PROJECT NOTIFICATION FORM

LOFTEL BOSTON
151 PORTER STREET
BOSTON, MA 02128

Submitted to:
Boston Redevelopment Authority
City Hall Square, 9th Floor
Boston, MA 02201

Prepared by:
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Haley & Aldrich

MARCH 2, 2015

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1.0 PROJECT DESCRIPTION

1.1 Introduction

183 Orleans LLC (the Proponent), an affiliate of Heath Management Company, proposes to rehabilitate the existing building at 151 Porter Street (the "Project"), shown in **Figure 1-1**. The Project is a core and shell rehabilitation that will renovate existing industrial space into a new boutique hotel and introduce restaurant and coffee shop use on the ground floor. The Project involves the restoration of the historic facades with appropriate and historically sensitive alterations. The historic façade will benefit from entirely glazed window openings to infill all non-masonry openings. The Project will improve the existing building by upgrading mechanical systems and relocating the existing telecommunication systems to the roof and out of sight from the pedestrian level. The Proponent is proposing the addition of a partial story at the penthouse/roof level for a business center, fitness center and to house the existing telecommunication systems.

The rehabilitation will create approximately 4,475 gross square feet (gsf) of restaurant and coffee shop, and 5,680 gsf of common space on the ground floor, 56,731 gsf of new hotel guest rooms on floors one through five and 4,570 gsf of business and fitness space on the Penthouse level. Although the current measurement of the Project indicates that this substantial rehabilitation will yield less than 100,000 gsf, with the Project will involve changing the use of over 50,000 gsf of existing building in the East Boston Neighborhood District, thus triggering Large Project Review under Article 80 of the Boston Zoning Code. This Expanded PNF for the proposed Project at 151 Porter Street, known as Loftel Boston, initiates that review.

1.2 Project Identification

Project Name:	Loftel Boston
Address/Location:	151 Porter Street
	Boston, MA

1.3 Project Team

Proponent:	183 Orleans LLC c/o Porterfrank Realty LLC 74 Clarendon Street Boston, MA 02116 (617) 266-1168 Paul Roiff Keith Beardsley
Architects:	Sharkey Design Company 74 Clarendon Street Boston, MA 02116 (617) 266-1168 x6 Patrick Sharkey
Development Manager:	Colliers International 160 Federal Street Boston, MA 02110 (617) 330-8000 Yanni Tsipis Amy Prange
Transportation/Civil Consultants:	Nitsch Engineering, Inc. 2 Centre Plaza, Suite 480 Boston, MA 02108 (617) 338-0063 Deborah Danik (Civil) Nick Haven (Transportation)
Legal Counsel:	Kara Law Offices 10 Post Office Square, Suite 970N Boston, MA 02109 (617) 426-3600 Henry Kara
Geotechnical Engineers:	Haley & Aldrich 465 Medford Street, Suite 2200 Boston, MA 02129 (617) 886-7400 Denis Bell

Structural Engineers:	Bombardier Structural Engineering 131 Lincoln Street Abington, MA 02351 (508) 631-3332 Lee Bombardier
MEPFP Engineers:	R.W. Sullivan Engineering 529 Main Street #203 Boston, MA 02129 (617) 523-8227 Michael O'Rourke
Landscape Architect:	Ulrich Bachand Landscape Architecture, LLC 156 Cabot Street Unit 2A Beverly, MA 01915-5822 (781) 686-4486 Rebecca Bachand

1.4 Project Description

1.4.1 Project Site

The Project Site comprises of three parcels totaling 50,329 SF (approximately 1.16 acres) fronting on Porter Street as shown in **Figure 1-1**. The Project Site is located in the East Boston neighborhood. The Proponent envisions that the Project will breathe new life into a longstanding neighborhood eyesore that has been vacant for years and that contributes nothing to the neighborhood's streetscape quality or economic vitality in its current condition.

The Project Site is located along the East Boston Greenway and is easily accessible to downtown Boston by car and via the MBTA's Blue Line subway. The neighborhood has a growing residential population, which is driving the need for improved streetscapes, lighting, parking, improvements to the public realm, and new retail shops and restaurants.

1.4.2 Existing Site Uses

Currently, the Project Site consists of a five-story underutilized industrial building with telecommunications uses and two paved parking lots. The existing building was constructed circa 1913 and occupied by Sterlingwear of Boston, a wool coat manufacturer for the US Navy, which still operates in East Boston. The building was one of the first cast-in-place concrete buildings constructed in the City of Boston. The building features exposed concrete structure, which will be maintained and showcased in the proposed hotel.

The existing building currently totals approximately 69,496 gross square feet (gsf). The building is in need of major capital repairs, and has a history (under prior owners) of citation by the Boston Inspectional Services Department (ISD) for exterior issues. Due to the unique architectural features of this historic building, the Proponent proposes to rehabilitate the building in a historically sensitive manner. **Figure 1-2** depicts existing conditions on the site.

Figure 1-1 Project Locus

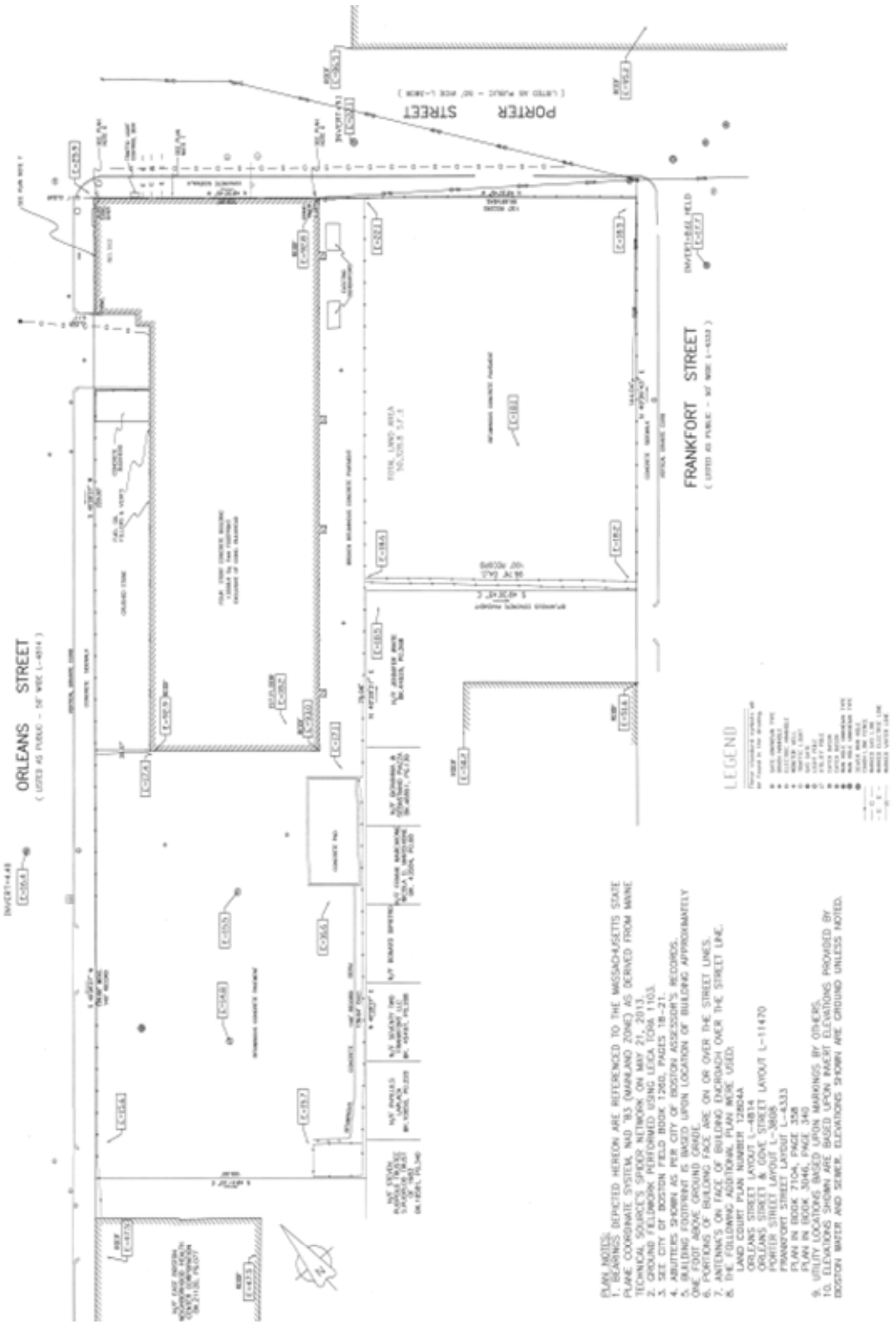


Figure 1-2 Existing Conditions

1.4.3 Detailed Project Description

The Project comprises the rehabilitation of the existing loft-style industrial building and the introduction of ground floor restaurant space. The Project will also add a one story addition to the existing building.

The Proponent followed several guiding principles in designing the Project:

- Respecting and celebrating the historical integrity of the existing early 20th century industrial building facades;
- Contributing to the continued success of this mixed-use district by upgrading existing underutilized industrial space and providing active street level uses such as a ground floor restaurant and coffee shop;
- Improving pedestrian conditions through streetscape upgrades; and
- Developing a LEED certifiable building in compliance with Article 37 of the Boston Zoning Code.

The focus of the proposed Project is to create a unique new 127-room loft-style boutique hotel. The Project will include a first-class ground floor restaurant operated by the hotel, which will activate the streetscape and draw pedestrians onto Porter Street. The Project proposes to renovate this unique early 20th century manufacturing building by retaining and cleaning the existing cast-in-place structure, installing new passenger elevators, and installing large new windows in the openings that were filled in with concrete block decades ago. The new smaller Penthouse addition will be comprised of a business center, fitness space and a rooftop garden and deck, in addition to a new home for the existing exposed telecommunications equipment. New mechanical and life safety systems will be installed in the building.

The rehabilitation of the proposed Project will stabilize and repair the building's noteworthy masonry facades. An architectural canopy above the main entrance will be designed to create a porte-cochere for hotel guests and restaurant patrons. The Project will highlight the robust architectural features of the building by removing the existing gray and white paint and restoring the historic brick and concrete to their natural colors. Existing infill single-pane windows and concrete block will be removed and replaced with new spandrel glass and energy efficient windows. The Project will establish at-grade entrances from the parking lot off of Porter Street and from the parking lot off of Orleans Street.

The Project will improve, repave and landscape both parking areas. The Proponent will replace the existing concrete sidewalks adjacent to the building to improve the pedestrian

experience and add street trees where dimensionally feasible. All surface parking will be screened with trees and plantings, similar to the treatment of the parking lot of the nearby East Boston YMCA on Bremen Street.

Figure 1-3 is a proposed site plan. Figures 1-4 through 1-6 show floor plans for the Project. Figures 1-7 through 1-10 show the elevations of the Project. Figures 1-11 and 1-12 show perspective views of the Project.

Figure 1-3 Proposed Site Plan

Figure 1-4 Ground Floor Plan

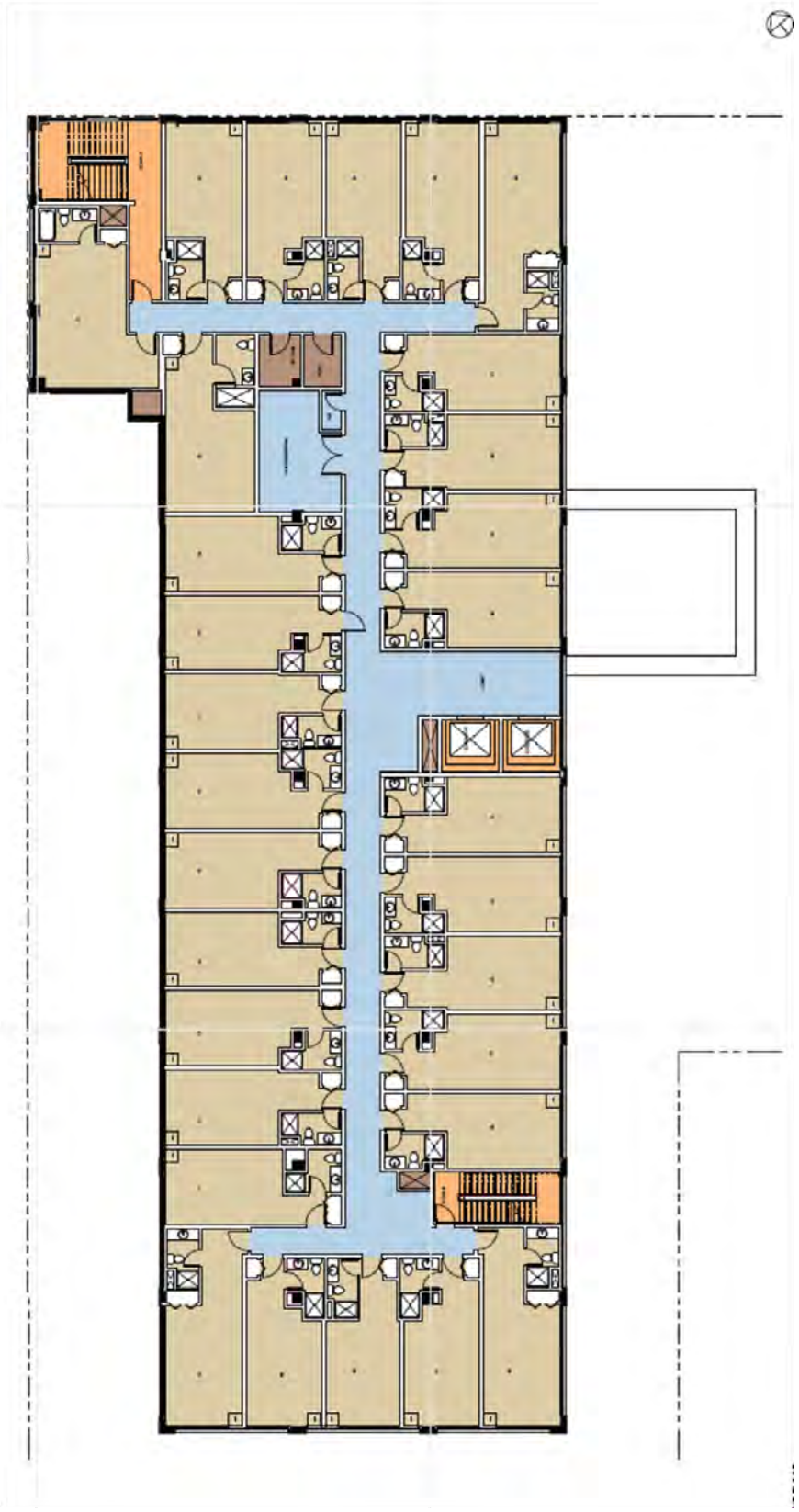


Figure 1-5 Typical Floor Plans Levels 2-5

Figure 1-6 Roof- Penthouse Floor Plan

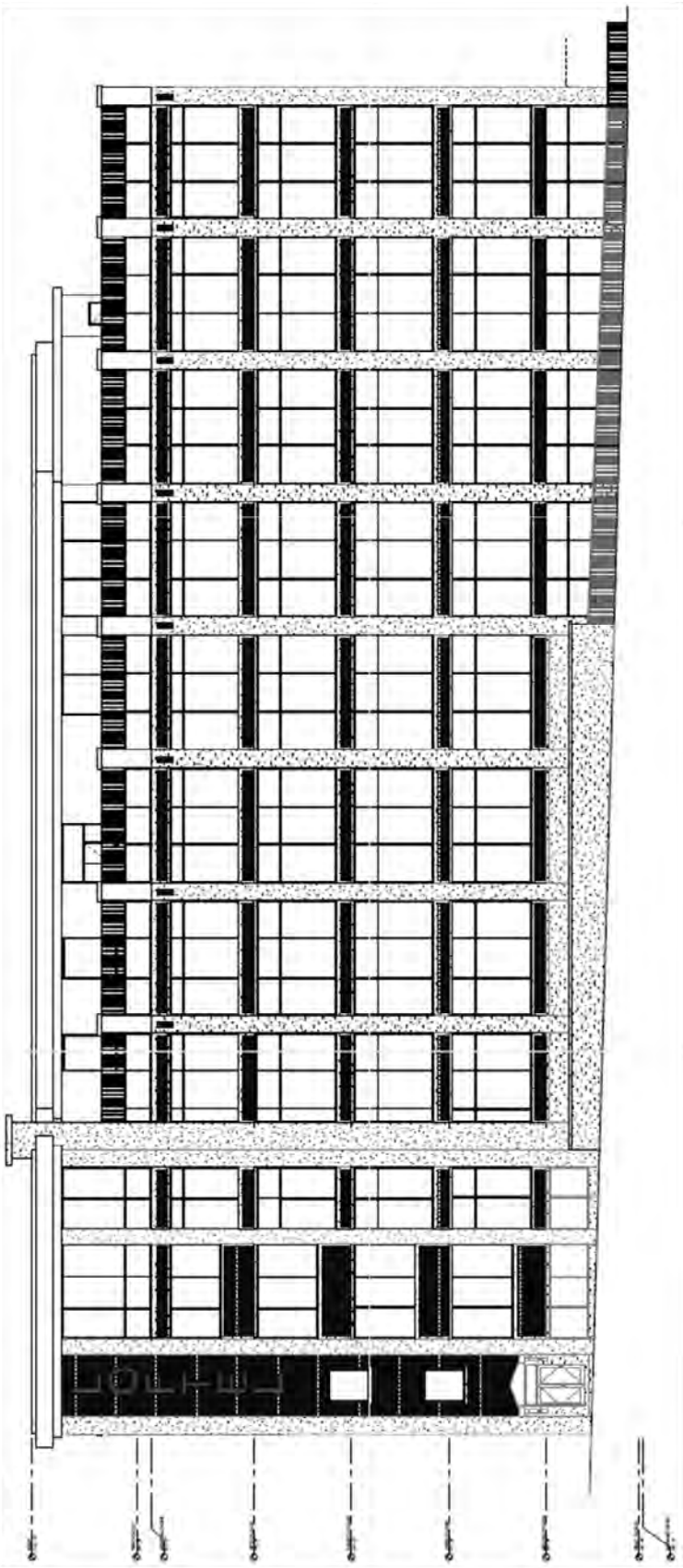


Figure 1-7 Northwest Elevation - Orleans Street

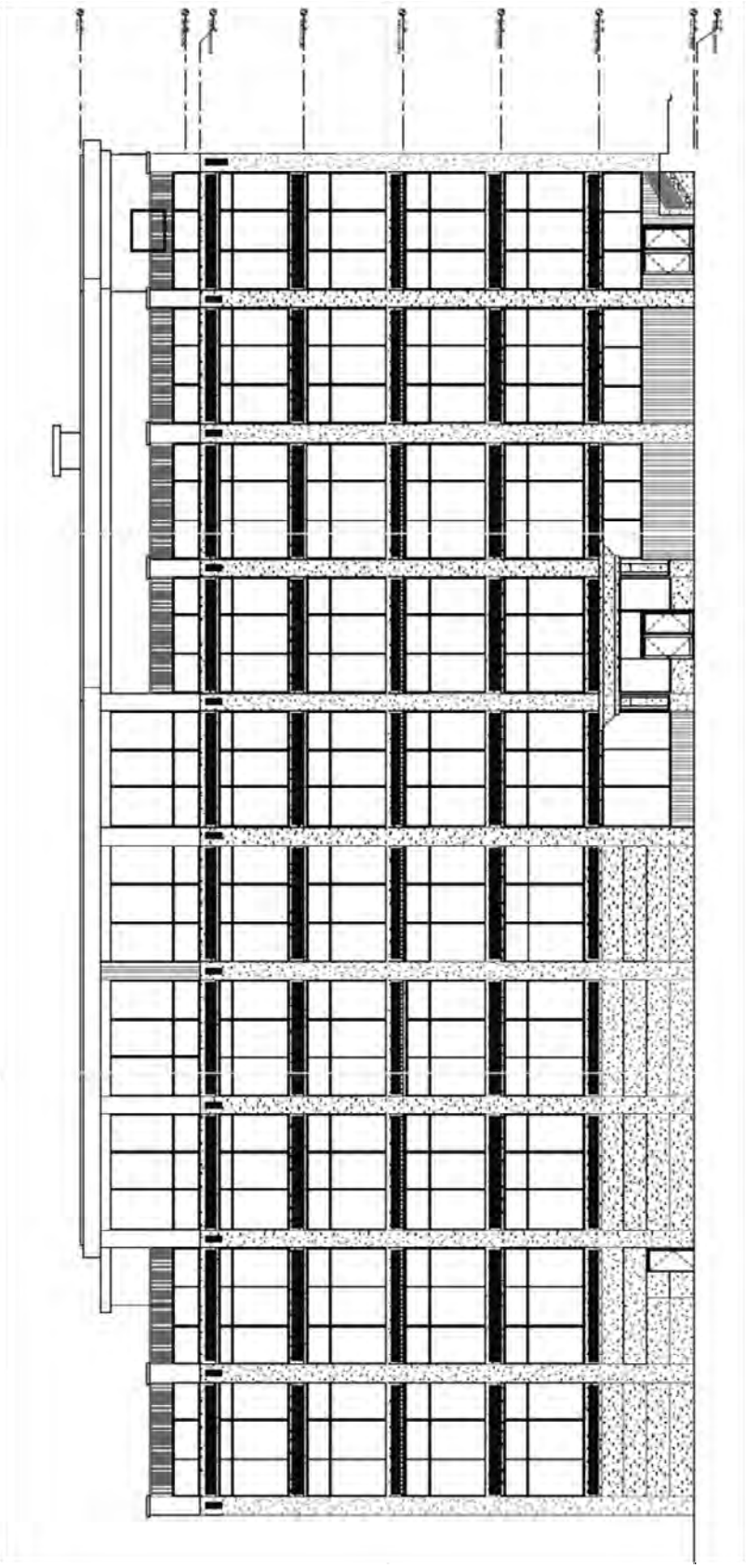


Figure 1-8 Southeast Elevation –Frankfort Street

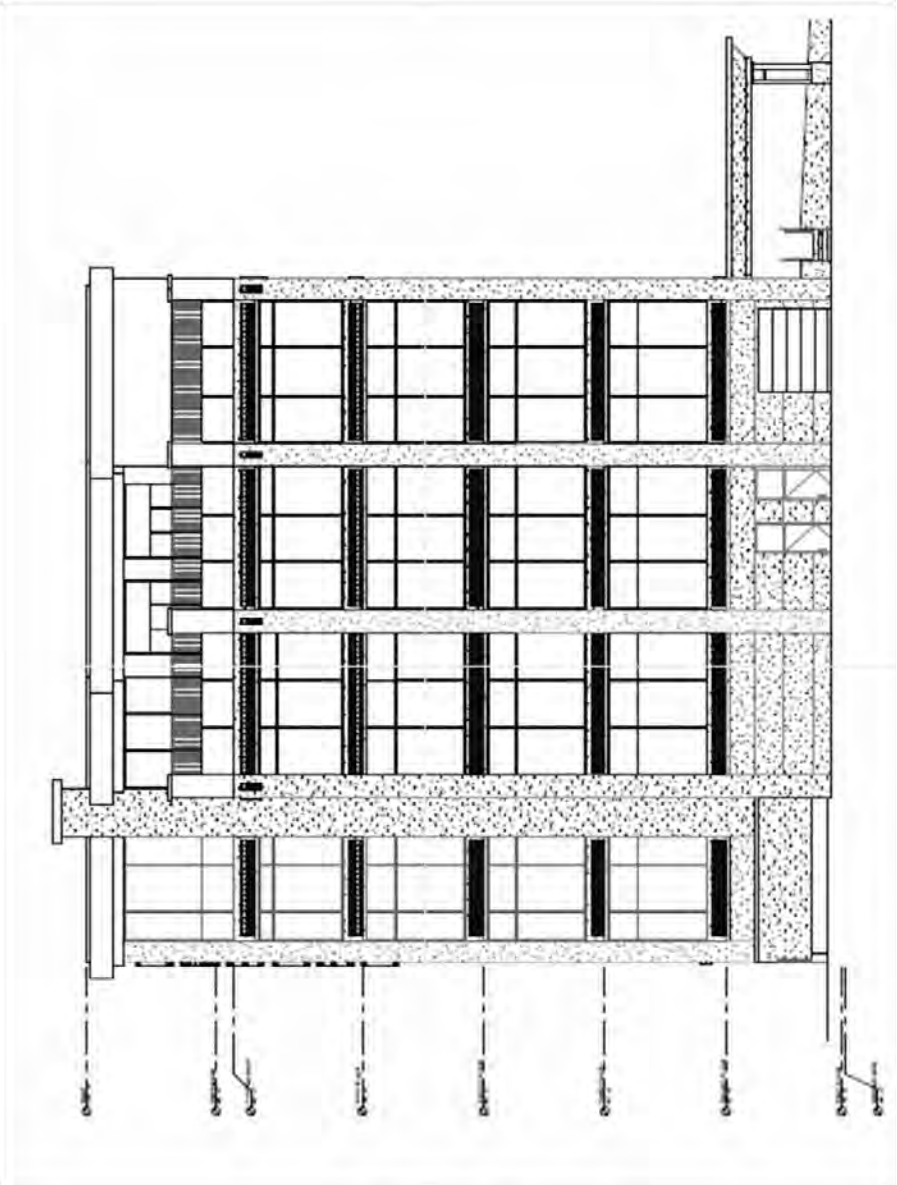


Figure 1-9 Southwest Elevation

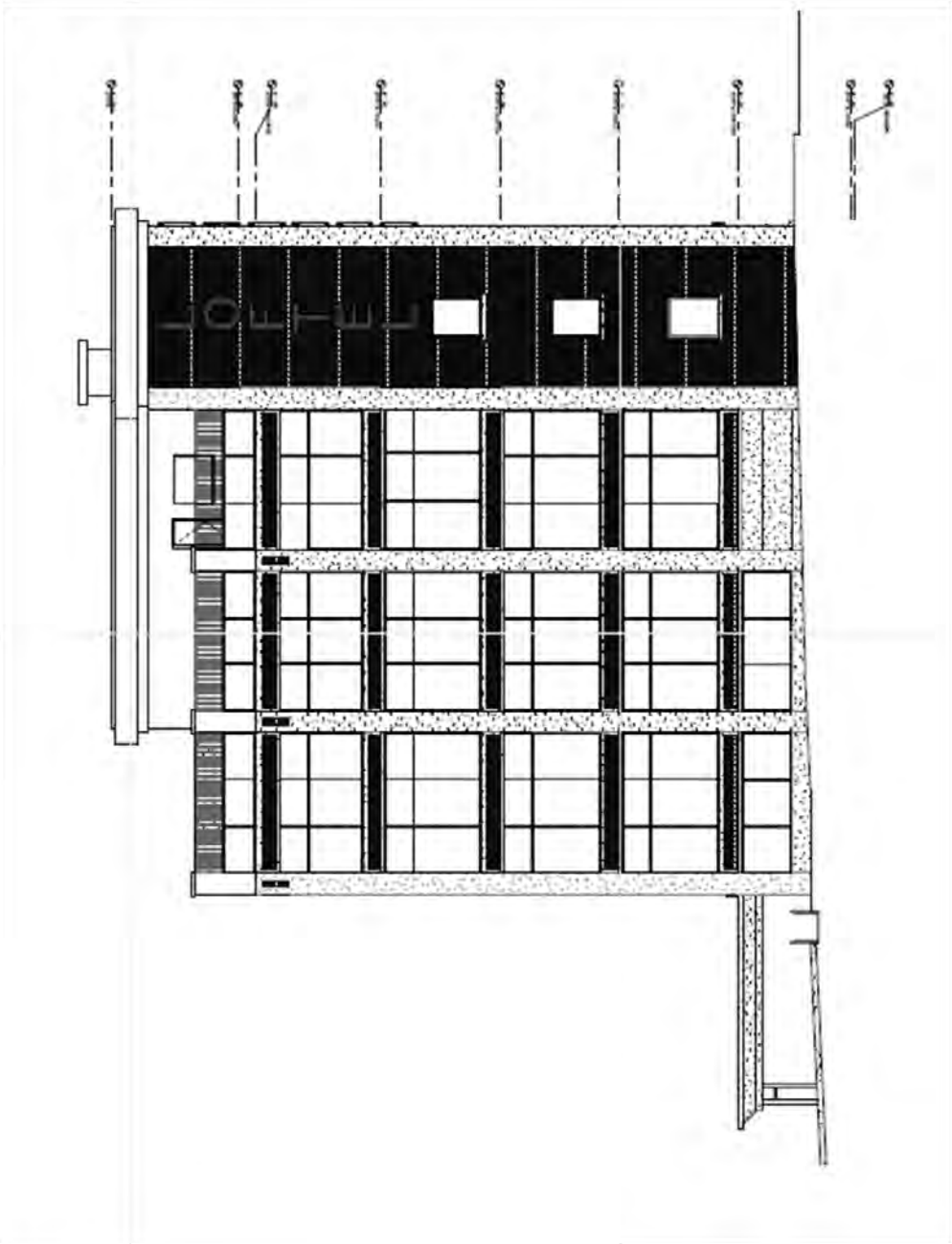


Figure 1-10 Northeast Elevation – Porter Street

Figure 1-11 Perspective View – Porter Street

Figure 1-12 Perspective View – Orleans Street

1.4.4 Approximate Dimensions

Site Area	1.16 acres
Existing	
Total	69,496 gsf
Parking	31 spaces - Orleans Street Lot 3 spaces – Orleans Street 36 spaces – Frankfurt Street Lot
Total Parking	70 spaces
Proposed Project	
Basement	1,114 gsf*
Ground Floor	3,885 gsf Restaurant 590 gsf Coffee Shop 5,680 gsf Hotel 2,495 gsf Hotel Guestrooms 1,810 gsf Mechanical* 700 gsf Garage*
Hotel Guestrooms Floors 2-5	54,236 gsf
Penthouse	4,570 gsf Business Center/Fitness 1,100 gsf Telecommunications* 1,020 gsf Mechanical/Storage*
Total*	71,456 gsf
Parking	31 spaces - Orleans Street Lot 2 spaces-Orleans Street, Dedicated Zipcar 32 spaces -Frankfort Street Lot
Total Parking	65 spaces
Maximum building height	
Existing	78 ft, 5 stories
Proposed	88 ft, 6 stories

* Mechanical, storage and garage space is not included in floor area ratio calculations as per Boston Zoning Code.

