phase-in data read from file MA_LEV2.D
                   Calendar Year:  2013
                           Month:  July
                        Altitude:  Low
             Minimum Temperature:  68.0 (F)
             Maximum Temperature:  94.0 (F)
               Absolute Humidity:   75. grains/lb
             Fuel Sulfur Content:   30. ppm

             Exhaust I/M Program:  Yes
                Evap I/M Program:  Yes
                     ATP Program:  Yes
               Reformulated Gas:   Yes

      Vehicle Type:      LDGV    LDGT12    LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC   All Veh
              GVWR:               <6000     >6000     (All)
                       ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
  VMT Distribution:    0.2983    0.4117    0.1620              0.0369    0.0001    0.0015    0.0857    0.0038    1.0000
 ------------------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
     Composite CO  :     4.01      3.99      4.33      4.09      6.42     1.473     0.445     0.999     16.90     3.927
 ------------------------------------------------------------------------------------------------------------------------

* # # # # # # # # # # # # # # # # # # # # # # # # #
* 2013 30 MPH Scenario - Summer

* File 1, Run 1, Scenario 4.
* # # # # # # # # # # # # # # # # # # # # # # # # #
 M583 Warning:
           The user supplied arterial average speed of 30.0
           will be used for all hours of the day.  100% of VMT
           has been assigned to the arterial/collector roadway
           type for all hours of the day and all vehicle types.
 M 48 Warning:
             there are no sales for vehicle class HDGV8b

LEV phase-in data read from file MA_LEV2.D
                   Calendar Year:  2013
                           Month:  July
                        Altitude:  Low
             Minimum Temperature:  68.0 (F)
             Maximum Temperature:  94.0 (F)
               Absolute Humidity:   75. grains/lb
             Fuel Sulfur Content:   30. ppm

             Exhaust I/M Program:  Yes
                Evap I/M Program:  Yes
                     ATP Program:  Yes
               Reformulated Gas:   Yes

      Vehicle Type:      LDGV    LDGT12    LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC   All Veh
              GVWR:               <6000     >6000     (All)
                       ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
```

```
 VMT Distribution:    0.2983    0.4117    0.1620              0.0369    0.0001    0.0015    0.0857    0.0038    1.0000
 ---------------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
    Composite CO  :       3.96      3.95      4.28      4.04      5.32     1.325     0.394     0.826     14.61     3.825
 ---------------------------------------------------------------------------------------------------------------------
****************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                               *
* Input file: MA13_BOY.INP (file 1, run 2).                                *
****************************************************************************
* *** Winter 2013 ***

* Reading Registration Distributions from the following external
* data file: 2005_REG.D
  M 49 Warning:
                   1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                  0.998     MYR sum not = 1. (will normalize)
  M 49 Warning:
                  0.998     MYR sum not = 1. (will normalize)
  M 49 Warning:
                  0.998     MYR sum not = 1. (will normalize)
  M 49 Warning:
                   1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                   1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                  0.999     MYR sum not = 1. (will normalize)
  M 49 Warning:
                  0.998     MYR sum not = 1. (will normalize)
  M 49 Warning:
                   1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                  0.999     MYR sum not = 1. (will normalize)
  M 49 Warning:
                   1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                   1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                   1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
                   1.00     MYR sum not = 1. (will normalize)

* Reading I/M program description records from the following external
* data file: MA13_IM.D
* I/M program inputs for 2013 calendar year model run
* MA31 Exhaust I/M program for Light Duty pre-1996 MY vehicles <=10,0000 lb GVWR

* Reading non-default I/M CUTPOINTS from the following external
* data file: MA13_CUT.D
* Two-Speed Idle Exhaust I/M program for Heavy Duty vehicles >10,000 lb GVWR
* OBD Exhaust I/M program for Light Duty MY 1996+ vehicles <=10,000 lb GVWR
* Gas Cap Evap I/M program thru CY 2003 for all Light Duty vehicles <=8,500 lb GVWR
* Gas Cap Evap I/M program for all MY Heavy Duty vehicles >8,500 lb GVWR
```

```
* OBD + Gas Cap Evap I/M program for MY 1996 - 2003 Light Duty vehicles <=8,500 lb GVWR starting 2004
* OBD Evap I/M program for MY 2004+
  M601 Comment:
             User has enabled STAGE II REFUELING.


* Reading 94+ LEV IMPLEMENTATION SCHEDULE from the following external
* data file: MA_LEV2.D

  Reading User Supplied Tier2 Exhaust bin phase-in fractions

     Data read from file: LEV2EXH.D


  Reading User Supplied Tier2 EVAP phase-in fractions

     Data read from file: LEV2EVAP.D


  Reading User Supplied Tier2 50K certification standards

     Data read from file: LEV2CERT.D

  M616 Comment:
             User has supplied post-1999 sulfur levels.
  M614 Comment:
             User supplied diesel sale fractions.

* # # # # # # # # # # # # # # # # # # # # # # # # #
* 2013 DEFAULT SPEED - Winter

* File 1, Run 2, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M112 Warning:
             Wintertime Reformulated Gasoline Rules Apply
*** I/M credits for Tech1&2 vehicles were read from the following external
    data file: TECH12.D
  M 48 Warning:
            there are no sales for vehicle class HDGV8b
 HDDV DEFEAT DEVICE EFFECTS ARE PRESENT. THE REBUILD FRACTION IS 0.10.

 LEV phase-in data read from file MA_LEV2.D
                    Calendar Year:  2013
                            Month:  Jan.
                         Altitude:  Low
             Minimum Temperature:  35.0 (F)
             Maximum Temperature:  45.0 (F)
               Absolute Humidity:   75. grains/lb
             Fuel Sulfur Content:   30. ppm

             Exhaust I/M Program:  Yes
                Evap I/M Program:  Yes
                     ATP Program:  Yes
```

```
            Reformulated Gas:  Yes

      Vehicle Type:     LDGV   LDGT12   LDGT34    LDGT     HDGV     LDDV     LDDT     HDDV       MC  All Veh
              GVWR:             <6000    >6000   (All)
                      ------   ------   ------  ------   ------   ------   ------   ------   ------   ------
  VMT Distribution:   0.3031   0.4092   0.1608            0.0365   0.0002   0.0015   0.0851   0.0037   1.0000
 ------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
    Composite CO  :    10.34     9.62     9.79    9.67     7.80    1.385    0.430    0.993    15.79    9.073
 ------------------------------------------------------------------------------------------------------------

* # # # # # # # # # # # # # # # # # # # # # # # # #
* 2013 Idle Scenario - Winter (multiply g/mi by 2.5 mph to get g/hr)

* File 1, Run 2, Scenario 2.
* # # # # # # # # # # # # # # # # # # # # # # # # #
 M583 Warning:
          The user supplied arterial average speed of  2.5
          will be used for all hours of the day.  100% of VMT
          has been assigned to the arterial/collector roadway
          type for all hours of the day and all vehicle types.
 M112 Warning:
             Wintertime Reformulated Gasoline Rules Apply
 M 48 Warning:
            there are no sales for vehicle class HDGV8b

 LEV phase-in data read from file MA_LEV2.D
                   Calendar Year:  2013
                           Month:  Jan.
                        Altitude:  Low
             Minimum Temperature:  35.0 (F)
             Maximum Temperature:  45.0 (F)
               Absolute Humidity:   75. grains/lb
             Fuel Sulfur Content:   30. ppm

             Exhaust I/M Program:  Yes
                Evap I/M Program:  Yes
                     ATP Program:  Yes
                Reformulated Gas:  Yes

      Vehicle Type:     LDGV   LDGT12   LDGT34    LDGT     HDGV     LDDV     LDDT     HDDV       MC  All Veh
              GVWR:             <6000    >6000   (All)
                      ------   ------   ------  ------   ------   ------   ------   ------   ------   ------
  VMT Distribution:   0.3031   0.4092   0.1608            0.0365   0.0002   0.0015   0.0851   0.0037   1.0000
 ------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
    Composite CO  :    20.61    19.08    20.45   19.46    36.17    4.093    1.379    4.404   100.99   19.416
 ------------------------------------------------------------------------------------------------------------

* # # # # # # # # # # # # # # # # # # # # # # # # #
* 2013 25 MPH Scenario - Winter

* File 1, Run 2, Scenario 3.
```

```
* # # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
          The user supplied arterial average speed of 25.0
          will be used for all hours of the day.  100% of VMT
          has been assigned to the arterial/collector roadway
          type for all hours of the day and all vehicle types.
  M112 Warning:
             Wintertime Reformulated Gasoline Rules Apply
  M 48 Warning:
            there are no sales for vehicle class HDGV8b

 LEV phase-in data read from file MA_LEV2.D
                  Calendar Year:  2013
                          Month:  Jan.
                       Altitude:  Low
            Minimum Temperature:  35.0 (F)
            Maximum Temperature:  45.0 (F)
              Absolute Humidity:   75. grains/lb
            Fuel Sulfur Content:   30. ppm

            Exhaust I/M Program:  Yes
               Evap I/M Program:  Yes
                    ATP Program:  Yes
               Reformulated Gas:  Yes

      Vehicle Type:      LDGV    LDGT12    LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC   All Veh
              GVWR:               <6000     >6000     (All)
                       ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
  VMT Distribution:    0.3031    0.4092    0.1608              0.0365    0.0002    0.0015    0.0851    0.0037    1.0000
 ------------------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
    Composite CO  :      9.73      9.01      9.14      9.05      7.88     1.444     0.451     1.068     15.67     8.542
 ------------------------------------------------------------------------------------------------------------------------

* # # # # # # # # # # # # # # # # # # # # # # # # # #
* 2013 30 MPH Scenario - Winter

* File 1, Run 2, Scenario 4.
* # # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
          The user supplied arterial average speed of 30.0
          will be used for all hours of the day.  100% of VMT
          has been assigned to the arterial/collector roadway
          type for all hours of the day and all vehicle types.
  M112 Warning:
             Wintertime Reformulated Gasoline Rules Apply
  M 48 Warning:
            there are no sales for vehicle class HDGV8b

 LEV phase-in data read from file MA_LEV2.D
                  Calendar Year:  2013
                          Month:  Jan.
                       Altitude:  Low
```

```
Minimum Temperature:  35.0 (F)
Maximum Temperature:  45.0 (F)
  Absolute Humidity:   75. grains/lb
Fuel Sulfur Content:   30. ppm

Exhaust I/M Program:  Yes
   Evap I/M Program:  Yes
        ATP Program:  Yes
   Reformulated Gas:  Yes
```

Vehicle Type: GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3031	0.4092	0.1608		0.0365	0.0002	0.0015	0.0851	0.0037	1.0000
Composite Emission Factors (g/mi):										
Composite CO :	9.66	8.94	9.06	8.98	6.53	1.297	0.400	0.883	13.78	8.408

05/05/08
13:46:06

```
 ***  SCREEN3 MODEL RUN  ***
 *** VERSION DATED 96043 ***

SCREEN3 Modeling Runs for Emergency Generators

SIMPLE TERRAIN INPUTS:
   SOURCE TYPE              =        POINT
   EMISSION RATE (G/S)      =      1.00000
   STACK HEIGHT (M)         =      42.2000
   STK INSIDE DIAM (M)      =        .4600
   STK EXIT VELOCITY (M/S)=        14.2000
   STK GAS EXIT TEMP (K)    =     789.0000
   AMBIENT AIR TEMP (K)     =     293.0000
   RECEPTOR HEIGHT (M)      =        .0000
   URBAN/RURAL OPTION       =        URBAN
   BUILDING HEIGHT (M)      =      44.0000
   MIN HORIZ BLDG DIM (M)   =      38.1000
   MAX HORIZ BLDG DIM (M)   =      67.4000

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.


BUOY. FLUX =    4.631 M**4/S**3;  MOM. FLUX =    3.961 M**4/S**2.

*** FULL METEOROLOGY ***

**********************************
*** SCREEN DISCRETE DISTANCES ***
**********************************

*** TERRAIN HEIGHT OF    0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***
```

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
10.	.0000	0	.0	.0	.0	.00	.00	.00	NA
20.	.0000	0	.0	.0	.0	.00	.00	.00	NA
30.	.0000	0	.0	.0	.0	.00	.00	.00	NA
40.	.0000	0	.0	.0	.0	.00	.00	.00	NA
50.	.0000	0	.0	.0	.0	.00	.00	.00	NA
60.	.0000	0	.0	.0	.0	.00	.00	.00	NA
70.	.0000	0	.0	.0	.0	.00	.00	.00	NA
80.	.0000	0	.0	.0	.0	.00	.00	.00	NA
90.	.0000	0	.0	.0	.0	.00	.00	.00	NA
100.	.0000	0	.0	.0	.0	.00	.00	.00	NA
120.	.0000	0	.0	.0	.0	.00	.00	.00	NA
150.	111.4	5	1.0	1.5	10000.0	47.70	16.03	28.48	SS
125.	.0000	0	.0	.0	.0	.00	.00	.00	NA
130.	.0000	0	.0	.0	.0	.00	.00	.00	NA
135.	116.1	5	1.0	1.5	10000.0	47.70	14.46	27.58	SS
140.	114.5	5	1.0	1.5	10000.0	47.70	14.99	27.88	SS
145.	112.9	5	1.0	1.5	10000.0	47.70	15.51	28.18	SS
175.	104.4	5	1.0	1.5	10000.0	47.70	18.61	29.97	SS
200.	98.31	5	1.0	1.5	10000.0	47.70	21.17	31.46	SS
300.	78.60	5	1.0	1.5	10000.0	47.70	31.18	37.42	SS
400.	63.71	5	1.0	1.5	10000.0	47.70	40.85	43.38	SS
500.	52.29	5	1.0	1.5	10000.0	47.70	50.21	49.18	SS
600.	43.93	5	1.0	1.5	10000.0	47.70	59.27	52.70	SS
700.	37.71	5	1.0	1.5	10000.0	47.70	68.06	56.07	SS
800.	32.92	5	1.0	1.5	10000.0	47.70	76.59	59.30	SS
900.	29.13	5	1.0	1.5	10000.0	47.70	84.89	62.41	SS
1000.	26.05	5	1.0	1.5	10000.0	47.70	92.97	65.40	SS

```
**********************************
*** SCREEN DISCRETE DISTANCES ***
**********************************

*** TERRAIN HEIGHT OF    0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***
```

```
  DIST      CONC               U10M   USTK  MIX HT   PLUME   SIGMA   SIGMA
   (M)    (UG/M**3)    STAB   (M/S)  (M/S)    (M)    HT (M)   Y (M)   Z (M)  DWASH
 -------  ----------   ----  -----  -----  ------  ------  ------  ------  -----

 DWASH=   MEANS NO CALC MADE (CONC = 0.0)
 DWASH=NO MEANS NO BUILDING DOWNWASH USED
 DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
 DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
 DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

 ********************************************
 *  SUMMARY OF TERRAIN HEIGHTS ENTERED FOR  *
 *    SIMPLE ELEVATED TERRAIN PROCEDURE     *
 ********************************************

      TERRAIN        DISTANCE RANGE (M)
       HT (M)       MINIMUM    MAXIMUM
      -------      --------   --------
           0.          10.         --
           0.          20.         --
           0.          30.         --
           0.          40.         --
           0.          50.         --
           0.          60.         --
           0.          70.         --
           0.          80.         --
           0.          90.         --
           0.         100.         --
           0.         120.         --
           0.         150.         --
           0.         125.         --
           0.         130.         --
           0.         135.         --
           0.         140.         --
           0.         145.         --
           0.         175.         --
           0.         200.         --
           0.         300.         --
           0.         400.         --
           0.         500.         --
           0.         600.         --
           0.         700.         --
           0.         800.         --
           0.         900.         --
           0.        1000.         --

****************************************
     *** REGULATORY (Default) ***
    PERFORMING CAVITY CALCULATIONS
  WITH ORIGINAL SCREEN CAVITY MODEL
          (BRODE, 1988)
****************************************


 *** CAVITY CALCULATION - 1 ***       *** CAVITY CALCULATION - 2 ***
  CONC (UG/M**3)       =    224.8       CONC (UG/M**3)       =    397.7
  CRIT WS @10M (M/S) =      1.00       CRIT WS @10M (M/S) =      1.00
  CRIT WS @ HS (M/S) =      1.33       CRIT WS @ HS (M/S) =      1.33
  DILUTION WS (M/S)  =      1.00       DILUTION WS (M/S)  =      1.00
  CAVITY HT (M)      =     66.84       CAVITY HT (M)      =     53.61
  CAVITY LENGTH (M)  =    100.63       CAVITY LENGTH (M)  =     41.93
  ALONGWIND DIM (M)  =     38.10       ALONGWIND DIM (M)  =     67.40

****************************************
      END OF CAVITY CALCULATIONS
****************************************


     ***************************************
     *** SUMMARY OF SCREEN MODEL RESULTS ***
     ***************************************
```

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)	
SIMPLE TERRAIN	116.1	135.	0.	
BLDG. CAVITY-1	224.8	101.	--	(DIST = CAVITY LENGTH)
BLDG. CAVITY-2	397.7	42.	--	(DIST = CAVITY LENGTH)

```
***************************************************
** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
***************************************************
```

05/05/08
13:41:41

```
 ***  SCREEN3 MODEL RUN  ***
 *** VERSION DATED 96043 ***

SCREEN3 Modeling Runs for Parking Garage

SIMPLE TERRAIN INPUTS:
   SOURCE TYPE            =        POINT
   EMISSION RATE (G/S)    =      1.00000
   STACK HEIGHT (M)       =       3.7000
   STK INSIDE DIAM (M)    =       3.0500
   STK EXIT VELOCITY (M/S)=        .0000
   STK GAS EXIT TEMP (K)  =     293.0000
   AMBIENT AIR TEMP (K)   =     293.0000
   RECEPTOR HEIGHT (M)    =        .0000
   URBAN/RURAL OPTION     =        URBAN
   BUILDING HEIGHT (M)    =      44.0000
   MIN HORIZ BLDG DIM (M) =      38.1000
   MAX HORIZ BLDG DIM (M) =      67.4000

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.


BUOY. FLUX =     .000 M**4/S**3;  MOM. FLUX =     .000 M**4/S**2.

*** FULL METEOROLOGY ***

*********************************
*** SCREEN DISCRETE DISTANCES ***
*********************************

*** TERRAIN HEIGHT OF    0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***
```

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
10.	.0000	0	.0	.0	.0	.00	.00	.00	NA
20.	.0000	0	.0	.0	.0	.00	.00	.00	NA
30.	.0000	0	.0	.0	.0	.00	.00	.00	NA
40.	.0000	0	.0	.0	.0	.00	.00	.00	NA
50.	.0000	0	.0	.0	.0	.00	.00	.00	NA
60.	.0000	0	.0	.0	.0	.00	.00	.00	NA
70.	.0000	0	.0	.0	.0	.00	.00	.00	NA
80.	.0000	0	.0	.0	.0	.00	.00	.00	NA
90.	.0000	0	.0	.0	.0	.00	.00	.00	NA
100.	.0000	0	.0	.0	.0	.00	.00	.00	NA
120.	.0000	0	.0	.0	.0	.00	.00	.00	NA
150.	349.0	4	1.0	1.0	320.0	3.70	28.30	32.01	SS
125.	.0000	0	.0	.0	.0	.00	.00	.00	NA
130.	.0000	0	.0	.0	.0	.00	.00	.00	NA
135.	373.4	4	1.0	1.0	320.0	3.70	27.30	31.00	SS
140.	365.0	4	1.0	1.0	320.0	3.70	27.63	31.34	SS
145.	356.9	4	1.0	1.0	320.0	3.70	27.97	31.67	SS
175.	313.3	4	1.0	1.0	320.0	3.70	29.98	33.68	SS
200.	282.9	4	1.0	1.0	320.0	3.70	31.65	35.36	SS
300.	196.6	5	1.0	1.0	10000.0	3.70	38.35	42.06	SS
400.	144.5	5	1.0	1.0	10000.0	3.70	45.05	48.76	SS
500.	106.1	5	1.0	1.0	10000.0	3.70	54.59	54.84	SS
600.	86.05	5	1.0	1.0	10000.0	3.70	63.52	58.12	SS
700.	71.84	5	1.0	1.0	10000.0	3.70	72.18	61.27	SS
800.	61.31	5	1.0	1.0	10000.0	3.70	80.60	64.30	SS
900.	53.24	5	1.0	1.0	10000.0	3.70	88.79	67.23	SS
1000.	46.88	5	1.0	1.0	10000.0	3.70	96.77	70.06	SS

```
*********************************
*** SCREEN DISCRETE DISTANCES ***
*********************************

*** TERRAIN HEIGHT OF    0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***
```

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

****
* SUMMARY OF TERRAIN HEIGHTS ENTERED FOR *
* SIMPLE ELEVATED TERRAIN PROCEDURE *
****

TERRAIN HT (M)	DISTANCE RANGE (M) MINIMUM	MAXIMUM
0.	10.	--
0.	20.	--
0.	30.	--
0.	40.	--
0.	50.	--
0.	60.	--
0.	70.	--
0.	80.	--
0.	90.	--
0.	100.	--
0.	120.	--
0.	150.	--
0.	125.	--
0.	130.	--
0.	135.	--
0.	140.	--
0.	145.	--
0.	175.	--
0.	200.	--
0.	300.	--
0.	400.	--
0.	500.	--
0.	600.	--
0.	700.	--
0.	800.	--
0.	900.	--
0.	1000.	--

****
*** REGULATORY (Default) ***
PERFORMING CAVITY CALCULATIONS
WITH ORIGINAL SCREEN CAVITY MODEL
(BRODE, 1988)
****

*** CAVITY CALCULATION - 1 ***

CONC (UG/M**3)	=	224.8
CRIT WS @10M (M/S)	=	1.00
CRIT WS @ HS (M/S)	=	1.00
DILUTION WS (M/S)	=	1.00
CAVITY HT (M)	=	66.84
CAVITY LENGTH (M)	=	100.63
ALONGWIND DIM (M)	=	38.10

*** CAVITY CALCULATION - 2 ***

CONC (UG/M**3)	=	397.7
CRIT WS @10M (M/S)	=	1.00
CRIT WS @ HS (M/S)	=	1.00
DILUTION WS (M/S)	=	1.00
CAVITY HT (M)	=	53.61
CAVITY LENGTH (M)	=	41.93
ALONGWIND DIM (M)	=	67.40

****
END OF CAVITY CALCULATIONS
****

****
*** SUMMARY OF SCREEN MODEL RESULTS ***
****

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)	
SIMPLE TERRAIN	373.4	135.	0.	
BLDG. CAVITY-1	224.8	101.	--	(DIST = CAVITY LENGTH)
BLDG. CAVITY-2	397.7	42.	--	(DIST = CAVITY LENGTH)

```
***************************************************
** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
***************************************************
```

05/05/08
13:47:07

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 96043 ***

SCREEN3 Modeling Runs for Loading Dock

SIMPLE TERRAIN INPUTS:

SOURCE TYPE	=	POINT
EMISSION RATE (G/S)	=	1.00000
STACK HEIGHT (M)	=	3.7000
STK INSIDE DIAM (M)	=	3.0500
STK EXIT VELOCITY (M/S)	=	.0000
STK GAS EXIT TEMP (K)	=	293.0000
AMBIENT AIR TEMP (K)	=	293.0000
RECEPTOR HEIGHT (M)	=	.0000
URBAN/RURAL OPTION	=	URBAN
BUILDING HEIGHT (M)	=	44.0000
MIN HORIZ BLDG DIM (M)	=	38.1000
MAX HORIZ BLDG DIM (M)	=	67.4000

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

BUOY. FLUX = .000 M**4/S**3; MOM. FLUX = .000 M**4/S**2.

*** FULL METEOROLOGY ***

****
*** SCREEN DISCRETE DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
10.	.0000	0	.0	.0	.0	.00	.00	.00	NA
20.	.0000	0	.0	.0	.0	.00	.00	.00	NA
30.	.0000	0	.0	.0	.0	.00	.00	.00	NA
40.	.0000	0	.0	.0	.0	.00	.00	.00	NA
50.	.0000	0	.0	.0	.0	.00	.00	.00	NA
60.	.0000	0	.0	.0	.0	.00	.00	.00	NA
70.	.0000	0	.0	.0	.0	.00	.00	.00	NA
80.	.0000	0	.0	.0	.0	.00	.00	.00	NA
90.	.0000	0	.0	.0	.0	.00	.00	.00	NA
100.	.0000	0	.0	.0	.0	.00	.00	.00	NA
120.	.0000	0	.0	.0	.0	.00	.00	.00	NA
150.	349.0	4	1.0	1.0	320.0	3.70	28.30	32.01	SS
125.	.0000	0	.0	.0	.0	.00	.00	.00	NA
130.	.0000	0	.0	.0	.0	.00	.00	.00	NA
135.	373.4	4	1.0	1.0	320.0	3.70	27.30	31.00	SS
140.	365.0	4	1.0	1.0	320.0	3.70	27.63	31.34	SS
145.	356.9	4	1.0	1.0	320.0	3.70	27.97	31.67	SS
175.	313.3	4	1.0	1.0	320.0	3.70	29.98	33.68	SS
200.	282.9	4	1.0	1.0	320.0	3.70	31.65	35.36	SS
300.	196.6	5	1.0	1.0	10000.0	3.70	38.35	42.06	SS
400.	144.5	5	1.0	1.0	10000.0	3.70	45.05	48.76	SS
500.	106.1	5	1.0	1.0	10000.0	3.70	54.59	54.84	SS
600.	86.05	5	1.0	1.0	10000.0	3.70	63.52	58.12	SS
700.	71.84	5	1.0	1.0	10000.0	3.70	72.18	61.27	SS
800.	61.31	5	1.0	1.0	10000.0	3.70	80.60	64.30	SS
900.	53.24	5	1.0	1.0	10000.0	3.70	88.79	67.23	SS
1000.	46.88	5	1.0	1.0	10000.0	3.70	96.77	70.06	SS

****
*** SCREEN DISCRETE DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH

DWASH=   MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

****
* SUMMARY OF TERRAIN HEIGHTS ENTERED FOR *
* SIMPLE ELEVATED TERRAIN PROCEDURE *
****

TERRAIN HT (M)	DISTANCE RANGE (M) MINIMUM	MAXIMUM
0.	10.	--
0.	20.	--
0.	30.	--
0.	40.	--
0.	50.	--
0.	60.	--
0.	70.	--
0.	80.	--
0.	90.	--
0.	100.	--
0.	120.	--
0.	150.	--
0.	125.	--
0.	130.	--
0.	135.	--
0.	140.	--
0.	145.	--
0.	175.	--
0.	200.	--
0.	300.	--
0.	400.	--
0.	500.	--
0.	600.	--
0.	700.	--
0.	800.	--
0.	900.	--
0.	1000.	--

****
*** REGULATORY (Default) ***
PERFORMING CAVITY CALCULATIONS
WITH ORIGINAL SCREEN CAVITY MODEL
(BRODE, 1988)
****

*** CAVITY CALCULATION - 1 ***		*** CAVITY CALCULATION - 2 ***	
CONC (UG/M**3) =	224.8	CONC (UG/M**3) =	397.7
CRIT WS @10M (M/S) =	1.00	CRIT WS @10M (M/S) =	1.00
CRIT WS @ HS (M/S) =	1.00	CRIT WS @ HS (M/S) =	1.00
DILUTION WS (M/S) =	1.00	DILUTION WS (M/S) =	1.00
CAVITY HT (M) =	66.84	CAVITY HT (M) =	53.61
CAVITY LENGTH (M) =	100.63	CAVITY LENGTH (M) =	41.93
ALONGWIND DIM (M) =	38.10	ALONGWIND DIM (M) =	67.40

****
END OF CAVITY CALCULATIONS
****

****
*** SUMMARY OF SCREEN MODEL RESULTS ***
****

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)	
SIMPLE TERRAIN	373.4	135.	0.	
BLDG. CAVITY-1	224.8	101.	--	(DIST = CAVITY LENGTH)
BLDG. CAVITY-2	397.7	42.	--	(DIST = CAVITY LENGTH)