1.4.5 Schedule

Construction of the Project is estimated to last approximately twelve months, with initial site work expected to begin in mid-2015, such that the Proposed Project would be completed for occupancy mid-2016.

1.5 Consistency with Zoning Regulations

1.5.1 Zoning District

The Project Site is located entirely within the East Boston Neighborhood District, with portions of the site within the Corridor Enhancement Subdistrict, MFR Sub District, Special Study Overlay District, as well as the Neighborhood Design Overlay District. The Project Site is not located within the Groundwater Conservation Overlay District ("GCOD"). Zoning relief is necessary for the Project.

1.5.2 Uses

The Project will include hotel, restaurant, take-out, telecommunications, retail, and accessory parking uses.

1.5.3 Building Dimensions

The Project will increase the height of the existing building by approximately 10 feet with the proposed rooftop addition, from approximately 78 feet to 88 feet to the highest roof structure. The Project will have a FAR of approximately 1.42, an increase from the existing FAR of 1.34. Zoning relief will be required. There are no requirements for minimum open space or minimum front or side yard setbacks.

1.5.4 Other Requirements

Because the Project is required to undergo Large Project Review, the provisions of Article 37, Green Buildings, apply to the Project. The Proponent's commitments to meeting the green building requirements are set forth in Section 2.2.14. The Project is also subject to review by the Boston Parks & Recreation Commission due to its proximity to the East Boston Greenway, a City of Boston park.

1.5.5 Historic Preservation Review

The existing building is not listed on the State or National Registers of Historic Places. The Project will not require any state or federal funding, licenses, permits, actions, or approvals, and no Massachusetts Historical Commission or Section 106 review will be required. The Project is not subject to MEPA.

1.5.6 Consistency with Zoning

The Project will seek zoning relief from the Boston Zoning Board of Appeals for certain dimensional and other matters required to construct the Project. A summary of the zoning relief required is provided in **Table 1-1**.

Table 1-1: Zoning Summary

Lot Information									
Lot Area:	50,329 square feet								
Zoning District:	East Boston Neighborhood District								
Zoning Subdistricts:	Corridor Enhancement Subdistrict								
Overlay District:	Special Study Overlay District								
Dimensional Regulations									
	Lot Area	FAR	Height	Open Space	Front Yard	Side Yard	Rear Yard	Parking	Article 37 Compliance
Required	None	1.0	35'	None	None	None	20'	Determined through Large Project Review	Yes
Provided	50,329 SF	1.42	88'	N/A	0'	0'	157'	Determined through Large Project Review	Yes
Zoning Relief Required									
Variances:	1. USE (Article 53, Section 36: Hotel & Take-out restaurant Forbidden) 2. HEIGHT (Article 53, Section 37) 3. FAR (Article 53, Section 37)								
Conditional Use Permits:	1. USE (Article 53, Section 36: Restaurant Use Conditional in Corridor Enhancement Subdistrict)								

1.6 Public Benefits

Through the redevelopment of Loftel Boston, the Project Site will be transformed from a vacant building in dire need of repair into a vibrant, contemporary boutique hotel with active ground floor uses.

The proposed Project provides numerous public benefits to the City of Boston and the East Boston community. The proposed Project will:

- Preserve and rehabilitate the historic building at 151 Porter Street;
- Help establish a vibrant mixed-use community by providing a range of uses that will contribute to a vital urban realm throughout the course of the day;
- Enliven the neighborhood with active ground floor uses such as restaurant and café with access from street level;

- Contribute public realm improvements through sensitive restoration of the historic facade, upgrades to street lighting, landscaping, signage, and paving;
- Addition of landscaping and trees around the Project Site;
- Provide a new Zipcar location for the neighborhood's use;
- Generate approximately 30 new permanent jobs in the restaurant component of the Project, 15 new hotel jobs and approximately 150 construction jobs over the twelve month construction period;
- Promote local employment through good-faith efforts to hire Boston residents for construction jobs; and
- Rehabilitate an existing building consistent with sustainable design principles and in compliance with Article 37 of the Boston Zoning Code.

1.7 Public Review

As noted above, the Project totals approximately 71,456 gsf, triggering review under Article 80 Large Project Review. This expanded Project Notification Form (PNF) is being prepared to initiate that review and the Proponent requests that the requirements for a Draft and Final Project Impact Report be waived.

No federal or state licenses, permits or approvals are required. Table 1-2 lists the local agencies from which permits or other actions may be required.

Table 1-2: Anticipated Permits and Approvals

City Agency	Permit, Review or Approval
Boston Inspectional Services Department	Building & Occupancy Permits
Boston Fire Department	Approval of Fire Safety Equipment, Flammable Storage license
Boston Public Improvement Commission / Boston Department of Public Works	Street/Sidewalk Repair Plan Permits for street occupancy and opening permit
Boston Redevelopment Authority	Article 80 Large Project Review
Boston Zoning Board of Appeal	Zoning Relief
Boston Transportation Department	Construction Management Plan Transportation Access Plan Agreement
Boston Water and Sewer Commission	Temporary Construction Dewatering Permit General Service Application Site Plan Review

1.8 Legal Information

1.8.1 Legal Judgments Adverse to the Proposed Project

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

1.8.2 History of Tax Arrears on Property

The Proponent is not in tax arrears on any property owned within the City of Boston.

1.8.3 Site Control / Public Easements

By deed dated October 9, 2013 and recorded at the Suffolk County Registry of Deeds at Book 52219, Page 157, the Proponent acquired title to the Project Site from J&F Realty Trust.

There are two existing rooftop easements for telecommunication access that will be modified but maintained by the Proponent. Based upon the completed site survey, there are no other easements into, through, or surrounding the Project Site.

2.0 ASSESSMENT OF DEVELOPMENT REVIEW COMPONENTS

2.1 Transportation

2.1.1 Purpose of the Report

This section describes the transportation-related components of the proposed Project at 151 Porter Street. It adheres to the Boston Transportation Department ("BTD") Transportation Access Plan Guidelines and Article 80 development review process guidelines. This transportation study includes an evaluation of existing site conditions, trip generation, parking demand, loading operations, transit services, and pedestrian activity.

2.1.2 Introduction

The Transportation Section of this Expanded Project Notification Form provides an assessment of existing and future traffic circulation and Site access for the proposed development at 151 Porter Street. As seen in **Figure 2.1-1**, the Project Site is located on Porter Street between Orleans Street and Frankfort Street.

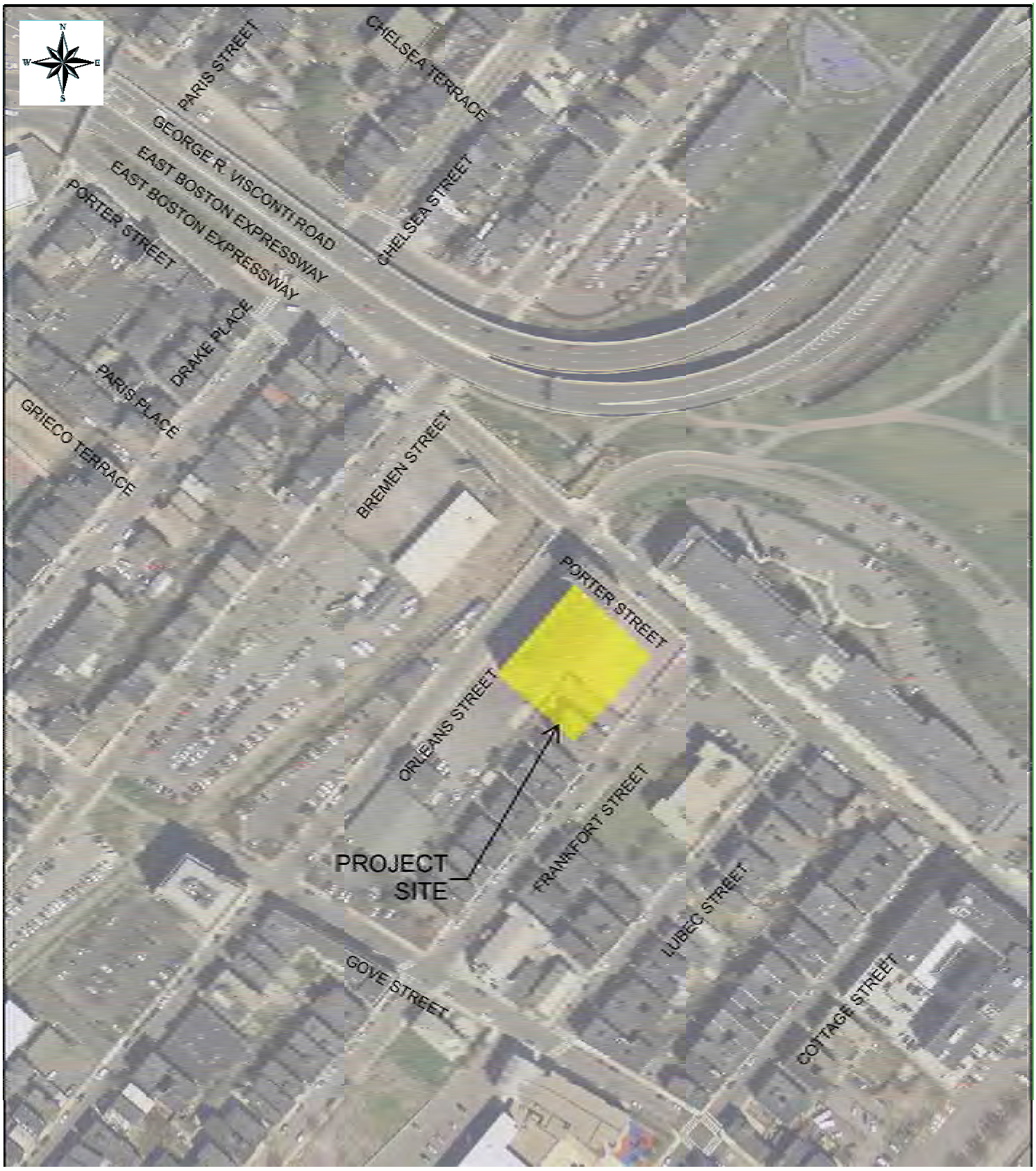
This assessment evaluates both the existing and projected traffic operations at key intersections in the vicinity of the Project Site with and without the proposed redevelopment. The evaluations will utilize data collected on August 20, 2014 including traffic and pedestrian volume data and parking utilization and turnover counts, the projected generated uses of the development, and existing safety characteristics of the Site's surroundings to assess weekday morning and evening peak hour impacts associated with the development of 151 Porter Street.

2.1.3 Study Area

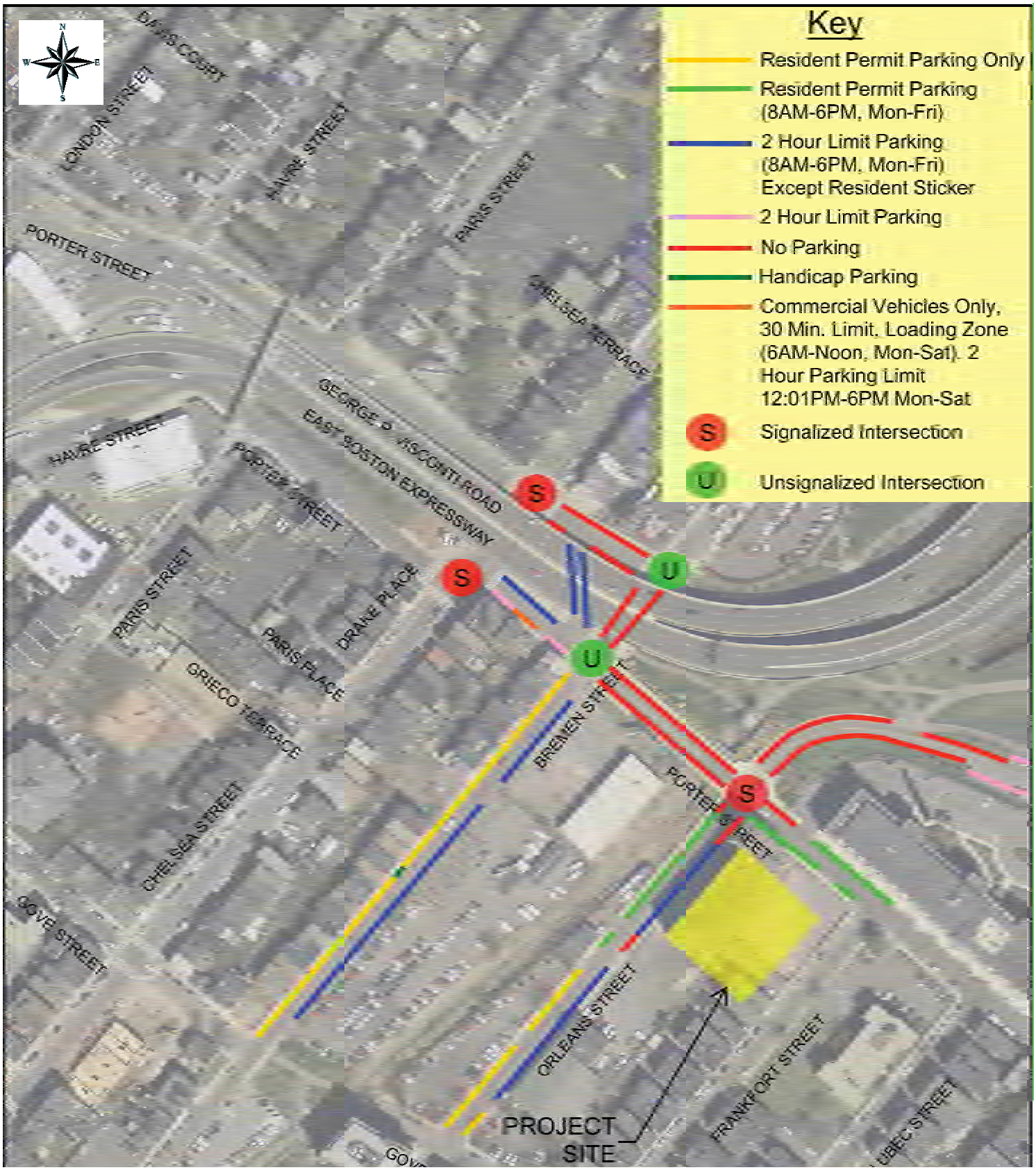
As shown on **Figure 2.1-2**, the primary area of study encompasses Porter Street between Drake Place and Frankfort Street including the intersecting streets of Orleans Street, and Bremen Street, as well as the intersection of Bremen Street and George R. Visconti Road.

Eleven hour turning movement vehicle and pedestrian counts were performed at the following locations:

- Porter Street and Orleans Street/Logan Airport Service Drive;
- Bremen Street and Porter Street; and
- Bremen Street and George R. Visconti Road.



LOCUS MAP			
JOB NO : **1307**	DATE : FEB. 2015	SCALE : **NOT TO SCALE**	**2.1-1**
SHARKEY DESIGN COMPANY 74 CLARENDON ST STE A, BOSTON MA 02116 617.531.0240 VOICE O O 617.266.2948 FAX	**BOSTON LOFTEL** 151 PORTER ST, EAST BOSTON, MA		



CURB USE		
JOB NO : **1307**	DATE : FEB. 2015	SCALE : **NOT TO SCALE**

SHARKEY DESIGN COMPANY
74 CLARENDON ST STE A, BOSTON MA 02116
617.531.0240 VOICE O O 617.266.2948 FAX

BOSTON LOFTEL
151 PORTER ST, EAST BOSTON, MA

2.1-2

2.1.4 Methodology

In accordance with BTD Transportation Access Plan Guidelines (2001) the study team conducted a transportation analysis for the proposed project. The analysis is summarized in the following sections:

- Section 2.1.5 comprises an inventory of existing transportation conditions, including roadway and intersection conditions; parking, transit, pedestrian and bicycle circulation; loading; and site conditions.
- Section 2.1.6 evaluated future transportation conditions and assesses potential traffic impacts associated with the proposed development and other neighboring projects. Long-term impacts are evaluated for the year 2019, based on a five–year horizon from the 2014 base year. Expected roadway, parking, transit, pedestrian, and loading capacities and deficiencies are identified. This section includes the following scenarios:
- The No-Build Scenario (2019) includes general background growth and additional vehicular traffic associated with specific proposed or planned developments and roadway changes in the vicinity of the site; and
- The Build Scenario (2019) includes specific travel demand forecasts for the project.
- Section 2.1.7 identifies appropriate measures to mitigate Project-related impacts identified in the previous phase. Also included in this section is an evaluation of short-term traffic impacts associated with construction activities.

2.1.5 Existing Conditions

The proposed development will be sited on the parcel of land that fronts on Porter Street between Orleans Street to the northwest and Frankfort Street on the southeast. The parcel encompasses 50,329 square feet. The existing Site has one curb cut on Orleans Street to access the loading bay doors at the existing building and one for access to an associated off-street parking lot. Another curb cut for access to the Site also exists on Frankfort Street.

2.1.5.1. Existing Roadway Conditions

The following are general descriptions of the characteristics of the roadways within the study area.

Porter Street

Porter Street is a segmented roadway. Within the vicinity of the Project Site, Porter Street is an east-west collector between Route 1A on the west to Logan International Airport and Cottage Street on the east. Porter Street extends within the Airport to Harborside Drive. Porter Street between Route 1A and Bremen Street is one-way heading eastward and from Bremen Street to Logan Airport is two-way with a single lane in each direction. Porter Street serves a mix of commercial, retail, and residential uses.

Orleans Street

Orleans Street is a two-way roadway with a single lane in each direction between Marginal Street on the south and Porter Street on the north. Orleans Street's primary uses are residential with some commercial use. Parking lanes are provided on each side. On-street parking is restricted to East Boston residents.

The Orleans Street right-of-way has a width of approximately 50-feet and includes 8-feet wide sidewalks on each side.

Bremen Street

Bremen Street is a major two-way north – south arterial roadway with a single lane in each direction running between Marginal Street (and Boston Inner Harbor) to the south and Curtis Street (and the Chelsea River) to the north. Bremen Street's primary uses are residential and commercial with parking lanes on each side. Bremen Street forms the west side boundary of the East Boston Greenway. The area that Bremen Street crosses Saratoga Street and extends to Curtis Street is the easterly boundary of the tank farms along the Chelsea River. On-street parking is restricted to East Boston residents.

The Bremen Street right-of-way has a width that varies along its length from 40-feet to 60-feet, and includes 7-feet wide sidewalks on each side.

Airport Service Drive

The Airport Service Road extending from the intersection of Orleans Street at Porter Street is a two-way roadway with a single lane in each direction. It provides access to the East Boston Memorial Park. Perpendicular parking serving the Park exists on both sides of the roadway.

George R. Visconti Road

George R. Visconti Road extends between London Street/Route 1A and Bremen Street. It is one-way westbound roadway with a parking lane on its north side. The pavement is not striped; it carries a single lane but is wide enough to have two-lane stacking if needed due to congestion at the Sumner Tunnel.

The roadway abuts the Route 1A elevated roadway on its south and includes a sidewalk on the north side interfacing with the East Boston community.

2.1.5.2. Existing Intersection Conditions

Bremen Street and George R. Visconti Road

The intersection of Bremen Street and George R. Visconti Road is unsignalized. George R. Visconti Road is one-way westbound. There are crosswalks across George R. Visconti Road and Bremen Street.

Porter Street and Bremen Street

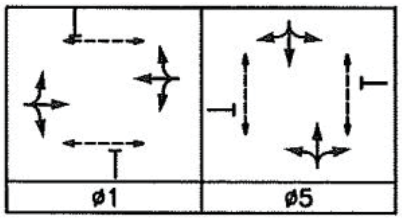
The intersection of Porter Street and Bremen Street is unsignalized with all four approaches stop controlled. There are crosswalks on three out of the four approaches to the intersection.

Porter Street and Orleans Street/Airport Service Drive

This is a 4-legged signalized intersection with Porter Street approaching from the northwest and southeast, Orleans Street approaching from southwest and Logan Airport Service Drive approaching from the northeast. All approaches consist of one (1) all-purpose lane at the intersection, separated by a double yellow center line. There are crosswalks on all approaches to the intersection.

This intersection is controlled by a 2-phase semi-actuated traffic signal. The first phase is the Porter Street movements. The second phase is the Orleans Street/Airport Service Drive movements.

Existing Phasing



2.1.5.3. Accident Summary

Accident data available from MassDOT for the three most available recent years – 2010 to 2012 was collected and reviewed for the study area intersections. The accident data contained no report of any crashes at the study intersections within these three years.

2.1.5.4. Traffic Volume Data

Nitsch Engineering completed a data collection effort for the study intersections on August 20, 2014. Data collected included Turning Movement Counts (TMCs) for cars, bicycles, pedestrians and heavy vehicles over an eleven hour period from 7:00 AM to 6:00 PM at the following intersections:

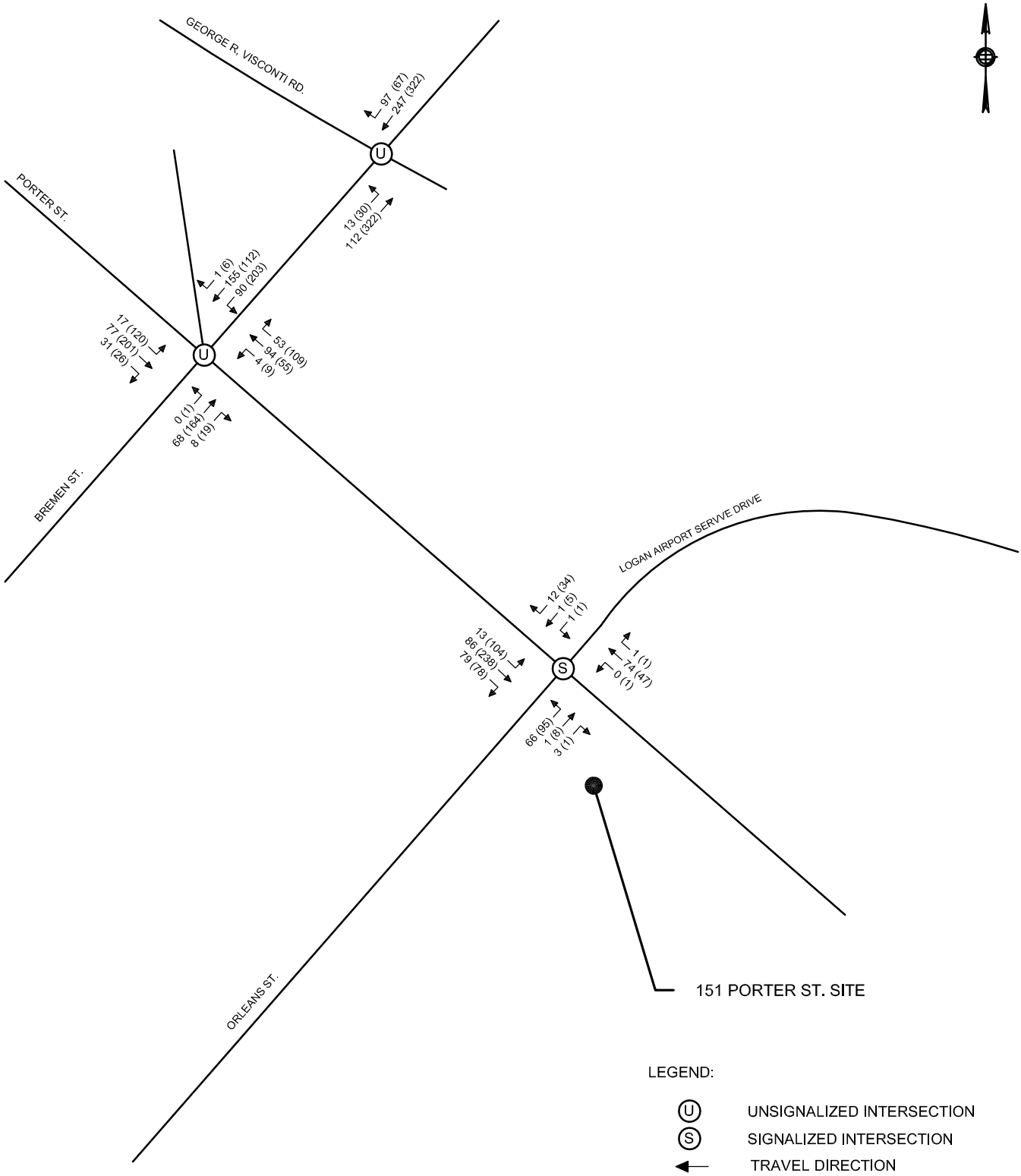
- Porter Street and Orleans Street/Logan Airport Service Drive;
- Bremen Street and Porter Street; and
- Bremen Street and George R. Visconti Road

Based on the counts, the AM peak hour is from 7:30 AM to 8:30 AM and the PM peak hour is from 5:00 PM to 6:00 PM. The existing traffic counts are summarized in **Figure 2.1-3**.

2.1.5.5. Intersection Operations

A Level of Service (LOS) analysis is a quantitative assessment of traffic operations at an intersection. Nitsch Engineering conducted a LOS analysis at the study area intersections using the procedures outlined in the 2010 Highway Capacity Manual (HCM)[1]. The intersections were analyzed using SYNCHRO Version 8 computer software, which conforms to MassDOT requirements. The HCM bases its LOS results on average delay experienced by vehicles at intersections. The HCM categorizes LOS by letters A through F, with LOS A representing minimum delays and good service, and LOS F representing significant delays and poor service. MassDOT considers, LOS A, B, C, and D as acceptable in urban/suburban areas, and LOS E and F as unacceptable. **Table 2.1-1** shows the LOS criteria for signalized and un-signalized intersections.

[1] *2010 Highway Capacity Manual;* Transportation Research Board.



2014 EXISTING TRAFFIC VOLUMES			
JOB NO : **1307**	DATE : FEB. 2015	SCALE : **NOT TO SCALE**	**2.1-3**
SHARKEY DESIGN COMPANY 74 CLARENDON ST STE A, BOSTON MA 02116 617.531.0240 VOICE O O 617.266.2948 FAX	**BOSTON LOFTEL** 151 PORTER ST, EAST BOSTON, MA		

Table 2.1-1: Level of Service Conditions for Intersections

Signalized Intersections		Un-signalized Intersections	
Level of Service[1]	Stopped Delay per Vehicle[1](Seconds)	Level of Service[1]	Stopped Delay per Vehicle[1](Seconds)
A	0 to 10	A	0 to 10
B	>10 to 20	B	>10 to 15
C	>20 to 35	C	>15 to 25
D	>35 to 55	D	>25 to 35
E	>55 to 80	E	>35 to 50
F	Over 80	F	Over 50

[1]Reference: 2010 Highway Capacity Manual, TRB

2.1.5.6. Existing Traffic Operations

Nitsch Engineering analyzed the existing 2014 traffic operations at the study intersections. **Table 2.1-2** summarizes the 2014 existing condition traffic operations.

Table 2.1-2: Level of Service Summary – 2014 Existing Conditions

Intersection	Movement	Weekday Morning Peak Hour					Weekday Evening Peak Hour				
		V/C[1]	DELAY[2]	LOS[3]	50th Q[4]	95thQ[5]	V/C[1]	DELAY[2]	LOS[3]	50th Q[4]	95thQ[5]
Porter St at Orleans St & Logan Airport Service Dr	Porter St EB-LTR	0.14	2.6	A	9	31	0.35	4.9	A	43	107
	Porter St WB-LTR	0.06	3.7	A	7	20	0.04	3.9	A	5	15
	Orleans St NB-LTR	0.47	24.7	C	30	41	0.49	25.2	C	30	65
	LASD SB-LTR	0.06	9.1	A	1	0	0.13	7.8	A	2	18
	Total	0.47	8.8	A			0.49	8.3	A		
Bremen St at George R. Visconti Rd	Bremen St NB-LT	0.01	1	A	-	1	0.03	1.0	A	-	1
	Bremen St SB-TR	0.22	0	A	-	-	0.24	0	A	-	-
Bremen St at Porter St	Porter St EB-LTR	0.24	9.6	A	-	-	0.77	27.5	D	-	-
	Porter St WB-LTR	0.23	9.4	A	-	-	0.37	13.5	B	-	-
	Bremen St NB-LTR	0.14	9.0	A	-	-	0.42	14.8	B	-	-
	Bremen St SB-LTR	0.38	11.0	B	-	-	0.65	21.3	C	-	-

[1] Volume to Capacity Ratio; [2] Vehicle Delay, measured in seconds; [3] Level Of Service; [4] 50th Percentile Queue (in feet); [5] 95th Percentile Queue (in feet) based upon 22 feet per vehicle; * = Defacto Left Lane; # = volume exceeds capacity, queue may be longer; m = 95th percentile queue is metered by upstream signal; ~ = Volume exceeds capacity, queue is theoretically infinite

Table 2.1-2 shows that all intersections operate at acceptable levels of service (LOS) during both AM and PM peak hours under the existing conditions. All individual approaches at the intersection operate at LOS D or better.

2.1.5.7. Existing Parking and Curb use

On-street parking and curbside use was inventoried along Porter Street between Frankfort Street and Chelsea Street; Orleans Street between Gove Street and Porter Street; Bremen Street between Gove Street and George R. Visconti Road; and George R. Visconti Road between Bremen Street and Chelsea Street. **Figure 2.1-2** graphically indicates the curb side use and parking regulations within the study area. Residential permit parking is predominate on Bremen Street, Orleans Street, and Porter Street east of Orleans Street.