```
***************************************************
** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
***************************************************
```

Emergency Generator Emissions

350 Boylston Street

Potential Emissions

Unit	Output		Input		MMBtu/hr	Emission Rate					Units	Hours	Annual Emissions - tpy				
						NOx	CO	VOC	PM	SO2			NOx	CO	VOC	PM	SO2
Egen#1	650	kW	910	BHP		4.800	2.6000	4.8000	0.2000	0.0318	g/bhphr	300	1.44	0.78	1.44	0.06	0.01
									Total Emergency Generators:				1.44	0.78	1.44	0.06	0.01
												Total	1.44	0.78	1.44	0.06	0.01

Unit	Output		Input		MMBtu/hr	short term per unit(g/s)						Hours	long term per unit (g/s)				
						NOx	CO	VOC	PM	SO2			NOx	CO	VOC	PM	SO2
Egen#1	650	kW	910	BHP		1.21	0.66	1.21	0.05	0.01		300	0.04152	0.02249	0.04152	0.0017	0.00027

Modeling Parameters

Unit	Egen#1	
flow (per unit)	4,937	cfm
Diam	18	inches
Diam	1.5	ft
Area	1.77	ft2
Flow	46.6	fps
Flow	14.2	mps
Temp	959.9	F
Temp	789	K
Stack Elev	139	ft agl
Ground Elev	0	ft asl

Note 1: All stacks are 10 feet above roof level

Appendix G

Scoping Determination and Comment Letters

Boston Redevelopment Authority

Boston's Planning & Economic Development Office

Thomas M. Menino, *Mayor*
Clarence J. Jones, *Chairman*
John F. Palmieri, *Director*

One City Hall Square
Boston, MA 02201-1007
Tel 617-722-4300
Fax 617-248-1937

MEMORANDUM

TO: PUBLIC AGENCIES, MEMBERS OF THE IMPACT ADVISORY GROUP ("IAG"), LOCAL ELECTED OFFICIALS, LOCAL RESIDENTS AND BUSINESS OWNERS

FROM: JAY ROURKE, SENIOR PROJECT MANAGER

DATE: MARCH 20, 2008

SUBJECT: 350 BOYLSTON STREET / BOSTON; SCOPING DETERMINATION

Enclosed for your review, please find the Scoping Determination in response to the Project Notification Form (the "PNF") submitted on December 18, 2008 and noticed in the *Boston Herald* on the same day. This includes comments submitted by public agencies, elected officials, members of the Impact Advisory Group and local residents and business owners during the designated public comment period that ended February 1, 2008.

At the present time the Proponent will be addressing the comments that appear in this Scoping Determination. When this is complete the Proponent will submit a Draft Project Impact Report that will undergo a comment period ending sixty (60) days after its notice in the *Boston Herald*. Please feel free to contact me at 617-918-4317 with any questions or comments. I look forward to your continuing participation in this important process.

Boston Redevelopment Authority
Boston's Planning & Economic Development Office
Thomas M. Menino, *Mayor*
Clarence J. Jones, *Chairman*
Mark Maloney, *Director*
One City Hall Square
Boston, MA 02201-1007
Tel 617-722-4300
Fax 617-248-1937

March 20, 2008

Ronald Druker, President
The Druker Company
50 Federal Street
Boston, MA 02110

Dear Mr. Druker:

Re: **350 Boylston Street, Boston, Massachusetts**
Project Notification Form for the Proposed 350 Boylston Street Project Consisting of a Nine (9) Story Office Building with First Floor Retail with a Height of Approximately One Hundred and Twenty (120) Feet Containing a Total of Approximately 221,000 Square Feet to be Served by Approximately One Hundred and Fifty (150) Sub-Surface Parking Spaces – Scoping Determination

Please find enclosed the Scoping Determination for the 350 Boylston Street project consisting of a nine (9) story office building with first floor retail with a height of approximately one hundred and twenty (120) feet containing a total of approximately 221,000 square feet to be served by approximately one hundred and fifty (150) sub-surface parking spaces. The Scoping Determination describes information required by the Boston Redevelopment Authority in response to the Project Notification Form, which was submitted under Article 80 of the Boston Zoning Code on December 18, 2007 and noticed in the *Boston Herald* on the same day. Additional information may be required during the course of review of the proposal.

If you have any questions regarding the Scoping Determination or the review process, please contact me at (617) 918-4317.

Sincerely,

Jay Rourke
Senior Project Manager

Cc. James M. Tierney
Heather Campisano

BOSTON REDEVELOPMENT AUTHORITY
SCOPING DETERMINATION

FOR

350 BOYLSTON STREET, BOSTON, PROJECT NOTIFICATION FORM

PREAMBLE

The Druker Company, Ltd (the "Developer" or "Proponent") submitted to Boston Redevelopment Authority ("BRA") a Project Notification Form ("PNF") under Article 80 of the Boston Zoning Code on December 18, 200 7 and noticed in the *Boston Herald* on the same day, to construct a nine (9) story office building with first floor retail with a height of approximately one hundred and twenty (120) feet containing a total of approximately 221,000 square feet to be served by approximately one hundred and fifty (150) sub-surface parking spaces (the "Proposed Project"). Written comments constitute an integral part of the Scoping Determination and should be responded to in the Draft Project Impact Report (the "DPIR").

Specific concerns below are highlighted for additional emphasis and consideration:

- In reading through the comment letters, some have suggested the Arlington Building should be preserved. This is based on the argument that a new building would result in loss of architectural character to our city as a whole. Presently a world class developer has set a goal to create a new signature building for this prominent corner of our city. Should the Arlington Building be preserved or should the owner be allowed to redevelop the site in a way that is allowed under the current zoning? The four (4) paragraphs that make up Section 2.3 of the PNF begin to explain the thought process the development team underwent during their preliminary assessment but the BRA would like to hear more. It is understood that the Arlington Building was not granted landmark status in 2006 but still it is an esthetically pleasing building and enjoyed by many. Knowing that the PNF main goal is to create this discussion, the DPIR should elaborate in greater detail on the topics mentioned in Section 2.3 so that the following can be understood by the all parties involved;
    - ➢ The difference in floor area ratio;
    - ➢ Greater construction costs;
    - ➢ Complications with bearing and fire wall locations;

- Supporting the existing façade over the sidewalk steam line and MBTA's Green Line;
- Different floor levels; and
- "Façade-ectomy" through dismantling and why this is not considered an acceptable form of preservation.

- Design. As you heard in the community meeting held on Thursday, January 17, 2008 at Boston Public Library, Copley Branch and in the formal BRA Scoping Session held on Friday, January 11, 2008, design is a major concern not only to the meeting attendees but also to the Mayor, local elected officials, the IAG and the BRA. The following has been addressed throughout the comment period and should be presented in the DPIR;
    - To understand the context of the proposal within its surroundings, further renderings should be presented that show views from the Public Garden, the intersection of Boylston and Berkeley and the intersection of St. James and Arlington.
    - It has been requested that the western elevation be better represented in the DPIR.
    - The Arlington, Boylston Street corner façade is located in an area of our city where thousands of eyes will see it every day. Such a relevant site deserves and requires the greatest attention to detail.
    - Special attention should be paid to the mechanical penthouse and what visual impacts it has on the surrounding area. Renderings should appear in the DPIR.
    - The development team is aware that a shadow study will appear in the DPIR. Please highlight (if any) the impacts on the Public Garden and the stained glass windows of the Arlington Street Church.
    - With the understanding that sample materials cannot appear in the DPIR filing, please be prepared to present these materials at any and all community meetings during the DPIR phase of review.

- It has been suggested that the northern sidewalk on Boylston Street be reduced and the southern side enlarged. The BRA requests that the development team work with us, the Boston Transportation Department and the Boston Public Works Department during the DPIR phase of review to create an enhanced pedestrian experience on both sides of Boylston Street.

- It has been requested that a breakdown of zoning relief be presented in the DPIR including a description that relates to the meaning of "special exception".

- Boylston Street is one of the major retail boulevards in our city while Providence Street is considered a "back of the house" passage. The pedestrian experience should be encouraged on Boylston Street but not hindered on Providence Street. A comfortable, safe and visually pleasing movement on Providence Street should be addressed in the DPIR.

- Please assess in the DPIR the number of on-street parking spaces that will be lost as a result of the proposed project.

- Construction Impacts. If approvals are to be granted the development team should take a pro-active approach to a construction plan. As with any urban development there needs to be a balance of construction related inconveniences and the day to day living, working, commuting and sightseeing that encompass the site.

- The Proponents need to show how they intend to provide a high level of Leadership in Energy and Environmental Design ("LEED") standards. Integrating green building components into the planning and design of new projects improves energy efficiency and promotes responsible and sustainable building practices.

- I applaud the development team and especially the Impact Advisory Group ("IAG") and community for working so hard over these past two (2) months on reviewing this important document. Multiple meetings and add to that work and personal requirements and it is obvious to see your commitment to this process. Thank you!

- Alternative modes of transportation should be encouraged. Biking and walking are not only great forms of exercise but they also alleviate traffic while creating a healthier neighborhood and city. The Developer should work to encourage these modes of transit to new occupants of the site.

- Please pay special attention to the comment letters. They represent the active residents, business leaders and elected officials of the community in which you intend to develop.

SUBMISSION REQUIREMENTS

FOR

THE 350 BOYLSTON STREET, BOSTON, PROPOSAL FOR A NINE (9) STORY OFFICE BUILDING WITH FIRST FLOOR RETAIL WITH A HEIGHT OF APPROXIMATELY ONE HUNDRED AND TWENTY (120) FEET CONTAINING A TOTAL OF APPROXIMATELY 221,000 SQUARE FEET TO BE SERVED BY APPROXIMATELY ONE HUNDRED AND FIFTY (150) SUB-SURFACE PARKING SPACES - DRAFT PROJECT IMPACT REPORT

The Boston Redevelopment Authority ("BRA") is issuing this Scoping Determination ("Scope") pursuant to Section 80B-5 of the Boston Zoning Code (the "Code"), in response to the Project Notification Form ("PNF") which The Druker Company, Ltd. (the "Developer" or "Proponent") submitted on December 18, 2007 to construct a nine (9) story office building with first floor retail with a height of approximately one hundred and twenty (120) feet containing a total of approximately 221,000 square feet to be served by approximately one hundred and fifty (150) sub-surface parking spaces (the "Proposed Project"). Notice of the receipt by the BRA of the PNF was published in the *Boston Herald* on December 18, 2007 initiating the public comment period that ended on February 1, 2008. Pursuant to Section 80A-2 of the Code, the Notice and the PNF were sent to all public agencies of the City and other interested individuals and parties. Written comments in response to the Notice and the PNF that were received by the BRA prior to the end of the public comment period are included in the Appendices of this Scope. The Scope requests information that the BRA requires for its review of the Proposed Project in connection with the following:

(a) Certification of Compliance of the Proposed Project pursuant to Article 80, Section 80B-6 of the Code; and

(b) Preliminary Adequacy Determination pursuant to Article 80, Section 80B-5.4(c) of the Code; and

The BRA is reviewing the Proposed Project pursuant to Article 80, Section 80B, Large Project Review, which sets out comprehensive procedures for project review and requires the BRA to examine the urban design, transportation, environmental, and other impacts of proposed projects. The Developer is required to prepare and submit to the BRA a Draft Project Impact Report ("DPIR") that meets the requirements of the Scope by detailing the Proposed Project's expected impacts and proposing measures to mitigate, limit, or minimize such impacts. The DPIR shall contain the information necessary to meet the specifications of Section 80B-3 (Scope of Review; Content of Reports) and Section 80B-4 (Standards for Large Project Review Approval) as required by the Scope.

Subsequent to the end of the sixty (60) day public comment period for the DPIR, the BRA will issue a Preliminary Adequacy Determination ("PAD") that indicates the additional steps necessary for the Proponent to complete in order to satisfy the requirements of the Scope and all applicable sections of Article 80 of the Code. If the BRA finds that the PNF/DPIR adequately describe the Proposed Project's impacts and, if appropriate, proposes satisfactory measures to mitigate, limit or minimize such impacts, the PAD will announce such a determination and that the requirements for the filing and review of a Final Project Impact Report are waived pursuant to Section 80B-5.4(c)(iv) of the Code. Before reaching said findings, the BRA shall hold a public hearing pursuant to Article 80 of the Code. Section 80B-6 requires the Director of the

BRA to issue a Certification of Compliance before the Commissioner of Inspectional Services can issue any building permit for the Proposed Project.

I. PROPOSED PROJECT DESCRIPTON

The 350 Boylston Street project is proposed on an approximately 27,654 square foot parcel of land located at the intersection of Boylston and Arlington Streets in Boston's Back Bay across from the Public Garden. The site is bounded by Boylston, Arlington, Providence Street and an existing building located at 364 Boylston Street and includes four (4) parcels of land together having approximately 221 feet of frontage on Boylston Street. This site presently is occupied by four (4) commercial structures located at 324-334, 344-350 and 352-360 Boylston Street.

The project is a mixed-use development consisting of approximately 221,230 square feet of gross floor area. The specific uses proposed for this newly constructed, nine (9)-story building will include approximately 15,000 square feet of ground floor retail and restaurant space, and eight (8) of first class office and related support space. Approximately one hundred and fifty (150) parking spaces and an approximately 6,000 square foot fitness center and spa for use by the building's office tenants are planned for the three below-grade levels (the "Proposed Project").

II. DEVELOPMENT REVIEW REQUIREMENTS - ARTICLE 80

SUBMISSION REQUIREMENTS

In addition to full-size scale drawings, fifty-six (56) copies of a bound report containing all submission materials reduced to size 8-1/2" x 11", except where otherwise specified, are required. The report should be printed on both sides of the page. In addition, an adequate number of copies must be available for community review. A copy of this Scope should be included in the report submitted for review.

A. GENERAL INFORMATION

1. Applicant Information
    a. Development Team
        (1) Names
            (a) Developer (including description of development entity and type of corporation)
            (b) Attorney
            (c) Project consultants and architect
        (2) Business address and telephone number for each

(3) Designated contact for each

b. Legal Information

(1) Legal judgments or actions pending concerning the Proposed Project

(2) History of tax arrears on property owned in Boston by the Applicant

(3) Evidence of site control over the project area, including current ownership and purchase options of all parcels in the Proposed Project, all restrictive covenants and contractual restrictions affecting the proponent's right or ability to accomplish the Proposed Project, and the nature of the agreements for securing parcels not owned by the Applicant.

(4) Nature and extent of any and all public easements into, through, or surrounding the site.

2. Design Development Information (See **Appendix 5** for required design development and contract document submissions).

3. Project Area

a. An area map identifying the location of the Proposed Project

b. Description of metes and bounds of project area or certified survey of project area

4. Public Benefits

a. Anticipated employment levels including the following:

(1) Estimated number of construction jobs

(2) Estimated number of permanent jobs

The Proponent is expected to provide a workforce development plan and needs assessment for the Proposed Project. The Proponent should describe the efforts it will undertake to ensure that an appropriate share of new jobs and construction jobs will be filled by Boston residents.

b. Current activities and programs which benefit adjacent neighborhoods of Boston and the city at large, such as: child care programs, scholarships, internships, elderly services, education and job training programs, etc.

c. Other public benefits, if any, to be provided.

5. Regulatory Controls and Permits

a. Existing zoning requirements, zoning computation forms, and any anticipated requests for zoning relief should be explained.
b. Anticipated permits required from other local, state, and federal entities with a proposed application schedule should be noted.
c. A statement on the applicability of the Massachusetts Environmental Policy Act (MEPA) should be provided. If the Proposed Project is subject to MEPA, all required documentation should be provided to the BRA, including, but not limited to, copies of the Environmental Notification Form, decisions of the Secretary of Environmental Affairs, and the proposed schedule for coordination with BRA procedure.

6. Community Groups

a. Names and addresses of project area owners, abutters, and any community or business groups which, in the opinion of the applicant, may be substantially interested in or affected by the Proposed Project.
b. A list of meetings held and proposed with interested parties, including public agencies, abutters, and community and business groups.

B. PROJECT DESCRIPTION AND ALTERNATIVES

1. Project Description

The DPIR shall contain a full description of the Proposed Project and its components, including its size, physical characteristics, development schedule, costs, and proposed uses. This section of the DPIR also shall present analysis of the development context of the Proposed Project. Appropriate site and building plans to illustrate clearly the Proposed Project shall be required.

2. Project Alternatives

A description of alternatives to the Proposed Project that were considered shall be presented and the primary differences among the alternatives, particularly as they may affect environmental conditions, shall be discussed. In addition, any alternative development studies requested by the Boston Landmarks Commission should be discussed.

C. TRANSPORTATION COMPONENT

Please refer the comments and information requested by the Boston Transportation Department ("BTD") included in **Appendix 1**.

D. ENVIRONMENTAL PROTECTION COMPONENT

Please refer to the comments and information requested by the Boston Environment Department ("BED") included in **Appendix 1**. In addition, the Proponent is requested to provide information on the following:

- The Proponent should consider and document how it would use the Leadership in Energy and Environmental Design (LEED) standards. Integrating green building components into the planning and design of new projects improves energy efficiency and promotes responsible and sustainable building practices.

E. URBAN DESIGN COMPONENT

Issues

The Proposed Project consists of approximately 221,230 SF of luxury office, retail, and support uses in a massing and height configuration that is responsive to the underlying zoning setback and related requirements. The Proponent has made a preliminary presentation to the BCDC and has been referred to Design Committee. The comments of the Commissioners as recorded in their minutes are attached. It is anticipated that the Proponent will respond to the Commissioners' comments as well as those of the public and BRA staff.

URBAN DESIGN COMPONENT

The Proposed Project as described in the PNF will demolish four existing buildings on the block (which will ALL require review under Article 85 by the BLC). The Boston Landmarks Commission reviewed (in 2006) a petition to landmark the Arlington Building (better known as the Shreve, Crump and Low Building) and voted not to accept it because (sic) the Arlington Building did not meet the criteria for designation as a Boston Landmark. It is worth pointing out that the PNF evaluates the four buildings, each of which was considered for an upgrade in its BLC ranking in 2006, in detail case by case; the Boylston Street Zoning Study developed the concept of a *'tout ensemble'* wherein an aggregation of notable individual buildings raised the historical value of the group as a whole. There is a rich level of detail which engages the public realm at the existing ground floor(s) and above; if this variegated experience is to be replaced by a new structure, the wealth of texture and detail must be reinterpreted in the new contemporary design. This must be a building every inch the equal, for its time, of the work of William Gibbons Rantoul and John Harleston Parker for theirs.

The design proposes rich materials (granite, wood, limestone, metal and glass) in a design that broadly references the idea of bays and continues them around the building, using a large radius that feels oddly like a slightly flattened version as a special treatment at the corner. The top two floors are set back, with the bays receding accordingly, and more use of metal generally; the ground floor has a more transparent retail expression. The overall treatment is fairly even around the building and gives the sense of an extrusion simply cut off down Boylston, while the corner takes the bay around in a geometric arc that has a center point possibly too deeply embedded in the building. Several aspects of the design *require further study*:

1. Study the proportions of the building as having a clear base, middle, and top. Also study the engagement of the ground floor with the upper portion of the building. In a building of this scale, a higher 'base' proportion might be expected, even if subtly expressed (the 'piano nobile'); this is particularly true if the second floor were to become retail.

2. Work on the expression at the top so that the two recessed floors, which serve as the visual recognition of building 'top' in your contemporary interpretation of Boston's tripartite divisions, are somewhat differentiated from the bays which fold into them. The floors' expression must clearly distinguish the 'top' from the 'middle' with appropriate recognition of the top's role as the culmination of the tripartite approach.

3. Study variations in the vocabulary atop the 7th floor in conjunction with item #2. Use this strategy, or one similar, to help give the building a more defined and differentiated ending at its skyline.

4. The main entry of the building is not expressed strongly enough; this may help with the effect noted in item #1.

5. Give a hierarchy to the treatments along Arlington and Boylston (with the latter street dominant) so that orientation of the building at this important corner (and its perception by observers) is more immediate.

6. Details on the most immediately publicly perceived portion (the lower two floors) of the Proposed Project should be convincingly developed, with attention to the richness of detail mentioned above as well as the expressed framing of the retail.

7. This Project is one that could catalyze the reconstruction of this block of Boylston to conform to the Boylston Streetscape Master Plan; the potential of accomplishing this must be investigated. At a minimum, the sidewalk should be reconstructed to conform to this as a possible future condition.

8. Consider giving a slightly more generous space to the MBTA headhouse on Arlington for circulation, or demonstrate that pedestrian movement around this corner, the egress/ingress of the T, and your significant retail entry at the corner do not result in pedestrian traffic jams.

9. Study the proportion of the bays and their spacing so that they are legible as the lesser percentage of facade. As part of this exercise, vary the contrast between the two to make it less stark (less black and white).

10. Consider tightening the proportion of the bay at the corner and celebrating/differentiating it more dramatically.

The following (standard list of) urban design materials should be submitted for the DPIR for the Proposed Project or, if no DPIR is requested, should be submitted as a record 'schematic design' submission pursuant to the BRA's Development Review Procedures:

1. Written description of program elements and space allocation for each element

2. Plan for the surrounding area and district and sections at an appropriate scale (1" = 40' or larger) showing relationships of the Proposed Project to the surrounding area and district:

    a. massing
    b. building height
    c. scaling elements
    d. open space
    e. major topographical features
    f. pedestrian and vehicular circulation
    g. land use

3. Black and white or color 8"x10" photographs of the site and neighborhood

4. Eye-level perspective (reproducible line drawings) showing the proposal (including main entries and public passages/areas) in the context of the surrounding area. Views from the area streets (Boylston, Arlington, i.e.) are required, showing the surrounding context, with particular emphasis on

important viewing areas such as key approaches from the Public Garden. Long-ranged (distanced) views of the proposed project should also be studied to assess the impact on the skyline or other view lines. I.e., a view that places the Project in the context of the Heritage, the Arlington Church, and perhaps the Taj. Photomontages are encouraged as a technique to fully understand the contextual setting. Context and the massing of other approved Projects should be included. At least one bird's-eye perspective should also be included. All perspectives should show (in separate comparative sketches) both the build and no-build conditions. The view locations should be approved by the BRA before analysis is begun. View studies should be cognizant of light and shadow, massing and bulk.

5. Site sections at 1" = 20' or larger showing relationships to adjacent buildings and spaces.

6. Site plan at an appropriate scale (1" = 20' or larger) showing:
   a. General relationships of proposed and existing adjacent buildings and open space
   b. Open spaces defined by buildings on adjacent parcels and across streets
   c. General location of pedestrian ways, driveways, parking, service areas, streets, and major landscape features
   d. Pedestrian, handicapped, vehicular and service access and flow through the parcel and to adjacent areas
   e. Survey information, such as extending elevations, benchmarks, and utilities
   f. Construction limits

7. Study building/site model at 1" = 16' or 1" = 20' showing preliminary concept of setbacks, cornice lines, fenestration (window treatment), facade composition, etc.

8. Massing model at 1" = 40' in basswood suitable for placement in the area model at the BRA (if applicable). (We *do* have a Back Bay section.)

9. Drawings at an appropriate scales (e.g., 1" =8', 1"-16', or 1"-20') to describe the facade design and proposed materials including:
   a. Building and site improvement plans
   b. Elevations in the context of the surrounding area
   c. Sections showing organization of functions and spaces
   d. Preliminary building plans showing ground floor and typical upper floors
   e. Phasing of the proposed project

10. A written and/or graphic description of the building materials and its texture, color, and general fenestration patterns is required for the proposed development.

11. Proposed schedule for submittal of all design or development related materials.

12. Proposed LEED certification plans and point rating goal assessment.

13. Electronic model of the Proposed Project in format suitable for use in the BRA's digital 3-D model of Boston. Format should be approved by Urban Design's Technology manager

Excerpted from the Boston Civic Design Commission Minutes of January 8, 2008:

The next item was a presentation of the **350 Boylston Street Project**. ET introduced Ron Druker (RD), who in turn introduced Cesar Pelli (CP) and the rest of his team, noting that the last time he was before the BCDC, he saw Cesar presenting the South Station Project. RD: I've been here for some time; I developed the building across the street. I wanted a great architect and found one in Cesar Pelli. RD then gave out the project statistics, and turned the presentation over to CP. CP showed a small board with 28 design schemes arrayed in order to give a sampling of the approaches they tried. CP: The design is simple and elegant...a contemporary building, but in synch with the tradition of buildings along Boylston Street. It grows out of Boston. It has bay windows, but with contemporary detail. It will be finely detailed, with wood storefronts set in stone on the street, and more. Shadows (impacts) very much give form to the building. It is a simple plan, with the core in the center, and primarily retail at the edge. The key entrance to retail is at the corner. The location makes it a well-positioned building...the major facades are usually shaded, since they are on the northeast and northwest sides. But we will get a LEED Silver certificate. We intend at the base glass, and precast to look like the limestone above. It is simple, straightforward, and handsome.

LW: The corner seems a little tight there, with the T and major retail entries. It's an important corner, a critical landmark in the City; how it hits the ground is important. CP: We have a strong corner facing the park, but it is not the main entry of the building. DH: I was hoping we'd have a chance to talk about the design (approach). I have questions about the storefronts: I'm not given to bouts of nostalgia, but we are losing the very rich, detailed storefronts on the site now. When I first saw this Project, I wondered why Arlington was treated so much the same as Boylston. This is not typical, usually it's hierarchical. I am persuaded by the idea of looking at the whole at the corner, but then I think it should be *more* enhanced. CP: Your points are well taken. There are differences, but perhaps they are subtle. Arlington's facade is compressed.

MD: We seem to spend time on this Commission saying, "Simpler." It's odd to find ourselves wanting to see *more*. Especially with this team and developer. AL: I like the choice of materials as a palette. I'm thinking about the proportion of the bays, vs. solid. The corner could perhaps be more expressed. I wonder if the evenness is needed. Perhaps you should study the proportion; the design might benefit from more of a hierarchy. CP: We wondered about exactly the same thing.

KS: We know Ron can do a great corner building: look at Atelier 505. And the LEED is good. I'd like to see it more *in context* in Design Committee, including the church across the street, i.e. The signage, canopies, the finer grain of how it all works at that level. And share some of your comments about the character, rhythm, and nature of Boylston. DS: I share some of that feeling. RD has done great projects. I'd put more emphasis on the corner; the variations on the corners seem out of whack, and the bays may need to evolve as they step up. Also, an articulated base, the treatment of the ground level, with the bays perhaps being resolved above...it feels a bit squashed, not grand enough. It seems like there is opportunity at this site especially...WR: I agree generally. The arc at the corner reads in the plan in a funny way. CP: Like a building facing the park, it is flattened. WR: It feels like the scheme is weighted toward Arlington; I wonder if that shape is contributing. PM: I'm not sure what shadow dictates, but a spire would be okay. DH: On this site, I would appeal for real limestone, not precast; it doesn't take rain well. CP: We will use our own pre-caster. RD: We also intend to lay up the facade.

ET: I was among the tenants at the corner (when at SOM). The sides are different, not alike. Arlington Street is different. So I'm surprised at the design. It never gets much sun on Arlington. And it is an incredibly *orienting* site, because it's where Boylston changes, and the Park begins. The renderings seem cold. I kind of miss the warmth of all the things around it. I'm surprised generally, because there is a certain unanimity in our comments, which is rare. WR: If it's possible to get a larger model, I'd like to understand how it relates to its context, to bays in the area, etc. (Herb Gleason steps up and hands out pictures of the Colton Building, now demolished, which was a block away.) RD: We have thought a lot about many of these things. I appreciate the comments and thank you for your time devoted to these projects. With that, the 350 Boylston Project was duly sent to Design Committee.

F. HISTORIC RESOURCES COMPONENT

It is clear that the Proposed Project is located adjacent to historic properties listed in the National and State Registers of Historic Places. The DPIR shall identify, map, and describe these historic resources and any other historic properties in the vicinity of the Proposed Project's site and shall evaluate the anticipated effects of the Proposed Project on these resources. Particular attention shall be given to the design, scale, height, massing, materials, and other architectural elements of the proposed buildings as these relate to the significant architectural and historic resources in the proposed project's vicinity. The DPIR must also include an assessment of the potential presence of archaeological resources that may be disturbed by the Proposed Project. The Proponents should also respond to the comments of the Boston Environment Department outlined in **Appendix 1**.

H. INFRASTRUCTURE SYSTEMS COMPONENT

The standard scope for infrastructure analysis is given below:

1. Utility Systems and Water Quality

a. Estimated water consumption and sewage generation from the Proposed Project and the basis for each estimate. Include separate calculations for air conditioning system make-up water;

b. Description of the capacity and adequacy of water, storm drain and sewer systems and an evaluation of the impacts of the Proposed Project on those systems;

c. Identification of measures to conserve resources, including any provisions for recycling;

d. Description of the Proposed Project's impacts on the water quality of Boston Harbor or other water bodies that could be affected by the project, if applicable;

e. Description of mitigation measures to reduce or eliminate impacts on water quality;

f. Description of impact of on-site storm drainage on water quality;

g. Detail methods of protection proposed for infrastructure conduits and other artifacts, including BSWC sewer lines and water mains, during construction; and

h. Detail the energy source of the interior space heating; how obtained, and, if applicable, plans for reuse of condensate.

Thorough consultation with the planners and engineers of the utilities will be required, and should be referenced in the Infrastructure Component section.

2. Energy Systems

a. Description of energy requirements of the Proposed Project and evaluation of the Proposed Project's impacts on resources and supply; and

b. Description of measures to conserve energy usage and consideration of the feasibility of including solar energy provisions or other on-site energy provisions.

Additional constraints or information required are described below. Any other system (emergency systems, gas, steam, optic fiber, cable, etc.) impacted by this development should also be described in brief.

- The location of transformer and other vaults required for electrical distribution or ventilation must be chosen to minimize disruption to pedestrian paths and public improvements both when operating normally and when being serviced, and must be described.

- Sewer systems and storm water systems must be separated if possible; utilization of combined systems should be avoided. Thorough analysis and continuing discussions with BWSC are required.

- Water supply systems adjacent to the Proposed Project and servicing the Proposed Project should be looped so as to minimize public hazard or inconvenience in the event of a main break.

In addition, the Proponent should respond to the comments by the Boston Water and Sewer Commission found in **Appendix 1**.

I. PUBLIC NOTICE

The Proponent will be responsible for preparing and publishing in one or more newspapers of general circulation in the city of Boston a Public Notice of the submission of the Draft Project Impact Report (DPIR) to the BRA as required by Section 80A-2. This Notice shall be published within five (5) days after the receipt of the DPIR by the BRA. Therefore, public comments shall be transmitted to the BRA within sixty (60) days of the publication of this Notice.

Sample forms of the Public Notices are attached as **Appendix 4**.

Following publication of the Public Notice, the Proponent shall submit to the BRA a copy of the published Notice together with the date of publication.

APPENDIX 1
COMMENTS FROM CITY PUBLIC AGENCIES

BRA MEMORANDUM

TO: Jay Rourke

FROM: Katie Pedersen

DATE: January 31, 2008

RE: 350 Boylston Street
Boston, Massachusetts
Comments on Project Notification Form

I have reviewed the Project Notification Form (PNF) dated December 18, 2008 and submit the following comments for the Environmental Protection Component. The Druker Company, Ltd. (the Proponent) proposes to construct a nine-story building; a mixed-use development consisting of approximately 221,230 square feet (sf) of gross floor area (the Proposed Project). The Proposed Project will include approximately 15,000 sf of ground floor retail and restaurant space as well as eight floors of office and related support space. In addition, the Proponent proposes the creation of three below-grade levels containing 150 parking spaces and an approximately 6,000 sf fitness center and space to be utilized by the building's office tenants. The Proposed Project will be located on an approximately 27,654 sf parcel of land, located at the intersection of Boylston and Arlington Streets, in the Back Bay neighborhood of Boston.

Wind

As described in the PNF, the Proposed Project height will be approximately 120 feet, and thus has the potential create an adverse impact on pedestrian level winds. The Proponent shall be required to conduct a quantitative analysis of pedestrian level winds. The analysis shall determine potential pedestrian level winds adjacent to and in the vicinity of the Proposed Project and shall identify any areas where wind velocities are expected to exceed acceptable levels, including the BRA's guideline of an effective gust velocity of 31 miles per hour (mph) not to be exceeded more than 1% of the time. The analysis shall further determine the suitability of particular locations for various activities (e.g., walking, sitting, eating) as appropriate. Particular attention shall be given to public and other areas of pedestrian use, including, but not limited to, entrances to the Proposed Project and adjacent buildings, sidewalks adjacent to and in the vicinity of the Proposed Project, parks, plazas, and other open spaces and pedestrian areas near the Proposed Project, including, without limitation, the Boston Public Gardens.

For areas where wind speeds are projected to be dangerous or to exceed acceptable levels, measures to reduce wind speeds and to mitigate potential adverse impacts shall be identified.

Shadow

The Proponent shall be required to conduct a shadow analysis for existing and build conditions for the hours of 9:00 a.m., 12:00 noon, and 3:00 p.m. for the vernal equinox, summer solstice, autumnal equinox and winter solstice and for 6:00 p.m. in the summer and fall.

The shadow impact analysis must include net new shadow as well as existing shadow and must clearly show the incremental impact of the Propose Project. For purposes of clarity, new shadows should be shown in a dark, contrasting tone distinguishable from existing shadow. The shadow impact study area shall include, at a minimum, the entire area to be encompassed by the maximum shadow expected to be produced by the Proposed Project. The build conditions shall include all buildings under construction and any proposed buildings anticipated to be completed prior to completion of the Proposed Project. Shadows from all existing buildings within the shadow impact study area shall be shown. A North arrow shall be provided on all figures. Shadows shall be determined by using the applicable Boston Azimuth and Altitude data.

Particular attention shall be given to the Boston Public Garden and any other proposed or existing public open spaces and pedestrian areas, including, but not limited to, the existing and proposed sidewalks and pedestrians walkways within and adjacent to, and in the vicinity of the Proposed Project.

The Proponent shall demonstrate that if a new shadow is cast upon the Boston Public Garden, it is only during the first hour after sunrise or before seven o'clock in the morning, whichever is later, or the last hour before sunset.

Daylight

The Proponent has stated that the skyplane obstruction created by the Proposed Project is anticipated to be similar to conditions typical of the surrounding area, thus no further investigation is required.

Solar Glare

The Proponent has stated that the Proposed Project does not include the use of reflective glass or other reflective materials on the building façades that would result in adverse impacts from reflected solar glare. Accordingly, no further investigation is required.

Air Quality

The Proponent shall conduct an air quality analysis to determine the impact of carbon monoxide (CO) emissions from combustion and mobile source emissions generated by the Proposed Project.

The Proponent shall submit a future analysis of carbon monoxide levels for any intersection where the level of service (LOS) is expected to deteriorate to D and the proposed project causes a 10 percent increase in traffic or where the level of service is E or F and the proposed project contributes to a reduction in LOS. The methodology and parameters of the air quality analysis shall be approved in advance by the BRA and the Massachusetts Department of Environmental Protection (DEP). Mitigation measures to eliminate or avoid any violation of air quality standards shall be proposed.

The traffic operations analysis shall describe the existing and projected future air quality in the Proposed Project vicinity and evaluate ambient levels to determine conformance with the National Ambient Air Quality Standards (NAAQS) and the U.S. Department of Housing and Urban Development (HUD) requirements for residential and other sensitive receptors. Particular attention shall be given to mitigation measures to ensure compliance with air quality standards.

The Proponent shall provide a description of the Proposed Project's heating and mechanical systems, including the location of buildings intake and exhaust vents and specifications, and an analysis of the impact on pedestrian level air quality and on any sensitive receptors from operation of the heating, mechanical and exhaust systems, including the building's emergency generator as well as the parking garage, shall be required. Measures to avoid any violation of air quality standards shall be described.

Noise

The Proponent shall establish the existing noise levels at the Proposed Project site and vicinity. The Proponent shall also calculate future noise levels after the Proposed Project completion, based on appropriate modeling and demonstrate compliance with the Design Noise Levels established by U.S. Department of Housing and Urban Development for residential and other sensitive receptors and with all applicable Federal, State and City of Boston Noise criteria and regulations.

Geotechnical Impacts

A description and analysis of the existing sub-soil conditions, including the potential for ground movement and settlement during excavation and potential impact on adjacent buildings and utility lines shall be provided. This analysis shall also include a description of the foundation construction methodology, the amount and method of excavation, and the need for any blasting and/or pile driving and the impact on adjacent buildings and infrastructure. A Vibration Monitoring Plan shall be developed prior to the commencement of construction activities so as to ensure that impacts from the project construction on adjacent buildings and infrastructure are avoided. Mitigation measures to minimize and avoid damage to adjacent buildings and infrastructure must be described.

Groundwater

The Proposed Project is located within a Groundwater Conservation Overlay District and thus required to demonstrate compliance with Article 32 of the Boston Zoning Code.

The Proposed Project design proposes the construction of three levels of below-grade parking which will require excavation to approximately 35 to 45 feet below ground surface (approximately El.-25 to -35 BCB). Hence, it is imperative, that the below ground portion of the Proposed Project be constructed, to the greatest extent possible, watertight. The Proponent has committed to both recharge any seepage, into the ground through the gallery under Providence Street as well as remove water from the building's underdrain during below ground construction, groundwater and stormwater that may accumulate during excavation and foundation construction will be collected and recharged back into a recharge gallery constructed by the Proposed Project along the Providence Street side of the site to allow re-injection into the ground. Sedimentation controls to filter the effluent will be conducted prior to discharge to the groundwater recharge gallery. As a result, the below grade construction activities will not adversely affect (lower) current groundwater levels. The watertight excavation support walls will serve as the building's below foundation walls, thus preventing any significant withdrawal of groundwater from beyond the below grade limits of the Proposed Project. In addition, any groundwater seepage and stormwater runoff generated at the Proposed Project site will also be pumped into the same recharge gallery constructed beneath Providence Street.

The Proponent has committed to incorporate provisions into the design and construction procedures as a means to limit potential adverse impacts to the groundwater levels. The Proposed Project shall include the installation of groundwater observation wells, to be monitored regularly for the duration of the below-grade construction period. The Proponent is encouraged to consult with the Boston Groundwater Trust (the Trust) as to the identification of existing wells and location of proposed wells. Upon construction completion, monitoring data shall be provided to the Trust.

Stormwater Management

The Proponent has provided a description of the Proposed Project's existing and future stormwater drainage and stormwater management practices. However, Proponent shall be required to illustrate the existing and future drainage patterns from the Proposed Project site and describe and quantify existing and future stormwater runoff from the Proposed Project site and the Proposed Project's impacts on site drainage. The Proponent shall also provide a description of the Proposed Project's stormwater management system, including best management practices to be implemented. The Proponent shall also demonstrate compliance with the Commonwealth's Stormwater Management Policies. Finally, the Proponent shall describe the Proposed Project's area's stormwater drainage system to which the Proposed Project will connect, including the location of stormwater drainage facilities and ultimate points of discharge.

Solid and Hazardous Wastes/Materials

The Proponent shall provide a list of any known or potential contaminants on site together with a description of remediation measures to ensure their safe removal and disposal, pursuant to the M.G.L., Chapter 21E and the Massachusetts Contingency Plan.

Any potential hazardous wastes to be generated by the Proposed Project must be identified. In addition, potential waste generation must be estimated and plans for disposal indicated and measures to promote reduction of waste generation and to promote recycling in compliance with the City's recycling program must be described.

Historic Landmarks

The Proponent has identified, mapped and described the numerous historic resources and other historic properties in the vicinity of the Proposed Project's site and evaluated the anticipated effects of the Proposed Project on these resources.

The Proposed Project is located within the boundaries of the Back Bay Historic District, which is listed on the National Register of Historic Places. The Proponent has stated that the National Register nomination for the Back Bay Historic District specifically mentions the Berkeley Building (a Boston Landmark) at 416-426 Boylston Street, Boylston Chambers at 739 Boylston Street, 885-889 Boylston Street, 651-655 Boylston Street, and 400-402 Boylston Street as architecturally prominent buildings within this section of the historic district.

The Proponent has stated that the Proposed Project has been presented to the Boston Landmarks Commission. The Proponent must demonstrate compliance with Article 85 of the Boston Zoning Code as well as demonstrate that Proposed Project will not create an adverse impact to any of the historic structures in the surrounding area.

Sustainable Design/Green Buildings

The purpose of Article 37 of the Boston Zoning Code is to ensure that major buildings projects are planned, designed, constructed and managed to minimize adverse environmental impacts; to conserve natural resources; to promote sustainable development; and to enhance the quality of life in Boston. Any proposed project subject to the provisions of Article 37 shall be LEED Certifiable (U.S. Green Buildings Council) under the most appropriate LEED rating system. Proponents are encouraged to integrate sustainable building practices at the inception of the design process.

The Proponent has provided a completed LEED-CS checklist for which the Proposed Project purports to achieve 29 points. The Proponent shall provide an explanatory narrative establishing compliance with specific points. The Proponent shall also demonstrate that the Proposed Project will meet the requirements of the article with appropriate supporting documentation and by certification from a LEED Accredited Professional and/or other expert recognized by the BRA.

February 12, 2008

John Palmieri, Director
Boston Redevelopment Authority
Boston City Hall, Room 925
Boston, MA 02201
Attention: Jay Rourke, Project Manager

Re: 350 Boylston Street - Project Notification Form

Dear Director Palmieri:

The City of Boston Environment Department has reviewed the Project Notification Form (PNF) and offers the following comments.

The Druker Company, Ltd. proposes to demolish four buildings - 324-334, 336-342, 344-350 and 352-360 Boylston Street – and construct:

- three levels below grade for 150 parking spaces, a fitness center and spa
- nine above-grade stories for ground-floor retail and restaurant with offices and related support space on the upper eight floors.

The proposed zoning height is 121' 6".

The site is bounded by Boylston Street, Arlington Street, Providence Street and a building at 364 Boylston Street.

The proponent plans to construct to the specification of the LEED for Core & Shell Green Building Rating System (LEED-CS).

The United States Green Building Council (USGBC) Web site indicates that, "LEED for Core & Shell is designed to be complementary to the LEED for Commercial Interiors rating system, as both rating systems establish green building criteria for developers, owners and tenants." We look forward to the proponent's plan for work with tenants.

Shadow studies should be provided in the Draft Project Impact Report. Diagrams should include:

- a north arrow;
- street names;
- the identification of doorways, bus stops, open space and areas where pedestrians are likely to congregate (in front of historic resources or other tourist destinations, for example);
- clear delineation of shadow on both rooftops and facades; and
- clear distinctions between existing shadow and new shadow.

They should oriented consistent with that used for diagrams depicting wind monitoring locations, no build and build. A 6:00 p.m. analysis should be conducted for the Summer Solstice and Autumnal Equinox.

A height of 150 feet is not an established minimum trigger for a wind study. The corner location, heavy pedestrian use in the area and proximity of the Public Garden make a wind study necessary.

The staff of the Boston Landmarks Commission (BL) has reviewed the PNF and notes that the four buildings slated for demolition, constructed between 1897 and 1906m are listed in the State and National Registers of Historic Places as part of the Back Bay Historic District. BLC staff strongly encourages a thorough study of alternatives that would rehabilitate or incorporate historic buildings into proposed development plans, rather than demolish them. Demolition would constitute not only a loss of historic fabric, but a loss of the building's embodied energy, fuel expenditure and air pollution during the demolition and removal of the building, as well as a large deposit of material to landfills. Preservation and rehabilitation of historic buildings is recognized as a sustainable building practice by LEED and the City of Boston.

The proposed demolition of these four buildings requires Article 85 Demolition Delay review by the Boston Landmarks Commission. The Article 85 Demolition Delay application can be found online at www.cityofboston.gov/environment.downloads.asp. Contact Gary Russell at 617-635-3850 if you have questions about the application.

In addition to establishing a program to protect nearby structures from construction-related vibration, a plan must be devised to protect the statue of Ellery Channing which stands in the Public Garden at the corner of Arlington and Boylston Streets.

In absence of preservation or rehabilitation of the existing historic buildings, BLC staff offers the following comments on the proposed new construction. BLC staff finds the overall massing and layout of the proposed new construction to be appropriate to the scale of the neighborhood, but does have some concern about the architectural expression and detailing. The expression of the building as it turns the corner of Boylston and Arlington does not distinguish itself as a strong presence at such an important site. The architectural expression and detailing of the entire building, this corner in particular, is important for its visual impact on nearby historic resources such as the Arlington Street Church and the Public Garden. The base of the building does not clearly articulate in a hierarchical manner the main entry to the office building versus the expression of the retail spaces. A more finely detailed expression at the street level would more successfully relate to the character of the surrounding historic context. The way in which the building steps back at the top should be carefully considered in how the main body of the building is terminated and how the set back portions may take on a distinct character. In general, BLC staff finds the proposed new construction to be acceptable in it's massing, but the ultimate success of the design will rely heavily upon the finer points of materials and detailing.

BLC staff agrees with BRA Urban Design staff that projects in the City should be constructed with traditional building materials and techniques rather than synthetic composite materials. Simulated materials such as exterior insulated finish systems (EIFS), and glass fiber reinforced concrete (GFRC) are inconsistent with Boston architecture and are unlikely to withstand decades of the City's freeze-and-thaw climate.

The BLC requests that dated cornerstones be incorporated into all new construction. This element will allow those who are attentive to and value the architecture of the City to appreciate the historical context in which structures were conceived.

According to the Massachusetts Department of Environmental Protection (DEP), about 33 percent of mobile source particulate matter (PM) and ten percent of all nitrogen oxide (NO_x) pollution in the northeast is caused by construction vehicles. More than 90 percent of diesel engine particulate emissions are highly respirable and carry toxins deep into the lung, exacerbating human respiratory ailments. The U. S. Environmental Protection Agency (EPA) has proposed classification of diesel exhaust as "highly likely to be carcinogenic in humans." It estimates that diesel engines currently on the road can run for 1,000,000 miles and remain in operation for as long as 20 to 30 years. This amounts to 160 to 240 tons of pollution over the life of each engine.

The DEP's Clean Air Construction Initiative is designed to reduce air quality degradation caused by emissions of carbon monoxide (CO), volatile organic compounds (VOC), NO_x and air toxins from heavy- duty, diesel-powered construction equipment. Oxidation catalysts and catalyzed particulate filters reduce toxic emissions of formaldehyde, benzene, acrolein and 1-3 butadiene by as much as 70 percent. The program offers contractors a cost-effective way to decrease localized adverse impacts and reduce dust and odor complaints from project abutters and regulatory agencies. Experience with a pilot project that retrofitted 83 pieces of equipment working on the Central Artery/Tunnel (CA/T) project showed that:

- Vehicles did not experience significant power loss.
- There are no additional operation and maintenance (O & M) or fuel costs.
- Engine manufacturers continue to honor vehicle warranties.

More information on the program can be obtained from Christine Kirby of DEP at 617-292-5500.

The City of Boston's is seeking to minimize the number of motor vehicles that enter Boston each day, currently 600,000, and to protect parking for city residents. As part of this effort, we request that a comprehensive

Transportation Demand Management (TDM) plan be established for all construction workers. Such a plan should include:

- Providing secure, on-site storage so that workers do not have to transport tools and equipment each day.
- Offering pre-tax payroll deduction for Massachusetts Bay Transportation Authority (MBTA) transit pass purchase.
- Providing a ride-matching service.
- Posting transit schedules in a prominent area.

Construction-period noise is subject to regulation by the Boston Air Pollution Control Commission (APCC), part of this department. The proponent must ensure compliance with the construction-related limits as outlined in the Regulations for the Control of Noise in the City of Boston.

This department receives frequent complaints about noise generated at construction sites before 7:00 a.m. Complaints show that contractors often allow workers on site before that time. Noise is often related to the run-up of diesel equipment and the preparation and movement of tools and materials. No sound-generating activity is allowed to occur at the site prior to 7:00 a.m.

Regular vacuum cleaning of streets and sidewalks in the project area should be employed to ensure that they remain free streets of dust and debris. The use of a vacuum cleaner is an important measure for preventing construction-related dust and debris from clogging storm drains.

We strongly encourage the proponent to require that tenants join the A Better City Transportation Management Association (ABCTMA) and to implement a variety of options for their employees. We also suggest devoting one or two parking spaces to a car-sharing service such as Zipcar. Zipcar offers a Z2B program for businesses which can be used for trips during the day, minimizing the need for employees to drive to work.

We commend the proponent for planning to provide secure bicycle storage and showers for employees who bike to work. We suggest that public racks be provided in the parking garage for visitors and messengers. Signage should be posted outside the garage indicating the availability of the racks. In addition, we encourage the proponent to participate in the City's Bike Friendly Business Program. Please contact Nicole Freedman, Director of Bicycle Program, at Nicole.Freedman.bra@cityofboston.gov, (617) 429-8440 for information on this initiative.

Thank you for the opportunity to offer comment. We look forward to the DPIR.

Sincerely,

Bryan Glascock
Director

350 Boylston.doc.DBG:MTZ.mtz

BOSTON
TRANSPORTATION
DEPARTMENT

ONE CITY HALL PLAZA/ROOM 721
BOSTON, MASSACHUSETTS 02201
(617) 635-4680/FAX (617) 635-4295

February13, 2007

Jay Rourke
Senior Project Manager
Boston Redevelopment Authority
9th Floor
City Hall
Boston, MA 02201

Re: 350 Boylston Redevelopment Project

Dear Mr. Rourke:

Thank you for the opportunity to review the Project Notification Form (PNF) for the 350 Boylston Street Redevelopment Project. The proposed development includes the redevelopment of four buildings into one larger building with a total of 221,230 square feet of space. Most of the new development will be office space, but there will be ground floor retail space, a fitness center and spa, and underground parking. The project is located at the corner of Arlington and Boylston Streets in Boston's Back Bay neighborhood.

The Boston Transportation Department (BTD) has reviewed the PNF and attached a detailed scope of work to this letter. The scope outlines specific information and analysis that BTD requires in order to determine the transportation impacts of the project. The results of the Scope should be submitted as part of the Draft Project Impact Report (DPIR). Upon review and approval of the transportation impacts, the next step will be for the proponent and BTD to agree on a Transportation Access Plan Agreement (TAPA) codifying the mitigation for the project's transportation impacts. The proponent is responsible for all costs associated with transportation mitigation in the TAPA.

The 350 Boylston project is located where the Boylston Street shopping area meets the Public Garden. It is important that the redevelopment serves as a welcoming transition from city park land to shopping district. The site is also located above Arlington Station on the MBTA's Green Line. It is important that the development is transit, bicycle, and pedestrian friendly given its central location in downtown Boston. BTD has several areas of concern which should be addressed in conjunction with the scope attached to this letter. Following is a description of BTD's concerns:

Transit Connections

The project site directly abuts the Arlington Station on the MBTA's Green Line. While this is advantageous for site access, the green line has experienced overcrowding during peak periods. The proponent's further analysis should show the number of transit trips that will be added to the system as a result of the new development. The proponent should also address whether the Green Line will be able to handle the additional passengers added as a result of the project.

Transportation Analysis

Because the project site is located in downtown Boston, access is very good by car, by bicycle and on foot. However, during peak commuting periods the immediate area does suffer from traffic congestion. The PNF provides a basic trip generation analysis based on ITE data. However, for the DPIR, the proponent should perform a more detailed transportation analysis based on the attached scope of work. The proponent should also make sure to carry out the following:

- An analysis of vehicular trip generation and network assignment.
- A detailed motor vehicle traffic analysis involving real traffic counts at a minimum of the intersections named in the scope. The list of intersections is subject to change based on the results of the analysis of vehicular trip generation and network assignment.
- A detailed pedestrian traffic analysis involving real counts at the intersections and locations named in the scope.
- A detailed bicycle traffic analysis involving real counts at the intersections and locations named in the scope. This analysis should be stand alone and separate from the pedestrian analysis.
- The analyses should be carried out for both No-build and Build scenarios

Loading and Service

According to the PNF, loading and service will take place at three internal loading docks on Providence Street. For the DPIR, the proponent should provide a proposed loading schedule that details the number of service trips expected for the loading docks. The schedule should also describe the size of the trucks that will be expected to service the building. Drawings should show the turning radii for the loading dock access points and show what size trucks will be able to make the proposed turns.

The proponent should also detail the how the loading docks will be managed. The proponent should consider closing the loading docks during peak periods to minimize commercial vehicle conflicts with peak period traffic. As the loading and garage entrance are proposed to be in close proximity, the proponent should describe how traffic will be managed to minimize conflicts.

Parking

The proponent should provide, as part of the DPIR, detailed drawings of the parking operations. The garage should have enough queuing space so that entering vehicles are not disrupting street traffic.

The proponent should provide BTD with further details on any proposed changes to curbside metered parking. Detailed drawings should accompany any request for the removal of parking. The drawings should show why the proponent is requesting the removal of parking.

Site Access
The PNF stated a desire to provide a pick/up and drop/off zone on Boylston Street to provide better site access. The proponent should show specifically where this proposed zone would be. Additionally, the proponent should detail the current usage and explain what the effects of the change would be. Please note that BTD does not generally allow for pick/up and drop/off space on major arterials such as Boylston and Arlington Streets.

Mitigation of Transportation Impacts
Based on further transportation analysis performed for the DPIR, BTD will discuss possible mitigation measures with the proponent. Mitigation may include signal upgrades, lane restriping, new signage, pedestrian improvements, and bicycle improvements. The proponent should focus on the area immediately surrounding the site as well as the intersections named in the scope of work for possible mitigation.

The issues discussed above and the tasks in the attached scope of work should be addressed as part of the DPIR for the 350 Boylston Street redevelopment project. BTD looks forward to working with the BRA and the proponent throughout the review process to address transportation issues and concerns. Please feel free to contact me with any questions at 617-635-3082.

Sincerely,

Paul Christner

Paul Christner
Transportation Planner

cc: Vineet Gupta, Director of Policy and Planning
John DeBenedictis, Director of Engineering

BOSTON TRANSPORTATION DEPARTMENT

TRANSPORTATION ACCESS PLAN GUIDELINES

And

SCOPE OF WORK

For

350 Boylston Street

Boston is a dense city, with high levels of vehicular congestion, pedestrian traffic, and parking demand. New development of all types increases travel demand, and will have transportation impacts that require analysis, review, and mitigation. Through the City of Boston's Article 80 development review process, the Boston Transportation Department (BTD) works with development team (the "project proponent") to ensure that they thoroughly evaluate the transportation impacts associated with the proposed project, propose and analyze ways to mitigate these transportation impacts, and implement appropriate mitigation measures.

The project proponent is responsible for assessing and mitigating the short-term and long-term impacts of the proposed project. submitting the following documentation to BTD:

1. Transportation Access Plan. The Transportation Access Plan shall fully describe all transportation-related issues surrounding the proposed project. It should include the following principal components:
   - Description of Existing Transportation Conditions. A summary of existing traffic, public transit, pedestrian, bicycle, and parking conditions in the study area.
   - Evaluation of the Proposed Project's Long-Term Transportation Impacts. A detailed description of the proposed project and a detailed analysis of the project's long-term impacts on traffic, public transit, pedestrian, bicycle, and parking conditions.
   - Mitigation of the Project's Long-Term Transportation Impacts. Identification of appropriate measures to mitigate project impacts, including physical and operational improvements, travel demand management (TDM), and long-term project impact monitoring.
   - Description of the Project's Short-Term Construction Impacts and Proposed Mitigation. General overview of the project's construction impacts, construction schedule and phasing, and measures to mitigate the short-term impacts. This is a summary of the more detailed Construction Management Plan (CMP) to be submitted to BTD under separate cover.

   The Access Plan typically comprises the transportation component(s) of the proposed project's various environment filings, such as the Draft Project Impact Report (DPIR) or the Final Project Impact Report (FPIR); in special cases, the Access Plan may be a separate document. In any case, the Access Plan should adhere to the guidelines and scope of work set forth below. The analysis and reporting guidelines below are designed to be general enough that they will apply to most or all major development projects; they are also designed to be specific enough to ensure adequate information and equitable review of all development projects. These guidelines shall be followed as closely as possible. If the project proponent believes that certain provisions are not applicable to the development in question, the proponent shall obtain BTD's explicit approval to forego those provisions.

2. Construction Management Plan. The Construction Management Plan (CMP) shall include a detailed proposal for the proposed project's construction: schedule, phasing, occupancy of the public right-of-way, access and delivery requirements, transportation impacts, and mitigation. The proponent shall submit the CMP to BTD, under separate cover from the Access Plan. The project's general contractor typically prepares the CMP. Guidelines for preparation of the CMP are available from BTD. The CMP shall be completed prior to the issuance of a Building Permit from the City of Boston's Inspectional Services Department (ISD).

3. Transportation Access Plan Agreement. The Transportation Access Plan Agreement (TAPA) is a formal legal agreement between the project developer and BTD. The TAPA formalizes the findings of the Access Plan, the mitigation commitments, elements of access and physical design, and any other responsibilities of the developer and BTD. Since the TAPA must incorporate the results of the technical analysis, physical design, and assessment of mitigation requirements, it must be executed after these processes have been completed. However, the TAPA must be executed prior to approval of the project's design through the City of Boston's Public Improvements Commissioner (PIC). An electronic copy of the basic TAPA form is available from BTD. It is the proponent's responsibility to complete the TAPA so that it reflects the specific findings and commitments for the project, and to get BTD review and approval of the document.

STUDY AREA

The Access Plan shall consist of a thorough analysis of the proposed project's transportation impacts throughout the relevant study area. The study area shall comprise the public right-of-way and important transportation elements of the area described by the following list of intersections:

a. Boylston Street/Arlington Street
b. Boylston Street/Berkeley Street
c. Boylston Street/Clarendon Street
d. Clarendon Street/St. James Avenue
e. St. James Avenue/Berkeley Street
f. St. James Avenue/Arlington Street
g. Providence Street/Berkeley Street
h. Providence Street/Arlington Street
i. Berkeley Street/Beacon Street
j. Arlington Street/Beacon Street
k. Boylston Street/Charles Street
l. Arlington Street/Stuart Street/Columbus Avenue
m. Stuart Street/Berkeley Street
n. Cortes Street On ramp to the Massachussetts Turnpike
o. Storrow Drive ramps at Arlington And Berkeley Streets

The proponent shall review all relevant project proposals and planning studies that would affect the study area, and incorporate these into the transportation analysis, as appropriate.

DEFINITION OF TASKS

Task 1. Description of Existing Transportation Conditions

The Existing Conditions component shall summarize the current status of the transportation system within the study area. It shall focus on the issues listed below, and shall identify any existing problems or deficiencies in the transportation system. The Existing Conditions analysis will form the basis for projecting future conditions, and enable comprehensive assessment of the proposed project's transportation impacts.

1.1 Project Site Conditions. Describe general conditions in the vicinity of the project site, including:

- Existing land use, including existing site square footage, building square footage, number of employees or residents, zoning provisions, and other applicable information
- Physical condition of the site, existing access and egress
- Major streets and intersections in the vicinity of the site
- On-street regulations

Include a survey of existing conditions.

1.2 Traffic. The Access Plan shall include traffic volume counts at the study area intersections for weekday morning and evening peak periods under existing conditions.

These shall be classification counts in areas with high volumes of heavy vehicles. The morning and evening peak volumes represent a minimum for traffic impact analysis. Depending upon the nature of the proposed project or local conditions, BTD may require traffic analysis for additional conditions, such as the Saturday afternoon peak.

Existing capacity analyses shall be performed to determine level of service at all study area intersections. Analyses shall reflect realistic peak period characteristics, including pedestrian volumes, requirements for pedestrian phases, curb operations (bus stops, pick-up / drop-off), usable lanes, grade, and percentage of heavy vehicles. Appropriate traffic models will be discussed below.

1.3 Parking. The Access Plan shall summarize the parking supply within ¼ mile of the project site. The parking inventory shall focus on publicly-available spaces, but shall also include private resident or employee spaces as well, if the information is available. The parking inventory shall include:

a. Location (block face for on-street spaces, facility for off-street spaces). Include a graphic representation of the parking supply locations with respect to the project.
b. Type of Space
    - On-street (metered, resident parking, unregulated, etc.)
    - Off-street (surface lot or garage, user type: resident, employee, commercially-available, customer, etc.)
c. Parking Fees, by Type of Space
d. Percentage Utilization During Parking Peak (assume 12 noon)

This inventory can be supplemented with data from published sources such as the BTD's 1987 Downtown Parking Inventory Study, updated as necessary with survey data.

If there is currently parking associated with the project site, the Access Plan shall summarize the parking use and management. The description of existing on-site parking use shall include: number of spaces; occupation of spaces by user type, hour of peak occupancy, turnover rate, parking fees, and any high-occupancy vehicle spaces.

1.4 Transit. The Access Plan shall describe the study area's mass transit system:

a. Transit Supply
    - Massachusetts Bay Transportation Authority (MBTA) services, proximity to site
        - Service (mode of transit, line, closest station stop)
        - Service characteristics (frequency during peak periods, geographic connections)
        - Physical characteristics (station conditions, rolling stock)
    - Private transit services (summarize characteristics above)
    - Other transit and high-occupancy vehicle (HOV) services

b. System Utilization
    - Capacity by line during peak periods
    - Current ridership and percentage capacity utilization by line during peak periods

1.5 Pedestrians. The Access Plan shall include a description of pedestrian conditions on sidewalks and intersections adjacent to the site, including major pedestrian routes and desire lines in and around the site, volumes of pedestrians on these routes, and the conditions of these corridors, including any deficiencies or barriers.

Pedestrian volumes shall be counted and pedestrian level of service shall be calculated at the following intersection crossings and sidewalk locations:

a. Boylston Street/Arlington Street
b. Boylston Street/Berkeley Street
c. Boylston Street/Clarendon Street
d. Clarendon Street/St. James Avenue
e. St. James Avenue/Berkeley Street
f. St. James Avenue/Arlington Street
g. Providence Street/Berkeley Street
h. Providence Street/Arlington Street
i. Berkeley Street/Beacon Street
j. Arlington Street/Beacon Street
k. Boylston Street/Charles Street
l. Arlington Street/Stuart Street/Columbus Avenue
m. Stuart Street/Berkeley Street

Describe pedestrian accommodation at signalized intersections in the study area (i.e. exclusive vs. concurrent, crossing time provided).

1.6 Bicycles. The Access Plan shall describe existing bicycle usage, primary bicycle routes, accommodation of bicycles in the public right-of-way, and the current supply and location of any existing bicycle racks on or adjacent to the project site. On a day with good weather (record date and weather conditions), survey bicycle rack utilization by location. Document storage of bicycles in locations without bicycle racks. Include bicycle volume counts at the following intersections and bike routes:

a. Boylston Street/Arlington Street
b. Boylston Street/Berkeley Street
c. Boylston Street/Clarendon Street
d. Clarendon Street/St. James Avenue
e. St. James Avenue/Berkeley Street
f. St. James Avenue/Arlington Street
g. Providence Street/Berkeley Street
h. Providence Street/Arlington Street
i. Berkeley Street/Beacon Street
j. Arlington Street/Beacon Street
k. Boylston Street/Charles Street
l. Arlington Street/Stuart Street/Columbus Avenue
m. Stuart Street/Berkeley Street

1.7 Loading and Service. The Access Plan shall describe any existing loading and service uses on the site, as well as any special conditions relative to loading and service in the surrounding area.

Task 2. Evaluation of Proposed Project's Long-Term Transportation Impacts

The central component of the Access Plan is the evaluation of the proposed project's long-term transportation impacts. The Access Plan must evaluate these impacts in detail, for all the transportation modes and aspects that will be affected, including traffic, parking, public transit, pedestrians, bicycles, and service and loading. These impacts must be compared to the appropriate baseline condition, the Future No-Build Condition. The following are the principal issues, modes, and conditions that must be analyzed.

2.1 Project Description. The Access Plan shall include a summary of the key project characteristics that are relevant to the project's transportation impacts. These include:

- Project name and street address
- Study area, including critical intersections
- Anticipated construction start and completion dates
- Relevant zoning regulations with respect to use, parking and other characteristics
- Required permits, variances, and licenses
- Site area
- Project's gross square footage and floor-area ratio (FAR)
- Gross square footage by use
- Other relevant variables (e.g. number of dwelling units, number of hotel rooms, number of employees)
- Number of parking spaces, specified by use type
- Number of loading bays, dimensions of bays, design loading vehicle

2.2 Trip Generation Analysis. The Access Plan shall include a clear and detailed trip generation analysis for the proposed uses of the site. This analysis shall include:

a. Person-Trip Generation. The Access Plan shall summarize the proposed project's person-trip generation, for daily, AM peak, and PM peak trips. For certain uses, person-trips shall also be calculated for other time periods, such as Saturday afternoon peak hour (e.g. cultural or entertainment use in an area with significant weekend congestion).

The person-trip calculations shall be based on appropriate trip generation rates, typically the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 6th Edition*. The ITE manual includes comprehensive vehicle-trip generation rates based on surveys in suburban locations throughout the United States. Because Boston benefits from an excellent public transit system and pedestrian access, ITE vehicle-trip generation rates are not directly applicable to resulting vehicle trips. ITE rates shall be used to generate total person-trips by correcting for vehicle occupancy rate (VOR). Appendix xx includes a compilation of the most common ITE trip generation rates and corresponding VOR. The proponent shall use these trip generation rates whenever possible. Where necessary, these trip generation rates may be supplemented by survey data or information from other sources (subject to BTD requirement and/or approval). The person-trip generation analysis shall be summarized in a clear table, in the body of the Access Plan, including all of the following information:

- Land use type
- Square footage, by land use type

- Vehicle-occupancy rate (VOR) assumption, by land use type (for translation of vehicle-trip rates to person-trip rates)
- Daily person-trip generation (by land use and overall)
  - Daily person-trip generation rate (per 1,000 square feet, or per unit)
  - Resulting daily person-trip ends
- AM peak hour person-trip generation (by land use and overall)
  - AM peak hour person-trip generation rate
  - AM peak hour person-trips, entering
  - AM peak hour person-trips, exiting
- PM Peak Hour person-trip generation (by land use and overall)
  - PM peak hour person-trip generation rate
  - PM peak hour person-trips, entering
  - PM peak hour person-trips, exiting
- Source for trip generation rates

b. Mode Split and Vehicle Occupancy Rate. Person-trips shall be apportioned among the various principal modes (automobile, public transit, walking, bicycling) using an appropriate mode split. The mode split shall be presented as percentages of automobile, public transit, and walk / bicycle travel. Working with BTD, the Central Transportation Planning Staff (CTPS) has compiled appropriate mode split assumptions for various sections of Boston, according to trip type. These mode splits, along with VOR for automobile trips, are included in Appendix xx. The mode split calculation shall be based upon these assumptions. If the proponent wishes to adjust these mode splits based upon specific project characteristics, the adjustment must be supported by accepted evidence and by appropriate mitigation commitments (e.g. enhanced travel demand management to justify a higher public transit mode share). BTD must approve any adjustments to the mode split and VOR assumptions in Appendix xx. The Access Plan shall include a clear, easily understood table that summarizes the assumptions and the resulting trips by land use type, by trip purpose, and by mode.

c. Trip Distribution. The trip distribution shall identify the directional split (i.e. north, south, west) of person-trips and vehicle-trips for the specific location and trip types of the proposed project. Detailed trip distribution information for trips to and from all areas of Boston is included in Appendix xx. The trip distribution is allocated by individual mode, and should be applied to the resulting trip totals by mode. The Access Plan shall use this information for trip distribution assumptions, unless BTD recommends or approves other trip distribution assumptions.

d. Trip Assignment. The distributed trips shall be assigned to the appropriate means of accessing the project: highway routes, surface streets, surface intersections, sidewalks, crosswalks, site access / egress points, and public transit lines. If the project expects to rely upon an off-site parking supply, trips shall be assigned appropriately to these locations. Drop-off, pick-up, and valet trips shall also be assigned appropriately, i.e. both entering and exiting the site access, and entering or exiting an off-site parking area.

Attached appendices include the base assumptions that the project proponent shall use for trip generation rates, mode splits, trip distribution, and vehicle occupancy rate for specified areas of Boston. The proponent may believe that other assumptions should be used due to specific circumstances, such as proximity to public transit (not relevant for downtown zones) or exceptional travel demand management commitments. Where such special circumstances warrant, the proponent may propose alternative assumptions, which are subject to explicit BTD approval.

2.3 Future No-Build Condition. The analysis of the proposed project's transportation impacts must be based on a comparison with an appropriate baseline condition. The proposed project's impacts would be felt fully during some future "horizon year" when the project is expected to be complete, occupied, and operating. The effects of the proposed project (under the "Future Build Condition") are most appropriately demonstrated in comparison to projected transportation conditions during the horizon year without the effects of the proposed project.

- The horizon year shall be five years in the future, unless specific circumstances require that a different time frame be used.
- The Future No-Build Condition shall be based on the Existing Conditions assessment, with the addition of development and infrastructure projects that have been proposed and are expected to be complete and operational by the horizon year (per BTD and BRA instructions).
- The Future No-Build Condition traffic, transit, and pedestrian volumes shall also include a background growth rate of 1 – 1 ½ % per year (depending upon local conditions) added to existing traffic volume counts, transit ridership, and pedestrian counts, unless otherwise specified by BTD.

2.4 Future Build Condition. The central component of the Access Plan is the assessment of the proposed project's long-term impacts. This shall include evaluations of the project's effects on all transportation modes and aspects, throughout the study area.

a. Traffic Impacts.

i) Traffic Volumes. The traffic analysis shall include diagrams of turning movement volumes generated by the proposed project at all study area intersections, and total turning movement volumes for the Future Build Condition. Therefore, the Access Plan shall include turning movement volume diagrams for AM peak volumes, PM peak volumes, and any other required period, of each of the following:

a) Existing Conditions (based on current traffic counts)
b) Future No-Build Conditions (Existing Conditions, plus appropriate future changes and growth factor)
c) Project-Generated Traffic Volumes (based on trip generation)
d) Future Build Conditions (Future No-Build Conditions, plus Project-Generated Traffic Volumes)
e) Future Build Conditions with Mitigation (if the proponent plans to undertake any roadway or signalization changes in order to mitigate traffic impacts of the proposed project)

ii) Traffic Capacity Analysis Software. The Access Plan shall include traffic capacity analyses for Existing Conditions, Future No-Build Conditions, and Future Build Conditions. The capacity analysis shall be performed using an approved and appropriate capacity analysis software program.

- For intersections that are widely spaced and will operate in isolation, the proponent shall use software based upon the *Highway Capacity Manual* (HCS), 1997 edition.
- For closely-spaced intersections with long queues that create interaction between intersections, the proponent shall use a computer model, such as Transyt-7F (version 8) or Synchro, that can accurately model these effects. In such cases, the proponent shall model all of the intersections that would interact.

The computer model output shall be attached to the Access Plan as an appendix.

iii) Traffic Capacity Analysis Results Summary. The Access Plan shall include a tabular summary of the traffic capacity analysis, for all conditions (Existing, No-Build, Build) for each intersection as a whole and for each approach of every intersection. The summary shall include the volume-to-capacity ratio (v/c), level of service (LOS), delay, and estimated queue lengths for each study intersection, and for each approach of every intersection. The summary table shall also highlight changes to intersection and individual approach LOS that result from site-generated traffic.

iv) Traffic Counts. The proponent shall submit, under separate cover, turning movement count summary sheets for each intersection in the study area.

b. Parking Impacts. The Access Plan shall include an analysis of projected parking demand and proposed parking supply.

i) Parking Demand Analysis. The Access Plan shall include an analysis of total parking demand in the horizon year, broken down by land use and user type (e.g. office employee vs. visitor, hotel employee vs. guest, retail employee vs. patron). The parking demand analysis shall include

- Daily vehicle-trip generation by land use and user type (consistent with mode split and VOR)
- Parking turnover by land use and user type (cite source)
- Parking demand peaks by land use and user type
- Overall parking demand and peak parking demand, based on shared parking among all land uses and user types included in the proposed projectd

ii) Proposed Parking Supply. The Access Plan shall include a summary of the project's proposed off-street parking supply. Parking supply, and parking costs, play a central role in determining mode split and vehicular traffic impact. In general, parking shall be limited to minimum supply that is appropriate to the neighborhood, the project's transit access, and the project's mode split. Appendix xx includes a map of parking ratio guidelines by land use and area of the city. The project's parking ratio shall remain within these guidelines. If the parking supply exceeds these guidelines, the proponent must justify the excess parking based on circumstances specific to the project. Higher parking ratios may increase transportation impacts, and necessitate enhanced mitigation measures. The information below shall be summarized in a clear table.