2.1.5.8. Existing Public Transportation Facilities

The Project Site is well served by transit and bus public transportation. The Site is approximately ½ miles from the MBTA's Maverick Station, a multi-modal transit hub that provides Blue Line subway service to Downtown and Revere. In addition there are 5 bus routes currently operating from Maverick that provide service to East Boston, Lynn, and Revere.

Table 2.1-3: Bus Route Summary

Route #	Start Point	End Point	Via	Weekday Frequency	Weekend Frequency
114	Bellingham Square	Maverick Station (Blue Line)	Meridian St	30 min	No Service (Sat and Sun)
116	Wonderland Station (Blue Line)	Maverick Station (Blue Line)	Meridian St	20 min	40 min (Sat/Sun)
117	Ashmont Station (Red Line)	Maverick Station (Blue Line)	Meridian St	10-15 min (peak), 15-20 min (off-peak)	25 min (Sat), 30 min (Sun)
120	Orient Height Station(Blue Line)	Maverick Station (Blue Line)	Meridian St	25 min	45 min (Sat), 60 min (Sun)
121	Wood Island Station	Maverick Station (Red Line)	Meridian St	30 min	No Service (Sat and Sun)

Figure 2.1-4 Public Transportation in the Study Area illustrates the available bus and other transportation services adjacent to the Project Site.

Existing Pedestrian Facilities

Sidewalks are provided on both sides of Porter Street and Orleans Street; and crosswalks are provided at key study intersections that are in generally good condition and supply adequate capacity. Handicapped-accessible ramps and crosswalks are provided at most study area intersections.

The pedestrian movements for this analysis were obtained on August 20, 2014. Figure 2.1-5 illustrates the 2014 Existing a.m. and p.m. peak-hour pedestrian movement counts.

2.1.5.9. Existing Bicycle Facilities

The Project Site is conveniently located near the East Boston Greenway, which provides approximately 3.3 miles of biking, walking, and jogging paths connecting portions of East Boston's historic waterfront to the Piers Park, the Boston Parks stadium and both the Wood Island Bay Marsh and Belle Isle Marsh.

The roadways adjacent to the Project Site have no designated bicycle lanes or markings.

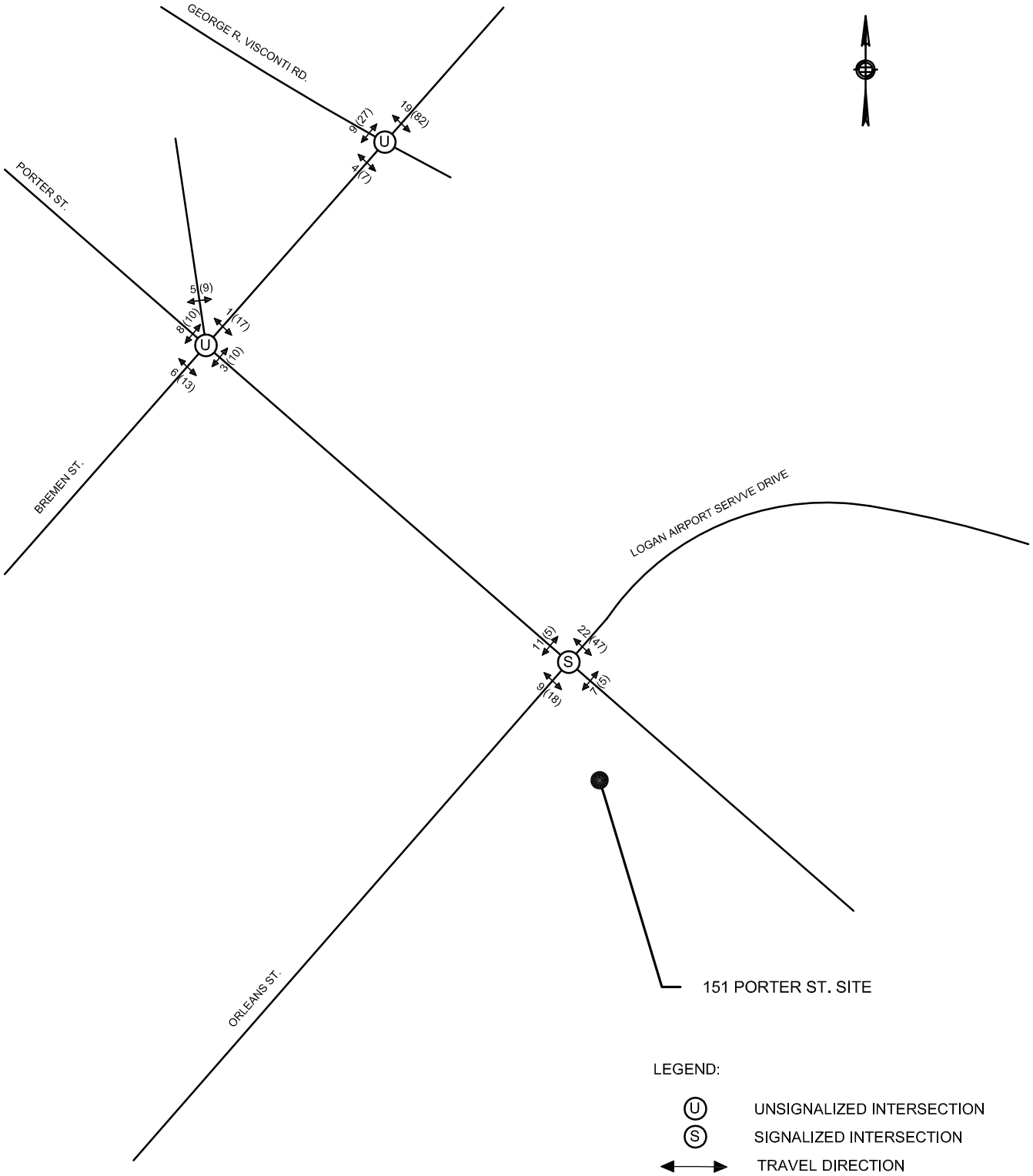
Figure 2.1-6 illustrates the 2014 Existing a.m. and p.m. peak-hour bicycle turning movement counts.

2.1.5.10. Existing Car Sharing Facilities

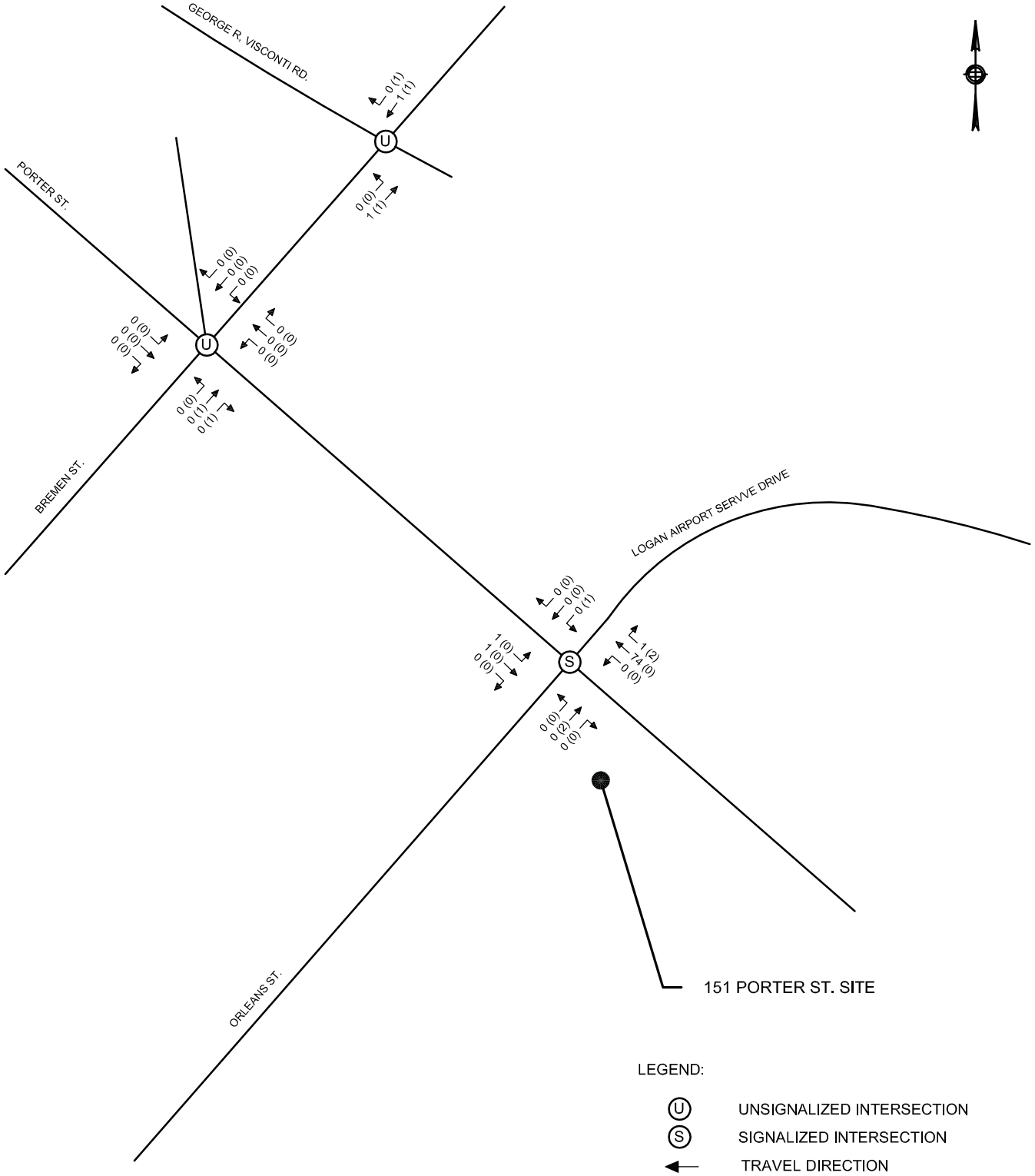
Car sharing, predominantly served by Zipcar in the Boston area, provides easy access to vehicular transportation for those who do not own cars. Vehicles are rented on an hourly or daily basis, and all vehicle costs (gas, maintenance, insurance, and parking) are included in the rental fee. Vehicles are checked out for a specific time period and returned to their designated location.

The nearby Zipcar service provides an important transportation option and reduces the need for private vehicle ownership. As shown on Figure 2.1-4 and summarized in Table 2.1-4, Zipcar has three locations in the vicinity of the Project Site with a combined total of 18 vehicles within the study area. The Proponent is proposing to add 2 dedicated Zipcar parking spaces off of Orleans Street, bringing the future total to 20 vehicles.

PUBLIC TRANSPORTATION IN THE STUDY AREA			
JOB NO : **1307**	DATE : FEB. 2015	SCALE : **NOT TO SCALE**	**2.1-4**
SHARKEY DESIGN COMPANY 74 CLARENDON ST STE A, BOSTON MA 02116 617.531.0240 VOICE O O 617.266.2948 FAX	**BOSTON LOFTEL** 151 PORTER ST, EAST BOSTON, MA		



PEDESTRIAN VOLUMES			
JOB NO : **1307**	DATE : FEB. 2015	SCALE : **NOT TO SCALE**	**2.1-5**
SHARKEY DESIGN COMPANY 74 CLARENDON ST STE A, BOSTON MA 02116 617.531.0240 VOICE O O 617.266.2948 FAX	**BOSTON LOFTEL** 151 PORTER ST, EAST BOSTON, MA		



BICYCLE VOLUMES			
JOB NO : **1307**	DATE : FEB. 2015	SCALE : **NOT TO SCALE**	**2.1-6**
SHARKEY DESIGN COMPANY 74 CLARENDON ST STE A, BOSTON MA 02116 617.531.0240 VOICE O O 617.266.2948 FAX	**BOSTON LOFTEL** 151 PORTER ST, EAST BOSTON, MA		

Table 2.1-4: Zipcar Summary

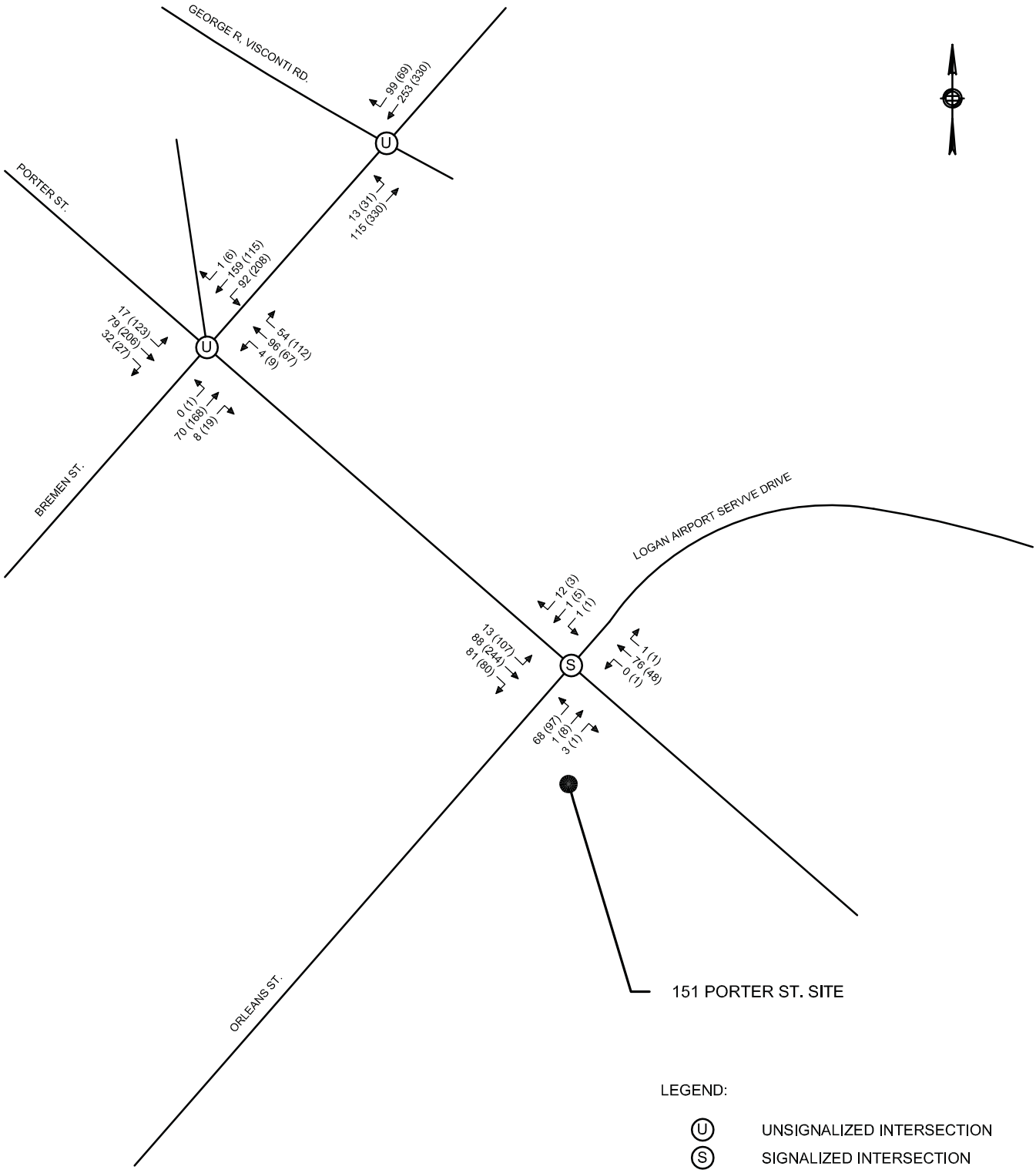
Facility Location	Number of Vehicles
Orleans Street/Gove Street	3
Maverick Street at Swish N'Swash.	10
Logan International AirportAvis/Budget.	5
Total	**18**

2.1.6 Future Conditions

As a conservative measure to account for any residential, commercial, or other developments, a background growth rate of 0.5% compounded annually was used to develop the future volumes for our analysis.

2.1.6.1. No-Build Conditions

Nitsch Engineering performed a design year traffic analysis to compare traffic operations without the proposed development. We based the analyses on a 5-year horizon from the current year, 2014. The 2019 No-build traffic volumes were developed using the 0.5% background growth rate. **Figure 2.1-7** shows the 2019 No-Build Volumes used in the traffic analysis and **Table 2.1-5** summarizes the result of the 2019 No-Build traffic analyses.



2019 PROJECTED TRAFFIC VOLUMES (NO BUILD)			
JOB NO : **1307**	DATE : FEB. 2015	SCALE : **NOT TO SCALE**	**2.1-7**
SHARKEY DESIGN COMPANY 74 CLARENDON ST STE A, BOSTON MA 02116 617.531.0240 VOICE O O 617.266.2948 FAX	**BOSTON LOFTEL** 151 PORTER ST, EAST BOSTON, MA		

Table 2.1-5: Level of Service Summary – 2019 No-Build Condition

Intersection	Movement	Weekday Morning Peak Hour					Weekday Evening Peak Hour				
		V/C[1]	DELAY[2]	LOS[3]	50th Q[4]	95thQ[5]	V/C[1]	DELAY[2]	LOS[3]	50th Q[4]	95thQ[5]
Porter St at Orleans St & Logan Airport Service Dr	Porter St EB-LTR	0.15	2.6	A	9	32	0.36	5.0	A	45	111
	Porter St WB-LTR	0.06	3.8	A	7	21	0.04	3.9	A	5	15
	Orleans St NB-LTR	0.48	25.0	C	31	42	0.50	25.3	C	30	66
	LASD SB-LTR	0.06	9.0	A	1	9	0.13	7.7	A	2	18
	Total	0.48	8.9	A			0.50	8.4	A		
Bremen St at George R. Visconti Rd	Bremen St NB-LT	0.01	0.9	A	-	1	0.03	1.0	A	-	2
	Bremen St SB-TR	0..23	0	A	-	-	0.25	0	A	-	-
Bremen St at Porter St	Porter St EB-LTR	0.25	9.7	A	-	-	0.81	31.6	D	-	-
	Porter St WB-LTR	0.24	9.5	A	-	-	0.40	14.2	B	-	-
	Bremen St NB-LTR	0.14	9.1	A	-	-	0.44	15.6	C	-	-
	Bremen St SB-LTR	0.39	11.2	B	-	-	0.68	23.5	C	-	-

[1] Volume to Capacity Ratio; [2] Vehicle Delay, measured in seconds; [3] Level Of Service; [4] 50th Percentile Queue (in feet); [5] 95th Percentile Queue (in feet) based upon 22 feet per vehicle; * = Defacto Left Lane; # = volume exceeds capacity, queue may be longer; m = 95th percentile queue is metered by upstream signal; ~ = Volume exceeds capacity, queue is theoretically infinite

Table 2.1-5 shows that under the 2019 No-Build conditions, all intersections will continue to operate at acceptable LOS during AM and PM peak hours. The LOS for Bremen Street NB approach during the evening peak hour decreases to LOS C from B. All other individual approaches at the intersections will operate at LOS D or better.

2.1.6.2. Site Access and Circulation

All vehicular access to the hotel and restaurant parking will be provided via a one-way entrance on Porter Street, and a two-way access driveway on Orleans Street. The access driveway on Orleans Street will also serve the delivery loading and egress from the Project Site. Primary pedestrian access to the hotel lobby and restaurant will be provided off of Porter Street. The existing curb cut on Orleans Street, closest to Porter Street, will be relocated south to provide a new parking area for three Zipcar spaces.

2.1.6.3. Trip Generation

Nitsch Engineering used the Institute of Transportation Engineers (ITE) publication Trip Generation, 9th Edition to estimate the vehicle trip rates for the proposed development. The building program used to conduct the traffic analysis consisted of two components:

- 150 room hotel; and
- 100 seats, restaurant.

The actual proposed building program consists of 127 guest rooms and approximately 130 seats in the restaurant; a higher hotel room count was used to provide a more conservative analysis; the lower restaurant seat count was used in recognition that some portion of the restaurant seating will de facto be occupied by hotel guests at all times that the restaurant is open for business and thus will not generate any trips to and from the Project Site whatsoever. The conservative trip generation rates for the hotel were based on Land Use Code (LUC) 310 (Hotel). Trip generation rates for the restaurant were based on LUC 932 (High Turnover (Sit-Down) Restaurant). The unadjusted vehicle trips calculated by the ITE trip generation rates were then converted into person trips using the 1995 National Personal Transportation Survey (NPTS) vehicle occupancy rate of 1.14 persons per vehicle. **Table 2.1-6** summarized the total Site generated person trips for the daily and morning and evening peak hours.

Table 2.1-6: Site-Generated Person Trips

Time Period	Hotel	Restaurant	Total
	Person Trips	Person Trips	Person Trips
Weekday Daily			
Enter	699	276	975
Exit	699	276	975
Total	1398	552	1950
Weekday AM			
Enter	48	40	88
Exit	41	29	70
Total	89	69	158
Weekday PM			
Enter	60	42	102
Exit	45	40	85
Total	105	82	187

As illustrated in **Table 2.1-6**, approximately 1950 new daily trips (975 trips in and 975 trips out) are expected to be generated by the Project, with 158 new trips (88 in and 70 out) during the AM peak hour and 187 new trips (102 in and 85 out) during the PM peak hour (increase of approximately 3 trips per minute on Porter Street and the adjacent roadway network during the AM and PM peak periods).

The Boston Transportation Department (BTD) mode split and distribution information for Zone 7, which covers the Project location, was used to develop the proposed travel mode characteristics of the 982 daily trips. **Table 2.1-7** summarizes the anticipated travel mode splits for the Project.

Table 2.1-7: Anticipated Travel Mode Characteristics

Time Period	Walking/Bicycle	Transit	Auto	Vehicle Occupancy
Weekday Daily				
	35%	13%	52%	1.14
Weekday AM Peak				
Enter	40%	10%	50%	1.14
Exit	32%	24%	44%	1.14
Weekday PM Peak				
Enter	32%	24%	44%	1.14
Exit	40%	10%	50%	1.14

2.1.6.4. Non-Auto Site Generated Trips

Using the values for the walking/bicycle and transit mode splits in **Table 2.1-7**, and applying them to the total site-generated person trips presented in **Table 2.1-6** the non-auto site generated trips were developed, and are summarized in **Table 2.1-10**.

Table 2.1-8: Non-Auto Site-Generated Trips

Time Period	Walking/Bicycle Trips		Transit Trips		Total Non-Auto Trips
	Hotel	Restaurant	Hotel	Restaurant	
Weekday Daily					
Enter	245	98	91	36	470
Exit	245	98	91	36	470
Total	490	196	182	72	940
Weekday AM					
Enter	19	16	5	4	44
Exit	13	9	10	7	39
Total	32	25	15	11	83
Weekday PM					
Enter	19	13	14	10	56
Exit	18	16	6	4	44
Total	37	29	20	14	100

2.1.6.5. Auto Trips

The number of auto trips arriving and departing the site by auto was calculated by applying the auto mode split to the person trips. In order to calculate the number of vehicle trips to the site, the local vehicle occupancy rate of 1.14 passengers per car was applied to the auto trips. However, to present a conservative analysis of the proposed Project's impacts, the auto trips were not reduced by a vehicle occupancy rate. **Table 2.1-9** summarizes the anticipated Site-generated auto trips for the Project. As a practical matter, we believe that the number of vehicular trips projected by the formula-based analytical methods mandated by BTD is significantly over-stated for a small urban hotel

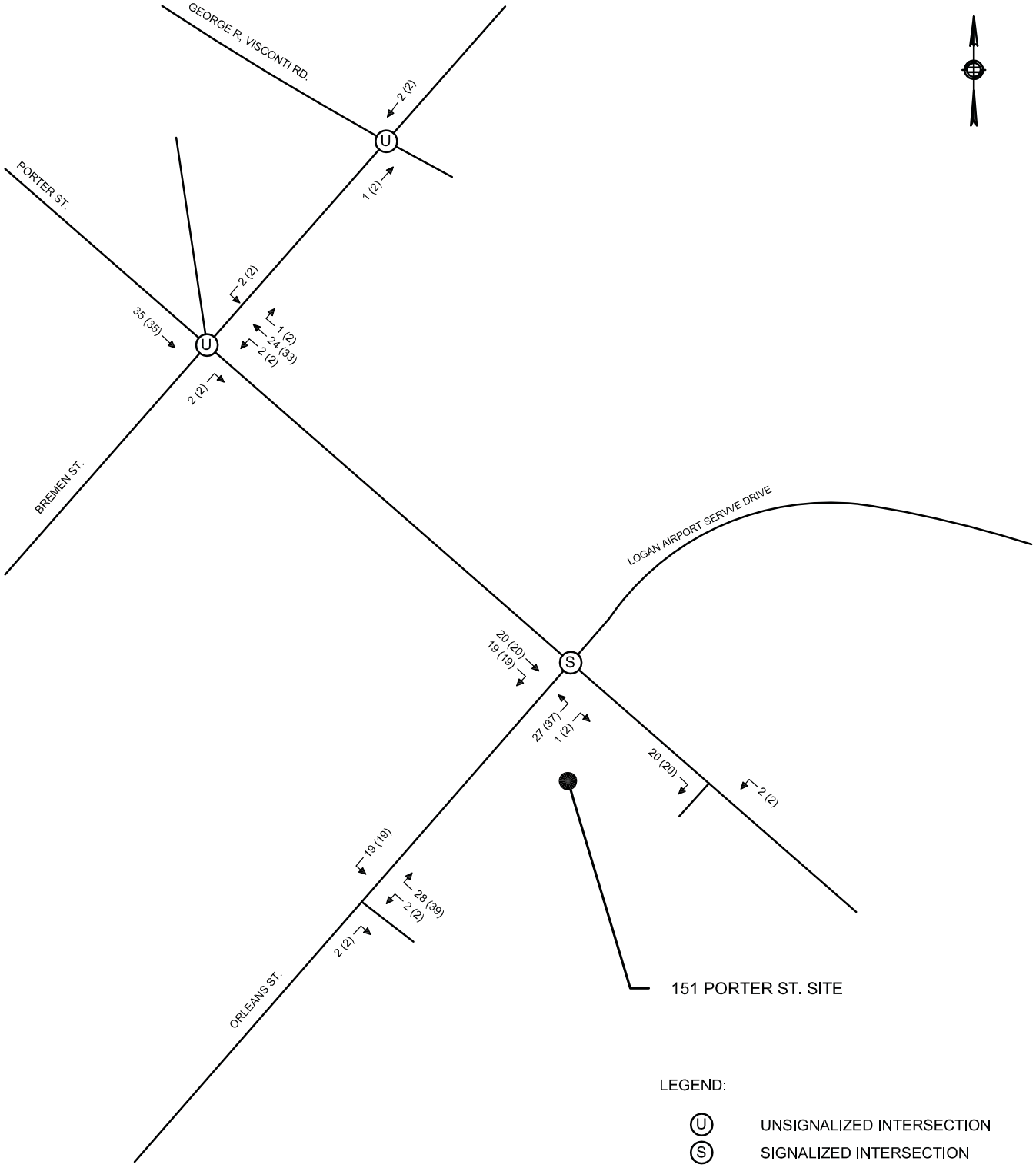
with excellent access to public transportation. However, out of an abundance of conservatism, we have included the ITE-based projections and their impacts in this PNF.