- Total Spaces
    - Existing

- Future No-Build (if applicable)
- Future Build Parking Conditions

- Parking Allocation
  - Space allocation among various land uses
  - Parking ratios: spaces per thousand square feet or per unit, by land use
  - Specially-designated parking spaces, e.g. vanpools, livery vehicles, rental cars, car-sharing
  - Treatment of existing parking spaces, including displacement of existing parking spaces and how the parking demand for these spaces would be met in the Future Build Condition
- Comparison of Parking Supply and Demand
  - Projected shortfall or surplus of parking spaces, by land use
  - Proposed management of shortfall or surplus
- Provide a plan of all parking facilities, including layout, access, and size of spaces.

iii) Off-Site Parking Supply. Describe any anticipated utilization of off-site parking supply (as described in the Existing Conditions section, amended to reflect Future No-Build Conditions) required to satisfy project-generated parking demand.

- On-Street Parking Supply
- Off-Street Parking Supply
  - Number and type of spaces required (i.e. publicly-available, employee, residential)
  - Resulting parking utilization at 12 noon on a weekday (additional parking survey times may be required, depending upon the nature of the project)

iv) Proposed Parking Management Plan

- Description of Proposed Parking Operations
  - Access control
  - Valet operations
  - Pass or payment medium
  - Management of operations to prevent illegal parking, violation of 5-minute idling law
- Parking Fees
- Management of Specially-Designated Parking Spaces (e.g. vanpool, carpools, rental cars, car-sharing)
  - Location
  - Parking fees
  - Accommodation of increased supply if demand warrants

c. Transit Impacts. Describe the anticipated impacts of the project on the mass transit system, based on the information about Existing Conditions and the projected transit person-trips (based on trip generation – trip distribution – mode split calculations). Future transit conditions shall be based on transit supply and capacity that is expected to be available in the horizon year; if there is some doubt, the proponent shall consult with BTD and/or the MBTA. The proponent may use generally available MBTA ridership data as a basis for this analysis. The Access Plan shall include the following information:

i) Transit Trip Distribution
- Distribution of project-generated transit trips by zone
- Distribution of project-generated transit trips by transit line / route

ii) System Utilization
- Existing Conditions: Capacity and utilization by line
- No-Build Conditions: Capacity and utilization by line
- Build Conditions: Capacity and utilization by line

d. Pedestrian Impacts. Describe future pedestrian conditions in the study area:
- Pedestrian access to and from the project, pedestrian circulation routes
- Pedestrian accommodation in the project's public spaces (e.g. sidewalk, adjacent intersections, plaza spaces, benches, etc.)
- Pedestrian level of service (LOS) at all surveyed crosswalks, sidewalks and other locations
  - Existing Conditions
  - Future No-Build Conditions
  - Future Build Conditions

NOTE: The traffic capacity analyses must also assume appropriate accommodation of pedestrians in all signalization assumptions. The pedestrian impacts analysis shall describe the assumptions regarding accommodation of pedestrians in the traffic analysis, i.e. pedestrian walk rate and percentage of cycles in which pedestrian phase is called (verify with BTD).

e. Bicycles. Describe bicycle access to, from, and within the project site. Describe bicycle storage and other amenities (e.g. shower and changing facilities) to be provided. BTD will provide guidelines on bicycle storage requirements based on project type and size.

f. Loading and Service. The project must accommodate loading and service facilities in an off-street location. The loading and service plan shall not rely upon loading facilities and truck back-up maneuvers in the public right-of-way. Describe service and loading requirements:
- Number of loading bays
- Services to be provided (e.g. garbage compactor, garbage collection, restaurant service, move-in / move-out, etc.)
- Level of loading and service activity (number of trucks per day or per week)
- Loading and service schedule, schedule restrictions (proponent shall prohibit or strictly limit loading and service activities during peak periods)
- Design vehicle(s)
- Required truck turning movements (show design vehicle turning movements on site plan)
- Major loading and service vehicle routes for site access and egress
- Access for emergency vehicles

2.5 Site Plan. Provide an engineered site plan showing Build Conditions (contrast with existing conditions):
- Public right-of-way layout

    - Roadways
    - Sidewalks
- Vehicular access and circulation
- Service and loading
- Parking
- Bicycle storage
- Proposed on-street regulations

Task 3. Mitigation of the Project's Long-Term Transportation Impacts

Major development projects offer benefits, but they also consume public services and create impacts on public resources. Chief among these impacts is a development's effect on the transportation system. The project proponent is required to quantify and analyze these impacts through the Access Plan. It is then the responsibility of the project proponent, working with BTD, to develop strategies for reducing and mitigating these impacts. These strategies will typically include travel demand management (TDM) measures and improvements to Boston's transportation system.

These transportation system improvements and mitigation measures have associated costs. The proponent should view these costs as an integral component of the overall project cost, necessary to enable the transportation system to accommodate the project's impacts. The mitigation measures benefit the users of the transportation system, in particular the new users associated with the proposed project. Project proponents shall allocate appropriate funding for the mitigation. The mitigation measures associated with a development project will be specified in the project's Transportation Access Plan Agreement (TAPA) between the proponent and BTD.

3.1 Travel Demand Management (TDM). Travel demand management comprises a variety of strategies designed to reduce single-occupancy vehicle (SOV) travel and encourage "alternate modes" of transportation (public transit, walking, bicycling). TDM programs are critical due to the disproportionate impacts of SOV travel on congestion, parking demand, air quality, and quality of life. TDM programs are especially important for projects that generate higher trip volumes, create concentrated peaks of demand, and create more impacts related to roadway congestion, parking demand, and vehicle emissions. TDM programs are required even when proponent uses the default analysis assumptions for mode split and VOR, since these default assumptions reflect long-standing TDM efforts and Transportation Management Association programs.

Appropriate TDM measures and requirements will vary depending upon the type of development, the neighborhood, the impact analysis assumptions, and other circumstances. For example, many of the measures below would not apply to a residential development. In the case of commercial office development, some (but not all) of the measures below would be the responsibility of the tenants, rather than the proponent. The proponent will be required to implement those TDM measures that are within its control, and should at least encourage and facilitate such measures. However, if the proponent seeks to base its impact analysis on aggressive assumptions (e.g. a high transit mode share), the proponent must require appropriate TDM measures in its lease agreements with tenants.

In the TAPA, the proponent will be required to implement the following TDM measures (as appropriate to the specific project):

a. Transportation Coordinator. Designate a full-time, on-site employee as the development's transportation coordinator. The transportation coordinator shall oversee all transportation issues. This includes managing vehicular operations, service and loading, parking, and TDM programs. In addition, the transportation coordinator will be responsible for the monitoring program and will serve as the contact and liaison for BTD and the Transportation Management Association (TMA).

b. Ridesharing / Carpooling. Facilitate ridesharing through geographic matching, parking fee discounts, and preferential parking for carpools / vanpools. May be accomplished through membership in a TMA, participation in CARAVAN for Commuters, and/or use of computerized ridesharing software.
c. Guaranteed Ride Home Program. Offer a "guaranteed ride home" in order to remove an obstacle to transit use and ridesharing
d. Transit Pass Programs. Encourage employees to use transit through the following measures:
   - Offer on-site transit pass sales or participate in the MBTA Corporate T-Pass Program
   - Offer federal "Commuter Choice" programs, including pre-tax deductions for transit passes and subsidized transit passes
e. Information and Promotion of Travel Alternatives
   - Provide employees and visitors with public transit system maps and other system information
   - Provide an annual (or more frequent) newsletter or bulletin summarizing transit, ridesharing, bicycling, alternative work schedules, and other travel options
   - Sponsor an annual (or more frequent) "Transportation Day" at which employees may obtain information on travel alternatives and register to participate in ridesharing programs
   - Provide information on travel alternatives for employees and visitors via the Internet
   - Provide information on travel alternatives to new employees
f. Transportation Management Association (TMA) Membership. Investigate joining a Transportation Management Association. Encourage tenants to join the TMA as well. If no TMA is established in the project area, investigate starting a new TMA or becoming affiliated with an existing TMA. A TMA can provide many of these TDM measures, including ridematching, guaranteed ride home, and transit information and promotional materials.
g. Bicycle Facilities and Promotion
   - Provide secure bicycle storage (number of spaces will be specified depending upon size of development and type of land use)
   - Provide additional publicly-accessible bicycle storage (number of spaces will be specified)
   - Provide shower and changing facilities for bicycle commuters
   - Promote bicycles as an alternative to SOV travel, provide promotional material on bicycle commuting and bicycle safety, and provide incentives for bicycle use
h. Parking Management
   - Charge market-rate parking fees
   - Offer preferential parking to carpools and vanpools
   - Offer reduced parking rates to carpools and vanpools
   - Offer parking "cash-out" option
   - Offer garage space for car rentals
   - Offer parking space for car-sharing
   - Offer parking space, charging facilities for electric vehicles
   - Offer parking / layover space for livery vehicles (hotel development)
   - Enforce a 5-minute limit on vehicle idling for all users of the Development, in accordance with Massachusetts state law

i. Trip Reduction Strategies. To the degree possible, the Developer shall implement the following strategies for its own on-site employees. The Developer shall also encourage tenants to implement these strategies as well.
   - Telecommuting. Reduce overall trip demand by enabling employees to telecommute.
   - Flexible Work Schedules. Reduce peak hour and overall trip demand by enabling employees to telecommute, work a compressed work week, or work hours that enable off-peak commuting.
   - Local Hiring. Recruit and hire employees from the local area. Such local employees can more easily use alternatives to SOV travel, including walking, bicycling, and transit.

j. Transportation Monitoring and Annual Reporting. Monitor transportation conditions, conduct employee transportation surveys, and provide BTD with an annual report on findings. This information will be useful to BTD in identifying and addressing issues with travel and access, including transit service, pedestrian and bicycle access, parking, and traffic. This information will enable BTD to pursue improved access for the project, and provide benefits to the proponent. BTD will provide employee survey forms and transportation monitoring forms to ensure uniformity of data.

3.2 Transportation System Improvements. In order to meet Boston's mobility needs as its population, density, and land development increase, Boston's transportation system requires improvements. These improvements offset the transportation impacts of new development. In addition, these improvements can make the traveling experience easier in the vicinity of the project, which accrues to the benefit of the proponent and the development's users.

a. Geometric Changes and Improvements to the Public Right-of-Way. The proponent may be required to make geometric changes and improvements to roadways, sidewalks, and other elements in the vicinity of the proposed project. These changes and improvements may be necessary in order to enable new circulation patterns resulting from the project and mitigate impacts of new vehicle or pedestrian trips. Changes and improvements shall be designed by the proponent's consultant in consultation with BTD. The project proponent will be required to directly fund and implement all changes and improvements to the public right-of-way, and to obtain any required permits. The proponent shall obtain the approval of the City of Boston's Public Improvements Commission (PIC) for any changes to the public right-of-way. These improvements shall be made with input from BTD, per specifications provided by BTD, by a contractor approved by BTD, and subject to final BTD inspection and approval.

b. Traffic Signal Improvements. BTD operates most of the traffic signals in Boston. Improvements to traffic signals in the vicinity of the proposed project may be necessary to manage the increased travel demands placed on the intersection. Improving the operations of these signals can reduce congestion and improve conditions for pedestrians, bicycles, transit vehicles, and general traffic. Typical traffic signal improvements that BTD may require include:
   i) Traffic signal equipment
      - Signal controller
      - Signal heads and pedestrian heads
      - Signal poles and mastarms
   ii) Traffic monitoring equipment

- System detectors
- Video monitoring cameras

iii) Traffic signal communications equipment
- Communications conduit (4" PVC)
- Signal interconnect cable

The project proponent will be required to directly fund and implement all traffic signal improvements, and to obtain any required permits. These improvements shall be made with input from BTD, per specifications provided by BTD, by a contractor approved by BTD, and subject to final BTD inspection and approval.

c. Public Transit System Improvements. New development can add significantly to public transit demand and have other impacts on the transit system. In order to manage this demand and mitigate the impacts, the proponent may be required to make or contribute to transit system improvements. These improvements shall be determined in consultation with BTD and the MBTA. Improvements may include:

- Physical improvements to MBTA system stations and stops
- Water transportation
  - Dock and/or landside infrastructure improvements
  - Operating subsidy for water transportation services
- Supplemental transit services. Public transit is the most desirable means of achieving transit access, and the proponent shall make every effort to facilitate transit access to the proposed project via public services. However, there may be some situations in which private supplemental transit services, such as shuttle buses, are necessary.
  - Overall transit demand in the area is too low to justify public transit service, but the proposed project requires transit access
  - The proposed project generates a concentration of trips to and from certain locations, such that a shuttle is feasible and useful in reducing auto trips (e.g. a hotel with airport and/or convention shuttles)

Task 4. Description of the Project's Short-Term Construction Impacts and Proposed Mitigation

The Access Plan shall include an overview of construction period transportation impacts and proposed short-term mitigation. This shall be a summary of the more detailed Construction Management Plan (CMP) that must be submitted to BTD under separate cover. The construction management summary in the Access Plan shall provide an appropriate level of information regarding the analysis and proposed management of the impacts of the project during the construction period, including:

- The need for full or partial street closures, street occupancy, sidewalk closures, and/or sidewalk occupancy during construction
- Frequency and schedule for truck movements and construction materials deliveries, including designated and prohibited delivery times
- Designated truck routes
- Plans for maintaining pedestrian and vehicle access during each phase of construction
- Parking provisions for construction workers
- Mode of transportation for construction workers, initiatives for reducing driving and parking demands
- Coordination with other construction projects in the area
- Distribution of information regarding construction conditions and impact mitigation to abutters

BRA MEMORANDUM

TO: Jay Rourke

FROM: Katie Pedersen

DATE: January 31, 2008

RE: 350 Boylston Street
Boston, Massachusetts
Comments on Project Notification Form

I have reviewed the Project Notification Form (PNF) dated December 18, 2008 and submit the following comments for the Environmental Protection Component. The Druker Company, Ltd. (the Proponent) proposes to construct a nine-story building; a mixed-use development consisting of approximately 221,230 square feet (sf) of gross floor area (the Proposed Project). The Proposed Project will include approximately 15,000 sf of ground floor retail and restaurant space as well as eight floors of office and related support space. In addition, the Proponent proposes the creation of three below-grade levels containing 150 parking spaces and an approximately 6,000 sf fitness center and space to be utilized by the building's office tenants. The Proposed Project will be located on an approximately 27,654 sf parcel of land, located at the intersection of Boylston and Arlington Streets, in the Back Bay neighborhood of Boston.

Wind

As described in the PNF, the Proposed Project height will be approximately 120 feet, and thus has the potential create an adverse impact on pedestrian level winds. The Proponent shall be required to conduct a quantitative analysis of pedestrian level winds. The analysis shall determine potential pedestrian level winds adjacent to and in the vicinity of the Proposed Project and shall identify any areas where wind velocities are expected to exceed acceptable levels, including the BRA's guideline of an effective gust velocity of 31 miles per hour (mph) not to be exceeded more than 1% of the time. The analysis shall further determine the suitability of particular locations for various activities (e.g., walking, sitting, eating) as appropriate. Particular attention shall be given to public and other areas of pedestrian use, including, but not limited to, entrances to the Proposed Project and adjacent buildings, sidewalks adjacent to and in the vicinity of the Proposed Project, parks, plazas, and other open spaces and pedestrian areas near the Proposed Project, including, without limitation, the Boston Public Gardens.

For areas where wind speeds are projected to be dangerous or to exceed acceptable levels, measures to reduce wind speeds and to mitigate potential adverse impacts shall be identified.

Shadow

The Proponent shall be required to conduct a shadow analysis for existing and build conditions for the hours of 9:00 a.m., 12:00 noon, and 3:00 p.m. for the vernal equinox, summer solstice, autumnal equinox and winter solstice and for 6:00 p.m. in the summer and fall.

The shadow impact analysis must include net new shadow as well as existing shadow and must clearly show the incremental impact of the Propose Project. For purposes of clarity, new shadows should be shown in a dark, contrasting tone distinguishable from existing shadow. The shadow impact study area shall include, at a minimum, the entire area to be encompassed by the maximum shadow expected to be produced by the Proposed Project. The build conditions shall include all buildings under construction and any proposed buildings anticipated to be completed prior to completion of the Proposed Project. Shadows from all existing buildings within the shadow impact study area shall be shown. A North arrow shall be provided on all figures. Shadows shall be determined by using the applicable Boston Azimuth and Altitude data.

Particular attention shall be given to the Boston Public Garden and any other proposed or existing public open spaces and pedestrian areas, including, but not limited to, the existing and proposed sidewalks and pedestrians walkways within and adjacent to, and in the vicinity of the Proposed Project.

The Proponent shall demonstrate that if a new shadow is cast upon the Boston Public Garden, it is only during the first hour after sunrise or before seven o'clock in the morning, whichever is later, or the last hour before sunset.

Daylight

The Proponent has stated that the skyplane obstruction created by the Proposed Project is anticipated to be similar to conditions typical of the surrounding area, thus no further investigation is required.

Solar Glare

The Proponent has stated that the Proposed Project does not include the use of reflective glass or other reflective materials on the building façades that would result in adverse impacts from reflected solar glare. Accordingly, no further investigation is required.

Air Quality

The Proponent shall conduct an air quality analysis to determine the impact of carbon monoxide (CO) emissions from combustion and mobile source emissions generated by the Proposed Project.

The Proponent shall submit a future analysis of carbon monoxide levels for any intersection where the level of service (LOS) is expected to deteriorate to D and the proposed project causes a 10 percent increase in traffic or where the level of service is E or F and the proposed project contributes to a reduction in LOS. The methodology and parameters of the air quality analysis shall be approved in advance by the BRA and the Massachusetts Department of Environmental Protection (DEP). Mitigation measures to eliminate or avoid any violation of air quality standards shall be proposed.

The traffic operations analysis shall describe the existing and projected future air quality in the Proposed Project vicinity and evaluate ambient levels to determine conformance with the National Ambient Air Quality Standards (NAAQS) and the U.S. Department of Housing and Urban Development (HUD) requirements for residential and other sensitive receptors. Particular attention shall be given to mitigation measures to ensure compliance with air quality standards.

The Proponent shall provide a description of the Proposed Project's heating and mechanical systems, including the location of buildings intake and exhaust vents and specifications, and an analysis of the impact on pedestrian level air quality and on any sensitive receptors from operation of the heating, mechanical and exhaust systems, including the building's emergency generator as well as the parking garage, shall be required. Measures to avoid any violation of air quality standards shall be described.

Noise

The Proponent shall establish the existing noise levels at the Proposed Project site and vicinity. The Proponent shall also calculate future noise levels after the Proposed Project completion, based on appropriate modeling and demonstrate compliance with the Design Noise Levels established by U.S. Department of Housing and Urban Development for residential and other sensitive receptors and with all applicable Federal, State and City of Boston Noise criteria and regulations.

Geotechnical Impacts

A description and analysis of the existing sub-soil conditions, including the potential for ground movement and settlement during excavation and potential impact on adjacent buildings and utility lines shall be provided. This analysis shall also include a description of the foundation construction methodology, the amount and method of excavation, and the need for any blasting and/or pile driving and the impact on adjacent buildings and infrastructure. A Vibration Monitoring Plan shall be developed prior to the commencement of construction activities so as to ensure that impacts from the project construction on adjacent buildings and infrastructure are avoided. Mitigation measures to minimize and avoid damage to adjacent buildings and infrastructure must be described.

Groundwater

The Proposed Project is located within a Groundwater Conservation Overlay District and thus required to demonstrate compliance with Article 32 of the Boston Zoning Code.

The Proposed Project design proposes the construction of three levels of below-grade parking which will require excavation to approximately 35 to 45 feet below ground surface (approximately El.-25 to -35 BCB). Hence, it is imperative, that the below ground portion of the Proposed Project be constructed, to the greatest extent possible, watertight. The Proponent has committed to both recharge any seepage, into the ground through the gallery under Providence Street as well as remove water from the building's underdrain during below ground construction, groundwater and stormwater that may accumulate during excavation and foundation construction will be collected and recharged back into a recharge gallery constructed by the Proposed Project along the Providence Street side of the site to allow re-injection into the ground. Sedimentation controls to filter the effluent will be conducted prior to discharge to the groundwater recharge gallery. As a result, the below grade construction activities will not adversely affect (lower) current groundwater levels. The watertight excavation support walls will serve as the building's below foundation walls, thus preventing any significant withdrawal of groundwater from beyond the below grade limits of the Proposed Project. In addition, any groundwater seepage and stormwater runoff generated at the Proposed Project site will also be pumped into the same recharge gallery constructed beneath Providence Street.

The Proponent has committed to incorporate provisions into the design and construction procedures as a means to limit potential adverse impacts to the groundwater levels. The Proposed Project shall include the installation of groundwater observation wells, to be monitored regularly for the duration of the below-grade construction period. The Proponent is encouraged to consult with the Boston Groundwater Trust (the Trust) as to the identification of existing wells and location of proposed wells. Upon construction completion, monitoring data shall be provided to the Trust.

Stormwater Management

The Proponent has provided a description of the Proposed Project's existing and future stormwater drainage and stormwater management practices. However, Proponent shall be required to illustrate the existing and future drainage patterns from the Proposed Project site and describe and quantify existing and future stormwater runoff from the Proposed Project site and the Proposed Project's impacts on site drainage. The Proponent shall also provide a description of the Proposed Project's stormwater management system, including best management practices to be implemented. The Proponent shall also demonstrate compliance with the Commonwealth's Stormwater Management Policies. Finally, the Proponent shall describe the Proposed Project's area's stormwater drainage system to which the Proposed Project will connect, including the location of stormwater drainage facilities and ultimate points of discharge.

Solid and Hazardous Wastes/Materials

The Proponent shall provide a list of any known or potential contaminants on site together with a description of remediation measures to ensure their safe removal and disposal, pursuant to the M.G.L., Chapter 21E and the Massachusetts Contingency Plan.

Any potential hazardous wastes to be generated by the Proposed Project must be identified. In addition, potential waste generation must be estimated and plans for disposal indicated and measures to promote reduction of waste generation and to promote recycling in compliance with the City's recycling program must be described.

Historic Landmarks

The Proponent has identified, mapped and described the numerous historic resources and other historic properties in the vicinity of the Proposed Project's site and evaluated the anticipated effects of the Proposed Project on these resources.

The Proposed Project is located within the boundaries of the Back Bay Historic District, which is listed on the National Register of Historic Places. The Proponent has stated that the National Register nomination for the Back Bay Historic District specifically mentions the Berkeley Building (a Boston Landmark) at 416-426 Boylston Street, Boylston Chambers at 739 Boylston Street, 885-889 Boylston Street, 651-655 Boylston Street, and 400-402 Boylston Street as architecturally prominent buildings within this section of the historic district.

The Proponent has stated that the Proposed Project has been presented to the Boston Landmarks Commission. The Proponent must demonstrate compliance with Article 85 of the Boston Zoning Code as well as demonstrate that Proposed Project will not create an adverse impact to any of the historic structures in the surrounding area.

Sustainable Design/Green Buildings

The purpose of Article 37 of the Boston Zoning Code is to ensure that major buildings projects are planned, designed, constructed and managed to minimize adverse environmental impacts; to conserve natural resources; to promote sustainable development; and to enhance the quality of life in Boston. Any proposed project subject to the provisions of Article 37 shall be LEED Certifiable (U.S. Green Buildings Council) under the most appropriate LEED rating system. Proponents are encouraged to integrate sustainable building practices at the inception of the design process.

The Proponent has provided a completed LEED-CS checklist for which the Proposed Project purports to achieve 29 points. The Proponent shall provide an explanatory narrative establishing compliance with specific points. The Proponent shall also demonstrate that the Proposed Project will meet the requirements of the article with appropriate supporting documentation and by certification from a LEED Accredited Professional and/or other expert recognized by the BRA.

February 12, 2008

John Palmieri, Director
Boston Redevelopment Authority
Boston City Hall, Room 925
Boston, MA 02201
Attention: Jay Rourke, Project Manager

Re: 350 Boylston Street - Project Notification Form

Dear Director Palmieri:

The City of Boston Environment Department has reviewed the Project Notification Form (PNF) and offers the following comments.

The Druker Company, Ltd. proposes to demolish four buildings - 324-334, 336-342, 344-350 and 352-360 Boylston Street – and construct:

- three levels below grade for 150 parking spaces, a fitness center and spa
- nine above-grade stories for ground-floor retail and restaurant with offices and related support space on the upper eight floors.

The proposed zoning height is 121' 6".

The site is bounded by Boylston Street, Arlington Street, Providence Street and a building at 364 Boylston Street.

The proponent plans to construct to the specification of the LEED for Core & Shell Green Building Rating System (LEED-CS).

The United States Green Building Council (USGBC) Web site indicates that, "LEED for Core & Shell is designed to be complementary to the LEED for Commercial Interiors rating system, as both rating systems establish green building criteria for developers, owners and tenants." We look forward to the proponent's plan for work with tenants.

Shadow studies should be provided in the Draft Project Impact Report. Diagrams should include:

- a north arrow;
- street names;
- the identification of doorways, bus stops, open space and areas where pedestrians are likely to congregate (in front of historic resources or other tourist destinations, for example);
- clear delineation of shadow on both rooftops and facades; and
- clear distinctions between existing shadow and new shadow.

They should oriented consistent with that used for diagrams depicting wind monitoring locations, no build and build. A 6:00 p.m. analysis should be conducted for the Summer Solstice and Autumnal Equinox.

A height of 150 feet is not an established minimum trigger for a wind study. The corner location, heavy pedestrian use in the area and proximity of the Public Garden make a wind study necessary.

The staff of the Boston Landmarks Commission (BL) has reviewed the PNF and notes that the four buildings slated for demolition, constructed between 1897 and 1906m are listed in the State and National Registers of Historic Places as part of the Back Bay Historic District. BLC staff strongly encourages a thorough study of alternatives that would rehabilitate or incorporate historic buildings into proposed development plans, rather than demolish them. Demolition would constitute not only a loss of historic fabric, but a loss of the building's embodied energy, fuel expenditure and air pollution during the demolition and removal of the building, as well as a large deposit of material to landfills. Preservation and rehabilitation of historic buildings is recognized as a sustainable building practice by LEED and the City of Boston.

The proposed demolition of these four buildings requires Article 85 Demolition Delay review by the Boston Landmarks Commission. The Article 85 Demolition Delay application can be found online at www.cityofboston.gov/environment.downloads.asp. Contact Gary Russell at 617-635-3850 if you have questions about the application.

In addition to establishing a program to protect nearby structures from construction-related vibration, a plan must be devised to protect the statue of Ellery Channing which stands in the Public Garden at the corner of Arlington and Boylston Streets.

In absence of preservation or rehabilitation of the existing historic buildings, BLC staff offers the following comments on the proposed new construction. BLC staff finds the overall massing and layout of the proposed new construction to be appropriate to the scale of the neighborhood, but does have some concern about the architectural expression and detailing. The expression of the building as it turns the corner of Boylston and Arlington does not distinguish itself as a strong presence at such an important site. The architectural expression and detailing of the entire building, this corner in particular, is important for its visual impact on nearby historic resources such as the Arlington Street Church and the Public Garden. The base of the building does not clearly articulate in a hierarchical manner the main entry to the office building versus the expression of the retail spaces. A more finely detailed expression at the street level would more successfully relate to the character of the surrounding historic context. The way in which the building steps back at the top should be carefully considered in how the main body of the building is terminated and how the set back portions may take on a distinct character. In general, BLC staff finds the proposed new construction to be acceptable in it's massing, but the ultimate success of the design will rely heavily upon the finer points of materials and detailing.

BLC staff agrees with BRA Urban Design staff that projects in the City should be constructed with traditional building materials and techniques rather than synthetic composite materials. Simulated materials such as exterior insulated finish systems (EIFS), and glass fiber reinforced concrete (GFRC) are inconsistent with Boston architecture and are unlikely to withstand decades of the City's freeze-and-thaw climate.

The BLC requests that dated cornerstones be incorporated into all new construction. This element will allow those who are attentive to and value the architecture of the City to appreciate the historical context in which structures were conceived.

According to the Massachusetts Department of Environmental Protection (DEP), about 33 percent of mobile source particulate matter (PM) and ten percent of all nitrogen oxide (NO_x) pollution in the northeast is caused by construction vehicles. More than 90 percent of diesel engine particulate emissions are highly respirable and carry toxins deep into the lung, exacerbating human respiratory ailments. The U. S. Environmental Protection Agency (EPA) has proposed classification of diesel exhaust as "highly likely to be carcinogenic in humans." It estimates that diesel engines currently on the road can run for 1,000,000 miles and remain in operation for as long as 20 to 30 years. This amounts to 160 to 240 tons of pollution over the life of each engine.

The DEP's Clean Air Construction Initiative is designed to reduce air quality degradation caused by emissions of carbon monoxide (CO), volatile organic compounds (VOC), NO_x and air toxins from heavy- duty, diesel-powered construction equipment. Oxidation catalysts and catalyzed particulate filters reduce toxic emissions of formaldehyde, benzene, acrolein and 1-3 butadiene by as much as 70 percent. The program offers contractors a cost-effective way to decrease localized adverse impacts and reduce dust and odor complaints from project abutters and regulatory agencies. Experience with a pilot project that retrofitted 83 pieces of equipment working on the Central Artery/Tunnel (CA/T) project showed that:

- Vehicles did not experience significant power loss.
- There are no additional operation and maintenance (O & M) or fuel costs.
- Engine manufacturers continue to honor vehicle warranties.

More information on the program can be obtained from Christine Kirby of DEP at 617-292-5500.

The City of Boston's is seeking to minimize the number of motor vehicles that enter Boston each day, currently 600,000, and to protect parking for city residents. As part of this effort, we request that a comprehensive

Transportation Demand Management (TDM) plan be established for all construction workers. Such a plan should include:

- Providing secure, on-site storage so that workers do not have to transport tools and equipment each day.
- Offering pre-tax payroll deduction for Massachusetts Bay Transportation Authority (MBTA) transit pass purchase.
- Providing a ride-matching service.
- Posting transit schedules in a prominent area.

Construction-period noise is subject to regulation by the Boston Air Pollution Control Commission (APCC), part of this department. The proponent must ensure compliance with the construction-related limits as outlined in the Regulations for the Control of Noise in the City of Boston.

This department receives frequent complaints about noise generated at construction sites before 7:00 a.m. Complaints show that contractors often allow workers on site before that time. Noise is often related to the run-up of diesel equipment and the preparation and movement of tools and materials. No sound-generating activity is allowed to occur at the site prior to 7:00 a.m.

Regular vacuum cleaning of streets and sidewalks in the project area should be employed to ensure that they remain free streets of dust and debris. The use of a vacuum cleaner is an important measure for preventing construction-related dust and debris from clogging storm drains.

We strongly encourage the proponent to require that tenants join the A Better City Transportation Management Association (ABCTMA) and to implement a variety of options for their employees. We also suggest devoting one or two parking spaces to a car-sharing service such as Zipcar. Zipcar offers a Z2B program for businesses which can be used for trips during the day, minimizing the need for employees to drive to work.

We commend the proponent for planning to provide secure bicycle storage and showers for employees who bike to work. We suggest that public racks be provided in the parking garage for visitors and messengers. Signage should be posted outside the garage indicating the availability of the racks. In addition, we encourage the proponent to participate in the City's Bike Friendly Business Program. Please contact Nicole Freedman, Director of Bicycle Program, at Nicole.Freedman.bra@cityofboston.gov, (617) 429-8440 for information on this initiative.

Thank you for the opportunity to offer comment. We look forward to the DPIR.

Sincerely,

Bryan Glascock
Director

350 Boylston.doc.DBG:MTZ.mtz

B.R.A.

The Commonwealth of Massachusetts

JAN 30 P 2:28

William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

January 28, 2008

John F. Palmieri
BRA
City Hall 9TH Floor
Boston, MA 02201

ATTN: Jay Rourke

RE: Proposed Project, Former Shreve Crump and Low Building, 324-334 Boylston Street, 336-342, 344-350 and 352-360 Boylston Street, Boston (Back Bay)

Dear Mr. Palmieri:

The Massachusetts Historical Commission (MHC) has the following comments on the proposed 350 Boylston Street project.

The project proposed to demolish 330-334 (former Shreve Crump and Low building), 336-342, 344-350 and 352-360 Boylston Street, all of which are significant historic buildings that are listed in the State and National Registers of Historic Places as part of the Back Bay Historic District. The four buildings were built between 1897 and 1906 in the Classical Revival, Renaissance Revival and Art Deco styles. The Shreve Building (also known as the Arlington Building) located at the corner of Boylston and Arlington Street serves as an important anchor, comparable to the Berkeley Building at the opposite end of the block. The Women's Educational and Industrial Union located at 352-360 Boylston Street is significant not for its historic architecture, but also for its important role in social history in the 20th century. The two historic buildings between them further define the historic Boylston Street streetscape. Together, these four buildings play a significant function in the Back Bay's architectural landscape, a comparable scale that relates to, without overwhelming, the highly significant Arlington St. Church and Public Garden across the street.

The MHC recommends that alternatives to the demolition of the historic buildings be carefully considered. Because the buildings are listed in the National Register of Historic Places and are commercial properties, a certified rehabilitation of the historic buildings for income-producing purposes would qualify for federal and/or state historic rehabilitation tax credits. The tax benefits are quite substantial, and should be calculated as a financially advantageous alternative to demolition and new construction.

In addition, the MHC is concerned that the proposed new design of the replacement building will have an adverse visual effect on the character of the Back Bay Historic District.

If you have any questions concerning these comments, please feel free to contact me.

Sincerely,

Brona Simon

Brona Simon
State Historic Preservation Officer
Executive Director
Massachusetts Historical Commission

xc: Ronald Druker
Boston Landmarks Commission
Boston Preservation Alliance
EOEEA/MEPA Unit
MWRA
DEP

220 Morrissey Boulevard, Boston, Massachusetts 02125
(617) 727-8470 • Fax: (617) 727-5128
www.state.ma.us/sec/mhc

Rourke, Jay

From: Giers, Bob
Sent: Tuesday, February 05, 2008 11:47 AM
To: Rourke, Jay
Cc: Jayasinghe, Para; Leo, Vincent; Banks, Joseph; Spinetto, Stephen; Hutt, Sarah; Crasco, Ken - Parks Dept.; McCarthy, Timothy (Public Works)
Subject: 350 Boylston Street

hi Jay,

Here are PWD comments for the subject project 350 Boylston Street located between 324-360 Boylston Street and bounded bt Boylston, Arlington and Providence Sts.in the Back Bay, where the developer is estimating the cost of the projects to be approximately $ 120,000,000:

Site Plan:
Developer must provide an engineer's site plan at an appropriate engineering scale, that shows curb functionality on both sides of all streets that abuts the property.

Sidewalks: (please note updated requirements in this section)
Developer is responsible for the reconstruction of the sidewalks *including the resetting of the existing curbing abutting the project, and to extend the limits to the nearest intersections. The reconstruction effort must meet current ADA/AAB guidelines, including the installation of new or reconstruction of existing compliant pedestrian ramps at all corners of all intersections,* to encourage and compliment pedestrian improvements and travel along Boylston Street. This effort also may constitute a License, Maintenance and Indemnification (LM&I) agreement with the Public Improvement Commission (PIC).

Discontinuances:
Any and all discontinuances (sub-surface, surface or above surface) within the Public Right-of-Way (ROW) must be processed through the PIC.

Landscaping:
Developer must seek approval from Ken Crasco, Chief Landscape Architect with the Parks and Recreation Department for all landscape elements. Program must accompany a LM&I with the PIC.

Street Lighting:
Street lighting needs must be consulted with Mr. Joe Banks of the Street Lighting Division with the PWD, and where needed, be installed by the developer, and must be consistent with the area lighting, to provide a consistent urban design.

Roadway: (please note updated requirements in this section)
Based on the extent of construction activity, including utility connections and taps, the Developer will be responsible for the reconstruction of the roadway sections that immediately abuts the property, and where appropriate, extend the limits on re-construction to the nearest intersection *and to insure compliance to ADA/AAB guidelines*.

Public Trash Receptacles:

Developer to consult with Tim McCarthy of BPWD, and is responsible for purchasing solar powered trash compactors to be used in Public space consistent with City of Boston's plan.

Public Art:
Developer is encouraged to contact Sarah Hutt, Boston Arts Commission to participate with the City's public arts program, creating notable art pieces in public spaces.

Groundwater:
Developer should install groundwater-monitoring wells in accordance to ISD standards, to monitor groundwater levels during construction, and convey the wells to the Groundwater Trust through the PIC after the completion of the project.

Note: Developer is encouraged to coordinate constructions activities and scheduling of this project with the current MBTA Green Line construction project at the intersection Arlington and Boylston Sts.

Note: these are the general standard BPWD requirements applicable to every project, more detailed comments will be addressed during the PIC review process;

Any questions please give me a call at 617-635-4966

Thank you, Bob Giers

Boston Groundwater Trust

234 Clarendon St., Third Floor, Boston, MA 02116
617.859.8439 voice • 617.266.8750 fax
bostongroundwater.org

January 18, 2008

Mr. Jay Rourke, Senior Project Manager
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201-1007

Subject: 350 Boylston Street

Dear Mr. Rourke:

Thank you for the opportunity to comment on the Project Notification Form for 350 Boylston Street. The Boston Groundwater Trust was established by the Boston City Council to monitor groundwater levels in sections of the City where the integrity of building foundations is threatened by low groundwater levels and to make recommendations for solving the problem. As such, my comments are limited to groundwater related issues.

I appreciate the attention to groundwater shown in the PNF, as well as the proponent's addressing the issue in his presentations at the scoping session and public meeting as well as in a meeting with the Trust.

The project is located in a sensitive area for groundwater issues. The buildings to be replaced by the structure are supported on wood pilings, as, I believe, are most of the remaining structures on the block. There has been a history of low to very low groundwater readings at several of our monitoring wells located on Arlington, Berkeley, Boylston, and especially Providence Streets surrounding the block on which the project is to be constructed. It would be very helpful if the project could help to pinpoint potential causes for these low readings.

The project as proposed includes a three level parking garage that extends well below the level at which it could potentially cause groundwater problems. I appreciate the proponent's commitment, repeated in several forums, that the below ground portion of the project will be substantially watertight. The PNF also states that any seepage into the building will be recharged into the ground through the gallery under Providence Street that will be installed to meet the GCOD requirements of Article 32 of the zoning code.

The PNF further states that water removed from the building's underdrain system will also be recharged through the building's storage tank and underground galley, both of which will be sized to handle this flow in addition to the volume required by Article 32 because of the building's footprint.

It is critical that all of these steps be taken in order to assure that the building cannot cause a reduction in groundwater levels on the site or on adjacent lots, as required by zoning. Additionally, the proponent should show in the DPIR the steps that will be taken to make sure that the project will not create a path for groundwater from the upper trapped aquifer which is critical to protection of pilings to penetrate to the aquifer located below the organic soil. Such a path could lead to reductions in critical groundwater levels in spite of the planned recharge system.

I appreciate the proponent's plans to monitor groundwater levels before and during construction. These findings should be reported shortly after they are taken to both the Authority and the Trust. Any new observation wells should be constructed to Trust standards and should be located in the public way and turned over to the Trust after completion of the project. I look forward to consulting with the proponent and his engineers about the best locations for these wells.

I believe that this project has the potential to make a significant positive contribution to improving groundwater levels on a very important site. I look forward to working with the Authority and the proponent to help bring that potential to fruition.

Very truly yours,

Elliott Laffer
Executive Director

Cc: Kathleen Pedersen, BRA
Maura Zlody, BED

Boston

Jay Rourke
Senior Project Manager
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201-1007

December 31, 2007

Dear Mr. Rourke:

Regarding the Project Notification Form for 350 Boylston Street project submitted to the BRA on December 18, 2007 the Boston Fire Department requires the following issues addressed by a qualified individual.

1. Emergency vehicle site access to the new buildings as well as existing buildings that might be affected.
2. Impact on availability and accessibility of hydrant locations for new buildings as well as for any existing buildings that might be impacted.
3. Impact on availability and accessibility to siamese connection locations for new buildings as well as for any existing buildings that might be impacted.
4. Impact that a transformer vault fire or explosion will have on the fire safety of the building. Particularly as it relates to the location of the vault.
5. Need for Boston Fire Department permit requirements as outlined in the Boston Fire Prevention Code, the Massachusetts Fire Prevention Regulations (527 CMR), and the Massachusetts Fire Prevention Laws (MGL CH148).
6. For projects involving air-supported structures, it is critical that the impact of the design has on fire safety relative to the interaction of the area underneath the structure to the structure as well as to the interaction of the structure to the area underneath the structure.
7. Due to the increasing popularity of private wireless communication services, it has become increasingly difficult and costly for the Fire Department to locate our emergency communications equipment at appropriate sites. At the same time, the need for antenna sites has grown as development continues in downtown/Back Bay. We would appreciate it if the BRA, as part of its development review process for high-rise towers, could assist the Fire Department in obtaining rooftop access for our communications equipment as a public benefit too meet this critical public safety need.

These items should be analyzed for all phases of the construction as well as the final design stage. This project will need permits from the Boston Fire Department as well as the Inspectional Services Department.

Respectfully,

Richard C. Francis
Acting Asst. Fire Marshal

Pjm
Cc: Paul Donga, FPE, Plans Unit, BFD

Boston Redevelopment Authority

Boston's Planning & Economic Development Office

Thomas M. Menino, *Mayor*
Clarence J. Jones, *Chairman*
John F. Palmieri, *Director*

One City Hall Square
Boston, MA 02201-1007
Tel 617-722-4300
Fax 617-248-1937

MEMORANDUM

TO: Roderick Fraser, Boston Fire Department

FROM: Jay Rourke, Senior Project Manager

DATE: December 18, 2007

SUBJECT: 350 Boylston Street, Notice of Project Notification Form Receipt and Invitation to Scoping Session

The purpose of this memorandum is to convey to you the Project Notification Form (the "PNF") Receipt for the subject project, and to invite you to a Scoping Session for the proposed 350 Boylston Street project in Boston (the "Proposed Project") which is undergoing a Large Project Review pursuant to Article 80 of the Boston Zoning Code. **The Scoping Session is scheduled for Friday, January 11, 2008 at 1:00p.m.** in Room 900 (BRA Board Room), 9th Floor, City Hall at the Boston Redevelopment Authority (the "BRA").

Article 80 of the Boston Zoning Code, Development Review and Approval, provides unified requirements for the review of development projects in Boston which include important opportunities for community involvement in the development review process. Project review under Article 80 is initiated when the project proponent ("Applicant") files a PNF in writing with the BRA. The PNF sets forth in sufficient detail those aspects of the proposed project that are necessary to determine its potential or likely impacts. Article 80 requires the BRA to invite all of the City's public agencies to a Scoping Session with BRA staff and the Applicant. Enclosed for your review is the PNF receipt and the PNF, which under Article 80 the BRA is required to send to you.

The Scoping Session is attended by staff from City public agencies that choose to send a representative, and the Applicant. The Applicant will briefly present the Proposed Project and then there will be an opportunity to clarify or explore issues of concern.

The BRA may issue a written Scoping Determination setting forth those elements of the Proposed Project described in the PNF that the Applicant must study, analyze and mitigate by filing a Draft Project Impact Report ("DPIR"), or find that the PNF is adequate and issue a Scoping Determination waiving further review. The BRA solicits comments from all City public agencies and the public in preparing the Scoping Determination. The BRA solicits comments from all City public agencies and the public in preparing the Determinations. Written comments on the Proposed Project must be received by the BRA no later than **Friday, February 1, 2008.**

If you need clarification please contact Jay Rourke at (617) 918-4317.

cc: BRA Project Review Team:

Ann Theresa Dwyer	Jansi Chandler	David Carlson	Susan Elsbree
James M. Tierney	Prataap Patrose	Richard Shaklik	Katie Pederson
Heather Campisano	Kairos Shen	Randi Lathrop	Tad Read

The Commonwealth of Massachusetts
House of Representatives
State House, Boston 02133-1054

MARTHA M. WALZ
8TH SUFFOLK DISTRICT
REPRESENTING
BOSTON AND CAMBRIDGE

Committees on
Education
Labor & Workforce Development
The Judiciary

ROOM 443, STATE HOUSE
TEL. (617) 722-2460
FAX (617) 626-0699
marty.walz@state.ma.us

February 1, 2008

Jay Rourke
Senior Project Manager
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Re: Project Notification Form for 350 Boylston Street

Dear Jay:

I am the State Representative for the 8th Suffolk District, which abuts 350 Boylston Street. I am writing with respect to the scope of review the Boston Redevelopment Authority should require The Druker Company (the "Proponent") to undertake in connection with the proposed building at 350 Boylston Street.

Architectural Design

The Providence Street façade is given only minimal consideration in the PNF and appears all but forgotten by the architects. If the design and materials facing this street are not treated with the same care as the design and materials facing Boylston and Arlington Streets, Providence Street will continue to be treated as a back alley. The DPIR should show the Providence Street façade in detail, and should show in detail how the entrances to the loading dock and parking garage will be treated.

As you have heard from many others, the west façade requires improvement. In the PNF, it appears to be a continuation of the Boylston Street and Providence Street facades, each of which is quite different from one another. While the adjacent buildings may partially obstruct the view of this façade, it will still be visible, especially to pedestrians walking east on Boylston Street. The west façade should be as attractive as the others.

The size, height, visibility, and shadow impact of the mechanical penthouse should be clearly presented in the DPIR. The penthouse may be visible from the Public Garden, so special care must be taken with its design in order to minimize its visual impact. Moreover, the shadow studies should include the penthouse to ensure that it does not cast any shadow on the Public Garden.

It is essential that the Proponent present detailed renderings of all four sides of the building, and in the context of the building's surrounding environment. Views of the proposed building should be presented from farther away on Boylston Street (looking at the site both from the east and from the west) and Arlington Street (looking at the site both from the north and from the south), and from the Public Garden. Views should also be presented as if looking west down Providence Street. All of these views should include the building's mechanicals.

Zoning

The DPIR should include a plan of the site that clearly labels which zoning height applies to each part of the parcel. An explanation of the special exception required for the proposed building should also be included.

Vehicular Traffic, Parking, and the Loading Dock

To ensure that Providence Street is not treated as an alley or as a loading/unloading area for trucks, detailed renderings should be provided of the street and sidewalk area. The length and location of the proposed curb cuts for the loading dock and for the parking garage should be identified.

In addition, the operations of the loading dock should be described in more detail. For example, the DPIR should identify the size of trucks that will be accommodated in the loading dock and what size trucks will be too large and, consequently, be required to use the street to load and unload. Unless the loading dock is large enough for trucks to turn around, trucks will be required to back in or out of the loading dock. The impact of such activity should be evaluated in a traffic study for Providence Street.

The number and location of metered parking spaces that the Proponent wishes to have removed should be identified. The Proponent should also be required to evaluate the impact of a Boylston Street drop off-pick up zone on traffic, particularly on traffic making a right turn on to Arlington Street. The Proponent should also confirm in the DPIR that it will not seek to narrow the Boylston Street sidewalk in order to accommodate a drop off-pick up zone.

The Proponent should also be required to explore moving the drop off-pick up zone from Boylston Street to Providence Street. This would keep more metered parking on Boylston Street and shift needed pedestrian activity to a Providence Street entrance/exit.

The Proponent should be required to study a smaller parking garage, one using a 0.5 ratio as is typically used for office space. It should also be required to study a building with no parking, which reflects the current condition. If transit oriented development is to have any meaning, this is a perfect site to make the concept real. With easy access to the Green Line, Orange Line, commuter rail, and various MBTA bus lines, there are few sites as easy to get to as this one. Moreover, there is ample commercial parking nearby, including at the Boston Common Garage and the parking garage between Clarendon and Dartmouth Streets over the Turnpike.

The proposed parking spaces will be largely unoccupied during evenings and weekends. The Proponent should study whether these spaces can be used as valet parking for the on-site restaurant and other restaurants nearby. The Proponent should also identify the impact, if any, of the parking freeze that includes this site so the IAG can further advise on the amount and legally permissible use of any on-site parking.

Pedestrian Traffic

Additional detail should be provided with respect to the pedestrian experience on Providence Street. For example, sidewalk width should be stated and a description of the lighting on the sidewalks should be included. As noted above, the length of the curb cuts for the loading dock and parking garage should be stated. The Proponent should also explore pulling the building back from the property line so the narrow sidewalks can be widened on Providence Street.

Further, the Proponent should commit to the indoor storage of all trash so that no trash dumpsters will be placed outdoors on Providence Street. The location of trash dumpsters should be identified in the DPIR, particularly with respect to those that will be used by the restaurant. Improper storage of trash, particularly from restaurants, aggravates the neighborhood's already severe rat problem, so careful attention should be paid to this issue.

The width of the Arlington Street sidewalk between the existing building and the subway entrances is quite narrow. The Proponent should explore alternative designs that would result in a wider sidewalk, including pulling the building back from the property line. It appears that this was done across the street at the Heritage on the Garden.

As noted above, the Proponent should commit that it will not seek to narrow the sidewalk on Boylston Street.

Boylston Street Improvement Plan

The Proponent should be required to explain in detail how it intends to implement the Boylston Street Improvement Plan. This should include a description of, among other things, sidewalk width, sidewalk materials, the location of trees, and the location of street furniture (including trash barrels and light poles).

Conclusion

In addition to these comments, I wish to note my agreement with the scoping requests made by the Neighborhood Association of the Back Bay, the Boston Groundwater Trust, and the Impact Advisory Group. They have provided detailed and thoughtful comments that I trust will be incorporated into the BRA's Scoping Determination.

If you have any questions, please do not hesitate to contact me at (617) 722-2460 or at marty.walz@state.ma.us.

Sincerely,

Martha M Walz

Martha M. Walz

APPENDIX 2

COMMENTS IAG

Rourke, Jay

From: Shope, John [JJS@foleyhoag.com]
Sent: Thursday, February 21, 2008 10:57 AM
To: Rourke, Jay
Subject: 350 Boylston Street IAG

Dear Jay:

I would like to follow up in writing on a few oral comments I have made to you previously. As you know, I have joined the joint IAG letter on the project. I comment separately on a point on which there was not an IAG consensus, specifically, parking. I understand that certain individuals and groups have suggested that a reduction or elimination of parking be considered. In my view, that would be a very bad idea, both for Bay Village (where I live) and for the city generally.

For the city as a whole, parking is already more expensive than in any other city nationwide other than New York City, and frustrates our ability to attract shoppers and others from the suburbs. To have a vital downtown with successful retail merchants, particularly the upscale establishments that we are hoping will be leasing at 350 Boylston, adequate and easy parking is vital for commercial success with all of the consequent benefits such as well-paying jobs and a solid commercial tax base. This is ultimately simply a matter of supply and demand.

For Bay Village, any reduction in the parking would be particularly negative due to the neighborhood's downtown location. As it stands, office workers at other downtown locations illegally but not infrequently park in Bay Village resident spaces, believing (perhaps correctly) that the daily savings in avoided private parking fees exceeds the cost of the occasional parking ticket. Adding a nearby office building at 350 Boylston without parking (or with less and therefore likely more expensive parking) would only exacerbate this problem. It would do so at just the wrong time, since the city's recent conversion to resident stickers issued every two years instead of one has, due to rental turnover, increased the number of parking stickers per space, as has the increased incidence of owner occupancy and residential use in Bay Village generally. In fact, greater difficulty in parking often contributes to an unhealthy dynamic in which residents oppose new projects because they would likely increase competition for parking spots. Boston will not be competitive nationally unless it reduces the many obstacles to new residential construction, and competition for parking is one of them.

In addition, as Bay Village has become a more desirable place to live, we have seen an increase in the number of residents who "reverse commute" out of the city during the week to jobs in the suburbs. These residents find parking to be especially difficult since they return to hunt for spaces at times of peak demand. An important relief from this crunch has been the opportunity to rent spaces at local office buildings (such as the John Hancock and 500 Boylston garages) at reduced rates for evening and weekend use only. It may be expected that owner of 350 Boylston would likely offer a similar program for economic reasons.

As with many other features of the project, the proposal for parking is a modest and reasonable one. Indeed, for the reasons stated above, a strong argument could be made to increase the amount of parking associated with the project, particularly since a heavy-handed federal decree prohibits the construction of new independent garages. It certainly should not be reduced.

I personally walk or take the MBTA to work, and drive only for errands on weekends. However, we must recognize that cars are a necessity of modern life and that facilitating parking in the city actually makes living here -- and commuting less -- more attractive and thus more likely.

Thank you for your consideration.

Sincerely,

John A. Shope
56 Fayette Street
Boston, MA 02116
(617)832-1233

350 BOYLSTON STREET IMPACT ADVISORY GROUP

February 1, 2008

Jay Rourke
Senior Project Manager
Boston Redevelopment Authority
One City Hall Plaza
Boston, MA 02201

Dear Mr. Rourke:

The project proposed for 350 Boylston Street is a good start, and members of the Impact Advisory Committee had the opportunity to review the proposal and met to discuss it on January 22nd. While individuals IAG members and other groups will weigh in with greater detail about topics they would like to see addressed, the consensus view of the IAG members present at the meeting is outlined in the points listed below:

- The IAG members request presentation of realistic renderings of 350 Boylston in the context of the surrounding architecturally detailed buildings, viewed from all directions - including further down Boylston and Arlington, Providence and Berkeley Streets, and from the Public Garden.
- IAG members felt that more detail needed to be provided on the west façade of the building and on the Providence Street side. Concern was expressed that both sides were not given equal treatment both in rendering and design, and IAG members want to better understand how those sides of the building will work with the building as a whole.
- While IAG members agree that Providence Street is the right location for the loading and parking entrance and exit functions and serves more as a back alley than a street. We would like to understand how the changes proposed by the project will make it more attractive than it is today.
- The importance of the Arlington/Boylston Street corner was noted by all and members who encourage the architect to articulate a stronger impact visually on the corner. Some members agree with the BCDC that some of the façade be broken up with different design elements to prevent the building from seeming monolithic.
- IAG members request a comparison of total square footage as it exists today, compared to what is proposed, i.e., what is the net increase of square footage?
- Members of the IAG would appreciate seeing more information regarding the detailing and materials chosen by the developer, and ask to review samples, including limestone/cast stone choices.

- IAG members seek clarification of zoning, including the height specifications, rules regarding proximity to the Public Garden (100 feet), and more explanation of the "special exception" the developer is seeking.
- IAG members were unclear about the massing, screening and detailing of the mechanical penthouse and whether they would cast any shadows, outside of what is permitted under zoning. Members would like to see a view from "close up" and to see in detail how it would look from the Public Garden.
- IAG members feel strongly that the developer should follow, without exception, the legislation regarding shadows on the Public Garden.
- We request an itemization of all on-street parking spaces that would be removed so that the impact can be evaluated.
- Members of the IAG sought to understand the number of parking spaces proposed by the developer to make sure that the correct balance was established.
- We would like to see more detail regarding traffic generated by and to the building, and further exploration of the traffic pattern, including how a valet service would fit it. IAG members suggested that the developer explore the option of a drop off/pick up area on Providence Street.
- Members of the IAG request that the developer study all intersections on Arlington and Berkeley streets between Storrow Drive and the Massachusetts Turnpike to understand the impacts of new traffic.
- Members discussed the Boylston Street Improvement Plan that outlined a plan to change the width of the sidewalk this side of Boylston Street and decrease the sidewalk on the other side. IAG members suggest that this development (in addition to the construction being done by the MBTA) should encourage the Public Works Department to implement that phase of the plan for Boylston Street.
- The developer and the City of Boston should explore opportunities to improve the right corner turning radius from Boylston to Arlington Street, which today is a fairly sharp turn.
- The IAG members request review and confirmation that trucks will be able to back into the loading dock from Providence Street, along with any limitations in the size of truck that can be so accommodated. Please address whether there are plans for deliveries from any larger trucks and, if so, how they will be handled.
- Acknowledging the narrowness of the sidewalk on Arlington Street adjacent to the project site, due to the location of MBTA exits/entrances, IAG members request that the developer seek creative solutions toward improving this condition.
- IAG members request that the developer to donate any archeological "finds" to the City of Boston.
- IAG members would like more information about the construction timing proposed for the development, and how that would not overlap with constructions plans of the MBTA.

- We encourage the developer to meet the recommendations outlined by the Boston Groundwater Trust.
- IAG members request more information about construction management plans, especially with regard to the impacts of demotion and on traffic.

Thank you for the opportunity to participate in the public process and we look forward to our continued review of the impacts of 350 Boylston Street.

Sincerely,

Members of the Impact Advisory Committee

Meg Mainzer-Cohen

Meg Mainzer Cohen

Kathleen Connor

Kathleen Connor

David Gibbons

Ann Gleason

David Goldberg

Rev. Kim K. Crawford

Rev. Kim K. Crawford ~~Taylor~~ HARVIE

Elliott Laffer

Henry Lee

Henry Lee

Aaron ~~Michaelwitz~~ Michlewitz

Myron Miller

John Shope

Mark Slater

Bill Taylor 92

Bill Taylor

APPENDIX 3
COMMENTS FROM THE PUBLIC

NE-SAH
New England Chapter, Society of Architectural Historians, Inc.
141 Cambridge Street, Boston, MA 02114-2799

409 Common Street
Walpole, MA 02081
29 February 2008

Mr. Jay Rourke
Boston Redevelopment Authority
One City Hall Square, Floor 9
Boston, MA 02201

RE: Project Notification Form for 350 Boylston Street Redevelopment

Dear Mr. Rourke:

As Preservation Chair for the New England Chapter of the Society of Architectural Historians, I am again responding to the proposed redevelopment plan for the corner of Arlington and Boylston streets in Boston.

I strongly urge the Boston Redevelopment Authority to consider redevelopment options which retain the existing building fabric at this location, especially the Arlington Building. In *Victorian Boston Today*, the late architectural historian Margaret Henderson Floyd observes that the buildings in this block provide "notable examples of the refined Classical designs that distinguished Boston architecture at the turn of the century" (56). This building is important for its original architect, William Gibbons Rantoul, and its renovation architect, William Aldrich. Architecturally, the blending of Classical Revival architecture and the Art Deco updates to the storefront of this building show the evolution of Boston architecture in the early 20th century. Historically, the building is significant for the decades that it hosted Shreve, Crump, & Lowe.

Please carefully investigate all options which would allow for the preservation of the buildings at this site. One of Boston's important character-defining features is the co-existence of buildings from many different eras. Surely some accommodation could be made here, on this significant Boston corner.

Please keep us at NE-SAH informed as this process moves forward.

Sincerely,

Timothy Orwig
Preservation Chair, NESAH

Downtown Crossing Association

February 14, 2008

Harry Collings
Executive Secretary
Boston Redevelopment Authority
Boston City Hall
Boston, MA 02201

Dear Mr. Collings:

I am writing to correct the record of a communication you received from the Park Plaza CAC regarding the development of 350 Boylston Street.

As you know, I have recently taken over as President of the Downtown Crossing Association. As such, I have not had a chance to be apprised of the Park Plaza CAC's procedures nor have I ever attended any meetings to discuss this project. I was disappointed to learn the Downtown Crossing Association had been included in a letter commenting on this project. In fact, I had communicated by phone and email that I did not want this Association to be listed on their "opinion letter". After the fact, I realized that the Downtown Crossing Association's name appeared on their letterhead.

Please let the record show that we are in no way in support of the letter you received and will ask that our name be dropped from appearing on their letterhead for this and any future matters.

Thank you for your attention to this matter.

Sincerely,

Rosemarie E. Sansone

Rosemarie E. Sansone
President
Downtown Crossing Association

59 Temple Place, Suite 552 | Boston, MA 02111 | 617.482.4312 phone | 617.482.1932 fax | www.downtowncrossing.org

> /Rourke

Boston Properties

MICHAEL A. CANTALUPA
Senior Vice President - Development

February 20, 2008

Mr. John F. Palmieri
Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

BOSTON, MA
NEW YORK, NY
PRINCETON, NJ
SAN FRANCISCO, CA
WASHINGTON, D.C.

Re: 350 Boylston Street

Dear Mr. Palmieri:

I am writing you in support of 350 Boylston Street being developed by The Druker Company.

This type of redevelopment project is a good example of "Smart Growth", of which we are a big proponent. The Druker Company is redeveloping an underutilized city block by activating the street level with retail and providing niche office space in a location that is supported by public transportation and the Back Bay's desirable 24/7 amenity base. The project as proposed is entirely appropriate given its location and the context of the surrounding neighborhood.

From the presentation materials we have seen, the project seems to be well thought out and should enhance the pedestrian experience on what is currently a challenged corner of Boylston Street. We applaud The Druker Company's stance on sustainability by seeking a LEED rating for the project. Given the Druker Company's track record on other projects, we have no doubt that this will be a successful first class project and will integrate well into the surrounding neighborhood.

On behalf of Boston Properties, I encourage the Boston Redevelopment Authority to approve this project.

Sincerely,

Michael A. Cantalupa

S:\Development\Personnel\Cantalupa\Support Letter_350 Boylston.doc

PRUDENTIAL CENTER • 800 BOYLSTON STREET • BOSTON, MASSACHUSETTS 02199-8103 • TEL 617.236.3300 • FAX 617.236.3684
WWW.BOSTONPROPERTIES.COM • BOSTON PROPERTIES, INC. (NYSE: BXP)

Rourke, Jay

From: Brendan Mahoney [bmahoney05@gmail.com]
Sent: Tuesday, February 19, 2008 10:15 AM
To: Rourke, Jay

Subject: Shreve Building

Mr. Rourke,

I am writing in opposition to the proposed demolition of the Shreve building and neighboring structures. I think the loss of these buildings would be an absolute shame. The structures that sit on the corner of Arlington and Boylston are irreplaceable. For me, they represent everything that I like about boston . . . quaint, charming, pedestrian friendly, varied architecture, lively streetscapes - A human scale in a very large and economically viable city. A human scale that is authentic, unlike many other American cities I encourage you to take a trip to Europe and observe how Europeans have had little trouble finding new uses for structures such as the Shreve (Geneva comes to mind). I encourage you to advise Druker to develop a luxury office complex by at least incorporating these existing structures into the design.

With technology making leaps and bounds, I know that there is a market for smaller-scale luxury footprints in the office sector. A a very well-established colleague of mine recently left my company to run her own investment fund and I imagine she would be a perfect tenant for class-A luxury space in a redeveloped Shreve.

I encourage you to think long and hard about your decision to move forward. Think about the places in this city that are most interesting to you, think about the types of buildings that encourage creativity in this city. Where do you find some of the most unique businesses that help to define an evolving Bostonian culture? I imagine places like the south end, fort point channel, the north end, the back bay, the leather district, Charles St., and the emerging ladder district might come to mind. It is not a coincidence that all of these places have very human-scale architecture. Now think about how desolate the financial district is outside of business hours (the only places that have human scale businesses and retail tend to be the older buildings along Broad St. for example). Besides new construction on very few vacant parking lots, the only places that could potentially house people in this district are the older class B and C structures that might eventually be converted. I am not against tall buidings, I actually really like the Financial District very much because of the mix of old and new. I just think the large footprint of a lot of the newer towers does not lend itself to fostering creativity as easily.

I realize Druker's plan incorporates retail space on the ground level, but so does Prudential Center and much of the newer portion of Boylston St. on the south side. I realize these places are vibrant and full of activity, but think of the type of retail that exist there. Nothing in the newer buildings on the south side of Boylston is unique to Boston, besides maybe Shreve Crump and Lowe. But certainly none of those building help to create a unique culture that captivates people and draws them in to the "Boston brand".

In a haste to redevelop this great city, I worry that City Hall is losing site of the greatest advantage that sets Boston apart from most other US cities. Although it would be hard to prove, I would argue that Boston's uniqueness and Boston's sense of place, is one of the key factors that will contribute to our success in the global economy. People are drawn to such places from afar in an attempt to escape monotony and sterility. This is why I stayed here after college when all my other friends moved away to work in London and New York in search of action. I will tell you though, that as Boston gains ground on the "action" front with new additions like the the Beehive and other small-scale restaurants and cafe's rather than Cheescake Factories (which can be found pretty much anywhere), many of my friends are likely to move back because my generation (I am 25 years old) is just waiting for their chance to step up and make a footprint. Please do not destroy what I see as blank canvass that that will soon be turned into a beutiful portrait. Boston is growing into its shoes, don't kill the momentum before it has a chance to really take hold.

hank You,

Brendan Mahoney

COPLEY PLACE

→ Ronda

B.R.A.

2008 FEB 12 P 2:52

February 11, 2008

John F. Palmieri
Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Dear Director Palmieri:

I am writing in support of the Druker project proposed for 350 Boylston Street.

This building – designed and executed in the manner described by the development team – would represent a welcome revitalization of an important but tired corner in the Back Bay.

As the operator of a major business in the Back Bay, I can understand and appreciate how a stronger, more vibrant Bolyston Street enhances both the neighborhood and the city. I recognize the site-specific synergy and area economic impact that office space in combination with street-level retail and restaurant uses can provide.

Today, this is a prominent intersection in our city that features noteworthy elements on just three of its four corners. 350 Boylston would enhance and complete the area in a very effective way.

I encourage the Boston Redevelopment Authority to approve this project.

Sincerely,
SIMON PROPERTY GROUP

William J. Kenney, CSM
General Manager
Copley Place

Two Copley Place, Suite 100, Boston, MA 02116
617.262.6600 | fax 617.369.5002 | www.simon.com

SIMON™

THE Fairmont
COPLEY PLAZA
BOSTON

B.R.A.

February 6, 2008

2008 FEB -7 P 3: 04

John F. Palmieri
Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Dear Director Palmieri:

I am writing in support of the project proposed for 350 Boylston Street.

The first block of Boylston Street is in need of more vitality, and the project proposed at 350 Boylston Street will dramatically improve that location. The Druker Company has created an elegant building design that respects history while looking forward.

As a businessperson in the Back Bay and a resident of Boston, I have appreciated the city's focus on creating a more vibrant and economically healthy Boylston Street. The Druker Company's project fits in with and expands upon that vision.

I particularly applaud the focus on office space, with a ground floor that incorporates active retail and restaurant uses. Hotels in the Back Bay rely on both visitors and office workers to shop, dine and recreate, and the new workers housed in the office will undoubtedly have an economic impact on the community.

The corner of Boylston and Berkeley has long been an underutilized area. By combining the former Shreve's site and adjacent building to create a single building, 350 Boylston Street will complete the potential generated by the Arlington Street Church, Public Garden and Heritage building. The building design will complement the area. While Cesar Pelli is best known for designing tall buildings, he did a magnificent job within the low-rise guidelines for this site. The building's design echoes the bay windows that Back Bay is known for, while the construction materials add an elegant edge. We look forward to seeing the building complete.

I encourage the Boston Redevelopment Authority to approve this project.

Sincerely,

Suzanne Wenz
Regional Director of ~~Public~~ Relations

CC: Meg Mainzer Cohen

138 ST. JAMES AVENUE, BOSTON, MASSACHUSETTS, U.S.A. 02116
TELEPHONE 617 267 5300 FACSIMILE 617 247 6681 RESERVATIONS 800 441 1414
www.fairmont.com

Marriott
BOSTON COPLEY PLACE

Rourke

David R. Giblin
General Manager

B.R.A.

2008 FEB -6 P 4: 11

February 4, 2008

Mr. John F. Palmieri
Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Dear Director Palmieri:

I am writing in support of the project proposed for 350 Boylston Street.

The first block on Boylston Street is in need of more vitality, and the project proposed at 350 Boylston Street will dramatically improve that location. The Druker Company has created an elegant building design that respects history while looking forward.

As a business owner in the Back Bay, I have appreciated the city's focus on creating a more vibrant and economically healthy Boylston Street. The Druker Company's project fits in with and expands upon that vision.

I particularly applaud the focus on office space, with a ground floor that incorporates active retail and restaurant uses. Businesses in the Back Bay rely on both visitors and office workers to shop, dine and recreate at our locations and the new workers housed in the office will undoubtedly have an economic impact on the community.

The corner of Boylston and Berkeley has long been an underutilized area. By combining the former Shreve's site and adjacent building to create a single building, 350 Boylston Street will complete the potential generated by the Arlington Street Church, Public Garden and Heritage building. The building design will complement the area. Cesar Pelli is best known for designing tall buildings, but he did a magnificent job within the low-rise guidelines for this site. The building's design echoes the bay windows that Back Bay is known for, while the construction materials add an elegant edge. We look forward to seeing the building complete.

I encourage the Boston Redevelopment Authority to approve this project.

Sincerely,

David R. Giblin
General Manager

Boston Marriott Copley Place
110 Huntington Avenue, Boston, Massachusetts 02116-5706
Telephone (617) 937 5700 Facsimile (617) 937 5697
david.giblin@marriott.com

February 8, 2008

Jay Rourke, Senior Project Manager
Boston Redevelopment Authority
One City Hall Plaza
Boston, MA 02201-1007
Jay.Rourke.bra@cityofboston.goc

RE: Park Plaza CAC letter dated February 6, 2008

Dear Mr. Rourke:

Please replace the previous letter from the Park Plaza CAC with the attached letter, dated February 8, 2008.

Thank you,

Beatrice Nessen

Beatrice Nessen, Secretary
19 Charles River Square
Boston, MA 02114
bnessen@earthlink.net

Park Plaza Civic Advisory Committee

Beatrice Nessen, Secretary
19 Charles River Square
Boston, MA 02114
bnessen@earthlink.net

CAC

February 8, 2008

Jay Rourke, Senior Project Manager
Boston Redevelopment Authority
One City Hall Plaza
Boston, MA 02201-1007
Jay.Rourke.bra@cityofboston.goc

RE Project Notification Form for 350 Boylston Street submitted by The Druker Company, LTD.

Dear Mr. Rourke:

The Park Plaza CAC, mandated as a condition of the approval of the Park Plaza Urban Renewal Plan has been reviewing and advising the BRA for the a thirty year period regarding development matters in and affecting that urban renewal area pursuant to the Commonwealth's mandate and our contract with the Boston Redevelopment Authority (BRA). The CAC consists of delegates from diverse organizations representing commercial, residential and general civic interests.

I am writing on behalf of the Park Plaza CAC to comment on the potential impacts of the project described in the PNF submitted by The Druker Company, LTD on the Park Plaza Area. Mr. Druker completed a major project working with the Park Plaza Civic Advisory Committee, which made significant contribution at a key site within the Park Plaza urban renewal area in the 1980's., the Heritage on the Garden. We look forward to a project of equal quality in terms of architectural and urban design.

The CAC requests that the next submission of the project more fully study pedestrian and vehicular traffic throughout the Park Plaza urban renewal area from Washington Street to Arlington Street. A number of our members feel that, given the proximity to public transportation and the congested state of many adjacent roadways, the number of parking spaces within the project could and should be reduced. We are interested in how the design of the proposed new building fits into its historic context. We, of course, are very concerned that a new building not project any new shadows on the Public Garden at any time and look forward to detailed shadow studies from daylight to sunset throughout the year.

Thank you for the opportunity to comment. We look forward to working on this project, which has the opportunity to extend the impact of the improvements in this part of Boston.

Sincerely,

Beatrice Nessen

Beatrice Nessen, Secretary

cc: John Palmiere, Director, BRA
Harry Collings, Secretary, BRA

GREATER BOSTON REAL ESTATE BOARD

GREATER BOSTON REAL ESTATE BOARD
Leading the Profession

Harry Collings
Executive Director/Secretary
Boston Redevelopment Authority
9th Floor, City Hall
Boston, MA

February 8, 2008

Dear Mr. Collings,

The Park Plaza CAC has gone on record commenting on a real estate development project being undertaken at 350 Boylston Street in Boston, Massachusetts. The Greater Boston Real Estate Board has not had a representative or participated with this group for over 4 years, and yet our name appears on the letter as being in favor of the group's position. For the record, the Park Plaza CAC does not have the authority to speak for, bind or represent the Greater Boston Real Estate Board in any capacity. This action by them was not only unprofessional, but simply duplicitous.