Table 2.1-9: Total Site-Generated Trips

Project Auto Trips			
Time Period	Total Trips		Total
	Hotel	Restaurant	
Weekday Daily			
Enter	364	144	508
Exit	364	144	508
Total	728	288	1016
Weekday AM Peak			
Enter	24	20	44
Exit	18	13	31
Total	42	33	75
Weekday PM Peak			
Enter	26	19	45
Exit	23	20	43
Total	49	39	88

2.1.6.6. Project Trip Distribution

The Project vehicle trips (from **Table 2.1-9**) were distributed and assigned to the surrounding roadway network based on existing travel patterns at the study area intersections. The Project trip assignments are illustrated in **Figure 2.1-8**



LEGEND:

U	UNSIGNALIZED INTERSECTION
S	SIGNALIZED INTERSECTION
←	TRAVEL DIRECTION
XX (XX)	PEAK HOUR TRAFFIC VOLUME - AM (PM)

TRIP ASSIGNMENT			
JOB NO : **1307**	DATE : FEB. 2015	SCALE : **NOT TO SCALE**	**2.1-8**
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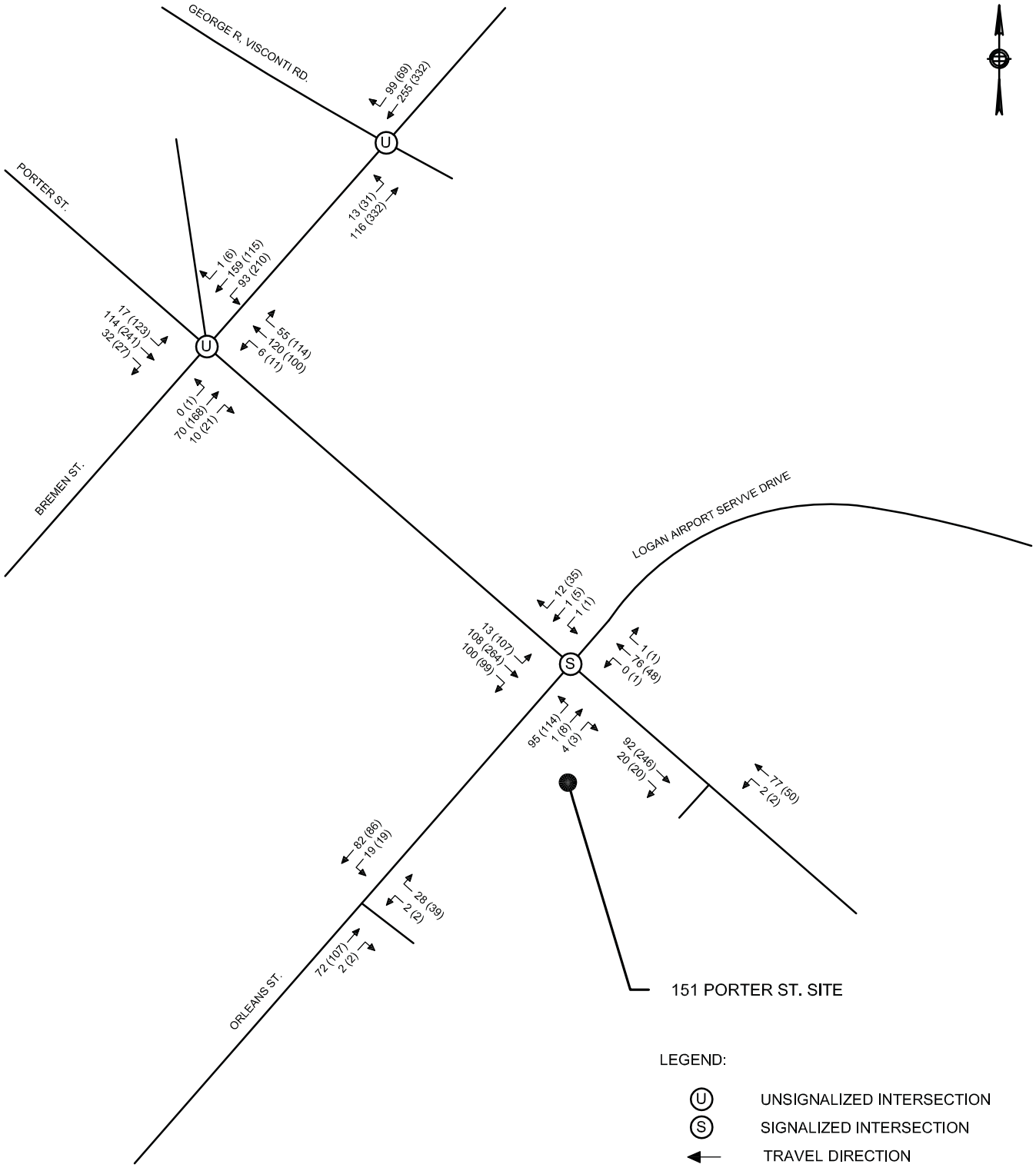
2.1.6.7. 2019 Build Traffic Analysis

The assigned Project related trips were added to the 2019 No-Build peak hour traffic volumes to reflect the 2019 Build peak hour volumes. The analysis for the 2019 Build conditions uses the same methodology as the 2014 Existing and 2019 No-Build conditions analyses. **Figure 2.1-9** shows the 2019 Build Volumes used in the traffic analysis and **Table 2.1-10** summarizes the result of the 2019 Build traffic analyses.

Table 2.1-10: Level of Service Summary – 2019 Build Condition

Intersection	Movement	Weekday Morning Peak Hour					Weekday Evening Peak Hour				
		V/C[1]	DELAY[2]	LOS[3]	50th Q[4]	95thQ[5]	V/C[1]	DELAY[2]	LOS[3]	50th Q[4]	95thQ[5]
Porter St at Orleans St & Logan Airport Service Dr	Porter St EB-LTR	0.18	3.1	A	13	41	0.40	5.7	A	53	134
	Porter St WB-LTR	0.06	4.5	A	8	24	0.04	4.4	A	5	17
	Orleans St NB-LTR	0.59	26.9	C	39	55	0.54	25.6	C	34	76
	LASD SB-LTR	0.05	8.5	A	1	9	0.13	7.4	A	2	18
	Total	0.59	10.6	B			0.54	9.2	A		
Bremen St at George R. Visconti Rd	Bremen St NB-LT	0.01	0.9	A	-	1	0.03	1.0	A	-	2
	Bremen St SB-TR	0.23	0	A	-	-	0.25	0	A	-	-
Bremen St at Porter St	Porter St EB-LTR	0.32	10.7	B	-	-	0.94	52.0	F	-	-
	Porter St WB-LTR	0.29	10.2	B	-	-	0.51	17.7	C	-	-
	Bremen St NB-LTR	0.15	9.5	A	-	-	0.49	17.8	C	-	-
	Bremen St SB-LTR	0.41	12.0	B	-	-	0.74	28.9	D	-	-

[1] Volume to Capacity Ratio; [2] Vehicle Delay, measured in seconds; [3] Level Of Service; [4] 50th Percentile Queue (in feet); [5] 95th Percentile Queue (in feet) based upon 22 feet per vehicle; * = Defacto Left Lane; # = volume exceeds capacity, queue may be longer; m = 95th percentile queue is metered by upstream signal; ~ = Volume exceeds capacity, queue is theoretically infinite



2019 PROJECTED TRAFFIC VOLUMES (BUILD)			
JOB NO : **1307**	DATE : FEB. 2015	SCALE : **NOT TO SCALE**	**2.1-9**
SHARKEY DESIGN COMPANY 74 CLARENDON ST STE A, BOSTON MA 02116 617.531.0240 VOICE O O 617.266.2948 FAX	**BOSTON LOFTEL** 151 PORTER ST, EAST BOSTON, MA		

As shown on Table 2.1-10, under the 2019 Build conditions all intersections will continue to operate at acceptable LOS (at LOS D or better) during AM and PM peak hours. The intersection level of service for Orleans Street at Porter Street decreases to LOS B during the morning peak hour.

The level of service for Porter Street eastbound approach at the intersection with Bremen Street decreases to LOS F during the evening peak hour. All other individual approaches will also operate at LOS D or better, except Porter Street eastbound approach at its intersection with Brement Street, which worsens to LOS F during the evening peak hours.

A comparison of the delay, level of service, and queue length indicated in Table 2.1-5 (2019 No Build) and Table 2.1-10 (2019 Build) reveal that the proposed development has negligible impact to the studied intersections. As would be expected, the major impact will be at the intersection of Orleans Street with Porter Street in closest proximity to the Project Site. During the weekday evening peak hour the delay in the Porter Street eastbound approach to Bremen Street increases by almost thirteen seconds, decreasing the level of service to LOS F. However, this does not impact the other intersections in the study area. As stated above, we believe this impact to be significantly overstated as a result of the ITE's formula-based trip generation model. We do not believe that the actual Project impacts will approach those suggested by the ITE-based model in light of the Project's excellent access to public transportation and urban context.

2.1.6.8. Bicycle Accommodations

BTD has established guidelines requiring projects subject to Transportation Access Plan Agreements (TAPA) to provide secure bicycle parking for residents and employees and short-term bicycle racks for visitors. The Project will provide 24 covered and secure bicycle storage spaces on-Site. 4 additional bicycle parking spaces will be provided by outdoor bicycle racks accessible to guests in accordance with BTD guidelines. All bicycle racks, signs, and parking areas will conform to BTD guidelines and be located in safe, secure locations. The Proponent will work with BTD to identify the most appropriate quantity and location for bicycle racks on the Project Site as part of the Transportation Access Plan Agreement (TAPA) process. Bicycle parking facilities will be available for hotel guests, hotel employees, and restaurant patrons, as it is anticipated that a significant number of restaurant patrons will be drawn from the surrounding East Boston neighborhood and are very likely to walk or ride a bicycle to the restaurant.

2.1.7 Transportation Mitigation Measures

In response to both existing transportation conditions and future needs, the Project has developed a comprehensive package of mitigation as part of the Project. This section describes the proposed strategies organized under the following four categories:

- Transportation infrastructure and operational improvements;
- Transportation Demand Management (TDM);
- Short term impacts and construction management.

2.1.7.1. Transportation infrastructure and operational improvements

The Proponent will develop a conceptual design for parking, bicycle, and pavement marking improvements along Porter Street and Orleans Street that will conform to the BTD's Complete Streets initiative and will enhance the multi-modal connectivity throughout the study area. The improvements include the following:

The existing parking regulation will be retained along west side of Orleans Street. Marked 7-foot wide lanes will be provided for any on-street parking along the project side (east side) of the Orleans Street.

Two travel lanes will be provided on Orleans Street and Porter Street, and lanes will be marked with sharrows to clearly define them as a facility that is shared by bicycles and vehicles.

The existing sidewalk will be reconstructed where necessary along the site frontage to enhance the pedestrian environment around the Project site on Orleans Street, and on Porter Street between Frankfort Street and Orleans Street. The scope of this work will be coordinated with the Boston Public Improvements Commission as the Project's design advances.

2.1.7.2. Transportation Demand Management

The Project Proponent is committed to implementing Travel Demand Management (TDM) measures to reduce dependence on automobiles. TDM will be facilitated by the nature and location of the Project.

A supply of transit information (schedules, maps, and fare information) will be kept on-site and be made available to the patrons of the Site. The Proponent will work with the City to develop a TDM program appropriate to the Project and consistent with its level of impact.

The Proponent is prepared to take advantage of the good transit access in marketing the site to future residents by working with them to implement the following demand management measures to encourage the use of non-vehicular modes of travel.

TDM measures for the Project may include but are not limited to the following:

- On Site Orientation and Information Packages-
  Orientation packets will be provided to guests by the Proponent. The packets will contain information on available transportation choices, including transit routes/schedules and nearby/onsite Zipcar locations. The management will help facilitate transportation for the guests.

- Electric Vehicle Charging Stations-
  The Proponent will explore the feasibility of providing two electric vehicle charging stations on-Site.

- Bicycling incentives and amenities-
  Bicycle storage will be provided in secure, sheltered areas. To encourage bicycling as an alternative mode of transportation, secure bicycle storage will also be made available to employees of the hotel and restaurant. Public use bicycle racks for visitors will be placed near building entrances (subject to necessary approvals). Bicycle parking will be readily available to restaurant and café patrons as well, as it is anticipated that a significant fraction of the business of both the restaurant and café will be generated by local East Boston residents, who are likely to walk or ride a bicycle to the Project Site.

- Information dissemination and Website-
  The website will include transportation-related information for hotel guests, employees, and restaurant patrons.

2.1.7.3. Short term impacts and construction management

Development on tight sites in the City of Boston, combined with concerns for avoiding traffic congestion and hazards to pedestrian and vehicular traffic, has led to increasing requirements for sophisticated construction period traffic management plans, known as Construction Management Plans (CMPs), which need to be approved by Boston

Transportation Department (BTD) as a precondition to the issuance of a building permit for the development. The Project's CMP will discuss and address the following in detail:

- Construction activity schedule;
- Construction staging area;
- Delivery schedule;
- Pedestrian and public safety;
- Perimeter protection;
- Employee parking;
- Material handling;
- Truck routes;
- Police details;
- Utilities;
- Construction noise;
- Construction air quality;
- Street cleaning and snow removal;
- Rodent control; and
- Site dewatering

The Project's CMP will also address the need for pedestrian detours, lane closures, and/or parking restrictions, if necessary, to accommodate a safe and secure work zone.

To minimize transportation impacts during the construction period, the following measures will be incorporated into the CMP:

- Construction workers will be encouraged to use public transportation and/or carpool;
- Secure spaces will be provided on-site for workers' supplies and tools so they do not have to be brought to the site each day by personal vehicle;
- Secure bicycle parking for construction workers will be provided on-site during construction;
- Open areas of the site will be used for construction material lay-down and storage to make delivery schedules more efficient and reduce the number of small truck trips making "just in time" deliveries.

2.2 Environmental Protection

2.2.1 Wind

The Project is not expected to cause impacts to pedestrian level winds. No construction is proposed that would tend to increase the downwash of wind along either of the public ways that bound the Project Site. The proposed Penthouse addition will be in the same plane or set back from the current streetwall and will not create new wind impacts. The new Penthouse addition is not significantly higher than surrounding structures so no new wind shear conditions would be created. The addition will be significantly set back from the streetwall on most sides of the Proposed Project, creating a stepped massing condition that would negate any incremental wind shear concerns.

As a result of the Proposed Project's focus on rehabilitation of the existing structure and modest rooftop construction, no wind tunnel analysis was conducted because no wind impacts are anticipated to result from the construction of the Proposed Project. Wind conditions in the vicinity of the Proposed Project are expected to be similar in the "Build" and "No-build" (existing) conditions.

2.2.2 Shadow

The Proposed Project is located in an urban-scale neighborhood. The Proponent has conducted a detailed shadow analysis to assess to the Proposed Project's shadow impacts within its urban context. The shadow analysis determines the net new shadow on the surrounding area created by the Proposed Project, and the difference between the net new shadow and the existing shadow created by the existing building.

Shadow studies were conducted for the following dates and times, consistent with BRA Development Review guidelines and customary practice:

- March 21 (vernal equinox): 9:00AM, 12:00PM, 3:00PM, 6:00PM
- June 21 (summer solstice): 9:00AM, 12:00PM, 3:00PM, 6:00PM
- September 21 (autumnal equinox): 9:00AM, 12:00PM, 3:00PM, 6:00PM
- December 21 (winter solstice): 9:00AM, 12:00PM, 3:00PM, 6:00PM

The study used the applicable Altitude and Azimuth data for Boston presented in Appendix B of the BRA's 2006 *Development Review Guidelines*.

The graphical results of the shadow studies can be found in **Appendix A**, as shown in Figures SKD1 through SKD16. In summary, the shadow studies yielded the following conclusions about the Proposed Project's shadow impacts:

Vernal Equinox (March 21)

At 9:00AM during the vernal equinox, shadow from the Proposed Project will be cast in a northwesterly direction. A tiny area of new shadow will be cast on privately-owned property on the far side of the East Boston Greenway, which is cast in shadow by the existing structure at that time.

As the day progresses, the shadows become shorter, falling to the north. At 12:00PM, new shadow from the Proposed Project will be cast across a minor portion of Orleans Street adjacent to the Project Site and across Porter Street onto a portion of the Logan Airport Access Drive.

At 3:00PM shadow will extend to the northeast. New shadow from the Proposed Project will fall on portions of the Logan Airport Access Drive, the rooftop of the Porter 156 building, and a small portion of Porter Street.

No new shadow is cast onto any of the area's open spaces. In general, the majority of the net new shadow impacts fall onto public streets and/or existing buildings and roadways, and in all cases the net new shadow is *de minimus* as a result of the very small rooftop addition proposed.

Summer Solstice (June 21)

At 9:00AM during the summer solstice, shadow will be cast in a westerly direction, a small area of new shadow cast by the Proposed Project will fall on the embankment area transitioning the grade between Orleans Street and the East Boston Greenway.

As the day progresses, the shadows become shorter and swing to the north. At noon, the Proposed Project will cast almost no net new shadow.

At 3:00PM, shadow will extend to the northeast. New shadow from the Proposed Project will fall on the Project Site, as well as on a small portion of the 156 Porter Street property, approximately the size of a passenger vehicle.

At 6:00PM, shadow will be cast to the east. New shadow from the Proposed Project will be cast across portions of Porter Street and a portion of the private property across Frankfort Street.

During the Summer Solstice, no material shadow is cast at any time of day onto any of the area's open spaces.

Autumnal Equinox (September 21)

At 9:00AM during the autumnal equinox, shadow will be cast northwest across Orleans Street and onto private property on the west side of the East Boston Greenway; the Greenway itself is cast in shadow by the existing building.

At noon, new shadow from the Proposed Project will be cast across Porter Street onto a portion of the Logan Airport Access Drive.

In the afternoon (3:00PM), new shadow will extend to the northeast. A small area of new shadow from the Proposed Project will be cast onto and across portions of Porter Street and on the grounds of 156 Porter Street.

By 6:00PM, much of the area is in existing shadow. New shadow from the Proposed Project will be cast to the east, on minor portions of the rooftop of the Porter 156 building.

No new shadow is cast onto any of the area's open spaces during the Autumnal Equinox.

In general, the majority of the net new shadow impacts fall onto public streets and/or existing buildings and roadways, and in all cases the net new shadow is *de minimus* as a result of the very small rooftop addition proposed.

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 shadows to elongate.

At 9:00AM, the morning sun will cast new shadow from the Proposed Project to the northwest, largely falling on roadbed of Porter Street.

At noon, shadow will extend to the north. The Proposed Project will cast almost no net new shadow at this time.

At 3:00PM, shadows elongate and extend northeast. The Proposed Project will cast a shadow that falls entirely within the MBTA right of way approximately where the Blue Line daylights east of the Route 1A viaduct.

2.2.2.1 Shadow Impacts on Open Spaces

The Proposed Project does not cast any material new shadow on any area public open spaces. De minimus incremental shadows are cast during certain times of day during a few months out of the year on the East Boston Greenway as a result of the Proposed Project's one-story rooftop addition, but these incremental new shadows are transient, vary through the year and by time of day, and will have no impact whatsoever on the

public's enjoyment of or the serviceability and maintenance of the horticultural resources on the East Boston Greenway. They are also very limited in scale, approximately the size of a passenger vehicle or smaller.

It should also be noted that the East Boston Greenway is located in a former grade-separated cut under the Porter Street bridge. As a result, many portions of the East Boston Greenway are already cast in more shadow than is shown in the model included in this PNF because the shadow model included herein does not take existing topography into account. This "flatness" of the shadow model understates the existing shadow impacts and overstates the net new shadow that would be caused by the Proposed Project. The analysis included herein is overly conservative, and demonstrates that the Proposed Project will have no shadow impacts on surrounding open spaces, including assets of the City of Boston Parks & Recreation Department.

2.2.2.2 Conclusions

New shadow from the Proposed Project will largely fall on portions of the immediate surrounding roadways and sidewalks of Orleans Street and Porter Street, as well as on surrounding surface parking areas. Typical of a densely built urban area, some new shadow will also be cast on the rooftops of adjacent buildings to the west, north, and east of the Proposed Project. No material new shadow from the Proposed Project will fall on any of the area's existing open spaces, and in no cases will the Proposed Project's shadow impacts have any effect on the health, quality, or serviceability of any public open spaces, historic resources, or other important public resources.

2.2.3 Daylight

The purpose of the daylight analysis is to estimate the extent to which a proposed project will affect the amount of daylight reaching the streets and the sidewalks in the immediate vicinity of the project site.

The existing 5 story building is constructed along the back of the Porter Street sidewalk and set back from the Orleans Street sidewalk; the existing building creates a visual streetwall that dominates the pedestrian experience along both streets for the length of the building. The 6th floor penthouse rooftop addition will be set back and will not contribute materially to the streetwall along Porter and Orleans Streets.

No material daylight impacts on surrounding open spaces or historic resources will result from the Proposed Project's construction.

Due to the minimal nature of the skydome impact associated with the 6th floor rooftop addition, a BRADA analysis was not conducted.

2.2.4 Solar Glare

The proposed Project does not include the widespread use of reflective glass or other reflective materials on the building facades that would result in adverse impacts from reflected solar glare from the Project.

2.2.5 Air Quality

Potential long-term air quality impacts will be limited to pollutant emissions from vehicular traffic generated by the Proposed Project. The transportation impacts of the Project are limited. The net change in traffic is not expected to generate adverse effects to the air quality in and around the Project Site.

2.2.6 Emergency Generator

It is anticipated that the Proposed Project will require one 200KW/250KVA, 120/208V utility grade generator. The generator will be located on the roof area and equipped with sound attenuated weather resistant enclosure. Typically, the generator will operate for approximately one hour each month for testing and general maintenance. Since the generator's maximum rating capacity is greater than the limit of 37 kW, the generator will be subject to Department of Environmental Protection's (DEP) Environmental Results Program (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 DEP within 60 days of commencement. It is anticipated that air quality impacts associated with the generator are minimal.

2.2.7 Water Quality / Stormwater

Please see Section 2.5.4 for a discussion of stormwater conditions at the Project Site.

2.2.8 Flood Hazard Zone / Wetlands

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) indicates the FEMA Flood Zone Designations for the Project Site (Suffolk County, Massachusetts, Map Number25025C 0081G, dated 9/25/2009). The map for the Project Site shows the Project is located in Zone X, areas determined to be outside the 0.2% annual chance floodplain. The Project Site does not contain any wetlands.

2.2.9 Geotechnical / Groundwater

2.2.9.1 Subsurface Soil and Bedrock Conditions

Review of historic information for the Proposed Site, including subsurface data and existing foundation plans was undertaken to evaluate subsurface conditions based on

available geologic data. Additional subsurface explorations will be undertaken for the project to provide additional information as needed for final design and construction.

Site ground surface elevations typically range from about El. 16 to El. 26 Boston City Base (BCB) datum, with the existing building ground floor slab at El. 18. There is no basement with the exception of a mechanical room. Based on available subsurface information from nearby explorations, the subsurface conditions are anticipated to be as follows (from ground surface downward):

- Miscellaneous Fill - Ranging from approximately 10 to 15 feet below ground surface intermixed san, silt, clay and gravel with varying amounts of miscellaneous debris such as wood, ash, brick, glass, and ceramics, typical of the fill stratum.
- Organic Deposits – Organic Deposits consisting of soft to medium stiff, gray to black organic silt with varying amounts of fine sand, shells, clay and fibrous peat is anticipated to extend to depths ranging from approximately 15 to 25 feet below the ground surface.
- Marine Clay Deposits – A deep marine clay deposits underlying the site is anticipated to extend to depths ranging from approximately 90 to 115 feet below the ground surface.
- Glacial Deposits - Glacial till consisting of varying amounts of sand, gravel, clay, cobbles and boulders typically underlie the Marine Clay deposits. The glacial deposits are expected to extend to depths of approximately 100 to 140 feet below ground surface.
- Bedrock – Bedrock consisting of Cambridge Argillite is anticipated to underlie the site at depths from 100 to 140 ft below the ground surface.

2.2.9.2 Groundwater

Groundwater levels near the site have been monitored by the Boston Groundwater Trust (BGwT) since 2006 as part of an area-wide groundwater level monitoring effort. Several groundwater observation wells (OWs) were installed around the site between 2005 to 2012 by the Boston Groundwater Trust. Groundwater levels reported by the BGwT range from El -2.2 to 8.1 BCB. Water levels vary with season, rainfall, construction activities, proximity to underground utilities, and other factors.

2.2.9.3 Existing Building Foundations

Existing buildings foundation plans are available and have been reviewed and evaluated. The foundation system installed for the original building construction (1911) was wood piles with the tops of the piles cut off about El. 6. The wood piles were driven through the fill and organic soils to bear in the top of the clay. Typical wood pile diameters range from about eight to 12 inches at the top (butt) to six inches at the tip and wood piles typically have capacities of eight to ten tons per pile.

The existing foundations are planned to be reused for support of the renovated structure. The wood pile conditions will be confirmed during project design; however, there is no evidence of foundation distress and the wood pile foundations are expected to be serviceable for the renovated building. The site is not in the Groundwater Conservation Overlay District and pile deterioration or damage has not been observed in the project area.

2.2.9.4 Impacts on Foundations and Groundwater Levels

Supplemental foundations may be required to support the proposed structural modifications. If required, supplemental foundations would consist of drilled-in small diameter grouted/concrete piles. These non-displacement foundation elements can be installed with minimal ground vibrations are not anticipated to impact surrounding structures.

The renovated building will not impact area groundwater levels. Any new elevator pits extending below the lowest level floor slab will be fully waterproofed. No new basement spaced is planned and dewatering will not be required for construction.

2.2.10 Solid and Hazardous Waste

2.2.10.1 Solid Waste Generation during Operation

The Project will generate solid waste typical of other similarly-sized hotel projects. Solid waste will include wastepaper, cardboard, glass, and bottles. A portion of the solid waste will be recycled as described below. The remainder of the waste will be removed by a waste hauler contracted by building management. With the exception of wastes typical of hotel and food service uses (for example, cleaning liquids), the Proposed Project will not generate hazardous waste.

The Proposed Project will provide ample interior space for waste storage and removal on the ground floor. Recyclable materials will be stored in designated interior recycling areas and handled by the building management for pick-up. A private trash collector will pick up refuse as needed.

Properly-sized space within the building will be provided and dedicated to the temporary collection of waste and the separation of recyclable materials. Loading and service will occur off of Orleans Street, from within the ground floor parking area at an interior receiving room. No loading activity will occur on Porter Street. All recycling, trash collection, and loading will occur on-site.

2.2.10.1.1 Recycling

Recycling by the hotel and restaurant will be coordinated by on-site management. To encourage recycling, the Proponent will implement a mandatory recycling program throughout the Project. The loading/receiving area within the building will include space

for the storage and pick-up of recyclable materials segregated from general refuse. Recyclable materials are expected to include newspaper, cardboard, cans, plastics, and bottles.

2.2.10.2 Solid Waste Generation during Construction

The Proponent will take an active role with regard to the processing and recycling of construction and building demolition waste. The disposal contract will include specific requirements that will ensure that construction procedures allow for the necessary segregation, reprocessing reuse and recycling of materials. For those materials that cannot be recycled, solid waste will be transported in covered trucks to an approved solid waste facility, per DEP's 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.

2.2.10.3 Hazardous Waste

No hazards to public health or nearby residents will be created during construction of the Proposed Project. No hazardous waste will be generated by the construction of the Proposed Project. Soil in the planned excavation area will be sampled and tested prior to excavation and if necessary managed in accordance with the Massachusetts Contingency Plan (MCP) and applicable DEP Policies.

2.2.10.4 Noise

The Proposed Project involves the rehabilitation of an existing building, including the addition of rooftop mechanical equipment. Based on the nature of the proposed building systems, the extent of rooftop enclosure that is proposed, and the size of the Proposed Project's mechanical equipment, the new noise impacts are anticipated to be minimal and well within the City of Boston's applicable noise ordinances for both daytime and nighttime noise levels in residential areas.

2.2.11 Construction Impacts

A Construction Management Plan in compliance with the City's Construction Management Program (CMP) will be submitted to the Boston Transportation Department (BTD) once final plans are developed and the construction schedule is determined. The CMP will include detailed information on construction activities, specific construction mitigation measures, and construction materials, access and staging area plans to minimize impacts to abutters and the local community. The construction contractor will be required to comply with the details and conditions of the approved CMP.

2.2.11.1 Construction Schedule

Construction of the Proposed Project is estimated to last approximately twelve months, with initial site work expected to begin in mid-2015.

The City of Boston allows construction work from 7:00 AM to 6:00 PM Monday through Friday. Construction outside of those hours requires a permit. Typical construction hours for the Proposed Project will be in compliance with the City's regulations with no work anticipated on the weekends. In the event that weekend work is necessary, the Proponent will obtain required City approvals.

The construction contractor will be responsible for coordinating construction activities during all phases of construction with City of Boston agencies in order to minimize potential scheduling and construction conflicts with other ongoing construction projects in the area.

2.2.11.2 Construction Staging / Public Safety / Access

Construction truck access to the Project Site will be outlined in the CMP to be filed with BTD in accordance with the City's transportation maintenance plan requirements. Staging for the Proposed Project is anticipated to start in mid-2015.

The Proponent will ensure that staging areas will be located to minimize impact to pedestrian and vehicular flow. It may be necessary to occupy pedestrian walkways and parking lanes on Orleans Street, Porter Street and Frankfort Street for temporary periods during construction to ensure pedestrian safety and to complete site improvements work around the Project Site. Secure fencing, signage, and covered walkways may be employed to ensure the safety and efficiency of all pedestrian and vehicular traffic flows. Sidewalk areas and walkways near construction activities will be well marked and lighted to protect pedestrians and ensure their safety. Pedestrian protection will be in place early in the construction process and will remain until construction completion. When necessary, police details will be provided to facilitate traffic flow. Construction procedures will be designed to meet all OSHA safety standards for specific site construction activities.

2.2.11.3 Construction Air Quality

During the construction period of the Proposed Project, temporary effects on ambient air quality adjacent to the construction site may occur. Routine construction activities, such as masonry restoration, drywall finishing, and excavation may generate fugitive dust which may result in localized increases in particulate levels. The Proposed Project does not involve extensive or deep excavations; therefore air quality impacts associated with fugitive dust is anticipated to be minimal. The Proponent will explore participation in the DEP Diesel Retrofit Program.

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 are expected to include:

- Using wetting agents on area of exposed soil on a scheduled basis;

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

2.2.11.4 Construction Noise

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

Mitigation measures are expected to include:

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

2.2.11.5 Construction Period Transportation Issues

Details of the overall construction schedule, working hours, number of construction workers, worker transportation and parking, number of construction vehicles, and routes will be addressed in detail in a Construction Management Plan to be filed with BTD.

The number of workers required during the construction period will vary, depending on the phase of construction. 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, all workers will be strongly encouraged to use public transportation. Space on-site will be made available for workers' supplies and tools so they do not have to be brought to the site each day by personal vehicle.

Specific delivery truck access routes will be established in consultation with the BTD through its approval of the CMP required for the Proposed Project. Construction contracts will include clauses restricting truck travel to primary roads. Enforcement of truck routes will be accomplished through clauses in the subcontractors' agreements.

2.2.11.6 Protection of Utilities

Protection of BWSC water, sewer, and drain lines will begin before commencement of site work. The Proponent will request that the locations of all existing water, sewer, and drainage lines be marked by BWSC. Excavation in the area of existing water, sewer and drain lines will proceed with caution. Hand excavation will take place when excavation in the immediate area of pipe walls is required. BWSC will require additional protection measures if new pipes are to cross existing pipes.

The BWSC will require the Proponent to submit a General Service Application and a site plan for review prior to construction. The site plan must include existing water mains, sanitary sewers, storm drains, and proposed service connections.

2.2.11.7 Vibration Control

Due to the limited excavation and non-driven foundation means & methods that will be employed by the Proposed Project's foundation work, it is anticipated that vibration impacts will be minimal. No driven foundation elements are proposed as part of the Proposed Project's construction.

2.2.11.8 Generation and Disposal of Construction Debris

The Proponent will take an active role with regard to the reprocessing and recycling of construction waste. The disposal contract will include specific requirements that will ensure that construction procedures allow for the sufficient space for the necessary segregation, reprocessing, reuse and recycling of materials.