I am personally troubled by this action because it draws into question the overall value of the comments produced by the Park Plaza CAC. Who really made these comments? Are other organizations aware of this action? Was the goal to use the influence of the "group" to stymie a project that is really not favored by just a few members of the CAC? We are writing to you because we feel that this was an egregious abuse of the public comment process and want to make sure that we register our concern with you in writing. Thank you for your attention to this matter.

Sincerely,

Gregory P. Vasil, Esq.
Chief Executive Officer
Greater Boston Real Estate Board

11 Beacon Street
First Floor
Boston, MA 02108
Tel: 617-423-8700

THE Fairmont
COPLEY PLAZA
BOSTON

B.R.A.

February 6, 2008

2008 FEB -7 P 3:04

John F. Palmieri
Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Dear Director Palmieri:

I am writing in support of the project proposed for 350 Boylston Street.

The first block of Boylston Street is in need of more vitality, and the project proposed at 350 Boylston Street will dramatically improve that location. The Druker Company has created an elegant building design that respects history while looking to the future.

As a hotelier in the Back Bay, I have appreciated the city's focus on creating a more vibrant and economically healthy Boylston Street. The Druker Company's project fits in with and expands upon that vision.

I particularly applaud the focus on office space, with a ground floor that incorporates active retail and restaurant uses. The Fairmont Copley Plaza relies on both visitors and office workers to shop, dine and recreate at the hotel, and the new workers housed in the office will undoubtedly have an economic impact on the community.

The corner of Boylston and Berkeley has long been an underutilized area. By combining the former Shreve's site and adjacent building to create a single building, 350 Boylston Street will complete the potential generated by the Arlington Street Church, Public Garden and Heritage building. The building design will complement the area. Cesar Pelli is best known for designing tall buildings, but he did a magnificent job within the low-rise guidelines for this site. The building's design echoes the bay windows that Back Bay is known for, while the construction materials add an elegant edge. We look forward to seeing the building complete.

I encourage the Boston Redevelopment Authority to approve this project.

Sincerely,

Paul S. Tormey
Regional Vice President and General Manager

CC: Meg Mainzer-Cohen

138 ST. JAMES AVENUE, BOSTON, MASSACHUSETTS, U.S.A. 02116
TELEPHONE 617 267 5300 FACSIMILE 617 247 6681 RESERVATIONS 800 441 1414
www.fairmont.com

Office (781) 326-4444
Fax (617) 266-6666
pakistan@tiac.net

Home (781) 326-3333
Cell (617) 584-5555

Barry D. Hoffman
558 Clapboardtree Street
Westwood, Massachusetts 02090

B.R.A.
2008 JAN 30 P 2:28

Mr. John F. Palmieri
Director of the Boston
Redevelopment Authority

January 29, 2008

Dear Mr. Palmieri,

I'm very impressed by Ron Druker's proposal for 350 Boylston Street. I have been active in the Back Bay for over 50 years and have seen it change into a very dynamic and economically healthy section of the city.

This first block of Boylston Street has always been a problem. I built the new building across the street at 419 Boylston about 25 years in partnership with New England Life which may have been the beginning of change but this new Cesar Pelli-designed building will certainly be a huge plus. I might add that my company built several other new office buildings in the Back Bay and developed many commercial and residential sites.

Let me also add that Ron Druker has a reputation for building projects of the highest quality and if you look at what he has done you'll be impressed.

I strongly recommend that the BRA approve his project.

Sincerely,

Barry D. Hoffman

BACK BAY ASSOCIATION

REPRESENTING BUSINESS SINCE 1923

February 1, 2008

Jay Rourke
Project Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Dear Mr. Rourke:

I am writing on behalf of the Back Bay Association in support of the proposed 350 Boylston Street building submitted by The Druker Company.

The Back Bay Association has worked with the city for several years to ensure that Boylston Street is a lively and inviting corridor through the Back Bay; known as the Boylston Street Improvement Plan. As the developer of Heritage on the Garden and owner of several buildings on Boylston Street, Ronald Druker has long been committed to this same vision and has been a significant voluntary donor each year.

I have known Mr. Druker since 1986, and can attest for his sincere commitment to developing a landmark building for the next generation on this site. I am convinced that the proposed 350 Boylston Street project is to be commended for several reasons:

- A world class design, created by famed architect Cesar Pelli
- A focus on office space which will support the further economic development of Boylston Street
- Ground floor retail that will compliment the neighborhood's existing shops and make it even more of a destination
- A commitment to stay within height and shadow guidelines for the site

It is clear from both the proposal and the renderings that this building will only add to the aesthetic, economic and social life of the Back Bay. For many years, we have received complaints about the "AB" block of Boylston Street, and why it failed to thrive. This new building will enhance Back Bay and will add some new commercial square footage to a part of Back Bay which hasn't seen new office space for many, many years. I was inspired to do a walk-through of the site last week, and saw close up the current condition of Providence Street. I know that 350 Boylston Street will improve the AB Block of Boylston Street, but it will totally transform and improve Providence Street as well.

I have been honored to participate as a member of the Impact Advisory Committee for 350 Boylston Street and I value the input and consensus achieved by members of the IAG.

Based on the projected positive impacts of the project, and glowing comments I've heard from BBA members, I encourage the BRA scoping determination to focus on direct impacts of the project.

Sincerely,

Meg Mainzer-Cohen

Meg Mainzer-Cohen

234 Clarendon Street, Boston, MA 02116 T 617.266.1991 F 617.266.8750

Liberty Mutual.

Liberty Mutual Group

Corporate Real Estate
175 Berkeley Street
Mail Stop: 03L
Boston, MA 02116
Telephone: (617) 357-9500
Fax: (617) 574-5779

B.R.A.

2008 FEB -1 P 3: 23

January 30, 2008

John F. Palmieri
Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Dear Director Palmieri:

I am writing in support of the project proposed for 350 Boylston Street.

The first block on Boylston Street is in need of more vitality, and the project proposed at 350 Boylston Street will dramatically improve that location. The Druker Company has created an elegant building design that respects history while looking forward.

As a representative of a business in the Back Bay, I have appreciated the city's focus on creating a more vibrant and economically healthy Boylston Street. The Druker Company's project fits in with and expands upon that vision.

Businesses in the Back Bay rely on both visitors and office workers to shop, dine and recreate at our locations and the new workers housed in the office will undoubtedly have an economic impact on the community.

The corner of Boylston and Berkeley has long been an underutilized area. By combining the former Shreve's site and adjacent building to create a single building, 350 Boylston Street will complete the potential generated by the Arlington Street Church, Public Garden and Heritage building. The building design will complement the area. Cesar Pelli is best known for designing tall buildings, but he did a magnificent job within the low-rise guidelines for this site. The building's design echoes the bay windows that Back Bay is known for, while the construction materials add an elegant edge. We look forward to seeing the building complete.

I encourage the Boston Redevelopment Authority to approve this project.

Sincerely,

Karen Kallander
AVP & Manager, Corporate Real Estate

Saunders Hotel Group

B.R.A.

2008 FEB -1 P 3:23

Telephone 617-861-9000
Facsimile 617-425-0901

January 30, 2008

www.saundershotelgroup.net
info@saundershotelgroup.net

Mr. John F. Palmieri, Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Dear Director Palmieri:

I am writing in support of the project proposed for 350 Boylston Street.

The first block on Boylston Street is in need of an injection of vitality, and the Druker Company has created a very thoughtful and elegant building design that respects history while looking forward.

As a third generation business owner in the Back Bay, I have appreciated the city's and the BBA's focus on creating a more vibrant and economically sustainable Boylston Street. The Druker Company's project fits in well with and expands upon that vision.

I particularly applaud active retail and restaurant uses. Businesses in the Back Bay rely on both visitors and office staff to shop and dine at our locations. The addition to the workforce in this area will undoubtedly have an economic impact in the community.

The building design will complement the area. While Cesar Pelli is best known for designing tall buildings, he did a magnificent job within the low-rise guidelines for this site. The building's design echoes the architectural features for which Back Bay is known, while the construction materials, for which no expense has been spared, add an elegant edge. We look forward to seeing the building complete.

On behalf of Saunders Hotel Group, I encourage the Boston Redevelopment Authority to approve this project.

Sincerely,

Gary L. Saunders, Chairman

240 Newbury Street, Boston, Massachusetts 02116-2564

BRISTOL PROPERTY MANAGEMENT, INC.
425 Boylston Street, Suite 9
Boston, Massachusetts 02116
Telephone: 617-266-9200 Facsimile: 617-266-9201

B.R.A.
2008 FEB -1 P 3: 23

January 31, 2008

John F. Palmieri
Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Re: Proposed office and retail development for 350 Boylston Street.

Dear Director Palmieri:

I am writing in support of the The Druker Company's proposed office and retail development for 350 Boylston Street.

Ron Druker, whom I have known for over 30 years, has proven once again that he is a "developer's developer."

In planning for uses on the Boylston Street corridor that will endure, in engaging Cesar Pelli who will provide Boston with yet another important signature building of seemingly durable design that so comfortably fits the site, in stressing a commitment to the building's sustainability, in providing a self-sufficient level of parking while also in close proximity to public transportation, and characteristically in so many other ways, Ron has shown once again that his projects are thoughtful and a credit to our city.

For these reasons and because I believe Mr. Druker will not rest in seeking perfection from ground breaking to final tenant occupancy – a mark of a Boston developer who takes great pride in the work he sees each day, I encourage the Boston Redevelopment Authority to approve this project.

Sincerely,

Peter J. Bassett
President

BROADWAY
REAL ESTATE
SERVICES

B.R.A.

2008 FEB -1 P 3:23

January 31, 2008

Mr. John F. Palmieri
Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Dear Mr. Palmieri:

On behalf of Broadway Real Estate Services, we are pleased to support the Druker Company's proposed project at 350 Boylston Street. By combining both office and retail, we believe the project will contribute to further enhancing Boylston Street and certainly provide a favorable economic impact to the community. In addition, the building design is sure to complement the area and surrounding properties.

As a property owner in the Back Bay, we support the 350 Boylston project and encourage the Boston Redevelopment Authority to approve this project.

Sincerely,

Brian Barriero
Portfolio Manager

Broadway Real Estate Services LLC
200 Clarendon Street | Boston, MA 02116
T 617.275.0100 | F 617.275.0199 | www.bwaypartners.com

Boston Properties

B.R.A.

2008 FEB -1 P 3: 23

January 31, 2008

John F. Palmieri
Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

BOSTON, MA
NEW YORK, NY
PRINCETON, NJ
SAN FRANCISCO, CA
WASHINGTON, D.C.

Dear Director Palmieri:

I am writing in support of the project proposed for 350 Boylston Street.

The first block on Boylston Street is in need of more vitality, and the project proposed at 350 Boylston Street will dramatically improve that location. The Druker Company has created an elegant building design that respects history while looking forward.

As a business owner in the Back Bay, I have appreciated the city's focus on creating a more vibrant and economically healthy Boylston Street. The Druker Company's project fits in with and expands upon that vision.

I particularly applaud the focus on office space, with a ground floor that incorporates active retail and restaurant uses. Businesses in the Back Bay rely on both visitors and office workers to shop, dine and recreate at our locations and the new workers housed in the office will undoubtedly have an economic impact on the community.

The corner of Boylston and Berkeley has long been an underutilized area. By combining the former Shreve's site and adjacent building to create a single building, 350 Boylston Street will complete the potential generated by the Arlington Street Church, Public Garden and Heritage building. The building design will complement the area. Cesar Pelli is best known for designing tall buildings, but he did a magnificent job within the low-rise guidelines for this site. The building's design echoes the bay windows that Back Bay is known for, while the construction materials add an elegant edge. We look forward to seeing the building completed.

I encourage the Boston Redevelopment Authority to approve this project.

Sincerely,

Peter V. See
Senior Vice President,
Property Management

BACK BAY ASSOCIATION

REPRESENTING BUSINESS
SINCE 1923

B.R.A.
2008 JAN 29 P 4: 29

January 25, 2008

John F. Palmieri
Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Re: Endorsement of the 350 Boylston Project

Dear Mr. Palmieri,

I am writing to endorse The Druker Company's proposed 350 Boylston Project. The project brings several benefits to Boston's Back Bay neighborhood:

Truck Loading: Truck loading will be removed from the street. This building design feature helps solve a growing problem of truck congestion in the Back Bay.

Street and Sidewalk Activization: The Back Bay is unique and nationally known as a highly successful mixed use neighborhood. The design of 350 Boylston embraces and brings energy to the street with its open and welcome retail format. 350 Boylston's design is consistent and complimentary with what makes the Back Bay "America's most dynamic neighborhood."

Long Term Building Materials: The materials of this building are extremely expensive given the size and scope. Where most developers are cutting costs, this project is being built with materials that will stand the test of time. The use of quality materials by The Druker Company will enable this building to look and feel fantastic for many years to come.

Smart Green Development: We applaud The Druker Company's commitment to the environment and sustainable design. This building will serve as a leader by example that LEED certified green development can be successful. The Druker Company is taking an old, obsolete and highly inefficient energy consuming building and replacing it with smarter density and modern efficient energy technology. This project is being built with a conscious and thoughtful regard for the environment.

We encourage the Boston Redevelopment Authority to approve the proposed 350 Boylston Project. We believe 350 Boylston is destined to be a tremendous addition and real gem in the Back Bay Neighborhood.

Thank you for your consideration.

Sincerely,

Bryan J. Koop

Bryan J. Koop
Chairman

234 Clarendon Street, Boston, MA 02116 T 617.266.1991 F 617.266.8750

→ Rourke

January 29, 2008

John F. Palmieri
Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Dear Director Palmieri:

I am writing in support of the project proposed for 350 Boylston Street.

The first block on Boylston Street is in need of more vitality, and the project proposed at 350 Boylston Street will dramatically improve that location. The Druker Company has created an elegant building design that respects history while looking forward.

As a businesswoman in the Back Bay, I have appreciated the city's focus on creating a more vibrant and economically healthy Boylston Street. The Druker Company's project fits in with and expands upon that vision.

I particularly applaud the focus on office space, with a ground floor that incorporates active retail and restaurant uses. Businesses in the Back Bay rely on both visitors and office workers to shop, dine and recreate at our locations and the new workers housed in the office will undoubtedly have an economic impact on the community.

The corner of Boylston and Berkeley has long been an underutilized area. By combining the former Shreve's site and adjacent building to create a single building, 350 Boylston Street will complete the potential generated by the Arlington Street Church, Public Garden and Heritage building. The building design will complement the area. Cesar Pelli is best known for designing tall buildings, but he did a magnificent job within the low-rise guidelines for this site. The building's design echoes the bay windows that Back Bay is known for, while the construction materials add an elegant edge. We look forward to seeing the building complete.

I encourage the Boston Redevelopment Authority to approve this project.

Sincerely,

Ann V. Ehrhart

C. TALANIAN
REALTY CO., INC.
Since 1932

→ Rourke

January 31,008

John F. Palmieri
Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Dear Director Palmieri:

I am writing in support of the project proposed for 350 Boylston Street.

The first block on Boylston Street is in need of more vitality, and the project proposed at 350 Boylston Street will dramatically improve that location. The Druker Company has created an elegant building design that respects history while looking forward.

As a business owner in the Back Bay, I have appreciated the city's focus on creating a more vibrant and economically healthy Boylston Street. The Druker Company's project fits in with and expands upon that vision.

I particularly applaud the focus on office space, with a ground floor that incorporates active retail and restaurant uses. Businesses in the Back Bay rely on both visitors and office workers to shop, dine and recreate at our locations and the new workers housed in the office will undoubtedly have an economic impact on the community.

The corner of Boylston and Berkeley has long been an underutilized area. By combining the former Shreve's site and adjacent building to create a single building, 350 Boylston Street will complete the potential generated by the Arlington Street Church, Public Garden and Heritage building. The building design will complement the area. Cesar Pelli is best known for designing tall buildings, but he did a magnificent job within the low-rise guidelines for this site. The building's design echoes the bay windows that Back Bay is known for, while the construction materials add an elegant edge. We look forward to seeing the building complete.

I encourage the Boston Redevelopment Authority to approve this project.

Sincerely,

Charles M. Talanian
President

Sales • Leasing • Development • Management
137 NEWBURY STREET BOSTON, MASSACHUSETTS 02116-2885
TEL 617. 536. 4655 FAX 617. 536. 7552

B.R.A.

2008 JAN 29 P 4: 29

January 25, 2008

John F. Palmieri
Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Re: Endorsement of the 350 Boylston Project

Dear Director Palmieri,

I write in support of The Druker Company's proposed office building at 350 Boylston Street.

As a resident, I applaud the design feature that removes truck loading off the street and reduces congestion.

I also endorse the ground floor design that incorporates active retail and restaurant uses. This design feature will further activate what has become a quiet and dull corner of our City.

Thank you for your consideration as I encourage the BRA and its Board of Directors to approve this project.

Sincerely,

Austin Barrett
51 Saint Germain St #2
Boston, MA 02115

B.R.A.

2008 JAN 29 P 4: 29

January 25, 2008

John F. Palmieri
Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Re: Endorsement of the 350 Boylston Project

Dear Director Palmieri,

I write in support of The Druker Company's proposed office building at 350 Boylston Street.

As a resident, I applaud the design feature that removes truck loading off the street and reduces congestion.

I also endorse the ground floor design that incorporates active retail and restaurant uses. This design feature will further activate what has become a quiet and dull corner of our City.

Thank you for your consideration as I encourage the BRA and its Board of Directors to approve this project.

Sincerely,

PATRICK MULVIHILL
233 D. STREET, UNIT #1
SOUTH BOSTON, MA 02127

B.R.A.

2008 JAN 29 P 4: 29

January 25, 2008

John F. Palmieri
Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Re: Endorsement of the 350 Boylston Project

Dear Director Palmieri,

I write in support of The Druker Company's proposed office building at 350 Boylston Street.

As a resident, I applaud the design feature that removes truck loading off the street and reduces congestion.

I also endorse the ground floor design that incorporates active retail and restaurant uses. This design feature will further activate what has become a quiet and dull corner of our City.

Thank you for your consideration as I encourage the BRA and its Board of Directors to approve this project.

Sincerely,

Philip F. Dorman

PHILIP F DORMAN
30 E. CONCORD ST #2
BOSTON, MA 02118

Boston Properties

Bryan J. Koop
Senior Vice President- Regional Manager

B.R.A.

2008 JAN 29 P 4: 29

January 25, 2008

John F. Palmieri
Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

BOSTON, MA
NEW YORK, NY
PRINCETON, NJ
SAN FRANCISCO, CA
WASHINGTON, D.C.

Re: Endorsement of the 350 Boylston Project

Dear Mr. Palmieri,

I am writing to endorse The Druker Company's proposed 350 Boylston Project. The project brings several benefits to Boston's Back Bay neighborhood:

Truck Loading: Truck loading will be removed from the street. This building design feature helps solve a growing problem of truck congestion in the Back Bay.

Street and Sidewalk Activization: The Back Bay is unique and nationally known as a highly successful mixed use neighborhood. The design of 350 Boylston embraces and brings energy to the street with its open and welcome retail format. 350 Boylston's design is consistent and complimentary with what makes the Back Bay "America's most dynamic neighborhood."

Long Term Building Materials: The materials of this building are extremely expensive given the size and scope. Where most developers are cutting costs, this project is being built with materials that will stand the test of time. The use of quality materials by The Druker Company will enable this building to look and feel fantastic for many years to come.

Smart Green Development: We applaud The Druker Company's commitment to the environment and sustainable design. This building will serve as a leader by example that LEED certified green development can be successful. The Druker Company is taking an old, obsolete and highly inefficient energy consuming building and replacing it with smarter density and modern efficient energy technology. This project is being built with a conscious and thoughtful regard for the environment.

We encourage the Boston Redevelopment Authority to approve the proposed 350 Boylston Project. We believe 350 Boylston is destined to be a tremendous addition and real gem in the Back Bay Neighborhood.

Thank you for your consideration.

Sincerely,

Bryan J. Koop

Bryan J. Koop

PRUDENTIAL CENTER • 800 BOYLSTON STREET, SUITE 1900 • BOSTON, MASSACHUSETTS 02199-8103 • TEL 617.236.3300
WWW.BOSTONPROPERTIES.COM • BOSTON PROPERTIES, INC. (NYSE: BXP)

B.R.A.

2008 JAN 29 P 4: 29

January 25, 2008

John F. Palmieri
Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Re: Endorsement of the 350 Boylston Project

Dear Director Palmieri,

I write in support of The Druker Company's proposed office building at 350 Boylston Street.

As a resident, I applaud the design feature that removes truck loading off the street and reduces congestion.

I also endorse the ground floor design that incorporates active retail and restaurant uses. This design feature will further activate what has become a quiet and dull corner of our City.

Thank you for your consideration as I encourage the BRA and its Board of Directors to approve this project.

Sincerely,

47 Irving Street
Boston, MA 02114

Rourke, Jay

From:	clinton heitman [clintonh@earthlink.net]
Sent:	Tuesday, February 05, 2008 11:20 AM
To:	Rourke, Jay; eware@bostonpreservation.org; nabbinc@verizon.net; palmer@globe.com; camglobe@aol.com
Subject:	A SUBTLE TREASURE
Attachments:	Shreve's.jpg; ATT4079609.txt

February 5, 2008

Dear City Of Boston,

I was dismayed to read on February first that it was the last day to comment on the impending demolition of the Arlington Building. Well, deadline or not, I do wish to comment on the likely loss of this elegant structure, though the wrecking ball seems to be well on its way.

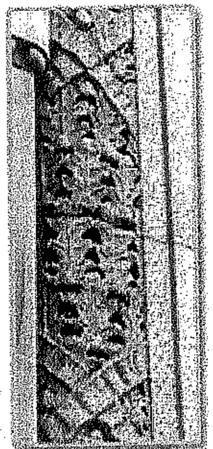
Shreve's, as I think of it, has been on that corner all my life, part of the fabric of the city. I took it for granted that it would always be there. Now that it may vanish I have taken a closer look, and pondered its architectural merits.
They are many. Built around 1929 it is definitely a merger of styles, a transition from Beaux-Arts to Art-Deco. Beaux-Deco perhaps? Yes, that sounds right.
Whoever the architect was he managed to merge the two styles into a subtle treasure. The scale, proportions, and choice of materials are all perfect. Quite unlike the two egotistical eyesores filling the next block from Berkley to Clarendon Streets. They appear to have been commissioned by a commitee composed of Stalin, Mussolini, and Hitler. We don't need more of that.

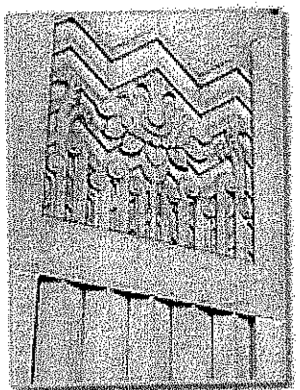
In contrast the new Mandarin Oriental hotel further up Boylston Street is looking like it will be a fine addition to the cityscape. Not very avant garde, but again, scale proportion and materials
are handled beautifully. And for avant garde I look forward to the
new Apple Store which opens
soon. Classy glass, unlike the anonymous pile proposed for the Shreve's site.

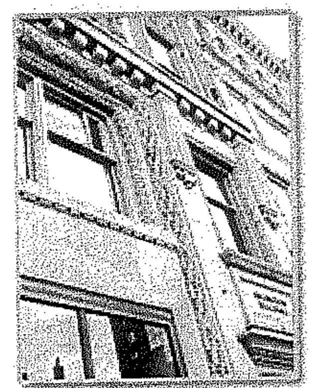
I'm enclosing a composite of photos taken the day after the deadline. If you are in the Back Bay soon take a closer look at the grand old lady. She will be sorely missed.

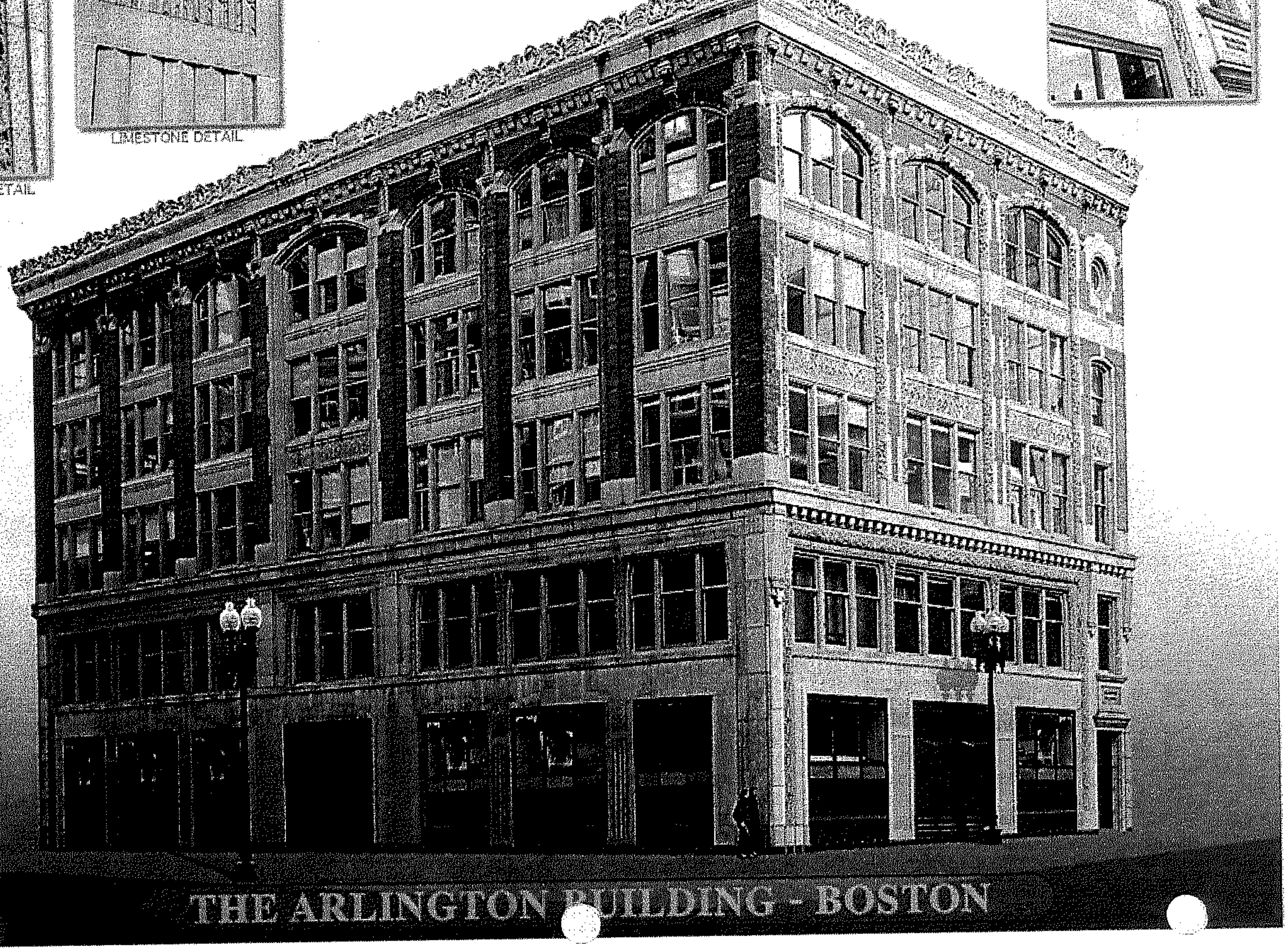
Sincerely, Clint Heitman

clintonh@earthlink.net
(617) 524-9944


GRANITE DETAIL


LIMESTONE DETAIL





Neighborhood
Association of the
Back Bay

N A B B

February 1, 2008

Jay Rourke, Senior Project Manager
Boston Redevelopment Authority
One City Hall Plaza
Boston, MA 02201-1007
Jay.Rourke.bra@cityofboston.gov

RE: Project Notification Form for 350 Boylston Street submitted by The Druker Company

Dear Mr. Rourke:

The Neighborhood Association of the Back Bay (NABB) has reviewed the Project Notification Form ("PNF") submitted by The Druker Company, LTD for the 350 Boylston Street project. We appreciate the opportunity to comment on the proposed development and its impacts.

The site of 350 Boylston Street, at the corner of Boylston and Arlington Streets, facing the Public Garden, is especially prominent and significant for Boston. The site is part of the composition that creates a gateway to the Back Bay and Bay Village. It demands a development of the highest architectural quality and responsible urban design. Its impacts on the surrounding environment must be conscientiously considered, and any negative results effectively mitigated. The development proposed for this site, as presented in the Project Notification Form and recent public meetings, represents an impressive start on project design. However, we feel that the design should be significantly improved to achieve the full potential of this unique site, and there are many areas of potential impact that require substantial clarification and study. The following issues warrant analysis, design consideration and possible mitigation, and should be addressed in the BRA scoping determination for developer response in the DPIR.

1. <u>Architectural Design</u>
   a. <u>Exterior Façade Treatment</u>. The proposed design does not achieve the rich character and interesting architectural quality that this prime site deserves. The effect of the massing and exterior treatment, running over 220 feet along Boylston Street, feels monolithic. The alternation of masonry-and-glass façade elements with projecting curtain-wall bays is very regular. This uniform and large-scale repetitive rhythm is inconsistent with the varied design, scale, window-size, and rhythm of 25-foot bay modules in the traditional building pattern of Boylston Street. The developer should explore alternative treatment concepts to create a stronger design, of memorable landmark stature, equivalent to the richness of the existing Arlington Building on the site.
   b. <u>Corner Bay Design</u>. The architect emphasized that the Arlington-Boylston corner, facing the Public Garden, is the most important façade and that the corner design strives to make a special architectural statement. The corner bay should stand-out more uniquely than in the proposed design, which shows minimal differentiation from the other façade bays. Design options should be developed that create a special, richer presence for this corner.

The Neighborhood Association *of the* Back Bay
337 Newbury Street, Boston, MA 02115 Tel 617.247.3961 Fax 617.247.3387

c. South Façade. The Providence Street elevation shows an undifferentiated masonry plane with a repetitive pattern of punched-window openings over wide loading dock and garage doors, rising straight to the top with no setback. This wall faces the tall uninterrupted rear façade of the Park Square Building. It makes Providence Street an uncomfortable canyon, and reinforces an impression of this street as a "back alley." The treatment is inconsistent with the Boylston and Arlington façades – like a different building. The design should make all faces of 350 Boylston feel well-related, and create a positive pedestrian-friendly character for Providence Street.

d. West Façade. The west side of the building will be visible from Boylston and Providence Streets over the adjacent low structures. Design of this face must be consistent with the prime quality expected on Boylston. The proposed façade awkwardly butts two very different treatments – masonry-and-glass curtain-wall against undifferentiated masonry with small regular punched window-openings. Fully rendered presentations are needed to understand the developer's intentions and compliance with this goal.

e. Contextual Rendered Presentations. The proposed design must be presented in colored renderings that show the project photo-realistically in the context of the varied building architecture in all directions along Boylston and Arlington, to better understand its impact and the compatibility of its design and scale in this environment. It should be noted that the immediate context of the new building, the three other corners of this major intersection include the historic Public Garden, the historic Arlington Street Church, and the immensely well received 1988 project also by The Druker Company, Inc, the Heritage on the Common. One challenge to the new building is to fit into and enhance this context. The illustrations requested are necessary to help the community visualize the proposed project.

f. Limestone vs. Cast Stone. The architect has referred to the predominant façade material as limestone, while the developer has said that it will be cast stone "laid-up to look like limestone." There is a noticeable difference in the architectural and visual effect of these materials, even properly laid-up, in finish, durability, color, texture and natural variation among the masonry elements. A building of this quality and prominence deserves real limestone, for the enduring benefit of this prime intersection.

g. Mechanical Penthouse. The project renderings and elevations seem confusing about the size, height, visibility and impact of the mechanical penthouse, as this large structure is ghosted-in and minimally rendered. The architect must accurately show the dimensions, location, exterior shielding treatment, degree of exposure of mechanical equipment, and visibility from the street and the Public Garden. It is not clear that the penthouse design treatment is integrated well into the overall building design. It is essential that the visual impact of this structure is minimized, that it does not cast unacceptable shadows, and it does not detract from the project design image. Visibility should be evaluated through renderings from a distance down Boylston and Arlington Streets and the Public Garden.

h. Exterior Detailing and Materials Samples. Experiential impact of the exterior treatment depends on quality detailing of the façade elements – coordination between materials, joint design, depth of window mullions and stonework reveals, color selection, control for consistency, etc. The BRA, with IAG input, must closely review materials samples, detailed submissions on all such treatments, and on-site mock-ups during construction, to ensure top quality design implementation.

2. Zoning

a. Clarified Zoning Plan Explanation. The height limits and zoning regulations applicable to different parts of the site are unclear from the PNF presentation. A plan detailing the limits for each part of the site would help explain the regulatory situation and how the development intends to comply.

b. "Special Exception" for Height. We have been told that an "exception" must be granted by the ZBA to allow construction above the zoning-limit height of 85 feet along Boylston Street to a point 100 feet west of Arlington, for a depth of fifty feet from Boylston. We would request a legal clarification of this "exception." Also, what design review process and provisions does the BRA intend to implement as a basis for such ZBA consideration?

c. Net Square Footage Increment. What is the increased total built square footage on the site, as defined by zoning, compared with that of the existing buildings to be demolished? The PNF omits this information.

3. Vehicular Traffic and Parking
   a. Area Traffic Impact. Net increase in built square footage and on-site parking capacity will increase vehicular traffic in the area. Back Bay street congestion is already severe, particularly on often-grid-locked Arlington and Berkeley. Comprehensive studies of traffic impacts on area streets and intersections are needed, incorporating the incremental impact of other developments planned in the area. The study needs to include intersections in the Park Square area, which is an important conduit to the Southeast Expressway. Levels-of-service should be studied, at peak hours and throughout the day, at all the intersections along Arlington and Berkeley from Storrow Drive to the Turnpike. Turning movements at the Boylston-Arlington intersection, which are currently difficult, should receive particular study.
   b. On-Site Parking Capacity. The project proposes 150 spaces of underground parking for building tenant use (0.68 spaces per 1,000 square feet of the total built square footage), where no on-site parking exists now. This will attract increased traffic to this congested area of the city. The impact of the parking provision on the already overtaxed Back Bay streets must be studied. The site has unusually good access to public transit, which should allow a less-vehicle-oriented mode-split. Effective building operation may be achievable with significantly fewer than 150 spaces. Options with lower parking capacity, based on BTD-recommended ratios, should be studied.
   c. Curbside Parking. How many Boylston and Providence Street on-street metered parking spaces will be lost to accommodate loading dock access and a drop-off/pick-up zone, as mentioned in the PNF? Will these be able to be relocated and, if so, where? Are there alternative locations for drop-off/pick-up, perhaps o Providence Street? What will be the traffic and parking impacts of these changes?
   d. Service on Providence Street. Providing off-street loading dock and delivery and service on Providence Street seems to be a positive direction to pursue. The functionality of this concept and specific layout features must be clearly presented and evaluated – including street width, loading dock dimensions, types and frequency of truck operations, viability of turning movements and assumed radii, potential conflicts with pedestrian travel and blockage of vehicular traffic on Providence Street.

4. Pedestrian Traffic
   a. Pedestrian Traffic Counts. Counts are needed of existing levels of pedestrian activity – on Providence, Boylston and Arlington Streets, surrounding the project site – and projections of the changes anticipated due to this project, as a basis for evaluation of the adequacy of pedestrian movement-space and potential impacts.
   b. Sidewalk Capacity. Is the sidewalk space on Boylston and Arlington, as shown on the proposed plans, adequate to accommodate the added retail and office use at this site? What proposals does the developer suggest to improve this condition? Boston Public Works has indicated an intention potentially to implement a vehicular right-of-way adjustment that would expand the sidewalk width on the south side of this block of Boylston and narrow the sidewalk slightly on the north side – which should be clarified. How can the project design be coordinated with this potential?
   c. Narrow Sidewalk at MBTA Portal. The Arlington Street sidewalk between the MBTA portal (and adjacent news boxes) and the face of the proposed building seems inadequate for the increased pedestrian traffic anticipated due to this development and others nearby. The available width for walking feels tight under current conditions – less than any suggested desirable quality of "crowded sidewalks are good sidewalks." The architect should explore ways to modify the ground-floor building perimeter in this area to provide for comfortable pedestrian passage.
   d. Providence Street Sidewalks. Currently the sidewalks on this street are substandard and hard for pedestrians to use. Addition by this project of loading docks, garage entries, and service and delivery vehicle movements will interrupt the sidewalks and interfere with pedestrian use of this street. There seems to be a danger that Providence Street will be marginalized as a pedestrian way and turned into a back alley. The developer should be directed to explore alternative plan layouts and design solutions to avoid these negative impacts. Location of drop-off/pick-up at a secondary building entrance on Providence, as suggested above, might activate and reinforce the pedestrian character of the street.
   e. Pedestrian-Vehicular Conflicts. Vehicular turning movements from Boylston to Arlington and rapid vehicle flows on Arlington endanger pedestrian safety in crosswalks, under current conditions. What remedies are envisaged to alleviate this problem and its potential exacerbation due to the proposed development and increased vehicular and pedestrian flows?

5. Public Garden Impacts
   a. Shadowing. The developer maintains that the project conforms to the regulations of the Public Garden Shadows Act. The regulatory requirements should be clarified. Complete and accurate shadow studies must be submitted and evaluated to validate this contention. The impact of the mechanical penthouse must be included in these studies.
   b. Parks Commission Review. We understand that the project is within 100 feet of a public park, and therefore must comply with Parks Frontage Ordinance regulations. These regulatory requirements should be clarified, and implications for the project documented.

6. Construction and Groundwater Issues
   a. Construction Schedule and MBTA Work. If the MBTA reconstruction of the Arlington Street realistically extends beyond the current projected completion date, how will this affect the propose construction schedule? It seems untenable for the operation of this intersection to have both projects under construction simultaneously. Will the start of 350 Boylston construction be required to wait until all MBTA construction is terminated?
   b. Subsurface Construction. How does the garage construction interface with the MBTA facilities and construction? If any of the adjoining buildings are on rotting piles, how will the development prevent damage during construction?
   c. Groundwater. Will the developer seek a solution to the groundwater depletion that is in evidence in the area of this intersection? What impact will the fact that the lowest level of the garage construction rests directly on the clay layer have on groundwater seepage and equalization? What will be done to prevent or mitigate potential problems? Please also respond to the detailed comments in the letter from the Boston Groundwater Trust.
   d. Staging and Construction Operations. Where will construction staging areas be located? What impacts are anticipated on area businesses and traffic? What constraints will be placed on construction vehicle access and operations, and time-of-day work patterns?
   e. Potential Archeological Issues. Excavation for underground facilities will likely extend below the level of existing building foundations on the site. This may expose previously undisturbed archeological remains, possibly including water-edge fish-weirs. What will be the procedure to address this or other potential archeological impacts?

NABB looks forward to working with, you, the Druker Company, and the IAG on the further development of a rejuvenated Arlington and Boylston Street corner building. We anticipate a process that results in a top quality project and an improved development for the City of Boston.

Very truly yours,

Jackie Yessian

Jacquelin Yessian, Chair

Manya Chylinski

Manya Chylinski, President

cc: John F. Palmieri, Director, Boston Redevelopment Authority
Kairos Shen, Director of Planning

HERBERT P. GLEASON
LAWYER
50 CONGRESS STREET, SUITE 300
BOSTON, MASSACHUSETTS 02109-4075
TELEPHONE (617) 973-9299
FACSIMILE (617) 523-7171
E-MAIL: hgleason@publicpolicylaw.com

January 31, 2008

Jay Rourke
Boston Redevelopment Authority
City Hall
Boston, MA 02109

I am writing on behalf of Arlington Street Church to comment on the Druker Company proposal for the redevelopment of 350 Boylston Street. Needless to say the Church is more directly affected by the proposal than any other property.

Ronald Druker has long been a generous supporter of the Church and he made a special and early effort to inform us about his plans. On the whole, we find them to be responsive to the neighborhood and in keeping with the high standard he observed in the development of the Heritage project.

Our present concerns are as follows:

1. We look forward to the shadow studies. The Church has one of the largest installations of Tiffany stained glass windows in the world. They greatly enhance our sanctuary on sunny Sunday mornings in the winter.
2. We are pleased with the prevalence of glass bays on the Boylston Street Parade. We hope they will aspire to the lightness that characterized the lamented Coulton Building which stood at the corner of Berkeley and Boylston Streets.
3. We hope that the Druker Company, the BRA and the MBTA will explore the possibility of placing the southwest entrance to Arlington Street Station inside the new building, as it is the case with the Kennedy Building on Summer Street, another admired Druker Project. Removing the entrance from the sidewalk would relieve the considerable congestion on that narrow passageway.

4. We look forward to an enumeration of the zoning relief the project will require.

Yours very truly,

Herbert P. Gleason

Herbert P. Gleason

hp

Cc: Rev. Kim Crawford
Ronald Druker
Susan Prindle

SAWYER ENTERPRISES
200 NEWBURY STREET
BOSTON, MA 02116-2504

TEL: (617) 262-3600
FAX: (617) 262-7777

CAROL SAWYER PARKS
Chief Executive Officer

JOHN P. CONNOLLY
Vice President Development

February 1, 2008

Mr. Jay Rourke
Senior Project Manager
Boston Redevelopment Authority
One City Hall Plaza
Boston, MA 02201

RE: 350 Boylston Street

Dear Mr. Rourke:

I am writing on behalf of Sawyer Enterprises in support of the 350 Boylston Street project proposed by The Druker Company.

- The primary uses of the project – office & retail – are appropriate for the site. And, the proposed massing of the building is within the allowed zoning envelope for the location.

- The design team consisting of Cesar Pelli and CBT Architects brings together two distinguished firms. The schematic design suggests a contemporary building which respects, through its materials and detailing, the historic architecture of the Back Bay.

- The developer, the Druker Company, is a multi-generational firm that has in recent years developed some of the most highly regarded buildings in Boston: Heritage on the Common, Atelier and the Colonnade Residences. We can be confident that the Druker Company will be as attentive to the quality of 350 Boylston Street as they were to these previous projects.