For those materials that cannot be recycled, solid waste will be transported in covered trucks to an approved solid waste facility, per DEP's Regulations for Solid Waste Facilities, 310 CMR 16.00. This requirement will be specific 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.

Removal of any hazardous materials will be treated as special waste in accordance with Massachusetts DEP guidelines and addressed and disposed of accordingly. Lead and asbestos will be removed in accordance with applicable regulations and will not present any hazard to surrounding areas.

2.2.11.9 Rodent Control during Construction

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

2.2.11.10 National Pollutant Discharge Elimination System

The Proposed Project will disturb over one acre of earth, therefore a National Pollutant Discharge Elimination System permit is required from the Environmental Protection Agency. The General Contractor will file for the permit prior to construction taking place, and erosion control measures will be maintained throughout the duration of construction.

2.2.12 Rodent Control

Operation of the building will focus on a high quality of maintenance. Although the details have not yet been finalized, the Proponent fully intends to use preventive methods by developing a safe, cost-effective and ecologically sound integrated pest management program. All waste will be stored in an interior trash/recycling room to minimize ongoing rodent activity caused by improper storage and handling of operational solid wastes.

2.2.13 Wildlife Habitat

The Project Site consists of an existing building and surface parking lots in an established, dense urban neighborhood. As such, the Proposed Project will not have impacts on wildlife habitats.

2.2.14 Sustainable Design

The "LEED v4 for BD+C: New Construction and Major Renovation" checklist has been completed for the Proposed Project. The Proponent has identified 50 points that the design and construction will generate, which meets the silver level of the LEED rating system.

The design is committed to optimizing energy efficiency and material reuse to the maximum extent possible consistent with the Proponent's goals. The following summarizes each LEED credit identified on the LEED checklist.

2.2.14.1 LEED

The Project will be LEED certifiable as required by Article 37 of the Boston Zoning Code. A preliminary LEED checklist is provided in **Appendix B**. The following summarizes each LEED credit identified on the LEED checklist.

Sensitive Land Protection (1 point) - The project avoids the development of environmentally sensitive lands. The existing land was previously developed and is not located with a floodplain.

LT Surrounding Density and Diverse Uses (3 points) - The Project is located in an urban area with existing infrastructure that offers a variety of services and casual destinations within a ¼ mile radius of the site.

LT Access to Quality Transit (5 points) - The project is located within ½ mile of an existing subway station and public bus station.

LT Bicycle Facilities (1 point) - The project will provide covered bicycle storage within 3-miles of MBTA bus and subway stops.

LT Green Vehicles (1 point) – 2 percent of the spaces shall be provided with (EVSE) Electric Vehicle Supply Equipment.

WE Indoor Water Use Reduction (4 points) - The credit requires the reduction of building potable water use by 40 percent as compared to the Energy Policy Act of 1992.

WE Water Metering (1 point) – Water use will be tracked with additional meter to identify opportunities for water savings.

EA Enhanced Commissioning (4 points) – The owner will hire a commissioning agent to provide enhanced and monitoring-based commissioning services for energy- and water-consuming devices.

EA Optimize Energy Performance (18 points) -The building will employ multiple strategies to exceed the requirements of the energy code by 50%. The Project will utilize the Whole Building Energy Simulation Approach and will exceed the requirements of the energy code.

MR Building Life Cycle Impact Reduction (2 points) - The Project will reuse or salvage 25% of the existing building materials as a percentage of the surface area, including structural elements and the facade.

MR Construction and Demolition Waste Management (2 points) - The Project will divert at least 50 percent of the total construction and demolition material from three material streams.

EQ Construction Indoor Air Quality Management Plan (1 point) - The Project proposes to adopt an IAQ management plan to protect the HVAC system during construction, control pollutant sources and interrupt contamination pathways. The installation of materials will be sequenced to avoid contamination of absorptive materials such as insulation, carpeting, ceiling tile and gypsum wallboard.

EQ Thermal Comfort (1 point) – The Project's HVAC systems and the building envelope will meet the requirements of ASHRAE Standard 55-2010, Thermal Comfort Conditions for Human Occupancy.

EQ Interior Lighting (1 point) – The Project's lighting design will meet at least four of the required strategies under Path 2, Lighting Quality.

EQ Daylight (2 points) – The Project will provide manual glare-control devices for and demonstrate that spatial daylight autonomy of at least 55% is achieved for regularly occupied floor area.

EQ Quality Views (1 point) – The Project will give building occupants a connection to the natural outdoor environment by providing quality views to the exterior.

Regional Priority EA Optimize Energy Performance (1 point) – Point Threshold: 8

Regional Priority WE Indoor Water Use Reduction (1 point) – Point Threshold: 4

2.3 Urban Design

2.3.1 Design Approach

The scope of the Proposed Project is to convert the existing five story structure into a 127 room Boutique Hotel. This building offers a unique opportunity to create industrial loft-style hotel guestrooms with high ceilings, exposed structure and oversized windows to optimize natural light and dramatic city views. This goal will be achieved with the rehabilitation of the existing historic building and the addition of a penthouse to provide space for a business center, fitness center, and rooftop gardens. The site will contain parking areas on both Orleans Street and Porter Street for Hotel guests. Both parking areas will be fully landscaped to provide a buffer screen for surrounding properties and to improve the pedestrian experience on surrounding public sidewalks. All trash removal will be contained within the building and accessed through the service corridor that exits onto the parking lot south of the building. Loading will also occur through the service corridor and parking lot. The main entry of the new Hotel will be from the parking lot off of Porter Street.

The Proposed Project's design acknowledges the need to encourage and support pedestrian activity in this area. The Proposed Project will introduce a new full-service restaurant on the southeast corner of the ground floor adjacent to the main building entry. This restaurant will provide seating for approximately 130 patrons, and will have a seasonal outdoor café. The restaurant windows will wrap around Porter Street to provide a strong visual connection to passersby. A coffee shop will also open out onto Orleans Street and will further activate this side of the Proposed Project. The Proposed Project will take advantage of the pedestrian activity created by the adjacent East Boston Greenway, the Bremen Street Park and the Airport MBTA Station and will enliven the surrounding streets with its new restaurant and café activity.

2.3.2 Proposed Design

The building was originally designed as a manufacturing facility, and construction was completed in 1913. It was one of the first reinforced concrete building constructed in Boston. The design was state of the art at the time; however the years have not been kind to the existing building. Damage to the structure has occurred in many areas by water penetration, resulting in extensive concrete spalling and rebar deterioration. A previous owner tried to remediate further damage by applying paint to all exterior surfaces. The Proposed Project will remove the gray paint, and repair and restore the entire façade to its original condition. Once cleaned and stabilized the brick will be cleaned, repointed and sealed. The original window openings will be restored, and retrofitted with new energy efficient windows. The new rooftop penthouse addition will be constructed in keeping with the original structure's architecture.

In recent years the building was retrofitted on an ad-hoc basis for use by cellular carriers. Many satellite dishes surround the top floor with cables snaking down from the roof and

penetrating the façade. The Proposed Project intends to remove all cellular equipment from the main façade of the building, and relocate all to a new enclosed centralized location on the penthouse level. This new location will ensure that all cellular equipment and cabling will be contained, set back and out of public view.

2.3.3 Conclusion

The desire and ability to preserve historic neighborhood character is a primary contributor to the City of Boston's success as a place to live, work, visit, and enjoy. The foresight to preserve, maintain, and repurpose its original buildings makes the City very distinctive among American cities. The Proposed Project will reinforce that goal by preserving and updating a unique piece of Boston's manufacturing past. The rehabilitation of this simple yet robust industrial building will help contribute to and maintain the historic fabric of East Boston. With the introduction of a unique loft-style boutique hotel to the area, the vitality and quality of this diverse community will be enhanced for residents and visitors alike.

2.4 Historic Resources and Archaeological Resources

This section describes the historic and archaeological resources on, and within the vicinity of the Project Site and describes the potential project-related impacts to these resources.

2.4.1 Historic Resources

Numerous properties and districts included in the State and National Registers of Historic Places are located within the Proposed Project's vicinity. In addition, there are properties within the vicinity that are included in the Massachusetts Historical Commission's Inventory of Historic and Archaeological Assets of the Commonwealth (the Inventory). The following includes descriptions of the State and National Register-listed properties and districts, and properties included in the Inventory, within a quarter mile of the Project Site. **Figure 2.4-1** and **Table 2.4-1** identify historic resources in the vicinity of the Proposed Project.

Figure 2.4-1 Historic Resources

Table 2.4-1: Historic Resources

Historic Resource Name and Massachusetts Historical Commission ID	Resource Address (all East Boston)	Approximate Distance from Subject Property	Resource Status or Designation
Engel Cone Shoe Company (BOS.116)	183 Orleans Street (Subject Property)	None	No determination
General Electric East Boston Lamp Works (BOS.123)	156-200 Porter Street	Approximately 50 feet northeast	NR-eligible (individual)
Cox Confectionary	150 Orleans Street	Approximately 450 feet (0.09 mile) southwest	NR-eligible (individual)
Boston and Albany R.R. Engine House (BOS.13010)	215 Bremen Street	Approximately 550 feet (0.10 mile) northeast	NR-eligible (individual)
Lyman School (BOS.25)	10 Gove Street	Approximately 850 feet (0.16 mile) northwest	NR-eligible (individual)
Street Clock (BOS.9463)	9 Chelsea Street	Approximately 0.25 mile southwest	BLC Landmark

2.4.1.1 Historic Resources within the Project Site

The Proposed Project involves the rehabilitation and addition to the historic Engel Cone Shoe Company factory building. This historic resource is included in the Massachusetts Historical Commission's inventory of Historical and Archeological Assets of the Commonwealth but the building does not carry any historic designation and has not been deemed National Register-eligible. The Proposed Project will not have any adverse effect on any on-site historic resources.

2.4.1.2 Historic Resources in the Vicinity of the Project Site

Several historic resources exist within a one-quarter mile radius of the Project Site as shown in **Figure 2.4-1** and summarized in **Table 2.4-1**. The Proposed Project will not adversely affect any of these historic resources, and will in fact enhance the public's chances of enjoying these historic assets by bringing new visitors and restaurant patrons to the East Boston community who might not otherwise have visited the area. No new shadow, wind, daylight, or other impacts on these historic resources will result from the Proposed Project's construction.

2.4.2 Archaeological Resources within the Project Site

The Proposed Project is located on a dense urban infill site and involves the re-use of an existing building with no material expansion to its footprint. The Proposed Project will have no impact on any archeological resources.

2.5 Infrastructure Systems

2.5.1 Introduction

The Infrastructure Systems section of this PNF outlines the existing utilities surrounding the Project Site, the connections required to provide service to the Proposed Project, and any impacts on the existing utility systems that may result from the construction of the Proposed Project. The following utility systems are discussed herein:

- Water System
- Sanitary Sewage
- Drainage
- Energy Needs

The Proposed Project includes the renovation and expansion of an existing approximately 69,496 square foot (sf), five-story industrial building into an approximately 71,456 sf, six-story hotel with a restaurant and the reconstruction of existing parking lots. The Project Site is approximately 50,329 sf and is located on Porter Street in East Boston. The Project Site is bounded by Porter Street to the northeast, Frankfort Street to the southeast, private property to the southwest, and Orleans Street to the northwest.

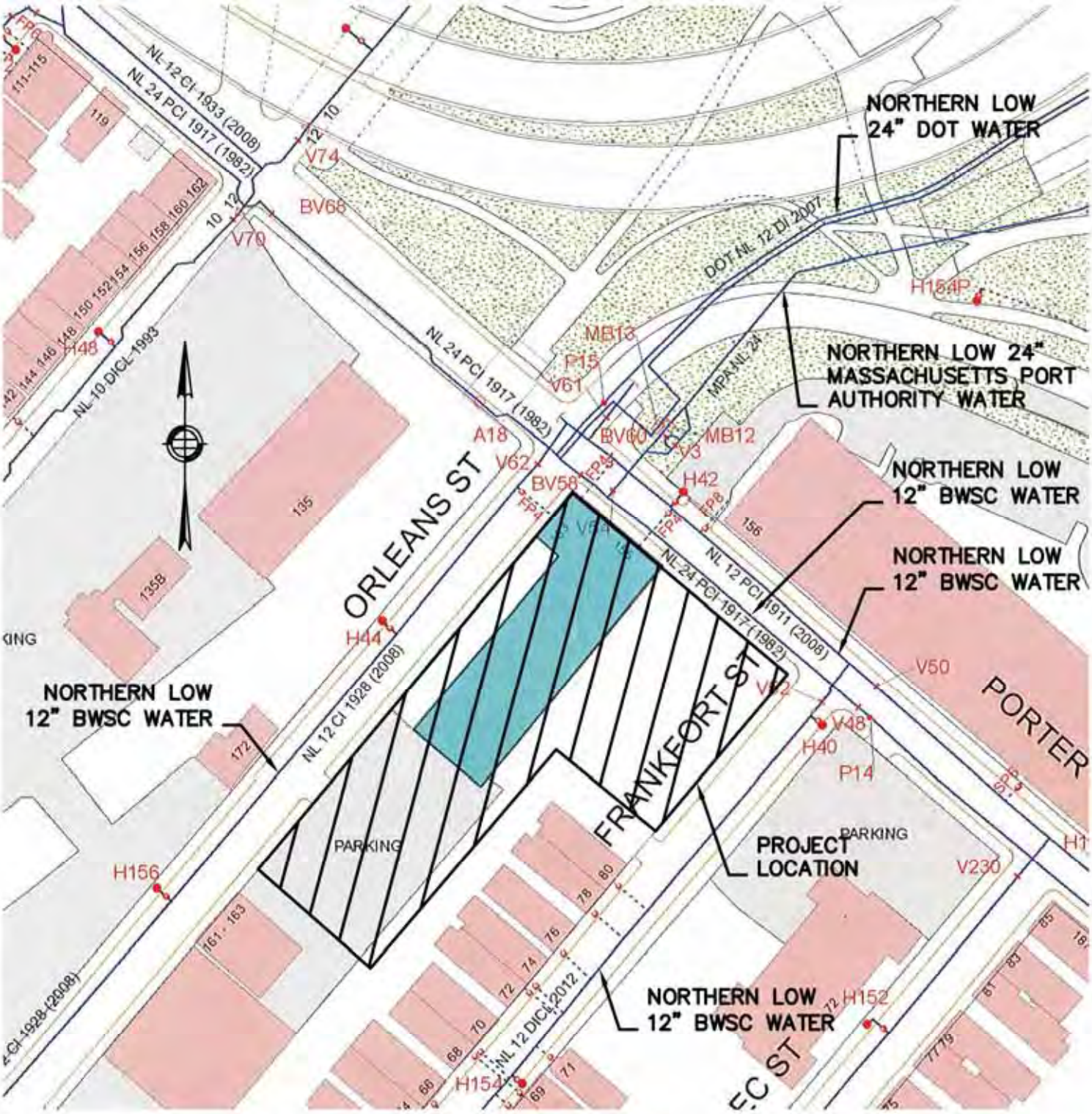
2.5.2 Water System

2.5.2.1 Water Infrastructure

Water for the Project Site will be provided by the Boston Water and Sewer Commission (BWSC). There are five water systems within the City of Boston, and these provide service to portions of the City based on ground surface elevation. The five systems are: Southern Low (commonly known as low service), Southern High (commonly known as high service), Southern Extra High, Northern Low, and Northern High. There is a 12-inch BWSC Southern Low water main and a 24-inch BWSC Southern Low water main in Porter Street. There is a 12-inch BWSC Southern Low water main in both Frankfort Street and Orleans Street. The existing water system is illustrated in **Figure 2.5-1**.

2.5.2.2 Water Consumption

The Proposed Project's water demand estimate for domestic water service is calculated using the Proposed Project's estimated sewage generation based on sewage generation values determined by the Massachusetts Department of Environmental Protection (MassDEP), described in detail in section 2.5.3.2. A conservative factor of 1.1 (10%) is applied to the estimated average daily sewage generation flows calculated with 310 CMR 15.203 values to estimate an average daily water demand. This factor accounts for consumption, system losses, and other usages. The Proposed Project's estimated domestic water demand is 20,500 gallons per day (gpd). With the factor, water for the Proposed Project will be supplied by the BWSC water mains in Orleans Street, Porter Street, and/or Frankfort Street.



EXISTING WATER SYSTEM

JOB NO : **1307**	DATE : **FEB. 2015**	SCALE : **NOT TO SCALE**

SHARKEY DESIGN COMPANY
74 GLADESTONE ST STE A, BOSTON MA 02115
617.851.8200 VOICE ⊙ ⊙ 617.268.2848 FAX

BOSTON LOFTEL
151 PORTER ST, EAST BOSTON, MA

2.5-1

Efforts to reduce water consumption will be made. Aeration fixtures will be installed and appliances will be chosen for water conservation qualities. In public areas, sensor operated faucets and toilets will be installed.

A double check valve assembly backflow preventer will also be required. New water service connections to the BWSC water mains will be installed in accordance with the latest BWSC, City of Boston, state, and federal codes and standards. Backflow preventers will be installed at both domestic and fire protection service connections. New domestic water meters will be installed with Meter Transmitter Units (MTU's) as part of the BWSC's Automatic Meter Reading (AMR) system.

2.5.2.3 Existing Water Capacity & Impacts

BWSC record hydrant flow test data containing actual water main flow rates and pressure within the vicinity of the Project Site was requested by the Proponent. Hydrant flow data was not available near the Project Site. As the design progresses, the Proponent will request hydrant flow tests be conducted by BWSC adjacent to the Proposed Project, as hydrant flow test data must be less than one year old when used for design.

2.5.2.4 Proposed Project

The domestic water and fire protection building services for the Proposed Project will connect to the existing BWSC water mains in Orleans Street, Porter Street, and/or Frankfort Street. The building will be equipped with a 6" domestic water service complete with BWSC approved strainer and water meter assembly. The building will be equipped with an 8" fire water service.

The domestic water and fire protection service connections required for the Proposed Project will meet the applicable BWSC, City of Boston, state and federal codes and standards, including cross-connection backflow prevention. Compliance with the standards for the domestic water system service connection will be reviewed as part of BWSC's Site Plan Review Process. This review will include sizing of domestic water and fire protection services, calculation of meter sizing, backflow prevention design, and location of hydrants and siamese connections that conform to BWSC and Boston Fire Department requirements.

2.5.2.5 Proposed Impacts

Water capacity problems are not anticipated within the BWSC water system as a result of the Proposed Project, as ample and unconstrained capacity exists in the vicinity of the Project Site.

2.5.3 Sanitary Sewage

2.5.3.1 Sewer Infrastructure

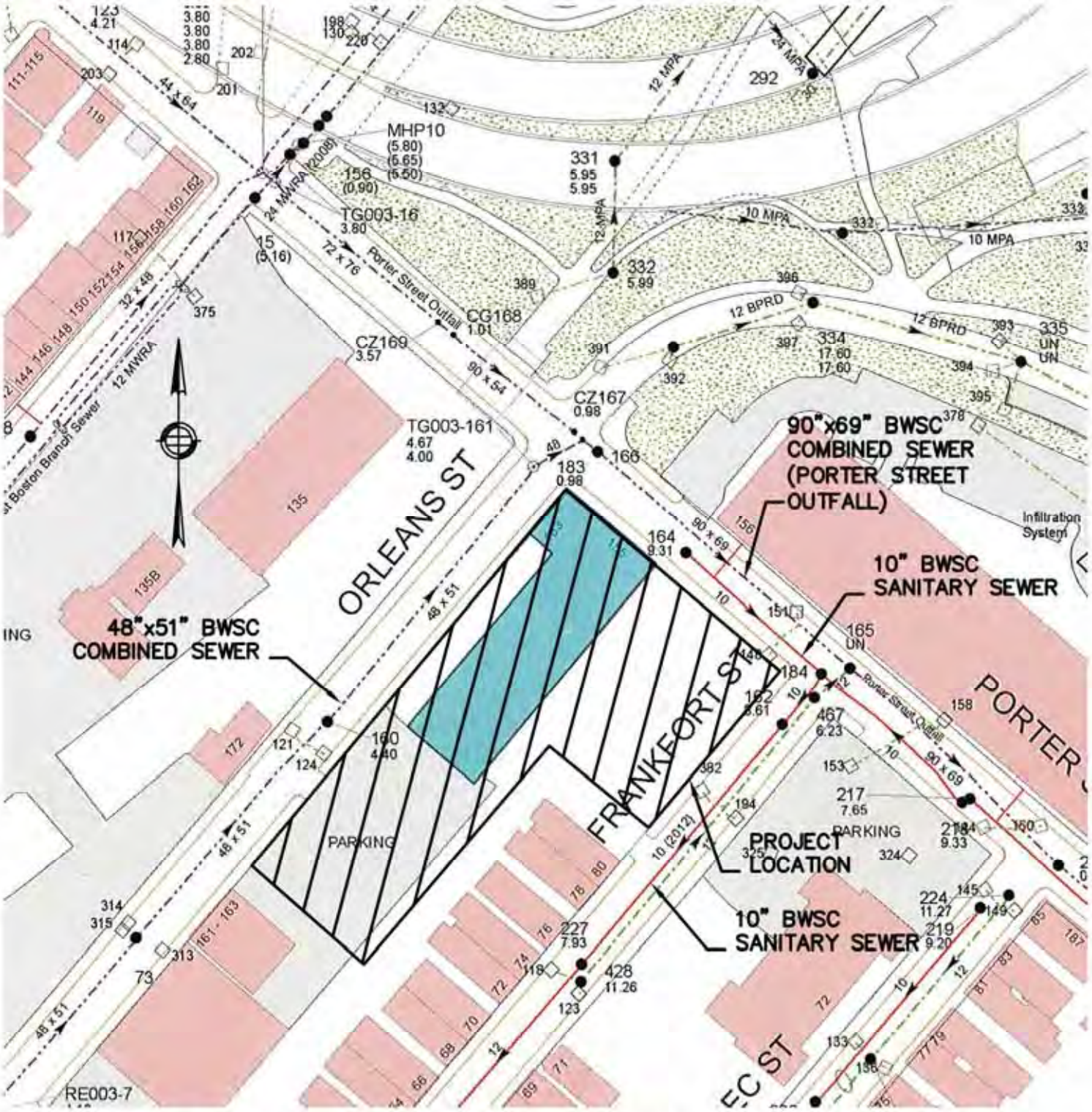
Existing BWSC sanitary sewer and/or combined sewer mains are located in Orleans Street, Porter Street, and Frankfort Street adjacent to the project site. There is a 48-inch by 51-inch BWSC combined sewer main in Orleans Street which flows northeasterly to connect to a 90-inch by 69-inch BWSC combined sewer main in Porter Street called the Porter Street Outfall. During wet weather, the Porter Street Outfall ultimately discharges to the Boston Inner Harbor through a combined sewer overflow. A 10-inch BWSC sanitary sewer main begins in Porter Street near the approximate midpoint of the Project Site and flows southeasterly and turns down Frankfort Street to flow southwesterly. Ultimately, the sanitary sewer main connects to the East Boston Branch Sewer which is directed to the MWRA Deer Island Waste Water Treatment Plant for treatment and disposal. The existing sewer system is illustrated in **Figure 2.5-2**.

2.5.3.2 Wastewater Generation

The Proposed Project's sewage generation rates were estimated using Section 310 CMR 15, the MassDEP "The State Environmental Code, Title 5," and the proposed building program. Section 310 CMR 15.203 lists typical sewage generation values by the proposed building use and are conservative values for estimating the sewage flows from buildings. The 310 CMR 15.203 values are used to evaluate new sewage flows or, in this case, an increase in flows to existing sewer connections. The existing industrial building sewage flows are calculated in **Table 2.5-1**. Tables 2.5-1 and 2.5-2 describe the existing and the increased sewage generation due to the Proposed Project's development in gallons per day (gpd). The Proposed Project will increase sewage generation from the site by 10,420 gpd.

Table 2.5-1 Existing Estimated Daily Sewage Discharges

Room Use	Size		310 CMR Value (gpd/unit)		Total Flow (gpd)
Industrial Building	540	People	15	/person	8,100
				Total Existing Flow:	8,100



EXISTING SANITARY SEWER SYSTEM

JOB NO : **1307**	DATE : **FEB. 2015**	SCALE : **NOT TO SCALE**

SHARKEY DESIGN COMPANY
74 CLARENDON ST STE A BOSTON MA 02116
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2.5-2

Table 2.5-2 Proposed Estimated Daily Sewage Discharges

Room Use	Size		310 CMR Value (gpd/unit)		Total Flow (gpd)
Hotel	127	Bedrooms	110	/bedroom	13,970
Restaurant	130	Seats	35	/seat	4,550
			Total Flow:	Proposed	18,520
				Proposed Increase in Flow:	**10,420**

2.5.3.3 Sewage Capacity & Impacts

The Proposed Project's impact on the existing BWSC sanitary sewer system in Porter and Frankfort Streets were analyzed. The existing sewer system capacity calculations are presented in **Table 2.5-3**.

Table 2.5-3 Sewer Hydraulic Capacity Analysis

Manhole (BWSC Number)	Distance (feet)	Invert Elevation (up)	Invert Elevation (down)	Slope (%)	Diameter (inches)	Manning's Number	Flow Capacity (cfs)	Flow Capacity (MGD)
Porter: 164 to 162	170	9.31	8.61	0.4%	10	0.013	5.43	3.51
Frankfort: 162 to 227	214	8.61	7.93	0.3%	10	0.013	4.77	3.08
						Minimum Flow Analyzed:	4.77	3.08

Notes: 1. Manhole numbers taken from record Boston Water & Sewer GIS Map
2. Flow Calculations based on Manning's Equation

2.5.3.4 Proposed Conditions

The Proponent will coordinate with the BWSC on the design and capacity of the proposed building sanitary sewer connections to the BWSC sewer system. The Proposed Project is expected to generate an increase in wastewater flows from the site of approximately 10,420 gpd. Approval for the increase in sanitary flow will be provided by the BWSC.

Improvements and building connections to BWSC infrastructure will be reviewed as part of the BWSC's site plan review process for the Proposed Project. This process will include a comprehensive design review of the proposed service connections, an assessment of Proposed Project demands and system capacity, and the establishment of service accounts.

2.5.3.5 Proposed Impacts

The adjacent BWSC sanitary sewer system in Porter and Frankfort Streets and potential building service connections to the sanitary sewer system were analyzed.

Table 2.5-3 indicates the hydraulic capacity of the sanitary sewer mains adjacent to the Project Site. The minimum hydraulic capacity of the BWSC sewer system adjacent to the Project Site is 3.08 million gallons per day (MGD) or 4.77 cubic feet per second (cfs) for the 10-inch sanitary sewer main in Frankfort Street. Based on an average daily flow estimate for the Project of 18,520 gpd or 0.019 MGD; and with a factor of safety of 10 (total estimate = 0.019 MGD x 10 = 0.19 MGD), no capacity problems are expected with the Frankfort Street sanitary sewer system due to the Proposed Project's construction.

2.5.4 Stormwater

2.5.4.1 Existing Drainage Conditions

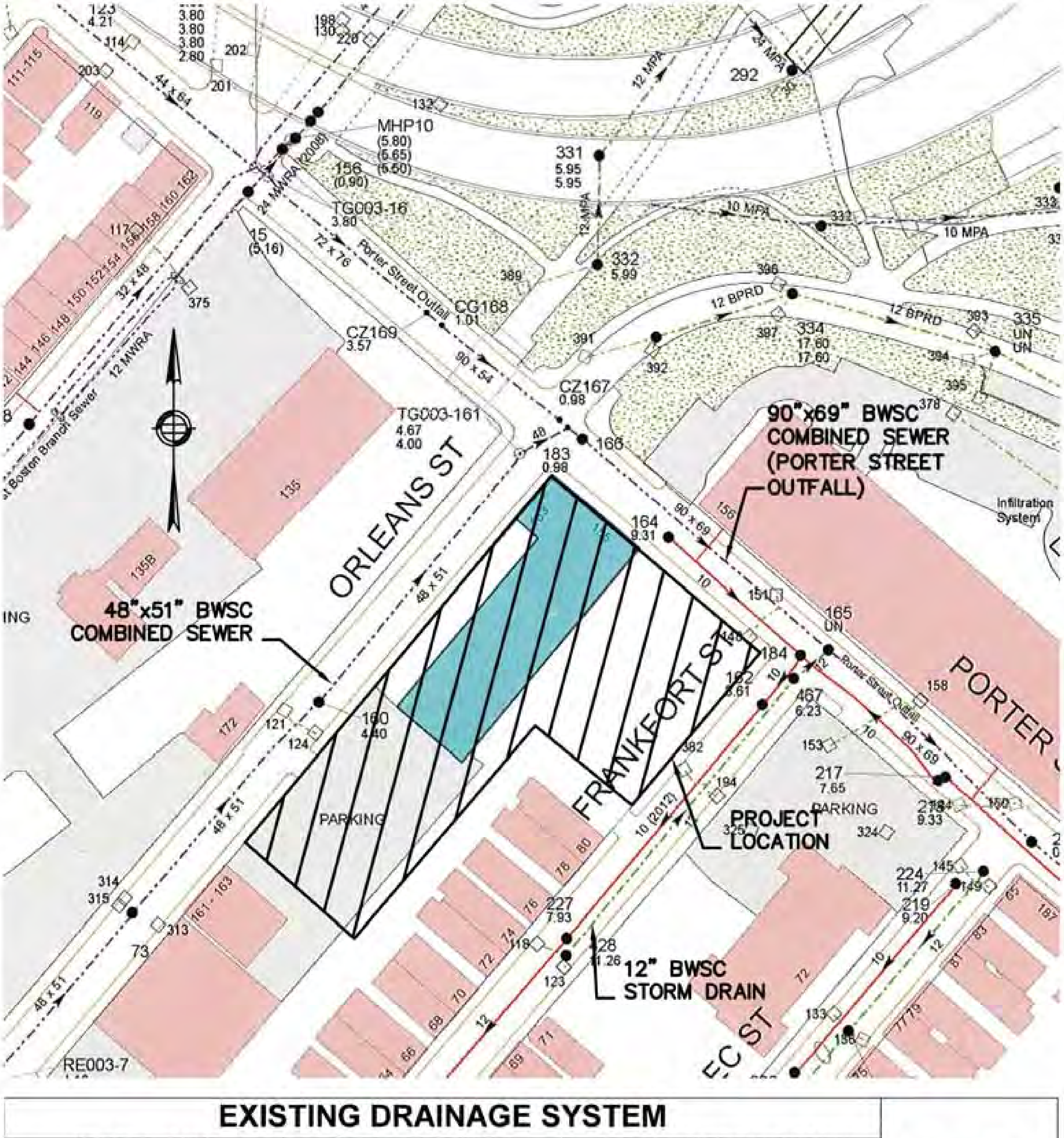
There are existing BWSC storm drain mains and combined sewer mains in the streets adjacent to the Project Site. There is a 48-inch by 51-inch BWSC combined sewer main in Orleans Street which flows northeasterly to connect to a 90-inch by 69-inch BWSC combined sewer main in Porter Street called the Porter Street Outfall. There is an existing 12-inch BWSC storm drain in Frankfort Street which flows northeasterly to connect to the Porter Street Outfall. During wet weather, the Porter Street Outfall ultimately discharges to the Boston Inner Harbor through a combined sewer overflow. The existing storm drain system is illustrated in **Figure 2.5-3**.

The existing site is covered by building or paved parking lots that do not include closed drainage systems, and is 100% impervious. Stormwater runoff from the existing parking lots and paved pedestrian areas sheet flow to BWSC catch basins in the adjacent streets, which connect to the BWSC storm drain and combined sewer systems in Orleans Street, Porter Street, and Frankfort Street.

2.5.4.2 Proposed Drainage Conditions

The Proposed Project will reduce the impervious area on the site with the addition of landscaped areas around the building and redesigned parking lots. The Proposed Project will reduce the peak rates and volumes of stormwater runoff from the site compared to the existing condition and promote stormwater recharge to the greatest extent practicable.

The Proposed Project will strive to infiltrate one-inch of stormwater runoff from the proposed impervious areas of the site into the ground to the greatest extent practicable. Stormwater runoff from the building roof will be collected and recharged into the ground prior to discharging into the BWSC storm drain system. The stormwater recharge system and any required site closed drainage systems will be designed so that there will be no



EXISTING DRAINAGE SYSTEM

JOB NO : **1307**	DATE : **FEB. 2015**	SCALE : **NOT TO SCALE**	**2.5-3**

SHARKEY DESIGN COMPANY
74 CLARENDON ST STE A, BOSTON MA 02116
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increase in the peak rate and volume of stormwater discharge from the developed Project Site when compared to the existing condition.

Improvements and connections to BWSC storm drain infrastructure will be reviewed as part of the BWSC's site plan review process. The process will include a comprehensive design review of the proposed service connections, and assessment of the Proposed Project's demands and system capacity.

2.5.4.3 Water Quality Impact

The Proposed Project will not affect the water quality of nearby water bodies. Erosion and sediment control measures will be implemented during construction to minimize the transport of site soils to off-site areas and BWSC storm drain and combined sewer systems. During construction, existing catch basins will be protected with filter fabric, straw bales and/or crushed stone, to provide for sediment removal from runoff. These controls will be inspected and maintained throughout the construction phase until the areas of disturbance have been stabilized through the placement of pavement, structure, or vegetative cover.

Any necessary dewatering will be conducted in accordance with applicable MWRA and/or BWSC discharge permits. Once construction is complete, the Proposed Project will be in compliance with current local and state stormwater management policies, as described below.

2.5.4.4 MassDEP Stormwater Management Policy Standards

In March 1997, MassDEP adopted a new Stormwater Management Policy to address non-point source pollution. In 1997, MassDEP published the Massachusetts Stormwater Handbook as guidance on the Stormwater Policy, which was revised in February 2008. The Policy prescribes specific stormwater management standards for development projects, including urban pollutant removal criteria for projects that may impact environmental resource areas. Compliance is achieved through the implementation of Best Management Practices (BMPs) in the stormwater management design. The Policy is administered locally pursuant to MGL Ch. 131, s. 40.

A brief explanation of each Policy Standard and the system compliance is provided below:

Standard #1: No new stormwater conveyances (e.g., outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.

Compliance: The proposed design will comply with this Standard. There are no new stormwater conveyances proposed.

Standard #2: Stormwater management systems shall be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.

This Standard may be waived for discharges to land subject to coastal storm flowage as defined in 310 CMR.

Compliance: The proposed design will comply with this Standard. The existing post-development peak discharge rates will not exceed pre-development peak discharge rates.

Standard #3: Loss of annual recharge to groundwater shall be eliminated or minimized through the use of infiltration measures *including environmental sensitive site design, low impact development techniques, stormwater best management practices, and good operation and maintenance. At a minimum, the annual recharge from the post-development site shall approximate the annual recharge from pre-development conditions based on soil type. This Standard is met when the stormwater management system is designed to infiltrate the required recharge volume as determined in accordance with the Massachusetts Stormwater Handbook.*

Compliance: The Proposed Project will comply with this standard to the maximum extent practicable.

Standard #4: Stormwater management systems shall be designed to remove 80% of the average annual post-construction load of Total Suspended Solids (TSS). This Standard is met when:

> *a. Suitable practices for source control and pollution prevention are identified in a long-term pollution prevention plan, and thereafter are implemented and maintained;*
>
> *b. Structural stormwater best management practices are sized to capture the required water quality volume determined in accordance with the Massachusetts Stormwater Handbook; and*
>
> *c. Pretreatment is provided in accordance with the Massachusetts Stormwater Handbook.*

Compliance: The proposed design will comply with this standard. Runoff from paved areas that would contribute unwanted sediments or pollutants to the existing storm drain system will be collected by deep sump, hooded catch basins and conveyed through water quality units before discharging into the BWSC system.

Standard #5: For land uses with higher potential pollutant loads, source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses to the maximum extent practicable. If through source control and/or pollution prevention all land uses with higher potential pollutant loads cannot be completely protected from exposure to rain, snow, snow melt, and stormwater runoff, the

proponent shall use the specific structural stormwater BMPs determined by the Department to be suitable for such uses as provided in the Massachusetts Stormwater Handbook. Stormwater discharges from land uses with higher potential pollutant loads shall also comply with the requirements of the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26-53 and the regulations promulgated thereunder at 314 CMR 3.00, 314 CMR 4.00 and 314 CMR 5.00.

Compliance: The proposed design will comply with this standard. The Project is not associated with Higher Potential Pollutant Loads (per the Policy, Volume I, page 1-6).

Standard #6: Stormwater discharges within the Zone II or Interim Wellhead Protection Area of a public water supply, and stormwater discharges near or to any other critical area, require the use of the specific source control and pollution prevention measures and the specific structural stormwater best management practices determined by the Department to be suitable for managing discharges to such areas, as provided in the Massachusetts Stormwater Handbook. A discharge is near a critical area if there is a strong likelihood of a significant impact occurring to said area, taking into account site-specific factors. Stormwater discharges to Outstanding Resource Waters and Special Resource Waters shall be removed and set back from the receiving water or wetland and receive the highest and best practical method of treatment. A "storm water discharge" as defined in 314 CMR 3.04(2)(a)1 or (b) to an Outstanding Resource Water or Special Resource Water shall comply with 314 CMR 3.00 and 314 CMR 4.00. Stormwater discharges to a Zone I or Zone A are prohibited unless essential to the operation of a public water supply.

Compliance: The proposed design will comply with this Standard. The Project will not discharge untreated stormwater to a sensitive area or any other area.

Standard #7: A redevelopment project is required to meet the following Stormwater Management Standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural stormwater best management practice requirements of Standards 4, 5, and 6. Existing stormwater discharges shall comply with Standard 1 only to the maximum extent practicable. A redevelopment project shall also comply with all other requirements of the Stormwater Management Standards and improve existing conditions.

Compliance: The proposed design will comply with this Standard. The Project complies with the Stormwater Management Standards as applicable to the redevelopment.

Standard #8: A plan to control construction-related impacts including erosion, sedimentation and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation, and pollution prevention plan) shall be developed and implemented.

Compliance: The Proposed Project will comply with this standard. Sedimentation and erosion controls will be incorporated as part of the design of these projects and employed during construction.

Standard *9: A Long-Term Operation and Maintenance (O&M) Plan shall be developed and implemented to ensure that stormwater management systems function as designed.*

Compliance: The Proposed Project will comply with this standard. An O&M Plan including long-term BMP operation requirements will be prepared for the Proposed Project and will assure proper maintenance and functioning of the stormwater management system.

Standard 10*: All illicit discharges to the stormwater management system are prohibited.*

Compliance: The Proposed Project will comply with this standard. There will be no illicit connections associated with the Proposed Project.

2.5.5 Energy Needs

The HVAC system for the building will likely be a water source heat pump system. A roof mounted cooling tower (approximately 300 nominal tons) will be required for cooling and high efficiency, condensing, gas fired, boilers (approximately 1,500 MBH total output capacity) will provide heating. A mechanical room will be provided to house the boilers and circulating pumps on the roof of the building. A condenser water loop of supply and return piping will be circulated throughout the building to vertical and horizontal water source heat pumps.

Domestic hot water will be generated by (4) gas fired storage type stainless steel water heaters with above 90% efficiency. Each set of heaters will be sized for 100% of the building demand. Guestroom and building hot water will be distributed at 120 degrees maintained by an electronic mixing valve station with full size bypass. Domestic hot water equipment will be located in the mechanical room.

Power for the building will be derived from Orleans Street underground utility company medium voltage network. From the Orleans Street existing Eversource (NSTAR) Manhole the medium voltage wiring service will be brought to the building transformer via medium voltage conduit duct bank. The medium voltage duct bank will consist of (4) 5" Schedule 40 PVC conduits encased in concrete and located 30" below grade. The Eversource (NSTAR) transformer will be pad mounted on the exterior of the building.

The Main electrical room shall house the Main Electrical Service Switchboard "MDSB". This switchboard shall be rated as 3000A, 120/208V, 3Phase, 4Wire and shall service the entire building electrical load.

The building will require one, 150KW/175KVA, 120/208V utility grade natural gas fired emergency generator. The generator shall be located on the roof area and equipped with sound attenuated weather resistant enclosure.

2.5.6 Protection Proposed During Construction

Existing public and private infrastructure located within nearby public rights-of-way will be protected during construction work on the Project Site. The installation of proposed utility connections within public ways will be undertaken in accordance with the BWSC, Boston Public Works Department, Dig-Safe Program, and applicable utility company requirements. Specific methods for constructing proposed utilities where they are near to, or connect with existing water, sewer, and drain facilities will be reviewed by the BWSC as part of its Site Plan Review process. Necessary permits will be obtained before the commencement of work.

The Proponent will continue to work and coordinate with the BWSC and the utility companies to ensure safe and coordinated utility operations in connection with the Proposed Project's construction.

2.5.7 Conservation of Resources

The State Building Code requires the use of water-conserving fixtures. Water conservation measures such as low-flow toilets and restricted flow faucets will help reduce the domestic water demand on the existing distribution system. The installation of sensor-operated sinks with water conserving aerators and sensor-operated toilets in public restrooms will be incorporated into the design plans for the Proposed Project.

3.0 COORDINATION WITH OTHER GOVERNMENTAL AGENCIES / PUBLIC REVIEW PROCESS

3.1 Community Outreach

The Proponent is committed to effective community outreach and will engage the surrounding community to ensure public input on the Project. The first Impact Advisory Group meeting was held on October 20, 2014, and significant changes were made to the Proposed Project's design in response to feedback received at that meeting. A presentation top the Jeffries Point Neighborhood Association's Planning & Zoning Committee on February 18, 2015. The Proponent will continue to engage with local officials as well as local community groups, abutters, neighbors and property owners to introduce them to the Proposed Project.

3.2 Architectural Access Board Requirements

The Proposed Project will comply with the requirements of the Massachusetts Architectural Access Board (MAAB) and will be designed to comply with the standards of the Americans with Disabilities Act.

3.3 Massachusetts Environmental Policy Act (MEPA)

The Proposed Project will not exceed any review thresholds requiring environmental impact review by the Massachusetts Environmental Policy Act ("MEPA") Office of the Massachusetts Executive Office of Environmental Affairs.

3.4 Massachusetts Historical Commission

The Proposed Project does not require any state and/or federal funding, licensing, permitting and/or approvals; therefore the Proposed Project is not subject to review by the Massachusetts Historical Commission (MHC) under State Register or Section 106 Review.

3.5 Other Permits and Approvals

Boston Civic Design Commission

The Proposed Project is not subject to review by the Boston Civic Design Commission because it does not exceed the review thresholds established for review in Article 28-4 of the Boston Zoning Code.

Other Permits

Section 1.7, Table 1-1, provides a list of agencies from which permits and approvals for the Project may be sought.

PROJECT CERTIFICATION

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

Signature of Proponent

Paul Roiff
Porterfrank Realty LLC
74 Clarendon Street
Boston, MA 02116

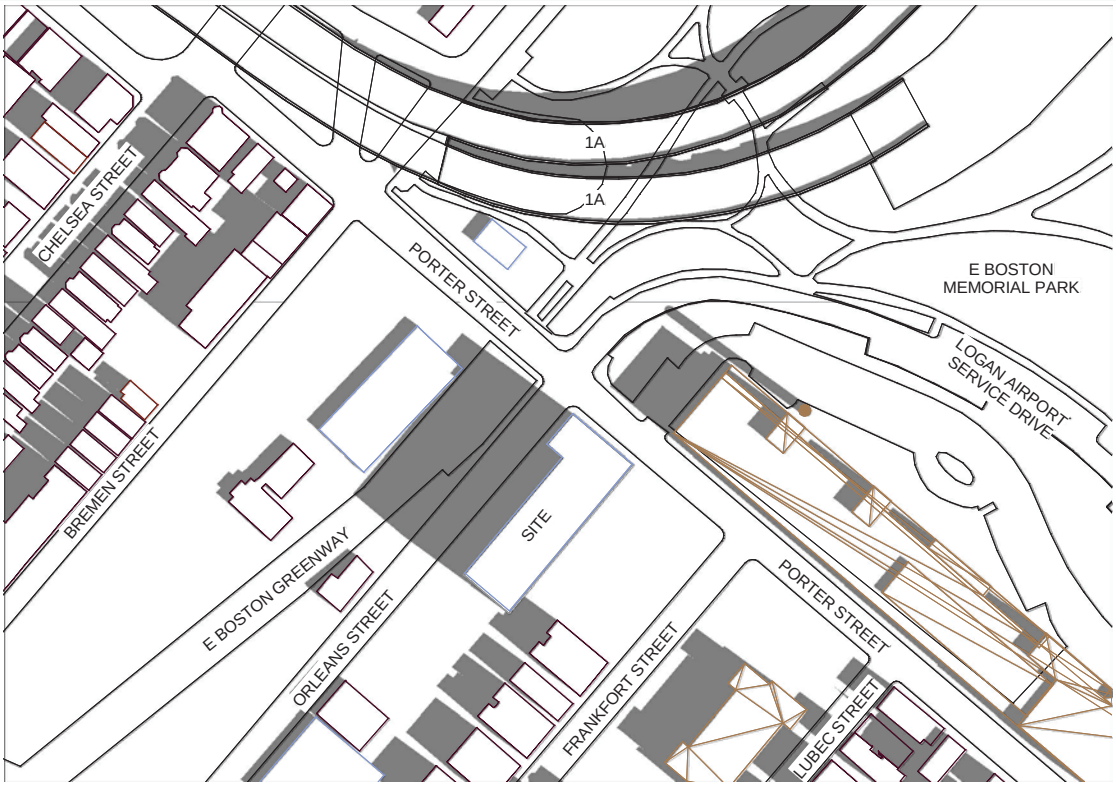
3-2-15
Date

Signature of Preparer

Yanni Tsipis
Colliers International
160 Federal Street
Boston, MA 02110

3-2-15
Date

APPENDIX A – SHADOW STUDY SKETCHES



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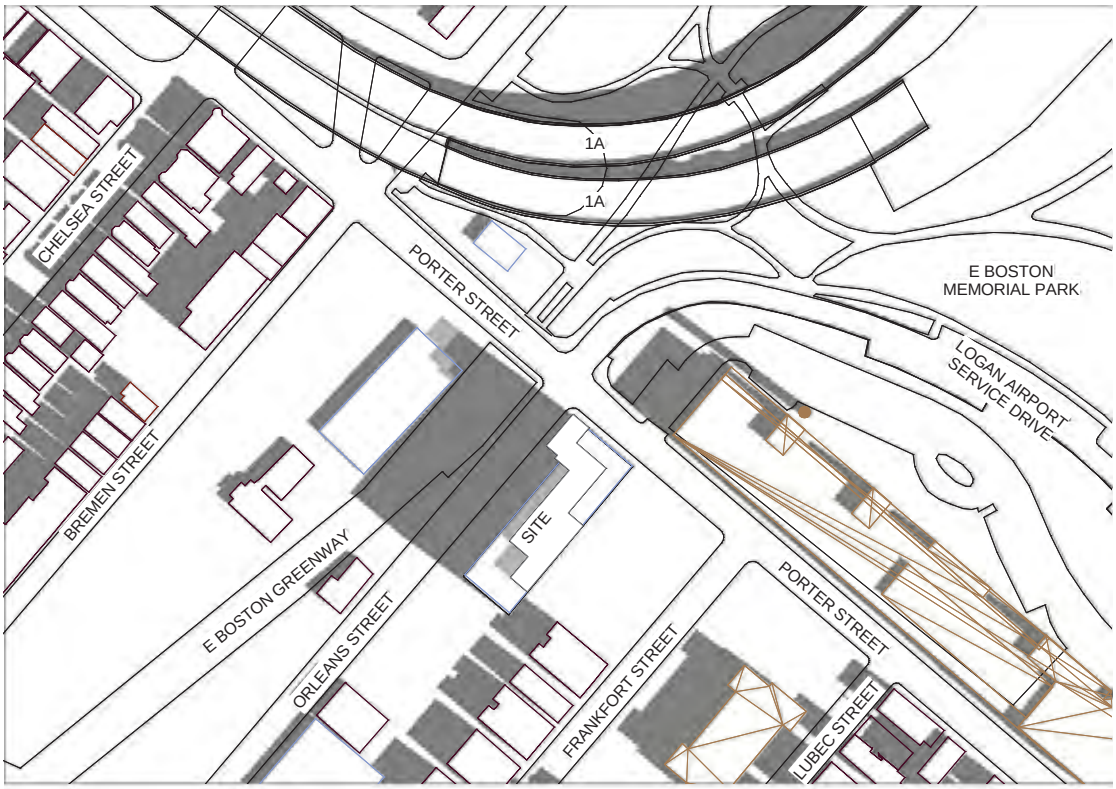

2 Proposed Shadow. Spring Equinox 9am
1" = 200'-0"

EXISTING SHADOW

PROPOSED SHADOW

DEREK RUBINOFF ARCHITECT

Spring Equinox. March 21. 9 am.

Loftel Boston
151 Porter Street Boston, MA 02128

JOB #:	1454
SCALE:	As indicated
DATE:	02/13/2014
DWN BY:	Author
CROSS REF:	

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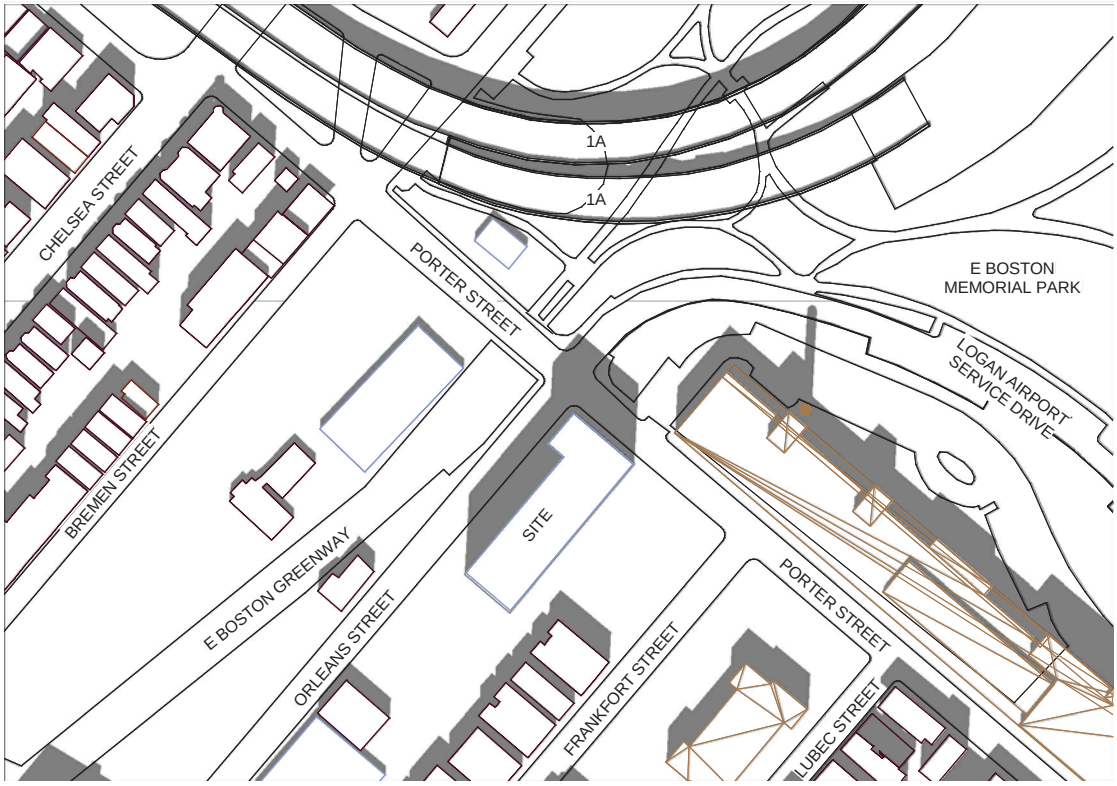

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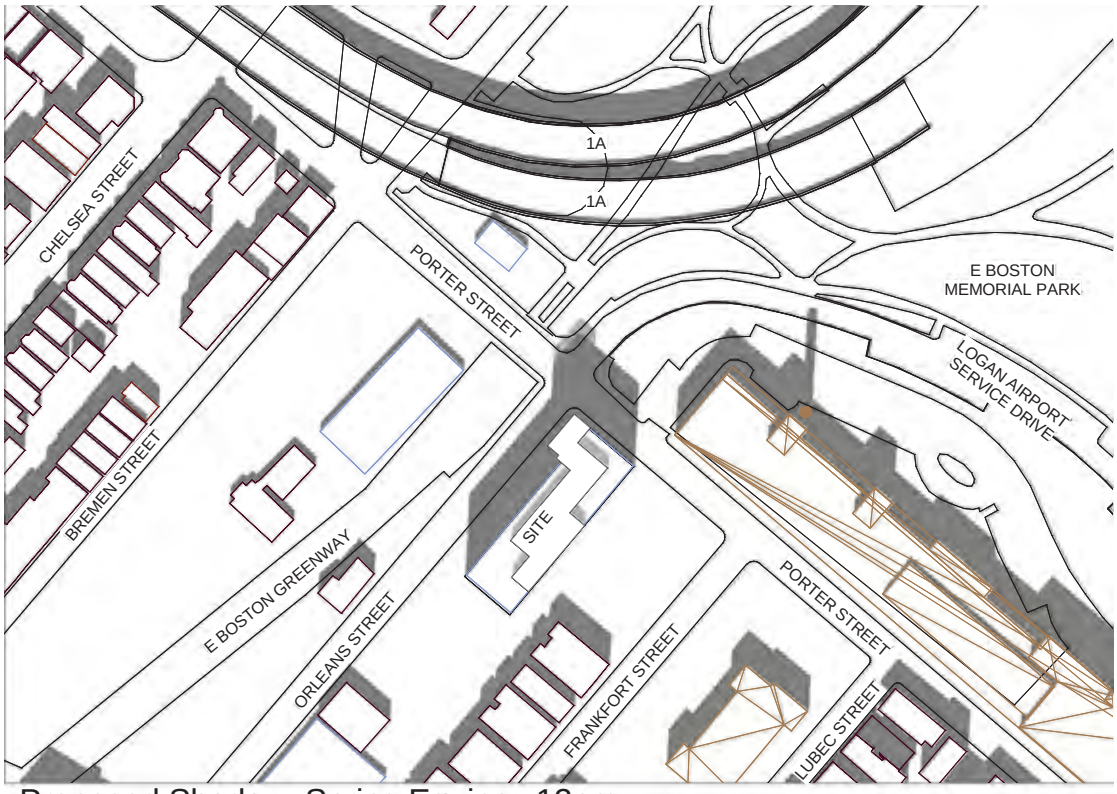

2 Proposed Shadow. Spring Equinox 12pm
1" = 200'-0"

EXISTING SHADOW

PROPOSED SHADOW

DEREK RUBINOFF ARCHITECT

Spring Equinox. March 21. 12pm.

Loftel Boston
151 Porter Street Boston, MA 02128

JOB #:	1454
SCALE:	As indicated
DATE:	02/13/2014
DWN BY:	Author
CROSS REF:	

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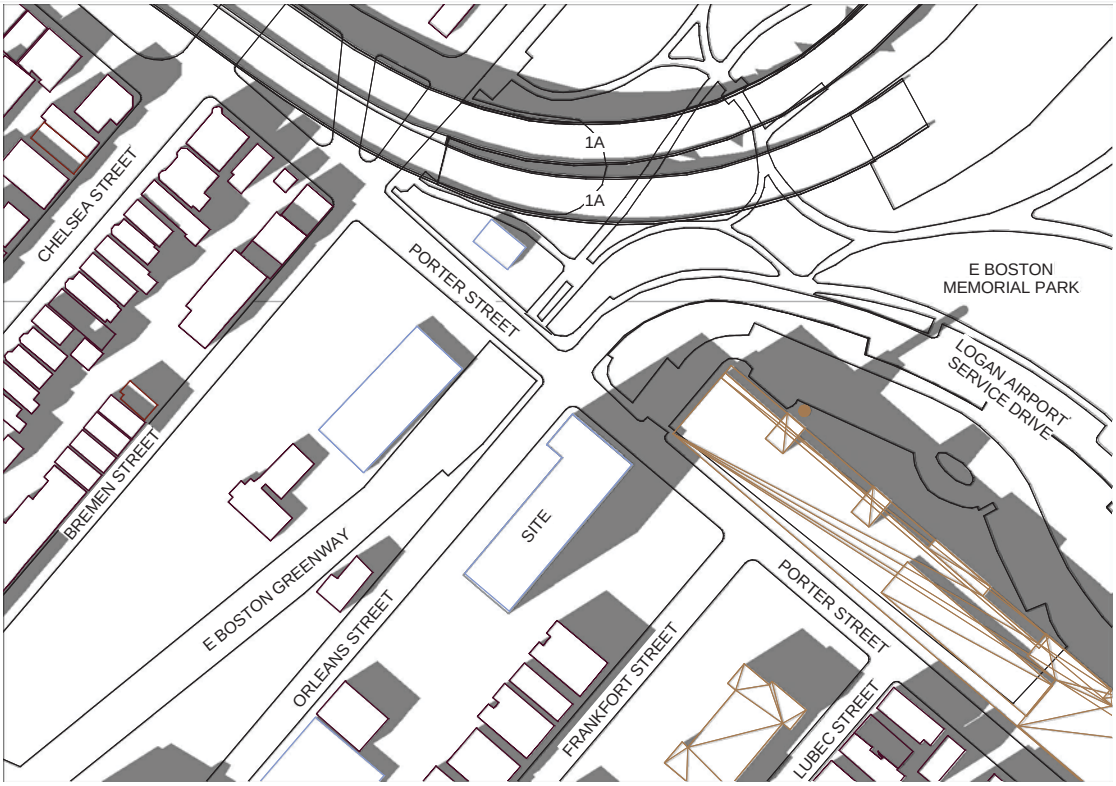

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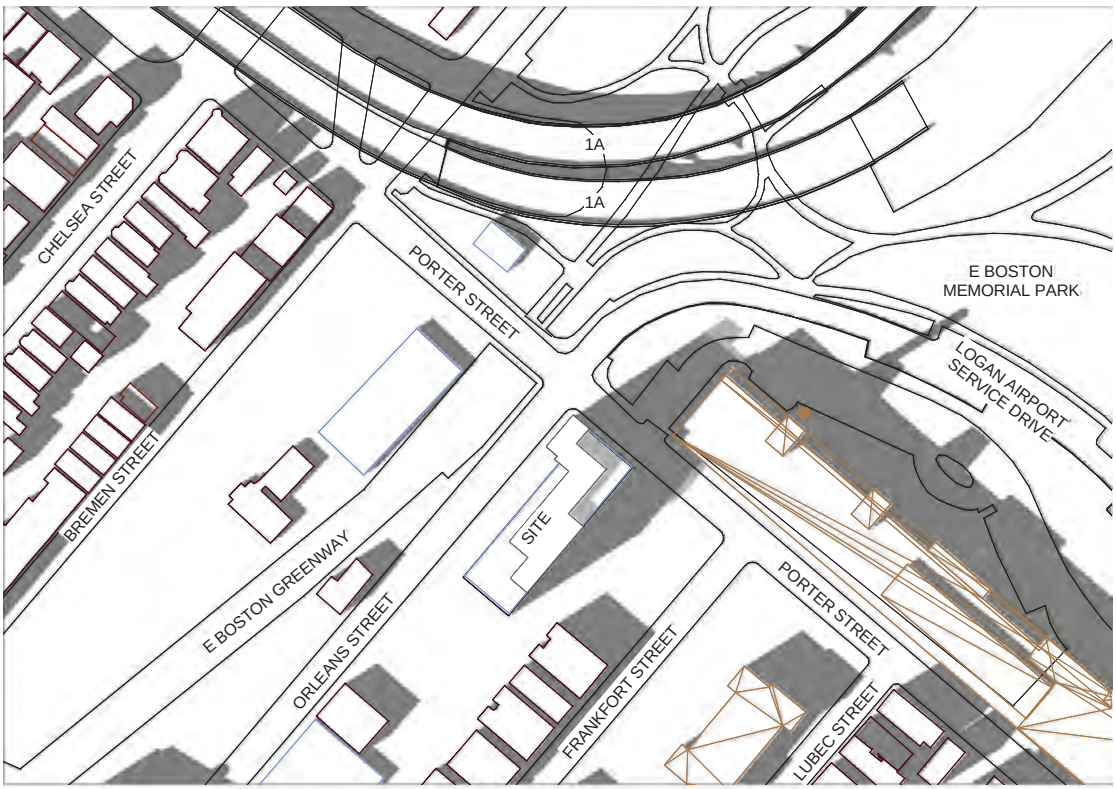

2 Proposed Shadow. Spring Equinox 3pm
1" = 200'-0"

EXISTING SHADOW

PROPOSED SHADOW

DEREK RUBINOFF ARCHITECT

Spring Equinox. March 21. 3pm.