Thank you for considering these comments in your review of 350 Boylston Street.

Sincerely yours,

John P. Connolly

John P. Connolly
Vice President Development

Rourke, Jay

From: Autler, Gerald
Sent: Monday, February 04, 2008 9:56 AM
To: Rourke, Jay
Subject: FW: Letter favoring retaining Arlington St. Building

---

From: Karen Weber [mailto:earthouronlyhome@yahoo.com]
Sent: Friday, February 01, 2008 10:17 PM
To: Autler, Gerald
Subject: Letter favoring retaining Arlington St. Building

Dear Gerald,

My business partner tried to submit this letter earlier today and found it was returned. Is there any chance you can forward it to the correct person - be it J. Rourke or someone else handling this project?

(I retained the delivery failure notification to show that it was sent within the appropriate timeframe, prior to 5 pm.)

Thanks for your kind assistance,
Karen

Earth Our Only Home, Inc. (where green roofs are a global warming solution)
Archdale Road
Boston, MA 02131
Tel/Fax 617-522-5447
www.earthouronlyhome.com

----- Forwarded Message ----
From: Clydia Davenport <earthouronehome@gmail.com>
To: earthouronlyhome@yahoo.com
Sent: Friday, February 1, 2008 10:09:01 PM
Subject: Fwd: Delivery Status Notification (Failure)

---------- Forwarded message ----------
From: <postmaster@boston.cob>
Date: Feb 1, 2008 3:15 PM
Subject: Delivery Status Notification (Failure)
To: earthouronehome@gmail.com

This is an automatically generated Delivery Status Notification.

Delivery to the following recipients failed.

j.rourke.bra@cityofboston.gov

Final-Recipient: rfc822;j.rourke.bra@cityofboston.gov
Action: failed
Status: 5.1.1

---------- Forwarded message ----------
From: "Clydia Davenport" <earthouronehome@gmail.com>
To: j.rourke.bra@cityofboston.gov
Date: Fri, 1 Feb 2008 15:15:34 -0500
Subject: Arlington Building

Whether or not the Arlington Buildig is of historic significance is not the question. The question is whether or not we are a throw away society. I guess we are. We don't like something or it isn't functioning as well as it should, do we fix it? No. We just tear it down and throw all of it away. Well, there is no away anymore. Pretty soon we are just going to implode right on ourselves. The planet can no longer sustain this type of useless exercise. With global warming due to wasteful human activity destroying life as we have known it for thousands of years, can't you tell Mr. Druker the rise to the challenge of making the existing building the most energy efficient green restoration in Boston?

Clydia Davenport
Earth Our Only Home, Inc.
4 Archdale
Roslindale, MA 02131
617-990-6522

THE GLEASON PARTNERSHIP - ARCHITECTS
114 COMMONWEALTH AVENUE
BOSTON, MASSACHUSETTS 02116
617-267-6980

Jay Rourke, Senior Project Manager
Boston Redevelopment Authority
One City Hall Plaza
Boston, MA 02201-1007
Jay.Rourke.bra@cityofboston.gov

Friday, February 1, 2008

RE: Project Notification Form for 350 Boylston Street submitted by The Druker Company, LTD.

Dear Mr. Rourke:

I have reviewed the Project Notification Form ("PNF") submitted by The Druker Company, LTD for the 350 Boylston Street project, and I appreciate the opportunity to comment on the proposed development and its impacts.

I was a member of the Neighborhood Association of the Back Bay Board of Directors for 16 years actively participating at various times as a member of a number of committees which included: Architecture, Licensing & Zoning, 500 Boylston Design Review; Co-chair Traffic & Parking, Development, Transportation. I have served on the task force for review of development impact of multiple projects including the Mass Turnpike air rights by Millennium Partners, 131 Clarendon, Prudential center hotel, 441 Stuart Street and Copley Residences and Scheme Z.

There are issues which are identified in the following comments of my review which justify analysis, design consideration and possible mitigation to bring to fruition the best possible project for this site. They should be addressed in the BRA scoping determination for developer response in the DPIR.

URBAN DESIGN - ARCHITECTURAL DESIGN

1. I believe that architectural quality is an "impact" within the scope of the Urban Design Assessment because of the significance of the location of this building. I believe Pelli Clark Pelli Architects can design a building of merit with quality materials, details and execution which is worthy of this notable location. The developer has demonstrated that he is of a mind to support such a building of merit as he has demonstrated so on other projects, notably the adjacent Heritage on the Common.
2. Location
   - A. Distinctive and sensitive SW corner of prominence on Arlington and Boylston Streets, and the only one of the 4 available for potential development.
   - B. Landmark Arlington Street Church to the north conforms to the Back Bay setbacks.
   - C. Landmark Boston Public Garden to the NW should be protected from any additional shadows.
   - D. The Heritage on the Garden to the east, developed by Druker, predominately exhibits architectural features characteristic to its context.
     1. The overall mass is articulated into several modules of complementary scale and rhythm, each of which is refined with elements to enhance the distinctiveness of each separate component yet create a harmonious whole.

2. There is a clearly defined base with a richness and repetition of entry sympathetic to the pedestrian environment.
3. There is a predominate 7 story cornice along the Boylston Street façade which wraps around the corner on Arlington Street a substantial distance. This is punctuated at periodic intervals consistent with the articulated modules. It results in a building mass which is essentially 7 stories along the extent of this sensitive corner to the site. This strong datum should be emulated as a massing criteria for the 350 Boylston site.
4. Solid to void ratios, choice and quality of materials, attention to detail and execution lend to a cohesive composition.

E. The existing Arlington St façade of Shreve's is offset about 20 feet east of that of the Arlington Street church. Arlington Street is narrowed and the sidewalk (also containing MBTA access/egress) is constricted. The Shreve's corner is highly visible within significant view corridors which include the Landmark Arlington Street Church and Landmark Boston Public Garden. New development at this corner should provide elements in the design to create a transition between these planes and ease the constricted pedestrian circulation at this busy corner. A corner treatment which retreats should be studied.

F. The existing Shreve's building has, in spite of its successive alterations, merit to be rated a Group III "Significant" by the Boston Landmarks Commission. It is one which has strengths in its own right, but more as one which contributes to the streetscape as a whole. It has richly detailed planar facades composed of a masonry clad frame and sub-divided windows which are organized around a recessed center entry. The masonry and window details progress from base to piano nobile to middle and top. A rich copper cornice terminates the whole composition of materials and color which harmonize with the prevailing character. Many of these elements are significant and should guide the proposed project design as it progresses.

3. Architectural Information presented in the PNF.

A. There is neither a graphic scale nor dimensions shown on plans, sections, elevations or adjacent building heights. The "schematics" contain enough information to indicate they are available. In fact, the drawings, even with their omissions, imply design is further along than indicated and the lack of any dimensions in the PNF is remiss.

1. The Heritage is missing in plans and elevations with the exception of the section looking south which shows the Heritage as a virtual wall on the street (reflective of the Park Square side) and not that which is reflective of the actual 7 story (90?+- foot) building at the Boylston Street corner. 350 Boylston should have a defined cornice which respects a similar height.
2. It looks like the proposed 7 story cornice at 350 Boylston St will be higher due to the office use than the 7 story cornice at the Heritage where the floor-to-floor heights of the residences were restricted.
3. From the Park Square Building and Providence Street, the rear façade of 350 will be quite visible in this important view corridor to the north showing the church and garden. The Heritage angles to the NE easing the corner for circulation and opening the view. Particular attention must be paid to the integration of the Providence Street elevation to that on Arlington Street. Currently, the glass bay wraps the corner at Providence Street and abruptly terminates at a utilitarian façade of horizontal proportion in contrast to the attempted vertical expression on the primary facades. The Providence Street elevation is plainly visible from Park Plaza Hotel entry and the pocket park associated with the Heritage.
4. The plans show curtain wall bays in excess of 50% of the building façade incorporating the structural columns on each side, however the perspectives appear to indicate that the proportional width is less than that. Given the stated 221' on Boylston one can estimate the width of each bay to be approximately 30 feet wide with the depth a possible 4 feet.

That is essentially the scale of 7 to 9 historic Back Bay buildings (with a repetition of entry and distinctiveness of architectural design not yet reflected in the proposed design).

5. The site plan does not show the property line or outline of the existing buildings such that a comparison can be made to the proposed. A subsequent plan should make this information available.
6. There is no information as to the materials and details on the west façade which is shown as a plain, uninspired utilitarian expression. The west elevation is pulled back from the west party wall at the fifth floor. It appears this is so the west façade does not have to be cantilevered over the structural column grid on that side. This is an awkward party wall condition which does not anticipate a possible new building at the 364-368 Boylston site. Further attention must be given to how this corner is turned and whether the building should extend to the west property line.

B. The renderings show, and the plans imply, canvas awnings at the building base. At this preliminary stage, it appears that they are tacked on and shown to provide some scale to an otherwise monolithic expression from base to top. Further design development should address creating a distinctive base which integrates street level elements with the façade.

C. The Design Objectives refer to "glazed projecting bays on the upper floors" yet the ground floor plan and Boylston Street rendering show bays to the street. It is necessary to note their location in relation to the property line in subsequent development.

4. There are a number of <u>Design Objectives</u> stated in 1.2.3 of the Project Summary and reiterated in 3.3 Urban Design..

A. Emphasis has been given to "...a unique rounded glazed bay..." at the corner ..."which emphasizes and reinforces the importance of this prime location."
   1. However, the rendering shows a curtain wall bay wrapping the corner which is essentially undifferentiated from base to top and in detailing from the others.
   2. The plan shows little relief at the ground plane and doors to a proposed retail location open into a busy street corner. The proper execution of a code compliant egress at this location will likely erode the base of this important corner and result in further departure from the stated intent.
   3. This corner will be highly visible at night with light projecting from the inside. It could have a deleterious impact on the Public Garden. The corner will prominently display the habits of the office use rather than a more appropriate, less transparent architectural expression. This cannot be easily mitigated without alternative design. The expression is primarily horizontal and is accentuated at night. In my opinion, all are undesirable architectural characteristics for a corner of this prominence.
   4. Special attention should be given in further design development to the corner condition, pedestrian circulation and creating a quality of presence. This should include an alternative expressing more masonry, and one which provides a transition between the church's setback and this site's setback, and one which relieves the corner by removal of mass (such as has ben done at the corner of 222 Berkeley).

B. <u>Continuation of the building massing along Arlington and Boylston Streets.</u> The proposed continuation of the massing along Boylston is misleading when presented in the context of the provided section. If the proposed building were to respect the prevailing contextual massing, the resulting cornice will be lower than it appears to be shown. This respect (criteria) should also apply to about 2/5 of the depth of the site toward the south, as the tower for The Heritage appears to be set back about 50'. Additionally, the massing across Boylston to the north from Arlington to 399 Boylston is below 90 feet. Design development should look to creating a cornice datum at a more compatible contextual height which is lower than that proposed.

C. "The base will be articulated by granite façade materials, ground floor wooden storefronts and a lobby entry to continue the historic Boylston Street context along the site."

1. The ground floor plan shows opaque, rounded corners at the base of the bays with the rest transparent glazing. The rounded form is not typically associated with ashlar masonry. This site and location demand quality materials and further design development should demonstrate successful execution of this intent.
2. Ground floor wooden storefronts are not shown or mentioned elsewhere and are inappropriate to the high-tech curtain wall schematic. Subsequent design should address the richness and materials at the street level and integration to the rest of the façade.
3. The Boylston Street context of entry is one of repetition in roughly 25' building modules, center location in combined building modules, or ceremony as seen in 222 Berkeley, 500 Boylston, 501 Boylston, 855 Boylston and the excellent historic Berkeley building at the other end of the block. The proposed façade reflects little, if any, of these characteristics. The entry to an office building on this site and of the proposed scale should have more prominence. The entry should be used as an organizing element for the facade and not be identified by a slight recess and different canopy. The elevations give no clue to the presence of this important programmatic and design element.

D. "A pattern of glazed projecting bays on the upper floors along Arlington and Boylston Streets will articulate and lend scale to facades along these major thoroughfares consistent with the scale of the older, existing buildings on these streets."
   1. The scale of each glass bay or the masonry expression of the façade between, are essentially equivalent to an historic building module. Typically, bays are subservient to a strong facade datum line and cornice and are narrower than those shown. Further design development should address the prominence of the façade in a manner more appropriate and consistent with the context, particularly if the bays are to remain a part of the design.
   2. If the expressed intention of a curved glass/spandrel glass corner to the bays persists through design development, particular attention should be paid to the detailing of this element in relation to the rest of the bay and façade.
   3. The character of bays change depending on glass tinting, spandrel glass color and time of day. These bays appear have solid spandrel glass so there will be a secondary horizontal element in the bays.

E. Due to the proposed width and materials of the bays, the building will appear to be a primarily glass building from most angles, particularly at night when the expression will become horizontal. This is a significant departure from the primarily masonry vernacular of the district which, even when punctuated by larger glass openings, still retains a masonry expression. The proposed building reverses this expression promoting a primarily glass façade punctuated by recessed masonry cladding. This is exaggerated on the Arlington Street façade where the masonry strips are narrower than those on Boylston. On Arlington it is roughly 2/3 glass, 1/3 masonry and on Boylston is roughly 1/2+ glass, 1/2- masonry. Buildings are most commonly seen in perspective, at an oblique angle and not in elevation. An example of the described effect can be seen in the "Darth Vadar" building on Exeter and Boylston.

F. The appearance of the proposed building and its impact must be considered and studied as it looks at night and with different glass.

G. Façade termination, massing, materials and architectural expression of the upper two floors.
   1. There is no cornice or terminus to the primary facades. There appears to be a rail which follows the perimeter at this level and on top of the first floor which is set back. The architectural intent is unclear as to whether it terminates at the bays or the corner because it is shown in the sections but not perceptible in the rendering.
   2. The top two stories step back from the main façade and show the identical cladding materials without any differentiation in form or character typically associated with a penthouse structure. This architectural expression requires further study and perhaps simplification.

H. The mechanical penthouse is a suggested outline at this schematic stage. The Boylston Street Study recommended setback, integration and a height of 15' which should guide further design development. It appears massive and higher than that as shown. The appearance and impact must be minimized and integrated into the whole composition. It is not likely to disappear and its potential impact should be studied from oblique, visible angles and the Public Garden.

I. Color - The rendering reflects a building cool in color and at variance with the context represented in the rendering. In reality it is at variance with the predominate coloring in the Back Bay. This is more pronounced because of the brevity of textural character, extent of glass and planar expression to the major volumetric elements. Buildings with architectural elements of cool color exist in the Back Bay but the color is complemented by warm elements such as a richness of detail, material and shadowing such as seen in the Berkeley Building.

5. Public Benefits - Improved Street and Pedestrian Environment

   A. It is stated that the project will include streetscape improvements and improve the pedestrian environment.

   B. It has been previously commented that the design of the glass bay corner does little to mitigate the constricted pedestrian environment at the Boylston and Arlington corner and that alternative designs be considered.

   C. The streetscape should continue with the Boylston Street Paving and street furniture Standards which include granite pavers.

SUMMARY COMMENTS ON URBAN AND ARCHITECTURAL DESIGN

1. The proposed building at 350 Boylston is essentially a glass building on the primary facades and masonry on the secondary facades. The composition of the primary facades departs from practically all of the predominate architectural characteristics in the district.

2. There is a pedantic reference to history and context by the use of the bays which does not lend itself to either a good new glass or new masonry expression for the building. The expression creates a repetition which could continue down the block and is the same whether for 1 module or 10 modules. It lacks a hierarchy within itself and a sense of wholeness, completeness and containment. The retreating penthouses refer to history in a massing form similar to a mansard. In my opinion, this, also, does not lend itself to either a good new glass or new masonry expression for the building.

3. I believe the current schematic design can and should be improved to be more appropriate in the context of the setting for the Landmark Arlington Street Church, and views to and from the Landmark Boston Public Garden, views from Park Plaza and looking east along Boylston. As currently shown, it competes for attention and distracts the eye rather than harmonizing with its environs.

4. Pelli Clark Pelli is adept at designing buildings of significant architectural quality and clear concept. Glass buildings are well detailed glass buildings. Masonry buildings are well detailed masonry buildings. 350 Boylston at this point in its genesis, seems to be an unresolved hybrid with a gesture to the masonry vernacular on a primarily glass façade. It is neither "fish "nor "fowl".

5. Much work has been done to reach this point in the project design. Yet the building stands out as a singular architectural statement and not one of complementary design in the urban fabric. Complementary does not imply inappropriately mimicking historical elements, but designing a new building with adequate reference to prevailing characteristics such that the building is well composed in itself and contributes to the whole.

6. As design development proceeds careful attention must be paid to the intent of the design and its resultant outcome. Its success is dependent on the quality of the detailing of the façade elements, choice of materials, color and coordination between them. It is also dependent on competent execution of the design which must be informed by full scale mock-ups on site for review.

CONSTRUCTION AND GROUNDWATER ISSUES

1. Subsurface Construction. The proposed three level underground parking garage will extend well below the groundwater level. It is critical that the below ground portion be watertight and that the DPIR statements to provide recharge measures for the underdrain system and any seepage into the building be provided. Furthermore we believe that storm water should be added to the recharge system, as it is not permitted to be discharged into the sewer and it needs to go somewhere. All GCOD requirements should be met. All monitoring wells should be constructed to GWT standards and be located in cooperation with GWT and be transferred to them at the end of the project.
2. A three story below grade parking garage which is below groundwater levels, acts as a dam and requires special monitoring in perpetuity is not a "Public Benefit" and does not belong in Section 1.2.5 of the PNF Public Benefits.
3. Groundwater. Will the developer seek a solution to the history of low groundwater and depletion that is in evidence in the area of this intersection? Monitoring wells located on Arlington, Berkley and especially Providence Streets show such a history. We would like you to pinpoint potential causes for these low readings if possible. Will the fact that the lowest level of the garage construction rests directly on the clay layer mean that the groundwater will not be able to equalize? What will be done to prevent this problem? What will be done to prevent this building and others from becoming another underground dam? How does the garage construction interface with the MBTA facilities and construction? If the adjoining buildings are on rotting piles, how will the development prevent damage during construction?
4. Perhaps Geotechnical Engineering should be required for an "anti" dam (pipe to conduct and equalize subsurface groundwater) to be extended near the abutter's property from Boylston to Providence and to ensure that the abutters inner party wall pilings are adequately protected by groundwater. Perhaps some of the building's recharge waters should be dispersed in this area. Perhaps there should be a monitoring well in the inner middle portion of the party wall.
5. Staging. Where is the construction staging area for the project to be located?
6. Potential Archeological Issues. Excavation for underground facilities will likely extend below the level of existing building foundations on the site. This may expose previously undisturbed archeological remains, possibly including water-edge fish-weirs. What will be the procedure to address this potential impact?

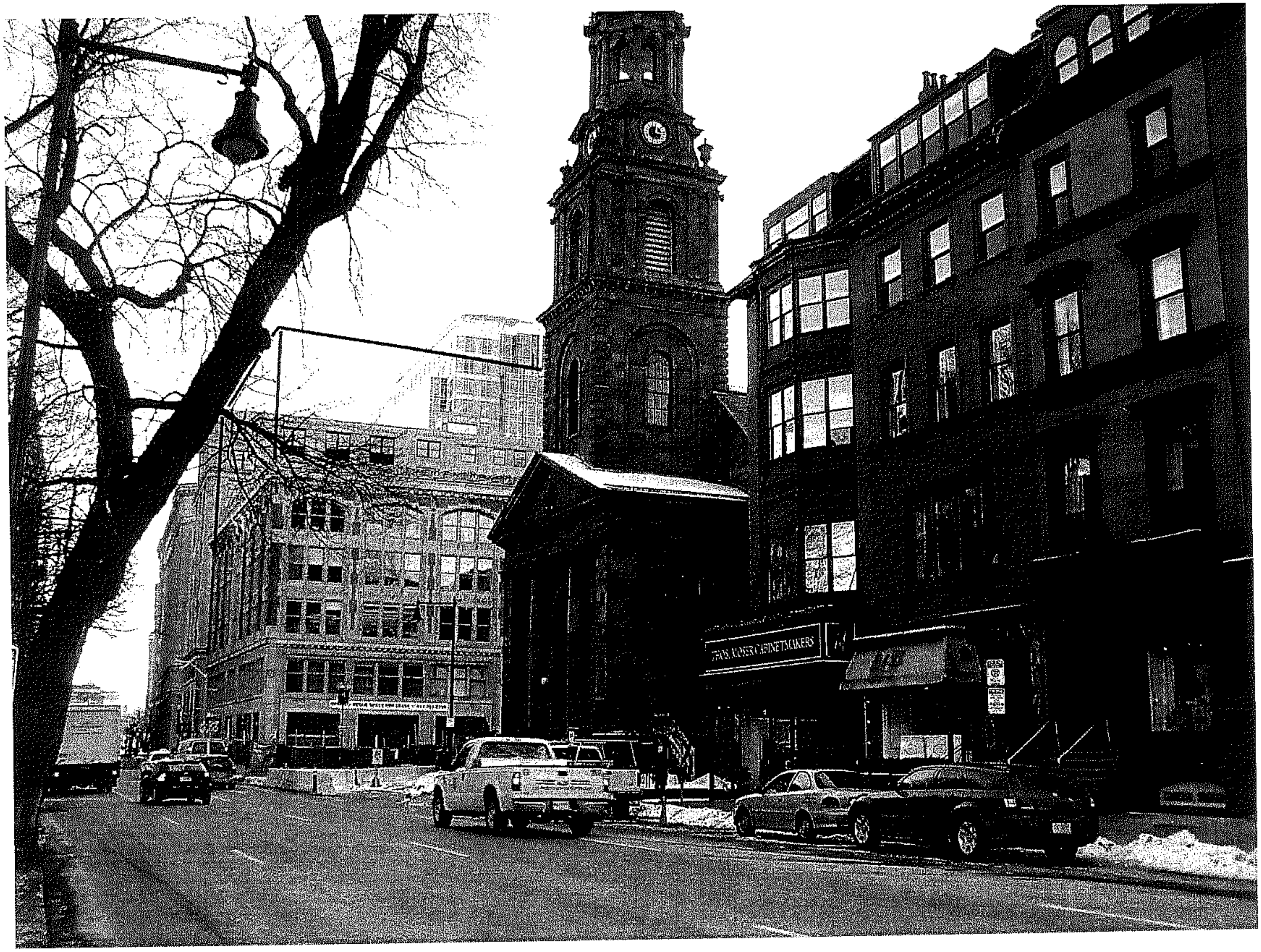
I thank you for your consideration of my comments and their inclusion in this process. I attach four photographs with wireframes to show assumed rough massing.

Sincerely,

Frederick C. Gleason, AIA

Frederick C. Gleason, AIA

3. From Boylston Street looking East



2. From Arlington Street Looking South – Arliington Street Church is the focal point,

4. From Park Plaza Hotel Entrance

1 .From Boylston Street Looking West

Rourke, Jay

From: Leigh Cochran [leighc@ctps.org]
Sent: Friday, February 01, 2008 4:52 PM
To: Rourke, Jay
Subject: Fw: Shreve's Building

Sorry for the late submission--wrong e-mail address

It would be a GREAT loss to Boston, sitting as it does right on the Public Garden. This building occupies an important site, in my working neighborhood, one which all the tourists see. Boston is losing its 19th century commercial streetscape at an ever-increasing rate and will soon be like any other city--a great loss to all. We are unique in America. We have so many old buildings because Boston experienced economic doldrums in the 19th century, such that the old buildings were just allowed to survive through benign neglect. It wasn't in anyone's interest to replace them, so we are left with an incredible treasure trove of buildings. That is the reason I live here and not in Chicago or Vegas.
I just had to strongly protest this whole plan to replace maybe not a landmark building, but certainly an irreplaceable building in a prominent spot, with yet another steel and glass affair, which in no way "fits the feel of Back Bay" (to quote the BostonNOW quoting Sarah Kelly from the so-called Boston Preservation Alliance).
Boston is disappearing right before our eyes, folks!
The destruction of this building seems to be a done deal--I hope not.

BOSTON PRESERVATION ALLIANCE

February 1, 2008

Mr. Jay Rourke
Boston Redevelopment Authority
One City Hall Square, Floor 9
Boston, MA 02201

RE: Project Notification Form for 350 Boylston Street Redevelopment

Dear Mr. Rourke:

The Boston Preservation Alliance has reviewed the Project Notification form for the Redevelopment of 350 Boylston Street as submitted by the Druker Company and offers the following comments:

<u>Existing Buildings at 324-334, 336-342, 344-350, and 352-360 Boylston Street</u>
The Alliance understands that the project proposal would involve the demolition of four buildings at 324-334, 336-342, 344-350, and 352-360. These buildings were constructed between 1897 and 1906 in the Classical Revival, Renaissance Revival and Art Deco styles. The Alliance has received the Massachusetts Historical Commission's (MHC) letter dated January 28, 2008 which indicates that all of these buildings are listed on the State and National Registers and recommends that alternatives to their demolition be carefully considered.

In October 2006, a petition was submitted to designate the building at 324-334 Boylston Street, the former Shreve Crump & Lowe Building, also known as the Arlington Building, as a Boston Landmark. The Alliance, along with the New England Chapter of the Society of Architectural Historians and a number of Back Bay residents, supported this petition. The petition was not accepted for further study and the building was deemed ineligible for Boston Landmark status. While the building did not meet this very high threshold for designation, testimony at the hearing demonstrated the building's historic significance for its longstanding association with the world renowned jeweler and local importance as a fine and prominently located example of its architectural style in the Back Bay.

In light of the fact that the buildings proposed for demolition are listed on the State and National Registers and the particular historic significance of the Arlington Building, the Alliance supports the MHC's recommendation that alternatives to their demolition be carefully considered. We request active participation in discussion of these alternatives.

Old City Hall, 45 School Street, Boston, MA 02108 Telephone 617-367-2458
www.bostonpreservation.org

Urban Design and Historic Context

The proposed new building would be constructed on the site of four existing buildings and would extend for approximately one third of the block of Boylston Street between Arlington and Berkeley Streets. The Alliance appreciates the effort that has been made by Pelli Clarke Pelli Associates to break down the massing of the new building with a series of glazed projecting bays.

However, the Alliance requests further study of the relationship of these bays to the existing rhythm of the existing facades along the street to ensure that the undulation of the new building compliments its historic context to the greatest extent possible. Furthermore, the Alliance urges the developer to explore design alternatives that would permit the building to read less as a monolithic structure and more as a series of forms that is in better keeping with the traditional pattern of small to medium scale buildings on this block of the street. It is critical that a building that is significantly more massive than the existing buildings on this block be designed in such a way that it does not overwhelm its context.

Ongoing Review Process

The Alliance appreciates the Druker Company's efforts to reach out to us early in their permitting and design development process. We are pleased that the developer has offered to make a more formal presentation to the Alliance's Board of Directors, if we would desire it, in early 2008. The Alliance encourages the developer to work closely with the Massachusetts Historical Commission and the Boston Landmarks Commission as the project design develops. We request active involvement in consultations concerning both the existing buildings on the site of the proposed new development and mitigation of potentially adverse impacts on the historic context Boylston Street and the Back Bay.

Sincerely,

Sarah D. Kelly
Executive Director

cc: Representative Marty Walz
City Councilor Michael Ross
Brona Simon, Massachusetts Historical Commission
Ellen Lipsey, Boston Landmarks Commission
Jackie Yessian, Neighborhood Association of the Back Bay
Tim Orwig, New England Chapter of the Society of Architectural Historians

214 BEACON STREET
BOSTON
MASSACHUSETTS 02116
617-266-7956

Feb. 1, 2008

Jay Rourke, Senior Project Manager
Boston Redevelopment Authority
One City Hall Plaza
Boston, MA 02201-1007

RE: 350 Boylston Street

Dear Mr. Rourke:

I am writing to comment on the office building proposed for 350 Boylston Street by the Druker Company. Numerous issues are raised by the proposal but the following in particular are of concern to me:

1. Design.

The site is one of great prominence and importance, adjacent to the Back Bay Historic District and within the National Historic District, and deserves the highest quality of urban design. The proposed design looks generic and bland, especially on the Providence Street side. I am one of those who supported historic protection for the current building so I am particularly distressed that the proposed replacement exhibits so little architectural grace or interest. The Boylston/Arlington corner bay deserves more emphasis given its high visibility from the Public Garden. The massing of the entire building, especially on Boylston Street, should be more irregular and varied, in keeping with the character of the remainder of the block

2. Traffic Impact

Arlington Street is already very congested, especially at evening rush hour. The increased activity in the office building and the addition of 150 parking spaces to the site will surely have a negative impact which should be studied further.

3. Sidewalk Congestion

The Arlington Street sidewalk with the MBTA entrance at that corner is already too narrow and becomes very congested at peak times. I urge you to explore possible remedies, including modifications to the ground floor design of the building to allow more space for pedestrian flow.

4. Shadow Studies

I am very concerned that no additional shadows fall on the Public Garden. Detailed shadow studies must be carried out.

There are other pressing issues, such as groundwater, which I will leave to those better equipped to discuss them.

I hope that the BRA will take these comments seriously so that the resulting building can enhance this truly special site.

Very truly yours,

Susan Ashbrook

Vice-President, Neighborhood Association of the Back Bay

THREE FAIRFIELD STREET
BOSTON, MASSACHUSETTS 02116

January 31, 2008

Jay Rourke, Project Manager
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Re: **350 Boylston Street**

Dear Mr. Rourke:

I have the following concerns about the proposed project at 350 Boylston Street:

1. The underground parking garage planned for the site will bring additional traffic to an already congested area. Because the green line has a stop right next to the site, thereby providing ideal public transportation, the parking garage ought to be eliminated, or at the very least, made much smaller. Providing on site parking will inevitably encourage the use of cars to reach the building, rather than encouraging the use of public transportation. The developers have publicized their desire to make this a "green" building. Making the building a convenient driving destination certainly does not bear this out. It is way past time that every developer and every relevant permitting agency made the reduction of traffic in this city one of their first priorities. Unless we start to seriously address this issue now, in connection with every proposed project that arises, we cannot much longer maintain the quality of life here that we all expect and enjoy.

2. The location of the proposed building is at a particularly important site both because of its proximity to the Public Garden and because it is an entrance to Back Bay. We certainly need further studies of its impact on the Garden with respect to shadows. Accurate studies must be made taking the mechanicals into consideration. They will, of course, be located on the roof, adding considerable additional height to the building. A more comprehensive shadow study must be very carefully looked at to make absolutely certain that there will be no adverse effect on the Garden. To pass over this issue lightly, without adequate in depth studies, would be completely irresponsible and could result in irrevocable damage to perhaps the most important centerpiece of our parks system.

3. Finally, as the result of the architectural renderings that have been shown so far, I am concerned about the overall design for this very prominent and

visible building that will be located at the eastern entrance to Back Bay. I am afraid the building, as presently shown, will read more as a contemporary glass building than as a traditional masonry building that would be much more fitting for the surrounding neighborhood. I understand that the plans are a work in progress, but great care must be taken to insure that the final design is all that this important location deserves.

Sincerely,

Dorothy B. Bowmer

Rourke, Jay

From: Cathleen Hoelscher [choelscher@hds.harvard.edu]
Sent: Friday, February 01, 2008 1:44 PM
To: Rourke, Jay
Subject: 350 Boylston Street

Dear Jay,

I may not be able to say anything eloquent here that will convince the developers to "see the light". But speaking as a former architect, a potential future developer, and a proponent of quality architecture, I had to at least try. Do we really want a city full of these modern, cold, steel and glass buildings? Where's the craftsmanship? The artistic qualities? If we continue to tear down buildings like this, we will lose forever all of these aspects. You can't get detailed stone work as exists on those buildings anymore. It costs too much and there's hardly anyone left in those trades with those skills. Thirty years from now when we realize that these glass and steel structures are not all they were cracked up to be, we'll be stuck with them. These existing buildings can easily be gutted from the inside (assuming that most of them are an open plan inside anyway, that's what the architecture suggests) and modified to make way for a new use. And with beautiful stone work and large windows, the buildings will be very attractive to potential tenants.

I hope that hearing from one more voice helps. If the buildings cannot be saved, I hope that everyone can find a way to preserve as much as possible. (Thru reusing elements in the building or donating items to other projects.) Thank you for your time and consideration.

Sincerely,

Cathleen Hoelscher
Operations Staff Assistant
Harvard Divinity School
45 Francis Avenue
Cambridge, MA 02138
617-496-2868

Rourke, Jay

From: boston drew [bostondrew62@yahoo.com]
Sent: Friday, February 01, 2008 1:03 PM
To: Rourke, Jay
Subject: STOP Demolition of Arlington Street building

Good Afternoon, Jay,

As a concerned resident of the city of Boston, (Dorchester), I am sending you this email to let you know that I'm **opposed** to the demolition of the 103 year old Art Deco building on the corner of Arlington/Boylston Streets, formerly Shreve Crump & Low.

How many more historic buildings need to be destroyed by greedy developers !
They are slowly ruining the architecture of our beautiful city.

Regards,
Andrew Carver

Rourke, Jay

From:	Thomas C Duffly [flduffly@verizon.net]
Sent:	Thursday, January 31, 2008 11:47 PM
To:	Rourke, Jay
Attachments:	350 Boylston Street comments. Jay Rourke, BRA.doc

Dear Mr. Rourke,

Thank you for the opportunity to comment on the proposed development of 350 Boylston Street (aka. The Shreve Building), and 330 - 360 Boylston Street. Attached are my comments.

Frances Lessin Duffly
289 Marlborough Street
Boston, MA 02116

Mr. Jay Rourke
Senior Project Manager
Boston Redevelopment Authority
One City Hall Square, Floor 9
Boston, MA 02201

RE: 350 Boylston Street Redevelopment

Dear Mr. Rourke:

This letter will be short. While I appreciate the opportunity afforded to the public by the Boston Redevelopment Authority to comment on development projects, it becomes tiresome to continually have to comment about inappropriateness of design. This unfortunately is the situation with 350 Boylston Street.

Have the developer and architect misunderstood in what city and what location this building is to be constructed? Arlington Street Church certainly relates better to the smaller existing buildings on the north and south side of Boylston Street than it does to the design being put proposed for the new building.

The proposed design of this new monolithic building, not withstanding its articulated bays, is certainly out of scale with other structures at this prominent corner. It detracts visually from the Arlington Street Church, the Public Garden, and Heritage on the Garden. The materials chosen are cold and unrelieved by detailing. The design fails to complement the Berkeley Building at the opposite end of the A to B block of Boylston Street.

Buildings may certainly be torn down. But if they are going to be torn down then it is the responsibility of the BRA, the developer and the architect to replace them with something better. What is important is that these be well designed buildings that relate well to their surroundings. This has not been demonstrated yet and that is what we should be looking for from the architects. Cesar Pelli has done better. It's time to send this back to the drawing board.

Sincerely,

Frances Lessin Duffly

Rourke, Jay

rom:	Benjamin Stanley [bstanman83@hotmail.com]
ent:	Thursday, January 31, 2008 6:10 PM
To:	Rourke, Jay
Cc:	nabbinc@verizon.net
Subject:	I Oppose Destruction of the Shreve's Building

Dear Mr. Rourke and Ms. Yessian,

My name is Benjamin Stanley. I am a Bostonian who recently heard from a number of my friends about a proposal to destroy the old Shreve, Crump & Low building and was told that opposition must be sent to you by tomorrow.

In doing so, I wanted to bring to the BRA's attention the toll the subprime and financing crises are taking on the New York development market, as the Wall Street Journal reports today.

Harry Macklowe, one of New York's most prominent developers, razed the Beaux-Arts Drake Hotel in Midtown to make room for an office tower.

Today, the Drake's site has been a big sinkhole for over 6 months. Now Macklowe is handing control of many of his properties over to his primary lender, Deutsche Bank, a result of the subprime fallout. (The Wall Street Journal article is below.) Uncertainty surrounds the Drake's sinkhole, and there is no sign it will be filled any time soon.

The chances that a developer with less clout than Macklowe, in a market with higher occupancy rates and a larger glut of office space under construction, can run into similar troubles are huge, even if they may be unforeseen today.

The Boston Preservation Committee, the body that denied the Arlington Building landmark status -- and where Druker's ughter, who works for his company, **happens** to be a member of the Board of Directors -- will have difficulties explaining itself to the city's residents in that case.

By JENNIFER S. FORSYTH
January 31, 2008 4:38 p.m.

Troubled New York real estate titan Harry Macklowe has reached a tentative agreement with his lender to turn over effective control of seven Manhattan office buildings he triumphantly acquired less than a year ago for $7.2 billion, according to a people familiar with the matter.

Mr. Macklowe borrowed $5.8 billion from Deutsche Bank to acquire the buildings in a highly leveraged transaction during the height of the real estate frenzy early last year. The debt is scheduled to come due on Feb. 9. But with the real estate debt market greatly constrained by the credit crunch, Mr. Macklowe has found no way to refinance that debt.

This week, he reached a tentative agreement with Deutsche Bank that would give him an extension of the loan but Deutsche Bank would in essence control the properties so they could be marketed and sold. Mr. Macklowe would still retain title, to avoid triggering costly New York City transfer taxes, and Macklowe Properties would still manage the buildings.

Mr. Macklowe's capitulation is one of the most dramatic signs so far of how the credit problems caused by the subprime crisis in residential real estate has spilled over into the world of office buildings, stores, apartment buildings and other commercial property. Numerous other investors who acquired real estate at the top of the market are facing similar problems because values have fallen and they can't refinance debt that they placed on buildings in rosier times.

Mr. Macklowe's situation is still very fluid and the deal could still collapse, people involved said. Even after final details with Deutsche Bank are hammered out, holders of junior debt on four of the seven buildings must also agree, according to two people involved. Deutsche Bank and William Macklowe, Mr. Macklowe's son and president of Macklowe Properties, declined to comment.

Mr. Macklowe, who also lost several major properties during the real estate collapse of the early 1990s, typically doesn't give up without a fight. His concession to Deutsch Bank appears to be an effort to preserve his resources for an even bigger battle with the hedge fund, Fortress Investment Group.

hen Mr. Macklowe bought the Equity Office portfolio he put in only $50 million of his own equity and borrowed the rest, some $1.2 billion, from Fortress. That loan also is due Feb. 9 and Mr. Macklowe has virtually no chance of refinancing it without a major equity infusion. Even worse, Mr. Macklowe pledged a personal guaranty of $1billion for that loan as well

of his interests in 12 other properties, including the prized General Motors Building, overlooking the Plaza Hotel and Central Park.
Write to Jennifer S. Forsyth at jennifer.forsyth@wsj.com

Why do I live in Boston? Why does anyone love this city, prized for its "Europeanness" in the New World? I value Boston as an important center of our entire country's history, and as a beautiful, unique city -- unlike Charlotte, Dallas or other cities I could have moved to.

Tearing down the finite number of century-old buildings that work well in the city's grid, provide an eclectic and personal look made special by time, and have interesting stories as the continent's oldest jeweler or the home of one of the first women's unions -- that threatens everything that makes Boston special, and everything that makes the city and region (which is a cold, nasty, mostly ugly place, let's not forget) attractive to workers and employers, and tourists.

If there were plans for a building in the Financial District or Chinatown that does something innovative, that creates value for Boston, I'd be for it.

But let's not kid ourselves: for all the claims of its "luxury" or "uniqueness" this design is no different from anything in a Rt. 128 office park. And it probably won't even have any tenants or be profitable, given the millions of sq. feet of office space coming online in the next few years. The space as it is would be great for a bottom-floor restaurant or boutiques and top-floor condos, maybe with some new floors added.

The Public Garden is one of the nice parts of the city. The last 50 years have left us City Hall Plaza, the Federal Reserve Building, and Charles River Park. Why add the southern edge of the historic Public Garden to that list of mistakes? Please don't let developers tamper with the parts of the city that are historic, beautiful, and work!