Loftel Boston
151 Porter Street Boston, MA 02128

JOB #:	1454
SCALE:	As indicated
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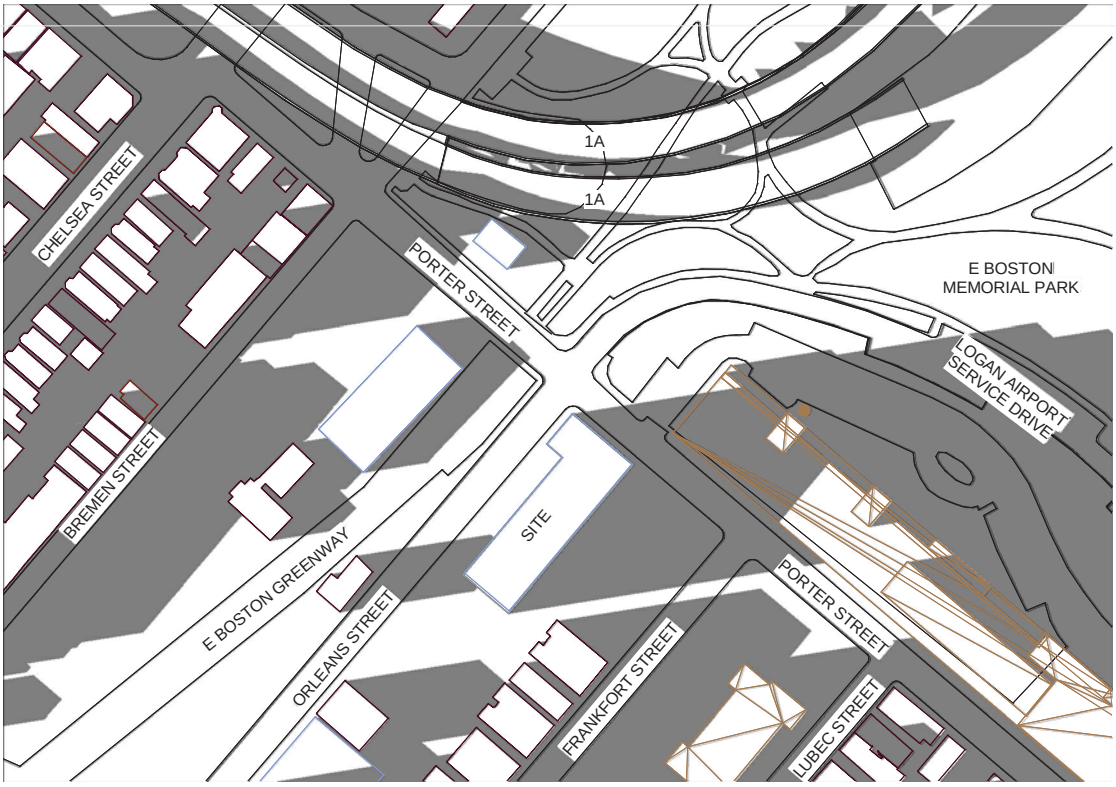
DWN BY:	Author
CROSS REF:	

SKD3



1 Existing Shadow. Spring Equinox 6pm
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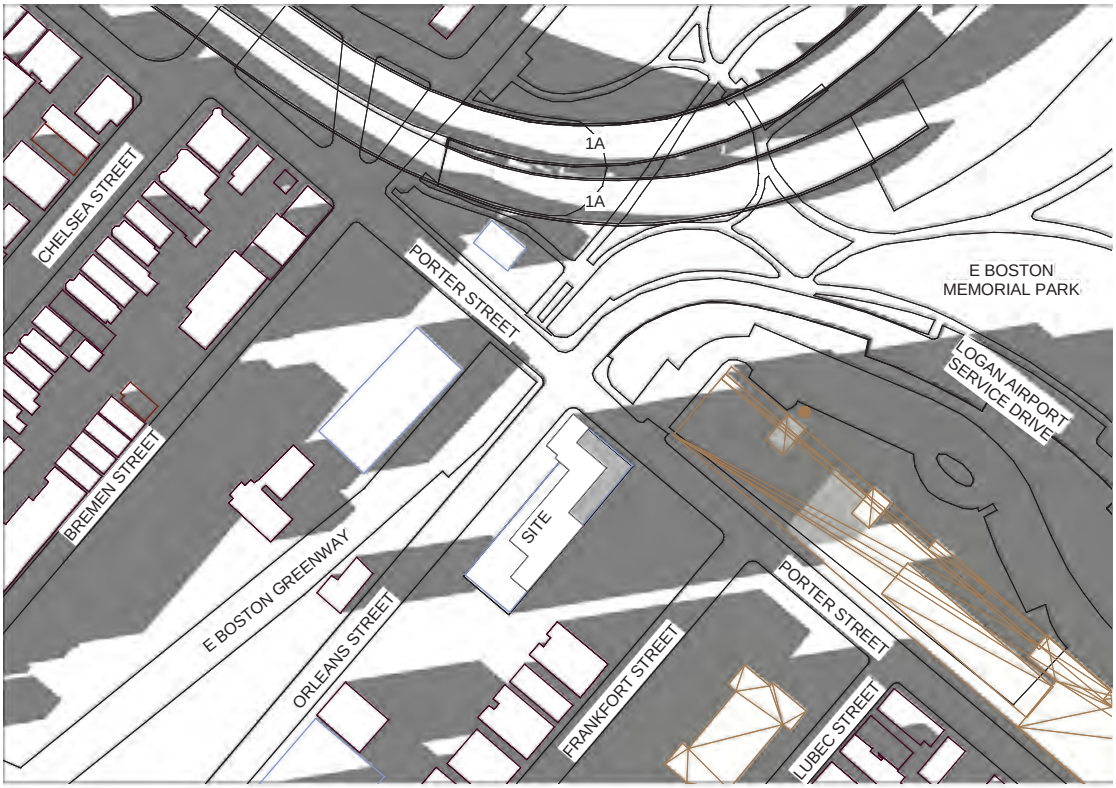

2 Proposed Shadow. Spring Equinox 6pm
1" = 200'-0"

EXISTING SHADOW

PROPOSED SHADOW

DEREK RUBINOFF ARCHITECT

Spring Equinox. March 21. 6pm.

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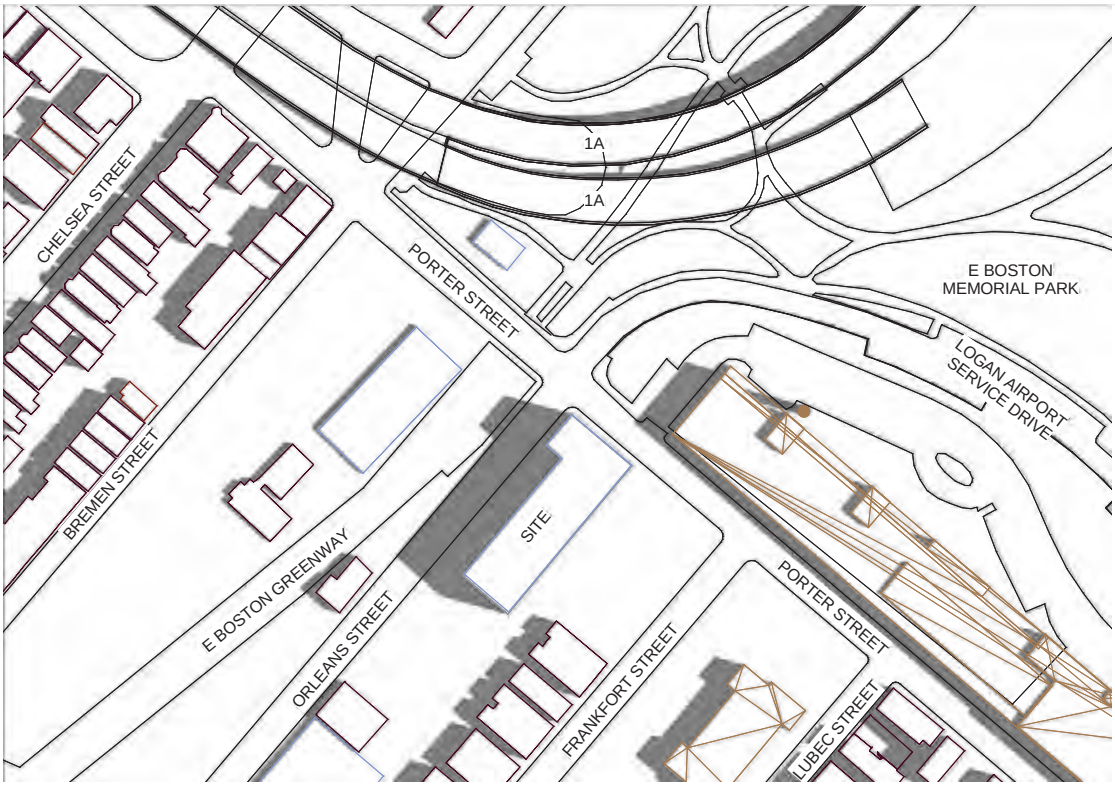
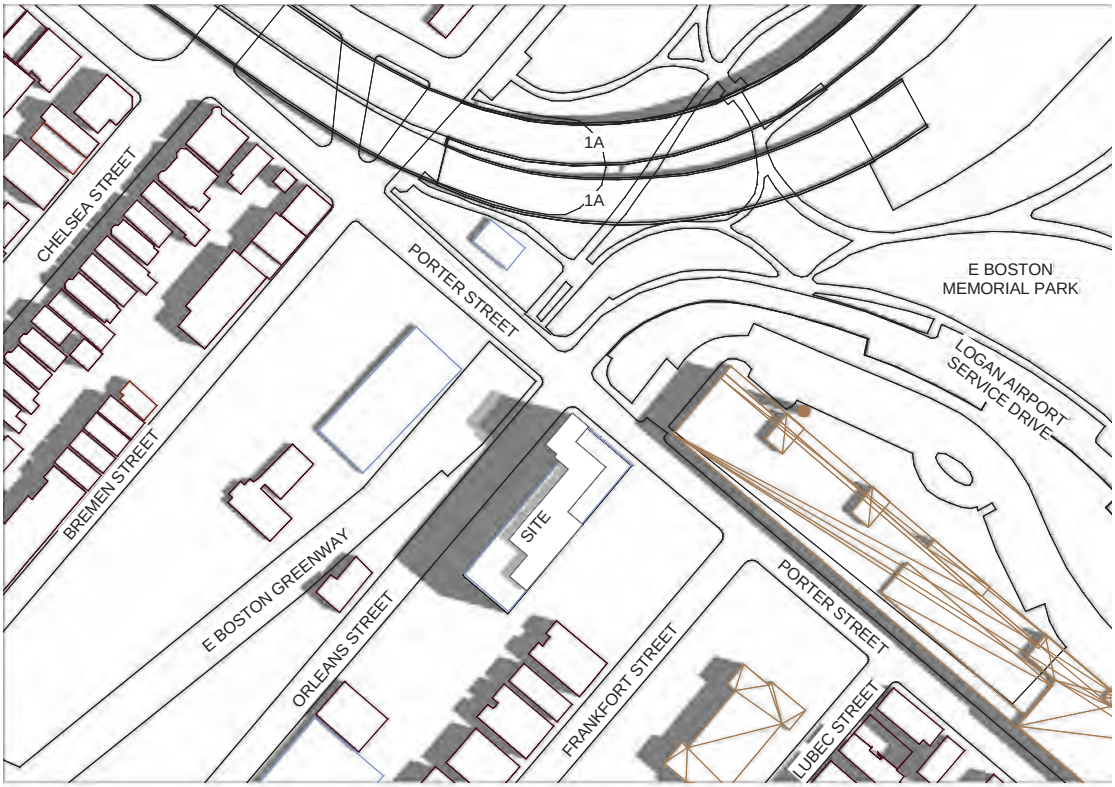
SCALE:	As indicated
DATE:	02/13/2014
DWN BY:	Author
CROSS REF:	

SKD4



1 Existing Shadow. Summer Solstice 9am
1" = 200'-0"



2 Proposed Shadow. Summer Solstice 9am
1" = 200'-0"

EXISTING SHADOW

PROPOSED SHADOW

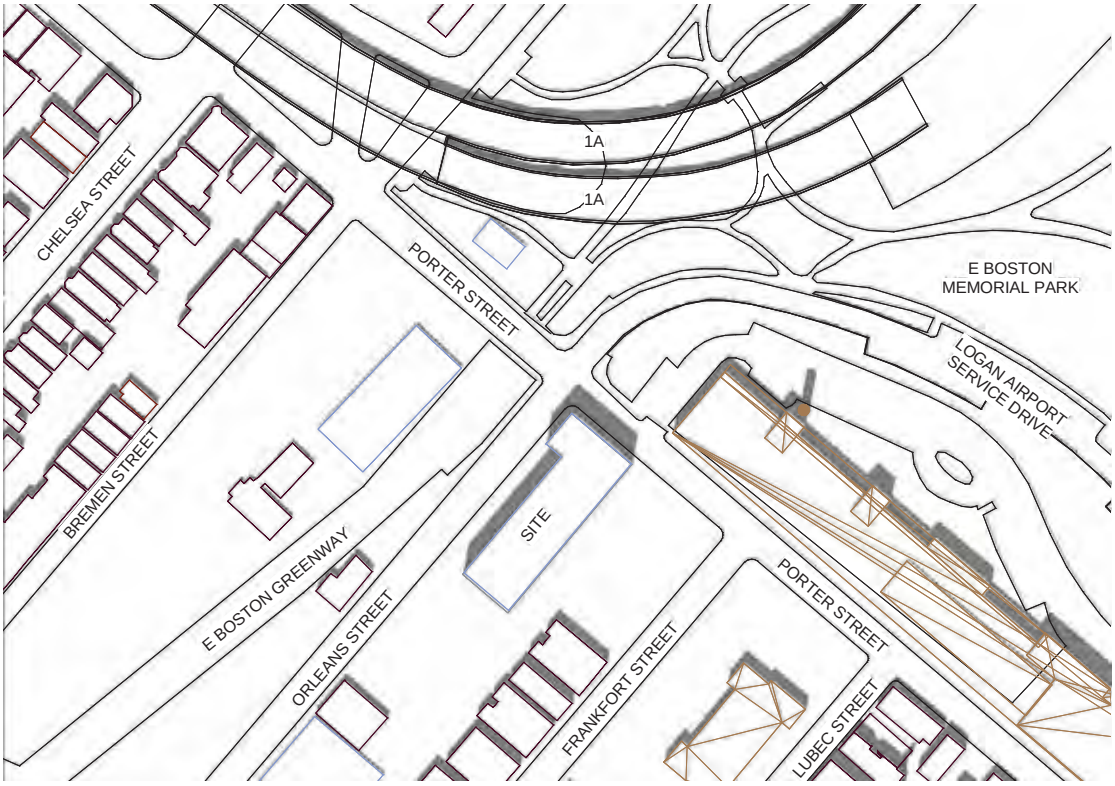
DEREK RUBINOFF ARCHITECT
[illegible]

Summer Solstice. June 22. 9am.

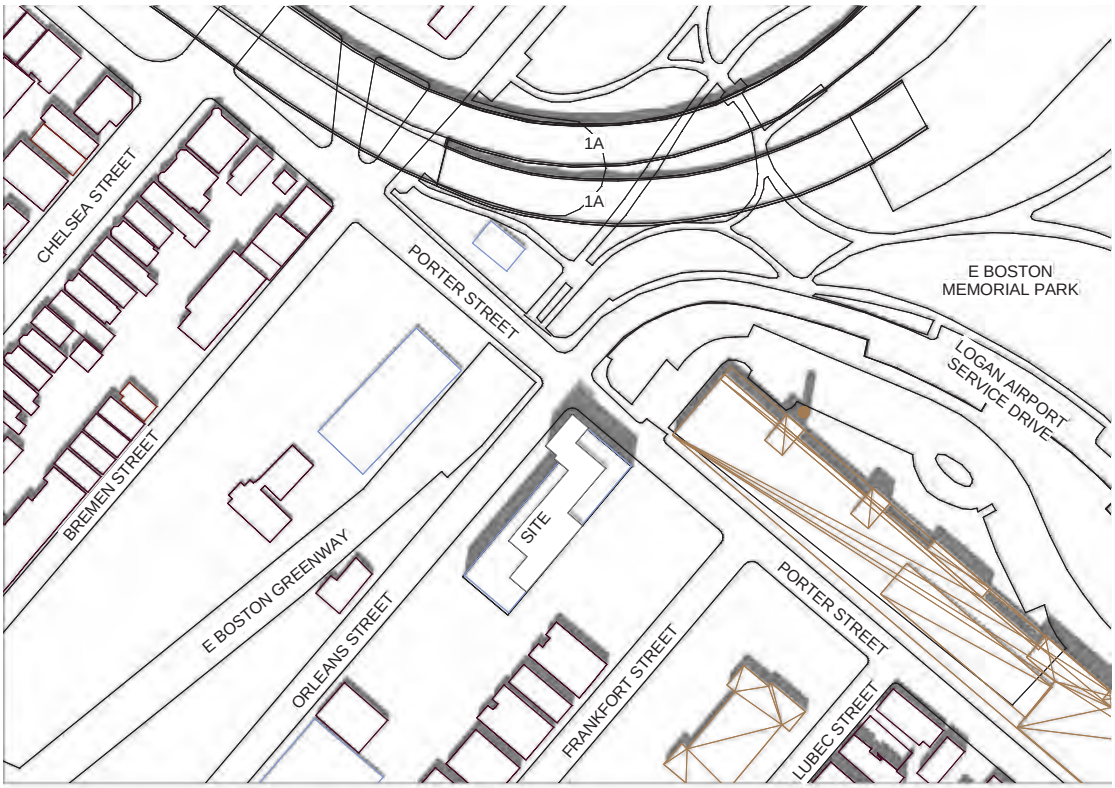
Loftel Boston
151 Porter Street Boston, MA 02128

JOB #:	1454
SCALE:	As indicated
DATE:	02/13/2014
DWN BY:	Author
CROSS REF:	

SKD5



1 Existing Shadow. Summer Solstice 12pm
1" = 200'-0"



2 Proposed Shadow. Summer Solstice 12pm
1" = 200'-0"

EXISTING SHADOW

PROPOSED SHADOW

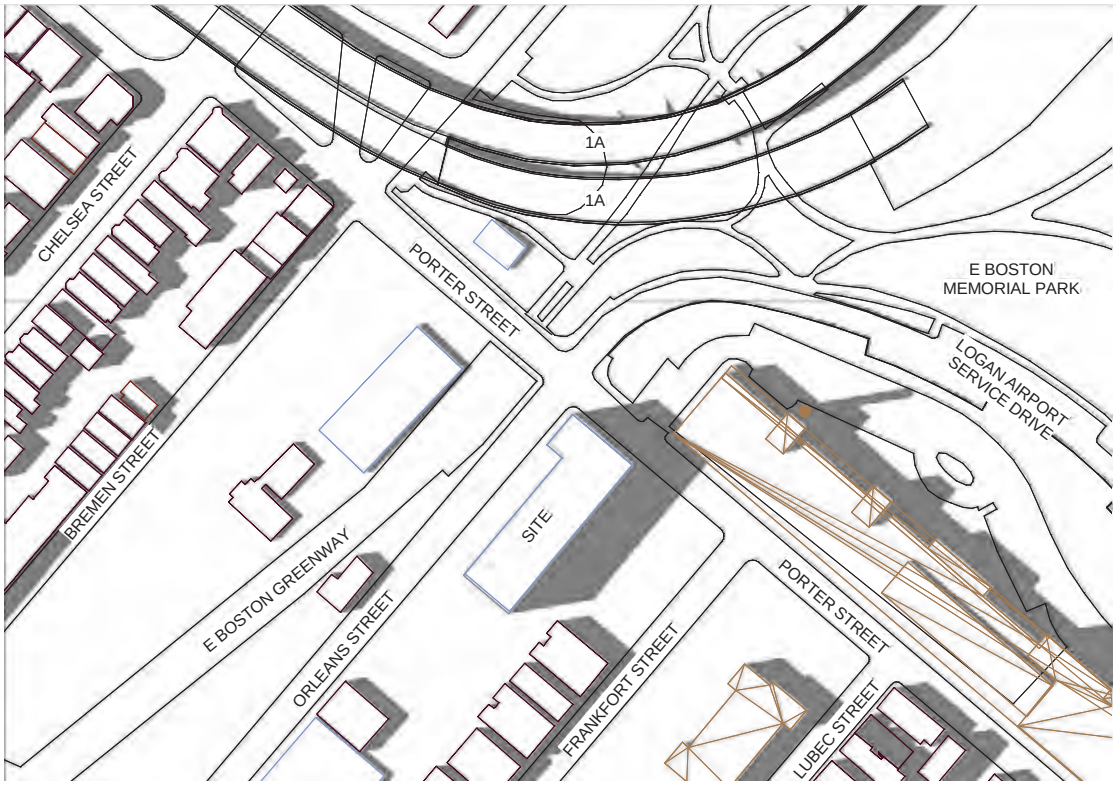
DEREK RUBINOFF ARCHITECT

Summer Solstice. June 22. 12pm.

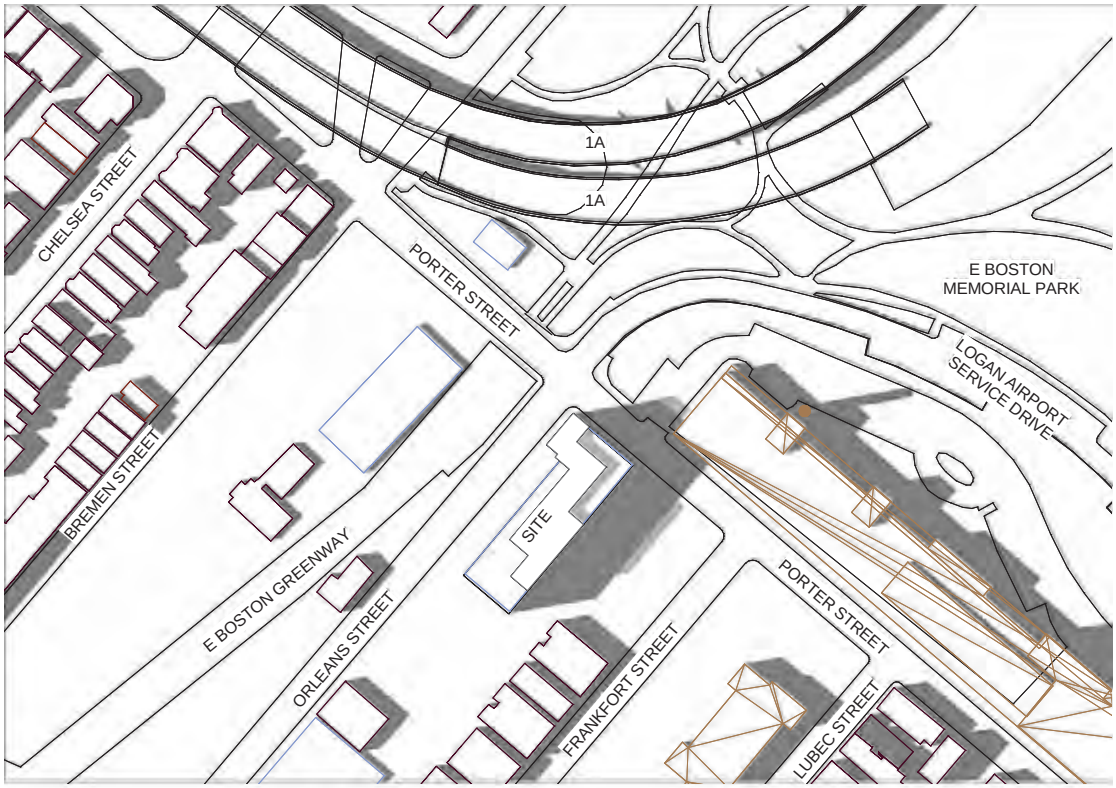
Loftel Boston
151 Porter Street Boston, MA 02128

JOB #:	1454
SCALE:	As indicated
DATE:	02/13/2014
DWN BY:	Author
CROSS REF:	

SKD6



1 Existing Shadow. Summer Solstice 3pm
1" = 200'-0"



2 Proposed Shadow. Summer Solstice 3pm
1" = 200'-0"

EXISTING SHADOW

PROPOSED SHADOW

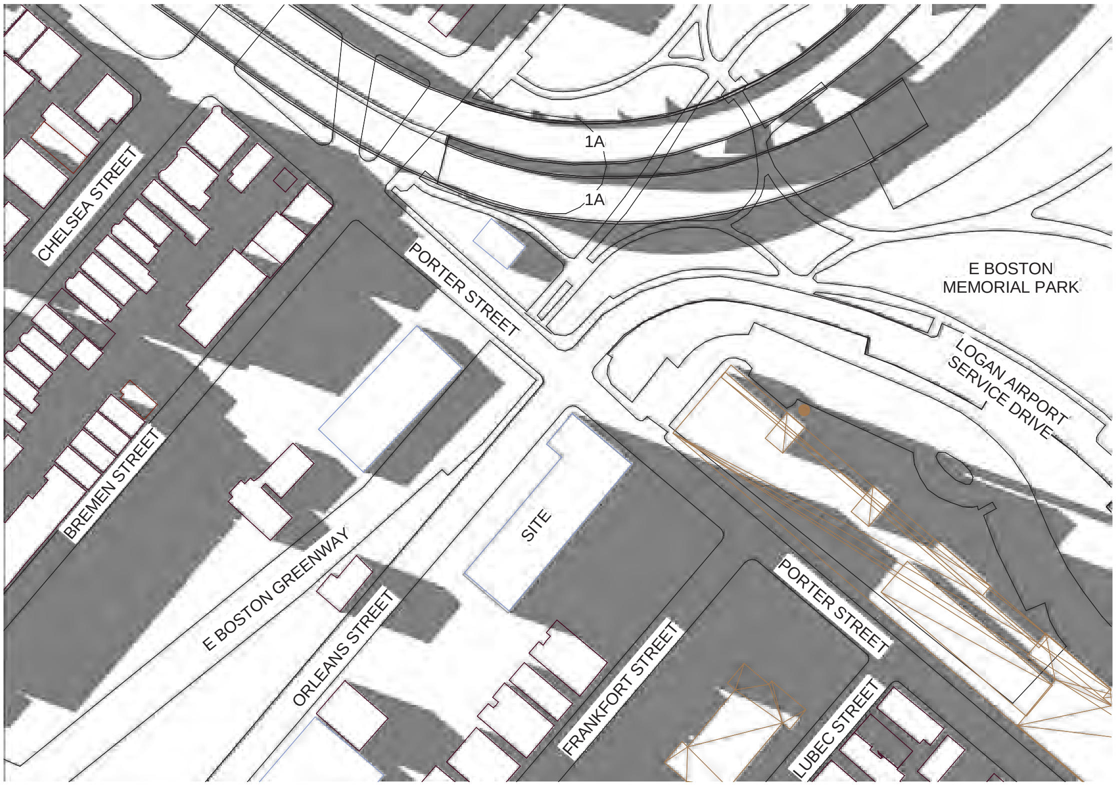
DEREK RUBINOFF ARCHITECT

Summer Solstice. June 22. 3pm.