Sincerely,
Benjamin Stanley

---

27 Hereford Street
Boston, MA 02115

February 1, 2008

Jay Rourke, Senior Project Manager
Boston Redevelopment Authority
Via e-mail Jay.Rourke.BRA@cityofboston

RE: 350 Boylston Street

Mr. Rourke:

I have the following comments on this project.

Historic Preservation:
The proposed building would replace buildings that contribute significantly to the area's historic character, whether or not they are designated landmarks. The Draft Project Impact Report should describe these buildings in detail, and provide any recommendations issued by the Boston Landmarks Commission and the Mass Historic Commission for minimizing adverse effects.

Zoning:
The DPIR should explain the existing and proposed height, FAR, setbacks, and other zoning controls for all parts of the site. The proposed building's height exceeds the zoning, and ZBA relief would be necessary; the nature of the contemplated zoning relief, the lawful justification (e.g., hardship) for such relief, and the public process for review should all be detailed in the DPIR.

Design:
The building design as rendered is massive, monolithic, and inconsistent with the scale and grain of the architectural context. It is not a sensitive response to the historic architecture, and needs reconsideration of articulation, materials, color, masonry/glass ratio, detailing, scaling of horizontal massing and vertical elements, light emission, and street frontage treatment. The architect has caricatured the Victorian spirit of the surrounding district into a bulky, grim, undifferentiated mass, perhaps to maximize the square footage of built space. This development team is capable of a more sophisticated interpretation of the historic vocabulary, and should reconceptualize the design.

All the facades should be clearly shown as they relate to adjoining buildings and streets. There should be no vehicular openings on the building on the main streets.

Environmental Impacts
This is an ideal site for transit-oriented development, especially for an office building which would generate peak-hour traffic. The DPIR should evaluate a zero-parking alternative.

Shadow protections on the Public Garden should be explained and impacts shown.

Skyplane impacts should be shown, as this building will block sunlight for a significant length of street.

Parks Frontage Ordinance regulations should be explained and addressed.

This is a sensitive area for groundwater and the impacts should be detailed.

Thank you for considering these comments.

Shirley Kressel

FRIENDS of the PUBLIC GARDEN

87 MT. VERNON STREET BOSTON, MASSACHUSETTS 02108 FRIENDSOFTHEPUBLICGARDEN.ORG

PHONE: 617-723-8144 FAX: 617-723-8127 EMAIL: FOPG@GIS.NET

January 29, 2008

Mr. Jay Rourke, Senior Project Manager
Boston Redevelopment Authority
Boston City Hall, 9th Floor
Boston, MA 02201-1007

Dear Mr. Rourke,

Thank you for arranging the IAG meeting last week. Next time we will find a chair for you. One outcome of the meeting, I understand, will be a commentary on the 350 Boylston Street project to which all members can subscribe. This letter addresses only those issues affecting the Public Garden and speaks solely for the Friends.

Our first concern, of course, is the impact of any shadow cast by the proposed building on the Public Garden. We are satisfied that, as presently proposed, the building conforms to the Shadow Bill. We expect, however, that you will require, as Mr. Miller wrote, complete studies to assure the accuracy of initial projections. We assume as well that shadow includes that cast by mechanicals (penthouse) placed on the building's roof. Additionally, we would appreciate your notifying us if any changes in the building's size and height are proposed during the approval process.

We do not see, at present, any threat to the Garden or the Channing Monument from groundwater changes, but we strongly support the commentary and requests contained in Mr. Laffer's letter to you of January 18, 2008.

It was not clear at our meeting where construction staging will occur. We would like assurance that , in all events, it will not impede access, physical or visual, to the Garden or damage plantings on its periphery. Some question exists on whether the building is within 100 feet of the Public Garden and hence subject to Park Commission review. We hope, in view of proximity, 100 feet or not, that the developer and BRA will respond to any concerns raised by the Parks & Recreation Department.

We note with appreciation the plan for rodent control as set forth in 3.2.12 of the PNF. Compliance will be important for the area around the site and for the Public Garden, which already has a serious rat problem.

With thanks again for your care and guidance in this important project.

Sincerely yours,

Henry Lee

Henry Lee

Cc: Elliott Laffer

Susan D. Prindle
140 Marlborough St.
Boston, MA 02116

Jay Rourke, Project Manager,
Boston Redevelopment Authority
One City Hall Square,
Boston, MA 02201

January 30. 2008

Re: 350 Boylston

Dear Mr. Rourke,

Although I am encouraged to see a well thought out and zoning compliant proposal for this important corner, I feel that there are significant areas of concern that need to be addressed in the DPIR.

Preservation
As one of the supporters of landmark status for the existing Shreve's building, I regret the impending loss of a unique piece of Boston history. I hope that it will be possible to preserve some of the building's history, either physically or in an historic record available to the public, or both.

Design
The developer has not shown his proposal in the context of other Boylston Street buildings. He should be required to do so in the DPIR, so that the scale of the structure can be evaluated. My initial sense is that the proportion of the bays may not fit well with the building's neighbors, and that a greater effort to break up the façade, which seems monolithic in comparison to the other buildings on the street, would be welcome.

It will be particularly important to see the building from the western and southern approaches, with the mechanical penthouse clearly delineated.

Zoning
While I am pleased that the project generally conforms to the zoning height and FAR for the area, I am concerned about the potential for an "exception." My understanding of the zoning is that it was put in place to protect the Public Garden from increased shadow. Any exception should be granted only after exhaustive shadow studies have corroborated the developer's statement that the building conforms to the terms of the Public Garden Shadows Act. Ideally, because the Garden is such an important public space, the building should not be allowed to cast any new shadow on it at any time of year.

Traffic
Because the developer is proposing an office building, the traffic impact will be felt mainly at peak hour. It is important that a thorough traffic study be done, including Park Square as well as the connectors to Storrow Drive and the Pike. I am particularly concerned about the impact of increased traffic in the residential area (particularly on Arlington and Berkeley Streets) at the peak hours. The developer should be encouraged to explore ways of encouraging commuting by means other than automobiles. I believe that reducing the

number of parking spaces he intends to provide would be the most effective way of doing this. Providing adequate bicycle parking is also desirable.

Pedestrian movement
It is to be hoped that this project's shops and restaurant will generate a great deal of pedestrian activity. The public sidewalks and street crossings at Arlington and Boylston Street will need the capacity to accommodate the increased foot traffic comfortably. This is particularly an issue in the area of the MBTA headhouses on Arlington Street, which seriously impact pedestrian flow from Park Square to Boylston Street.

The impact of increased pedestrian traffic needs to be factored in to the traffic analysis, particularly as it affects the Arlington/Boylston intersection.

Thank you for the opportunity to comment.

Sincerely,

Susan D. Prindle

Susan D. Prindle

Cc: NABB

January 29, 2008

Jay Rourke
Senior Project Manager
Boston Redevelopment Authority
One City Hall Plaza
Boston, Massachusetts 02201

Dear Mr. Rourke:

We are writing in support of the proposed project at 350 Boylston Street in Boston. Reading about the project in the newspapers and learning about it from the developer convinced us to write this letter in support. We live a five minute walk from the project and walk by the existing site almost every day.

How nice to have the Druker Company propose a building within downtown Boston that does not start out at a height that far exceeds the zoning guideline. We think the design of the building and proposed size fits in very well to the block. We are especially pleased to learn of the efforts to make the building "green" and also respect the shadow guidelines in place to protect the Public Garden. The proposed 350 Boylston Street project proves that it is possible to remain within the city's zoning guidelines and still create a building that benefits the developer and the neighborhood. We think this project complements the other three corners of this important intersection (Heritage on the Garden, the Arlington Street Church, and the Public Garden). The design of the façade is a wonderful play on the many uses of bay windows and large glass windows in Boston's historic buildings. The intersection needs revitalization, and we are grateful to have such a well respected company be the developer.

We think this project is absolutely one that the BRA should support.

Sincerely,

Kate Enroth and Dana Schmaltz

Kate Enroth and Dana Schmaltz
44 Brimmer Street
Boston, MA 02108
617-722-0848

Ultimate
Professional Valet Services

B.R.A.

2008 JAN 31 P 3:31

January 29, 2008

Mr. John Palmieri
Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

phone 617•424•1515
fax 617•424•8588

Dear Director Palmieri:

Since my business has been a resident in the Back Bay for two decades, I am writing in support of proposed project at 350 Boylston Street and feel it will be a valuable improvement to our neighborhood.

I applaud the project which includes office space in conjunction with various retail and restaurant outlets. Many businesses in the Back Bay rely on visitors and workers to shop and dine in our establishments. There is no doubt that the proposed project will have an economic impact to our community.

The corner of Boylston and Berkeley Streets has long been an underutilized area. By combining the former Shreve's site and adjacent building to create a single unit, 350 Boylston Street will complete the potential generated by the Arlington Street Church, Public Garden, and Heritage building. The project design will compliment the area. Mr. Pelli is renowned for designing tall buildings, but he did a wonderful job within the requirements for this site. The building's design incorporates the feel that Back Bay is known for and the newer construction materials create a modern feel. I look forward to seeing the project complete.

I encourage the Boston Redevelopment Authority to approve the proposed project.

Sincerely,

Andrew Tuchler
President & CEO

607 Boylston St. 4th Floor | Boston, Massachusetts | 02116

Abraham Properties Inc.

The Wesleyan Building • 581 Boylston Street • Copley Square • Boston • MA • 02116
(617) 267-8187 • Fax (617) 267-0929

B.R.A.
2008 JAN 31 P 3:31

January 29, 2008

John F. Palmieri
Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Dear Director Palmieri:

I am writing in support of the project proposed for 350 Boylston Street.

The first block on Boylston Street is in need of more vitality, and the project proposed at 350 Boylston Street will dramatically improve that location. The Druker Company has created an elegant building design that respects history while looking forward.

As a business owner in the Back Bay, I have appreciated the city's focus on creating a more vibrant and economically healthy Boylston Street. The Druker Company's project fits in with and expands upon that vision.

I particularly applaud the focus on office space, with a ground floor that incorporates active retail and restaurant uses. Businesses in the Back Bay rely on both visitors and office workers to shop, dine and recreate at our locations and the new workers housed in the office will undoubtedly have an economic impact on the community.

The corner of Boylston and Berkeley has long been an underutilized area. By combining the former Shreve's site and adjacent building to create a single building, 350 Boylston Street will complete the potential generated by the Arlington Street Church, Public Garden and Heritage building. The building design will complement the area. Cesar Pelli is best known for designing tall buildings, but he did a magnificent job within the low-rise guidelines for this site. The building's design echoes the bay windows that Back Bay is known for, while the construction materials add an elegant edge. We look forward to seeing the building complete.

I encourage the Boston Redevelopment Authority to approve this project.

Sincerely,

Nicko Abraham
President

Leggat McCall
PROPERTIES

B.R.A.

2008 JAN 31 P 3: 31

January 29th, 2008

John F. Palmieri, Director
Boston Redevelopment Authority
One City Hall Square
Boston MA 02201

Dear Mr. Palmieri:

In re 350 Boylston Street – Affirmation of Support

I write to you both as Senior Vice President of Leggat McCall Properties, with Back Bay clients Christian Science Church and Kensington Investment Company, and personally as a vested Back Bay home owner and resident for over thirty (30) years.

I recently attended an informational briefing on the Druker Company's proposed 350 Boylston Building, and came away impressed with the thoughtfulness, design care, and use planning that has become characteristic of Druker's buildings. The building design is elegant, has the right "feel" for that key corner block, and honors its neighboring abutter buildings. Druker had the creative foresight to retain Cesar Pelli for the design concept, but the pragmatic Boston sense to retain CBT Architects to execute the building in the Back Bay.

The treatment of the lobby with marble and wood, and the granite base and limestone cast stone for the upper floors will make this building premier office space. The retail and restaurant uses will bring this block alive with pedestrian activity, both day and evening.

I encourage this kind of development for the Back Bay, and urge your approval of this project.

Very truly yours,

J. Ralph Cole

J. Ralph Cole
Senior Vice President

Leggat McCall Properties LLC   10 Post Office Square   Boston, MA 02109   617.422.7000   fax 617.422.7002   www.lmp.com

K O R T E N H A U S

B.R.A.

2008 JAN 31 P 3: 31

January 29, 2008

John F. Palmieri
Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Dear Director Palmieri:

I am writing in support of the project proposed for 350 Boylston Street.

The first block on Boylston Street is in need of more vitality, and the project proposed at 350 Boylston Street will dramatically improve that location. The Druker Company has created an elegant building design that respects history while looking forward.

As a business owner in the Back Bay, I have appreciated the city's focus on creating a more vibrant and economically healthy Boylston Street. The Druker Company's project fits in with and expands upon that vision.

I particularly applaud the focus on office space, with a ground floor that incorporates active retail and restaurant uses. Businesses in the Back Bay rely on both visitors and office workers to shop, dine and recreate at our locations and the new workers housed in the office will undoubtedly have an economic impact on the community.

The corner of Boylston and Berkeley has long been an underutilized area. By combining the former Shreve's site and adjacent building to create a single building, 350 Boylston Street will complete the potential generated by the Arlington Street Church, Public Garden and Heritage building. The building design will complement the area. Cesar Pelli is best known for designing tall buildings, but he did a magnificent job within the low-rise guidelines for this site. The building's design echoes the bay windows that Back Bay is known for, while the construction materials add an elegant edge. We look forward to seeing the building complete.

I encourage the Boston Redevelopment Authority to approve this project.

Sincerely,

Lynne M. Kortenhaus
President & CEO

Kortenhaus Communications Inc. 29 Commonwealth Avenue Boston, Massachusetts 02116 Tel 617.536.5352 Fax 617.536.8883 www.kortenhaus.com

ROBERT L. BEAL 177 MILK STREET BOSTON, MASSACHUSETTS 02109-3410

B.R.A.

2008 JAN 31 P 3:31

January 30, 2008

Mr. John F. Palmieri
Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Dear Mr. Palmieri:

I am writing in support of The Druker Company's proposal for 350 Boylston.

I have known Ron Druker for many years and have worked with him on numerous civic and charitable organizations. Mr. Druker is an outstanding developer and I believe his proposal will create a more vibrant and economically prosperous Boylston Street.

His engagement of Cesar Pelli is wonderful and I believe the project will be a wonderful contribution to making the Back Bay and Boston a better city.

Sincerely,

Robert L. Beal
The Beal Companies, LLP

RLB:dah

Austin McClintock
117 Myrtle Street
Boston, MA 02114

January 30, 2008

Jay Rourke
Senior Project Manager
Boston Redevelopment Authority
One City Hall Plaza
Boston Massachusetts 02201

Dear Mr. Rourke:

I am writing in support of the proposed Druker Company project at 350 Boylston Street. As a resident of Beacon Hill, I am excited that the proposed building will offer a commitment to ground floor retail and restaurant space and will continue to revitalize that area of the Back Bay. Further, I am supportive of a design which focuses on office space instead of adding more residential space to an already overcrowded neighborhood.

I encourage the BRA to support this project.

Sincerely,

Austin McClintock

Austin McClintock

January 28, 2008

Jay Rourke
Senior Project Manager
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Dear Mr. Jay:

Please count me among supporters of The Druker Company's proposed redevelopment project at 350 Boylston Street. As a ten year resident of Beacon Hill, I care about the quality of urban life in Boston and it is important that we have a healthy Boylston Street between Arlington and Berkshire Streets. This block has, unfortunately, languished over the years.

Extending the office market to the east along Boylston is important to driving a healthy retail and restaurant uses on the first floor. This block, more than others, is at the junction of the office, residential and tourist markets, yet the retail and restaurants on the block do not belie this fact. Living across the Common from this project I look forward to the additional restaurant and retail options that the project will provide.

I encourage you and your organization to support this project.

Sincerely,

Ben Starr
49 Beacon Street, #10

Rourke, Jay

From:	Norman Morrill [nm88@att.net]
Sent:	Thursday, January 31, 2008 12:26 PM
To:	Rourke, Jay
Subject:	Druker's Shreve Property

Dear Mr. Rourke,

I realize this is late in the process (shame on me for not doing this earlier) but I'm really not one to write letters of complaint. However, here I am and here I go.

The Shreve Crump & Lowe property that Mr. Druker intends to demolish seems a waste of a fine building, especially considering the building he intends to construct. Granted, there's no accounting for taste (mine may be as faulty as anyone's and perhaps more), and we all have our special likes and dislikes. Me, for instance, I love Mr. Druker's Heritage on the Garden. It was a wonderful development, reinvigorating a dank block. Boylston, too my mind, is not dank nor in need of invigoration. Has your department decided this is an appropriate trade? I hope not.

If a citizen's vote means anything, I vote keep the Shreve building. Tear down the rest of the block if you must, but not that. Buildings like this help make Boston special. Buildings like this many cities would give their eye teeth for.

Unrelated, I wonder if the Druker on the Boston Preservation Alliance Board is a relation. No. Can't be. Not in Boston.

Thank you for taking the time.

Norman Morrill

Rourke, Jay

From: daniel.w.shea@us.pwc.com
Sent: Wednesday, January 30, 2008 12:27 PM
To: Rourke, Jay
Cc: NABBinc@verizon.net; NABBinc@verizon.com
Subject: Arlington Building Destruction
Attachments: Arlington Building_doc.zip; ATT3039045.txt

Dear Mr. Rourke,

I spoke with you today to voice my opposition to the proposed destruction of the historic Arlington Building, across from the Arlington Street Church on the corner of the Public Garden.

I would like to respectfully ask you and the BRA to consider the effects of the loss of a building of impressive historic worth and aesthetic value in a prominent and older part of the city where residents and tourists alike expect to see architecture of the Arlington Building's age and dignity, rather than generic, pre-cast office parks.

While the Arlington's Building would be an irreparable loss for the city and the already-flagging tourist industry, given that we are today facing a Recession and the fact the proposed structure is to be built on speculation without an anchor tenant at a time when Boston is set to see millions of office space come online very soon, I find the project particularly unwise and even cruel. We don't want a gaping hole like the Gaiety Theater's site on the corner of the Public Garden.

I have attached a letter for the BRA's consideration and stand with the rest of the Back Bay community and NABB in asking for a stay on the life of a gem of a building in an important part of the city.

Thank you very much.

With best wishes,

Dan Shea

Dan Shea | PricewaterhouseCoopers LLP
Phone: 347 244 3810 | Email: Daniel.W.Shea@us.pwc.com

Dear Mr. Rourke and members of the BRA,

As a Bostonian who eagerly awaits the latest piece of development news in the hopes for a great new building or innovative use for an old one, I write you now to ask you to deny the Druker Co. the destruction of the historic, unique Arlington Building at the intersection of Boylston and Arlington.

As you know, this graceful building is perched on an important corner and entry-point to one of the city's most historic, serene and tourist-frequented attractions, the Public Garden. Established in 1836 as the country's first botanic garden, the Public Garden has been deprived of much of its splendor over the last 20 years as large, already-outdated developments have spoiled the intimate, timeless quality created by classic buildings like the Arlington Building.

The Public Garden itself, made famous by "Make Way for Ducklings," is hurt when the architectural ensemble that has made it worthy of admiration and literary immortality for almost 200 years is drastically changed.

If we continue to steal important patches of the beautiful architectural quilt around the Public Garden, what will tomorrow's tourists see? The Arlington Street Church – and a row of buildings that could be in any office park in the country. If it's Kansas City people want to see, they'll go to Kansas City. But if it's Boston they want to see, they'll be very disappointed if they go to one of the city's premier attractions, the Public Garden. The wanton destruction of the city's greatest assets will mean nothing but an acceleration in the alarming downward trend in tourism.

Significantly, this 103-year-old structure housed Shreve, Crump & Lowe, the oldest jeweler in North America, for a longer period than any of the store's other homes over the years.

For 75 years, not only stiff-lipped Boston Brahmins but ambitious young immigrants, eager to buy their fiancé the most impressive engagement ring possible, came to the Arlington Building for the finest jewelry in Boston; the building remains as well-crafted as the earrings or broaches they bought.

The proud jewelers who forged tennis' original Davis Cup and baseball's Cy Young Award would not decamp in just any building. And the Arlington Building, designed by William Rantoul, notable for his fin de siecle Boston and North Shore mansions, is not just any building, which is why I and anyone aware of this project begs the BRA to halt its destruction.

Countless parking lots and ugly buildings dot all corners of the city – from prime downtown real estate to stretches of Boylston (a few stores down, at 390, or 364 or 594, on the corner of Dartmouth, come right to mind) vast tracts of South Boston, Roxbury and Allston. I am fervently pro-development – I pray Trans National Place gets built and

I'd be delighted to see skyscrapers in lieu of parks on the Greenway – and know that many plots in the city would benefit from a sleek office building.

But we have to decide how to build for posterity. Pre-cast concrete-and-glass office buildings will be a welcome addition on City Hall Plaza once we're able to get rid of that abomination, over the Mass Pike, or on the vast number of other sites now housing failed and ugly buildings or empty lots in any part of town. Boston's need is clearly to undo the ill effects of its fling with Modernism, not to return to it.

A Boston classic, once it meets the wrecking ball, can never be brought back to life.

Time and again Boston has been gripped by the intense regret we feel after obliterating a piece of our heritage in order to suit the architectural fancies of the day. We need to look no further than the old West End, half of Chinatown or other areas that were razed for urban renewal projects from City Hall to the Central Artery that seemed great at the time.

I worked in Moscow, Russia, for three years, and saw firsthand how Russians scramble today to rebuild the thousands of churches, aristocratic palaces and theaters that the Bolsheviks, Stalin and Brezhnev razed. Moscow has very little architectural heritage remaining, and that makes it one of the world's ugliest cities. As a result, the city rushes today to rebuild what was lost, but the re-creations are far, far from the real thing.

Cesar Pelli is a well-known architect, but it's impossible in today's economic climate to expect he will be able to build a classical palace with the sort of fine, handcarved touches and elegant metalwork the Arlington Building boasts. I have enclosed photographs of some of the buildings architectural details. They are exquisite.

With all due respect, Pelli's design on the other hand looks like it crawled in off of Rt. 128 or a late-80s Waltham office park.

Still, I understand a developer's needs. But adaptive reuse of the Arlington Building – leaving the façade and reworking the interior for offices or condos, or adding floors on top as is happening nearby at the Modern Theater – would be a compromise that would leave the city with its architectural heritage and tenants with a comfortable, modern space. Buildings like the Hearst Tower and LVMH building in New York, the Filene's redevelopment, Dainty Dot, or Russia Wharf show this sort of mixture of old and new can be done well, and profitably.

As someone who unhappily worked for years in a bland, 40-story glass skyscraper that was recently built in place of a Beaux-Arts tower in Midtown Manhattan, I can assure you it would create happier tenants and happier tourists.

If the city really needed this office space, the building could feasibly be built on one of the city's many empty plots. But with a recession coming and a record number of building projects and office space on the horizon, is this building needed? What if financing runs out, or if building this on speculation fails to lead to tenants? This isn't

Columbus Center, where financing issues means nobody gets hurt because the excavation was just done on the side of the road – here we may have a hole in the ground for 4 years, as has happened with the Gaiety Theater's site?

The destruction of a building of such quality and historical weight at a time of a slowing economy and a construction glut is cruel, wanton and gratuitous.

Mr. Rourke and members of the BRA, please look at the city and think about why you love it. If a building of this caliber can be sacrificed, then all the aspects that make Boston what it is are under threat. Boston is not unique because of the "heavy-hitters" of the BPL and MFA but because when visiting the city there are so many other buildings that provide a great backdrop. All you have to do is compare the filler buildings of yesterday with those of today. There is absolutely no comparison.

People in other parts of the country jealously say Boston has a European feel to it. Why? And what could change that? All you have to do is imagine all the buildings in Boston that are ornate, well-crafted beauties from an era when construction economics and aesthetic sense allowed for a kind of beauty that we'll never see again. Now imagine those buildings replaced with Modern ones. What you have is akin to a postwar Eastern European city, only razed by developers instead of invading armies. It instantly stops being interesting, disappointing tourists who had hoped for some connection to its famous past.

Unless the current state of new construction changes, buildings like the Arlington Building must be saved. If the city is willing to discard it, then given enough time Boston will be identical to any other American city. Highly paid, educated professionals who are increasingly picky about culture and beauty in their environment and who can live anywhere will exercise their right to move away. The Arlington Building is hardy, beautiful and historic. It is Boston.

Rourke, Jay

From: pastormichael1@juno.com
Sent: Wednesday, January 30, 2008 12:35 PM
To: Rourke, Jay
Subject: Save Shreves

Dear Mr. Rourke,

I highly recommend that you reconsider tearing down the old Shreve, Crump and Low building on Boylston St. Its architecture is irreplaceable and should be preserved in such a highly sensitive area of the city.

Thank you.
Fr. Michael Parise
Pastor, St. Andrew Church
Billerica, MA

Rourke, Jay

From: Nicholas DiPersio [ndipersio@gmail.com]
Sent: Wednesday, January 30, 2008 11:07 AM
To: Rourke, Jay
Subject: save the Shreve & WEIU Building

Jay,
I am writing to support the preservation of the Shreve Crump & Low and WEIU buildings. Considering the state of pre-cast industrially manufactured building processes, there is not one chance in a million that whatever building replaces the former SC&L and WEIU buildings (certainly not the proposed development), will be worthy of doing so.
The current buildings have a unique character that differentiates Boston from more generic cities, and to do away w/them is to make Boston common. They bring elegance to this vital part of the city and define the area as being uniquely Boston. The quality of construction materials and the buildings' period details are of a time past; once removed, they will never be adequately replaced.
Of all locations in Boston that people claim are worthy of being preserved (i.e., the Dainty Dot building) the argument at this site is actually valid. I would strongly urge the developer to consider incorporating these buildings into any new development on the adjacent properties at all costs.
Thank you,

Nicholas DiPersio
Molecular Cytomics Inc.
75 Kneeland St. Boston, MA 02111 Suite 605
PH:617-556-2700
FX:617-556-2708

Rourke, Jay

From: jonathan.fox@maine.edu
Sent: Tuesday, January 29, 2008 7:26 PM
To: Rourke, Jay
Subject: Shreve Crump and Low Building

Mr. Rourke,

Normally I find myself at odds with those who stand in the way of development in Boston. I am supportive of the 115 Winthrop Square (Transnational Place) proposal (yes, even sans-Piano), the Filene's Project, the Clarendon, and even the new Apple store on Boylston St. However, I think it would be a shame to lose the facade of the Shreve, Crump, and Low building for the glass box proposed by Ronald Druker.

Now, I'm well aware that the appearance of a building is a matter of opinion, but I feel that the city would lose a beautiful building if this project is cleared for that development. I understand that this project is outside the Back Bay Historical District and is not under the same type of examination that the Apple store was for those reasons; but i think it's safe to say that the SC&L building is far more significant than the one cleared for the Apple store.

Again, I don't propose that developments with this site be halted. In fact, something needs to be done as this building sits vacant on prime real estate. There is no issue in my opinion with the size of the development, it's what will be destroyed to make way for that development that bothers me. What I do propose is that the facades be preserved (a la Russia Wharf) to maintain the pedestrian friendly effect that these facades have.

There are buildings that deserve to be demolished, and there are buildings that deserve to be saved. The Shreve, Crump, and Low building is the latter. I think that with a little Yankee Ingenuity both sides will be content.

Thank you for your time,
Jonathan Fox

Rourke, Jay

From: Paul Carlson [pcarlson@carlsonlawofficespc.com]
Sent: Tuesday, January 29, 2008 5:08 PM
To: Rourke, Jay
Subject: Comments regarding Druker proposal for Shreve, Crump and Low Building

Dear Mr. Rourke:

I wanted to write to inform you of my opinion regarding Mr. Druker's proposal to demolish several buildings and construct a new building on Boylston Street. In summary, I think this proposal will result in a great loss to Boston. The Back Bay neighborhood and Boston in general is so much more desirable than the average American city because of our wealth of interesting historical buildings, well preserved streetwalls, and diverse and active streetscapes.

Unfortunately, demolishing these very aesthetically attractive structures situated on relatively small footprints and replacing them with a monolithic structure with a large footprint is a step in the wrong direction for the Back Bay/Park Sq. area and Boston in general. It will only homogenize and degenerate the visual diversity of this section of Boylston Street. Small footprints and visual diversity is why Newbury Street is such an aesthetic success for Boston.

I realize increased tax revenue may be realized by a new structure but perhaps the Shreve Crump and Low facade could be incorporated into a larger modern structure in this location.

I have followed local urban development with great interest for many years. I am not anti-development. I'm all for increased density and a more populated and vibrant Boston, but I do not think this should occur at the expense of destroying Boston's very unique historic and engaging urban fabric. Boston should be thinking about adding density with height on smaller footprints. The visually impacts of these structures with very large footprints will leave Boston a less desirable place in the long run.

The proposed building could as well be located in Atlanta or Houston. Boston will be less better off in the long run if these buildings are razed and replaced by the proposed structure with the much larger footprint. As someone who has a great interest in urban design, I am always a bit surprised that slightly taller buildings proposed on fallow land at the Prudential Center or over the Mass Turnpike generate so much opposition compared to the destruction of these buildings which almost goes unnoticed.

Thank you for your consideration.

Regards,

Paul Carlson

Rourke, Jay

From: David W. Powers [davidwpowers@verizon.net]
Sent: Sunday, January 27, 2008 6:24 PM
To: Rourke, Jay

January xx, 2008

Jay Rourke
Senior Project Manager
Boston Redevelopment Authority
One City Hall Plaza
Boston Massachusetts 02201

Dear Mr. Rourke:

I am pleased to support the 350 Boylston Street project proposed by the Druker Company. As a resident of the neighborhood, I routinely admire not only the design of Druker's first building in the neighborhood – Heritage on the Garden – but appreciate the interesting array of ground floor retail and restaurants on the site.

I am confident that Ron Druker will construct another project that is consistent with his commitment to quality design, careful construction and selection of retail tenants that improve the neighborhood. With the addition of this building to lower Boylston Street, the block will truly be complete.

More developers should follow the Druker Company's approach. I hope the BRA will support this project as a message that buildings that respect the surrounding neighborhood are important to the city.

Sincerely,
David W. Powers
151 Beacon St., #5
Boston, MA 02116

Rourke, Jay

om: Brian Davis [brian.davis.e@gmail.com]
ənt: Sunday, January 27, 2008 7:46 PM
To: Rourke, Jay
Subject: Former Shreve, Crump, Low building

Hi Jay,

I am very worried about the state of the former Shreve, Crump, Low building on Boylston/Arlington. This proposed development, which wishes to demolish an entire half-city block, will forever put an ugly scar on what is currently a beautiful corner. Sure, the building needs some TLC, so thats fine. Require the builder to incorporate the facade into the new development. We cannot set a precedent that developers are allowed to tear historic structures down in the city center of Boston. Look what has happened: Hotel Commonwealth. We do not need another example of this. One is enough. Please do something about this.

Sincerely,
Brian Davis, BU '06

Rourke, Jay

From: Mike McQuade [mpm313@comcast.net]
Sent: Sunday, January 27, 2008 8:10 PM
To: Rourke, Jay
Subject: The Arlington Building

Dear Mr. Rourke,

I find it hard to fathom that the BRA as well as NABB and other organizations would even CONTEMPLATE tearing down the Arlington Building. Have you bothered to look at it up close? That building could not be replaced today. The artistry is beyond contemporary craftsmen's abilities. The tragedy is that it's impending demise is all about money and politics. It, or at least its façade, could easily be saved if anyone in power had the GUTS to say "stop". In Boston we save the best of the past, unlike other cities. And Mr. Druker has very deep pockets. So, to save time and a little inconvenience for Mr. Druker we'll lose a beautiful building that has great meaning to generations of Bostonians. This is a shameful act. Take a good look across Boylston St at another large office building that was built in the late eighties. It's tacky and pretentious. Drukers new building will not age well either because he takes pretentiousness to a new level. Also, this is a city issue, not just a Back Bay issue, that building belongs to ALL of us, not just the highest bidder.
Again, Boston differentiates itself from other cities by keeping the best of its past.

Sincerely,

Michael McQuade

Rourke, Jay

From: Annagret Sacerdote [absacerdote@mac.com]
Sent: Tuesday, January 22, 2008 8:20 PM
To: Rourke, Jay

January 22, 2008

Jay Rourke
Senior Project Manager
Boston Redevelopment Authority
One City Hall Plaza
Boston Massachusetts 02201

Dear Mr. Rourke:

I am pleased to support the 350 Boylston Street project proposed by the Druker Company. As a resident of the neighborhood, I routinely admire not only the design of Druker's first building in the neighborhood - Heritage on the Garden - but appreciate the interesting array of ground floor retail and restaurants on the site.

The Back Bay continues to evolve, and as residents, we hope to see more sites that understand the neighborhood's needs, from those of a tourist visiting to those of a young family, like ours.

I am confident that Ron Druker will construct another project that is consistent with his commitment to quality design, careful construction and selection of retail tenants that improve the neighborhood. With the addition of this building to lower Boylston Street, the block will truly be complete.

More developers should follow the Druker Company's approach. I hope the BRA will support this project as a message that buildings that respect the surrounding neighborhood are important to the city.

Sincerely,

Annagret Burtschy Sacerdote
15 Marlborough Street

David Friend
40 Commonwealth Ave., Apt. E
Boston, MA 02116
617-395-8373
Fax: 309-418-2183
david@davidfriend.name

Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Dear Sirs:

With reference to the proposed new Druker project at 330-360 Boylston St., I think it is a shame that the facades of the existing buildings, at least the old Shreves building at the corner of Arlington, cannot be preserved, thereby maintaining the character of the street. The proposed new jewel box building could fit right in in Dallas or Phoenix. But unlike the Heritage that I think blends in pretty well because of the brick façade and ample set-back from the street, the proposed design just sticks out like a sore thumb.

I know that the existing retail buildings are not architectural landmarks, but they do create a richness and variety at the street level that will be totally lost with this new building. And with the extra height, Boylston St. continues to become more and more cavernous and of inhuman scale. It's getting to be like New York.

Regards,

APPENDIX 4
EXAMPLES OF PUBLIC NOTICE

SAMPLE

PUBLIC NOTICE

The Boston Redevelopment Authority (BRA), acting pursuant to Article 80 of the Boston Zoning Code, hereby gives notice that a Draft Project Impact Report (DPIR) for Large Project Review has been received from ______________________________

____

(Name of Applicant)

for ____

(Brief Description of Project)

proposed at ____.

(Location of Project)

The DPIR may be reviewed or obtained at the Office of the Secretary of the BRA Boston City Hall, Room 910, between 9:00 A.M. and 5:00 P.M., Monday through Friday, except legal holidays. Public comments on the DPIR, including the comments of public agencies, should be transmitted to Jay Rourke, Senior Project Manager, Boston Redevelopment Authority, Boston City Hall, Boston, MA 02201, within sixty (60) days of this notice or by ______________. Approvals are requested of the BRA pursuant to Article 80 for ______________________________.

The BRA in the Preliminary Adequacy Determination regarding the DPIR may waive further review requirements pursuant to Section 80B-5.4(c)(iv), if after reviewing public comments, the BRA finds that the ______________________________ adequately describes the Proposed Project's impacts.

BOSTON REDEVELOPMENT AUTHORITY
Harry R. Collings, Secretary

APPENDIX 5

SUBMISSION REQUIREMENTS FOR DESIGN DEVELOPMENT AND CONTRACT DOCUMENTS SUBMISSIONS

Phase II Submission: Design Development

1. Written description of the Proposed Project.

2. Site sections.

3. Site plan showing:

   a. Relationship of the proposed building and open space and existing adjacent buildings, open spaces, streets, and buildings and open spaces across streets.

   b. Proposed site improvements and amenities including paving, landscaping, and street furniture.

   c. Building and site dimensions, including setbacks and other dimensions subject to zoning requirements.

4. Dimensional drawings at an appropriate scale (e.g., 1" = 8') developed from approved schematic design drawings which reflect the impact of proposed structural and mechanical systems on the appearance of exterior facades, interior public spaces, and roofscape including:

   a. Building plans

   b. Preliminary structural drawings

   c. Preliminary mechanical drawings

   d. Sections

   e. Elevations showing the Proposed Project in the context of the surrounding area as required by the Authority to illustrate relationships or character, scale and materials.

5. Large-scale (e.g., 3/4" = 1'-10") typical exterior wall sections, elevations and details sufficient to describe specific architectural components and methods of their assembly.

6. Outline specifications of all materials for site improvements, exterior facades, roofscape, and interior public spaces.

7. Eye-level perspective drawings showing the Proposed Project in the context of the surrounding area.

8. Samples of all proposed exterior materials.

9. Complete photo documentation (35 mm color slides) of above components including major changes from initial submission to the Proposed Project approval.

Phase III Submission: Contract Documents

1. Final written description of the Proposed Project.

2. A site plan showing all site development and landscape details for lighting, paving, planting, street furniture, utilities, grading, drainage, access, service, and parking.

3. Complete architectural and engineering drawings and specifications.

4. Full-size assemblies (at the project site) of exterior materials and details of construction.

5. Eye-level perspective drawings or presentation model that accurately represents the Proposed Project, and a rendered site plan showing all adjacent existing and proposed structures, streets and site improvements.

6. Site and building plan at 1" - 100' for Authority's use in updating its 1" = 100" photogrammetric map sheets.

Phase IV Submission: Construction Inspection

1. All contract addenda, proposed change orders, and other modifications and revisions of approved contract documents, which affect site improvements, exterior facades, roofscape, and interior public spaces shall be submitted to the BRA prior to taking effect.

2. Shop drawings of architectural components, which differ from or were not fully described in contract documents.

Appendix H

Transportation Data

The *Transportation Data Appendix* is bound separately and available upon request from VHB.