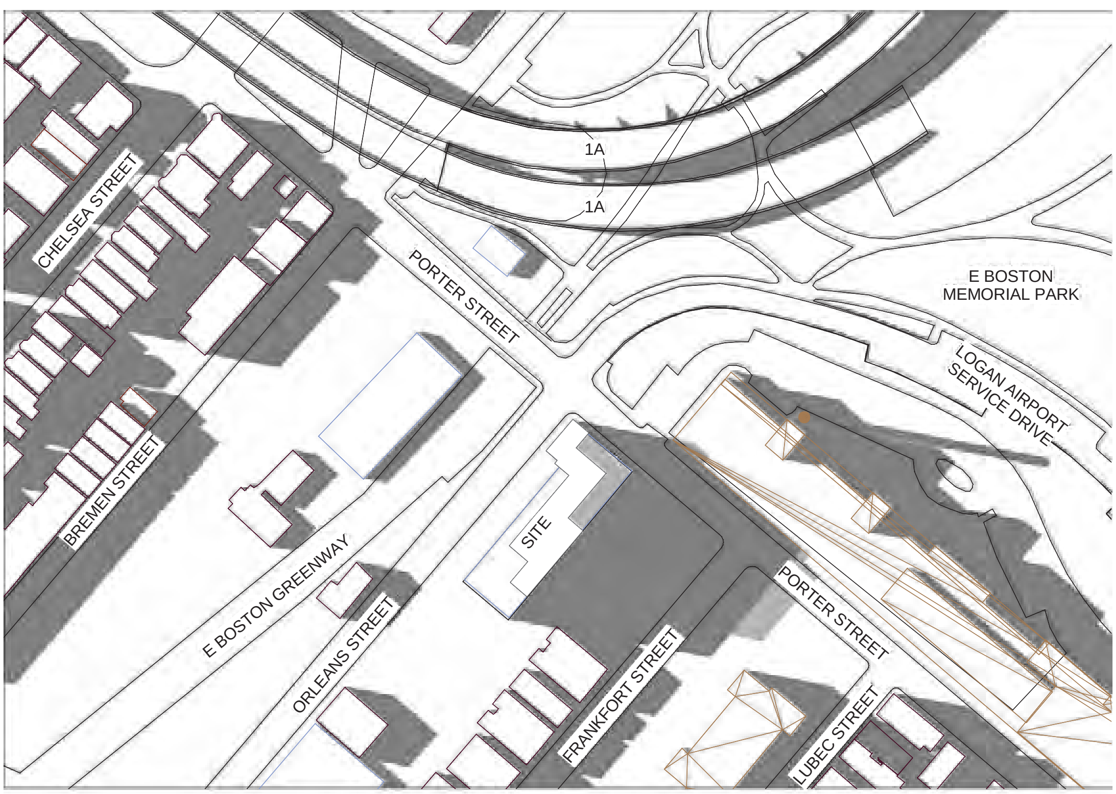
Loftel Boston
151 Porter Street Boston, MA 02128

JOB #:	1454
SCALE:	As indicated
DATE:	02/13/2014
DWN BY:	Author
CROSS REF:	

SKD7



1 Existing Shadow. Summer Solstice 6pm
1" = 200'-0"



EXISTING SHADOW

PROPOSED SHADOW

2 Proposed Shadow. Summer Solstice 6pm
1" = 200'-0"

DEREK RUBINOFF ARCHITECT

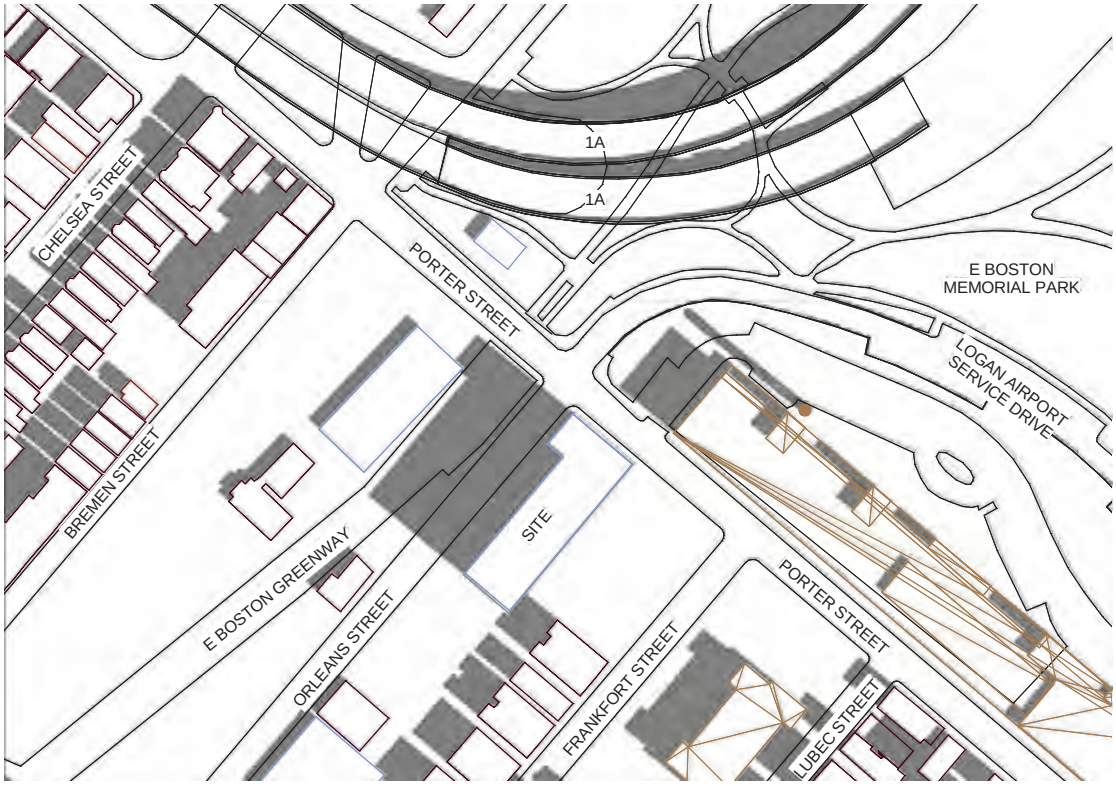
Summer Solstice. June 22. 6pm.

Loftel Boston
151 Porter Street Boston, MA 02128

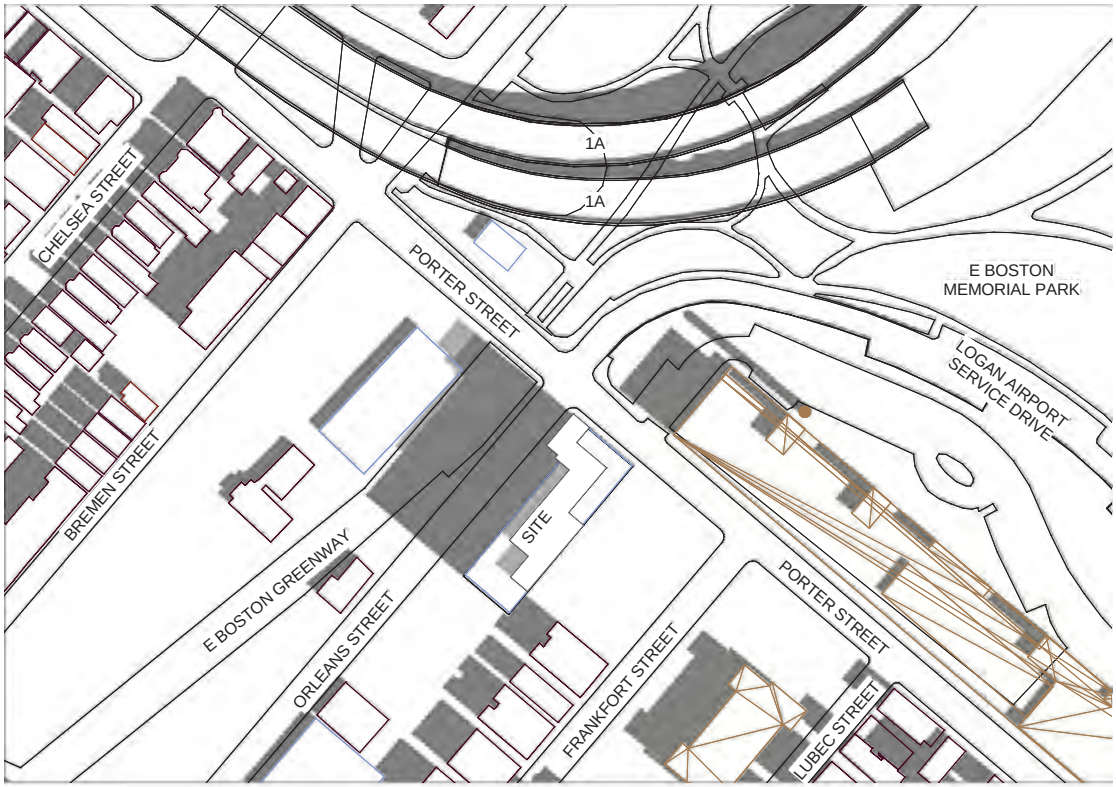
JOB #:	1454
SCALE:	As indicated
DATE:	02/13/2014
DWN BY:	Author
CROSS REF:	

SKD8

2/13/2015 6:07:04 PM   \\RUBINOFFLAPTOP\Jobs 2\151 Porter Street old don't use\Revit\Central\Shadow Study1.rvt



1 Existing Shadow. Autumn Equinox 9am
1" = 200'-0"



2 Proposed Shadow. Autumn Equinox 9am
1" = 200'-0"

EXISTING SHADOW

PROPOSED SHADOW

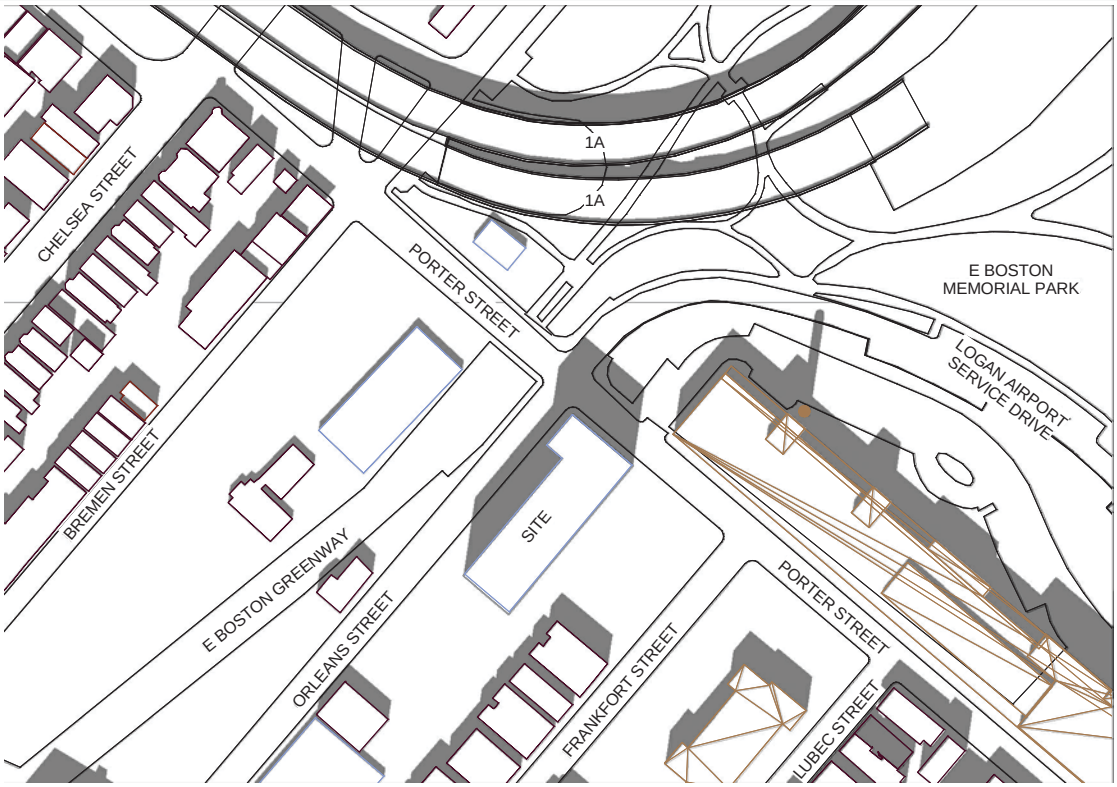
DEREK RUBINOFF ARCHITECT

Autumn Equinox. September 21. 9am.

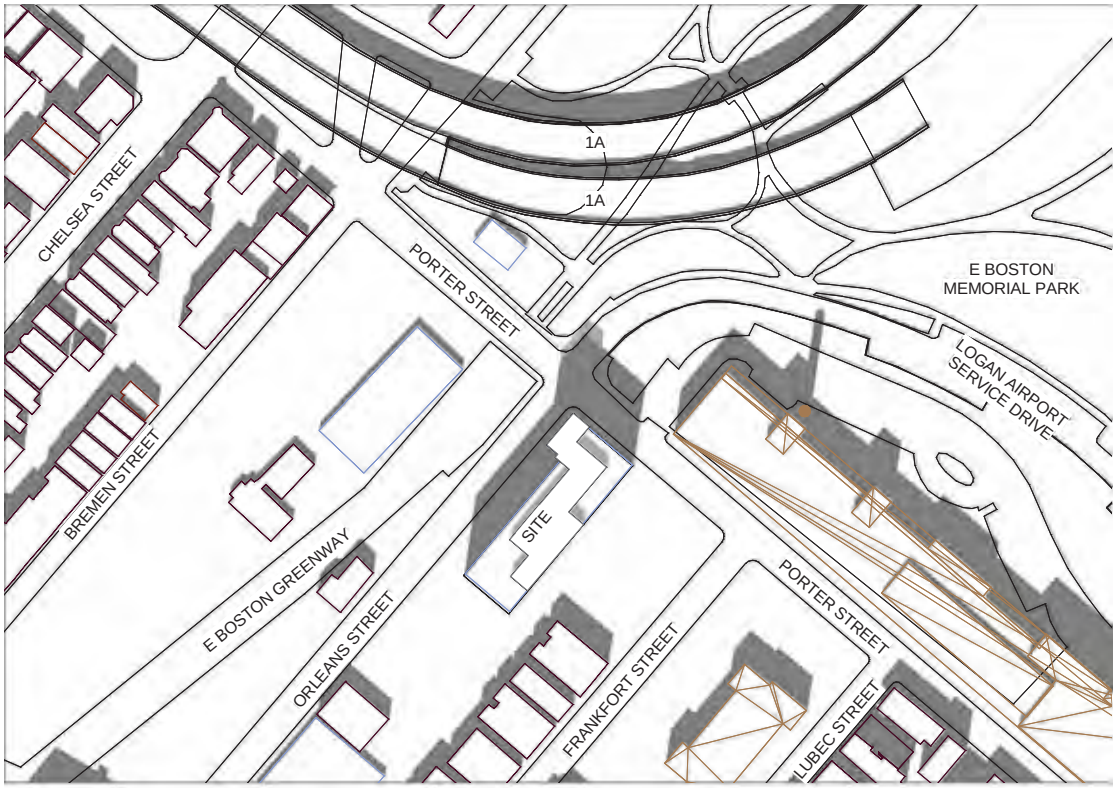
Loftel Boston
151 Porter Street Boston, MA 02128

JOB #:	1454
SCALE:	As indicated
DATE:	02/13/2014
DWN BY:	Author
CROSS REF:	

SKD9



1 Existing Shadow. Autumn Equinox 12pm
1" = 200'-0"



2 Proposed Shadow. Autumn Equinox 12pm
1" = 200'-0"

EXISTING SHADOW

PROPOSED SHADOW

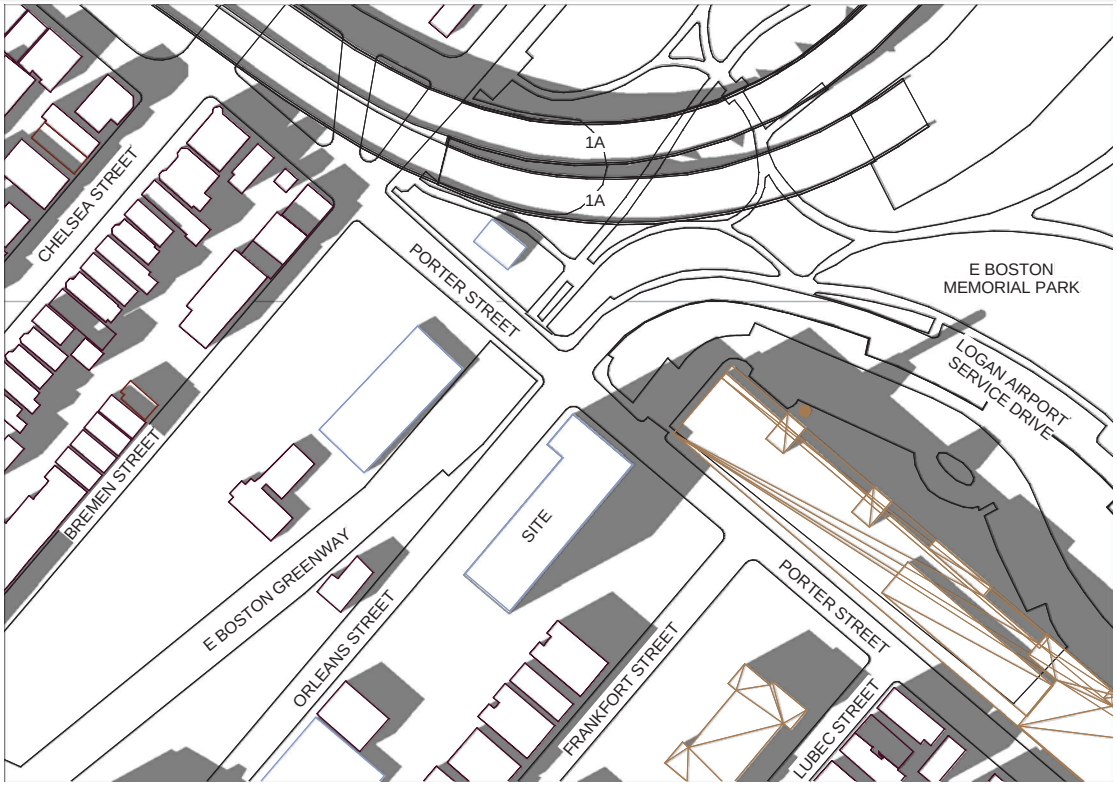
DEREK RUBINOFF ARCHITECT

Autumn Equinox. September 21. 12pm.

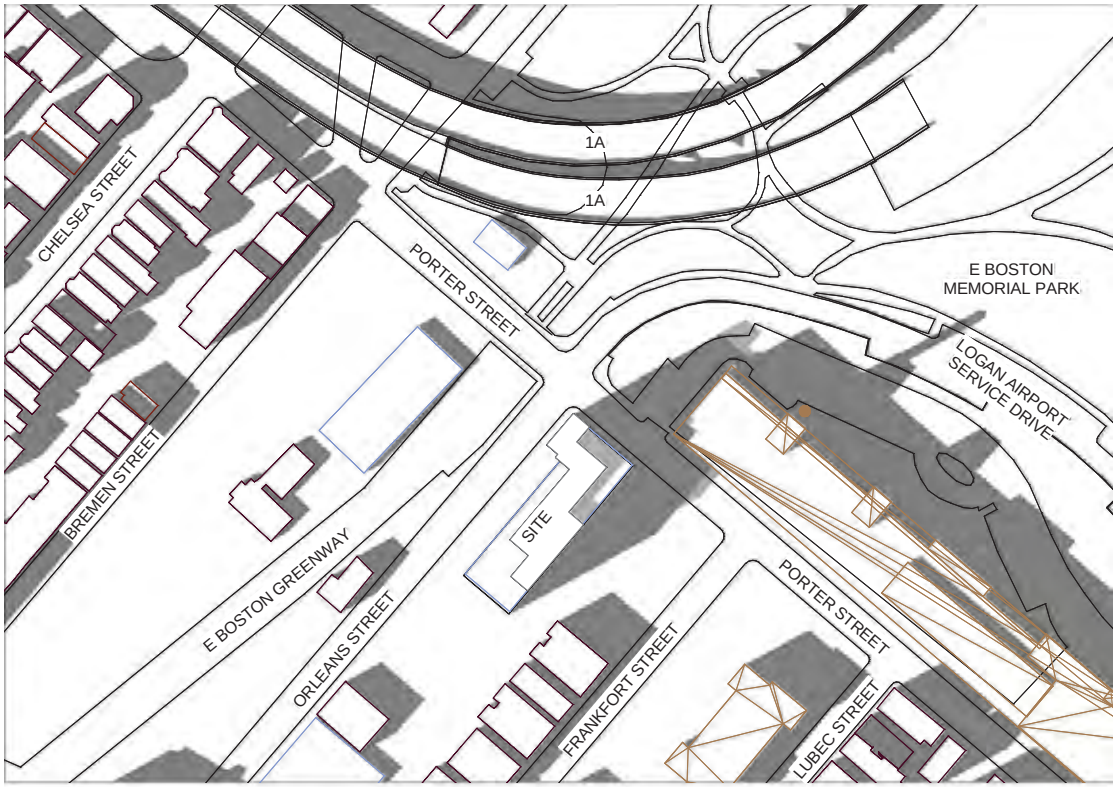
Loftel Boston
151 Porter Street Boston, MA 02128

JOB #:	1454
SCALE:	As indicated
DATE:	02/13/2014
DWN BY:	Author
CROSS REF:	

SKD10



1 Existing Shadow. Autumn Equinox 3pm
1" = 200'-0"



2 Proposed Shadow. Autumn Equinox 3pm
1" = 200'-0"

EXISTING SHADOW

PROPOSED SHADOW

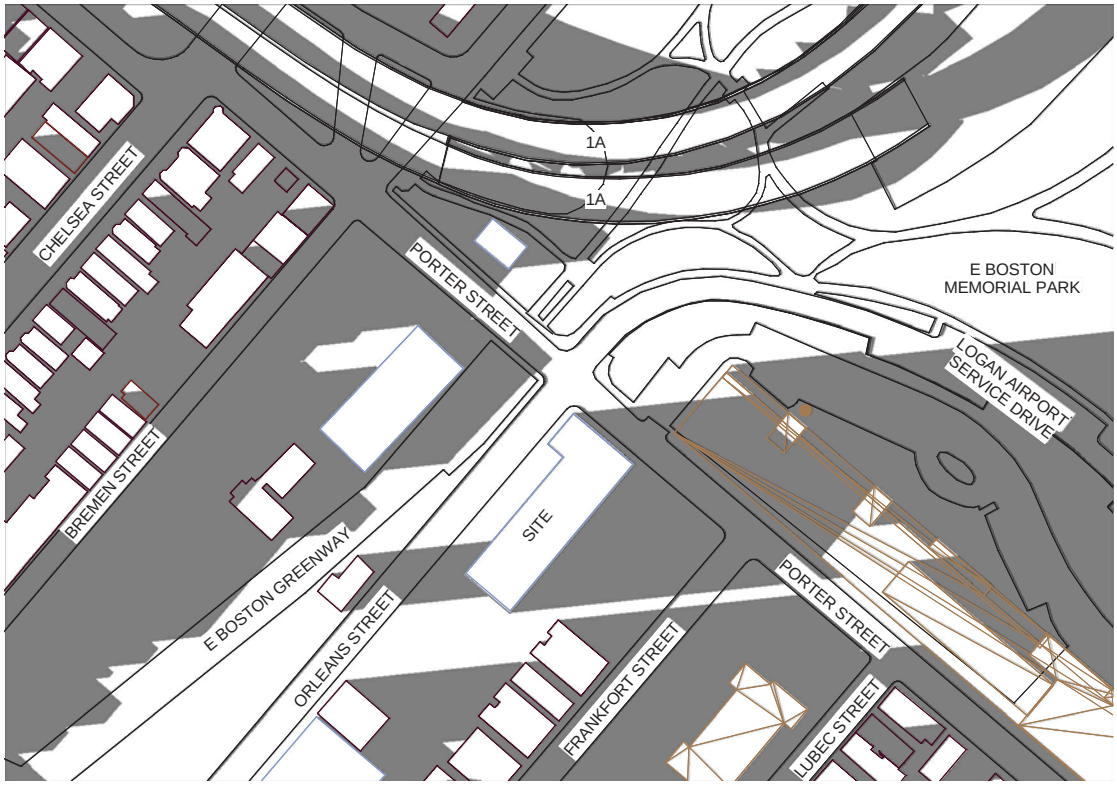
DEREK RUBINOFF ARCHITECT

Autumn Equinox. September 21. 3pm.

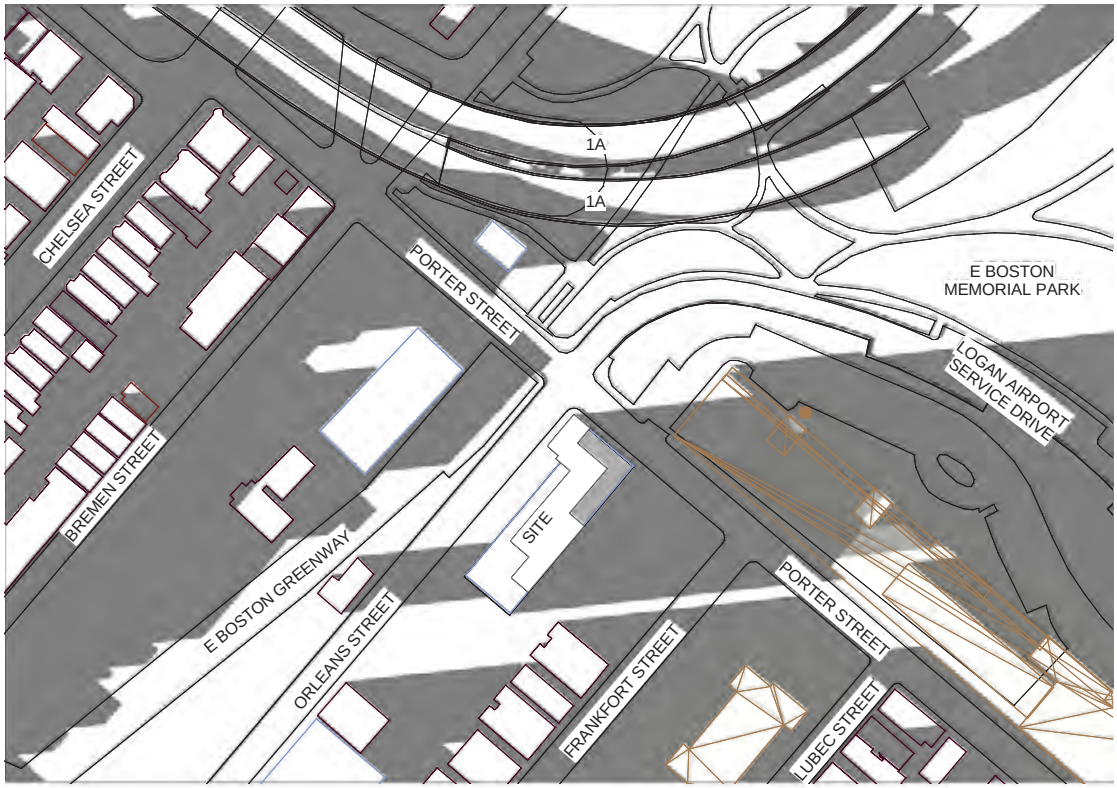
Loftel Boston
151 Porter Street Boston, MA 02128

JOB #:	1454
SCALE:	As indicated
DATE:	02/13/2014
DWN BY:	Author
CROSS REF:	

SKD11



1 Existing Shadow. Autumn Equinox 6pm
1" = 200'-0"



2 Proposed Shadow. Autumn Equinox 6pm
1" = 200'-0"

EXISTING SHADOW

PROPOSED SHADOW

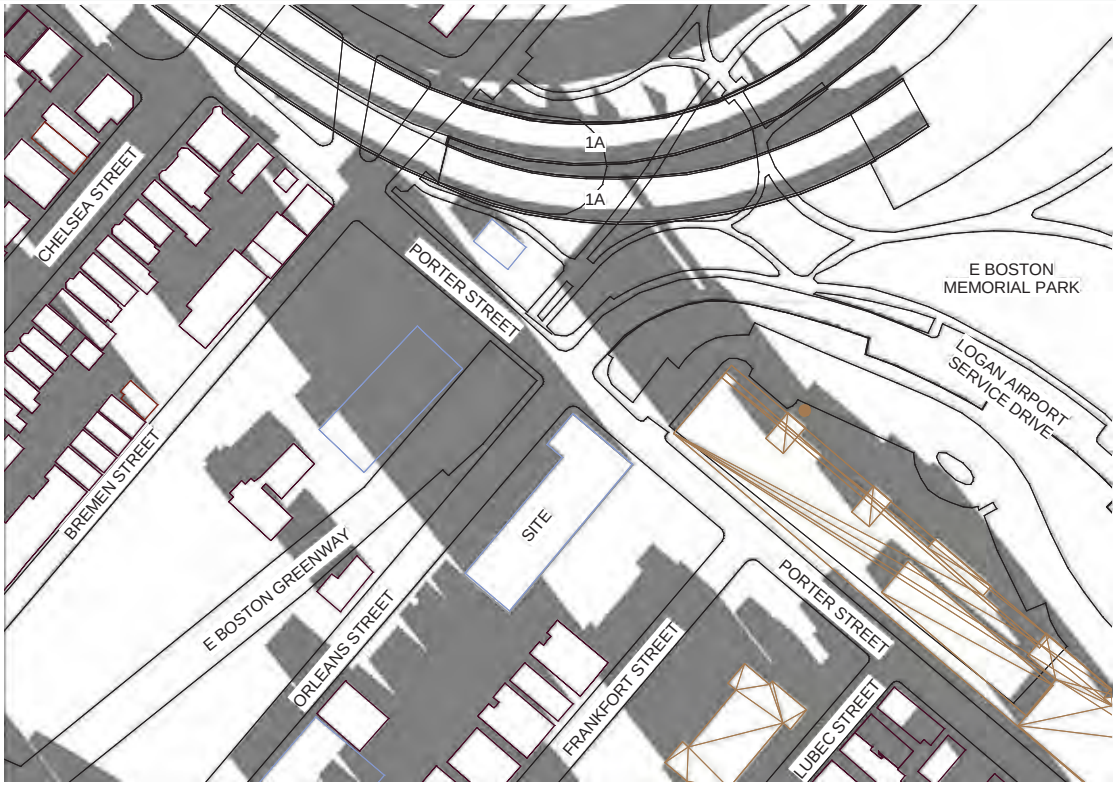
DEREK RUBINOFF ARCHITECT

Autumn Equinox. September 21. 6pm.

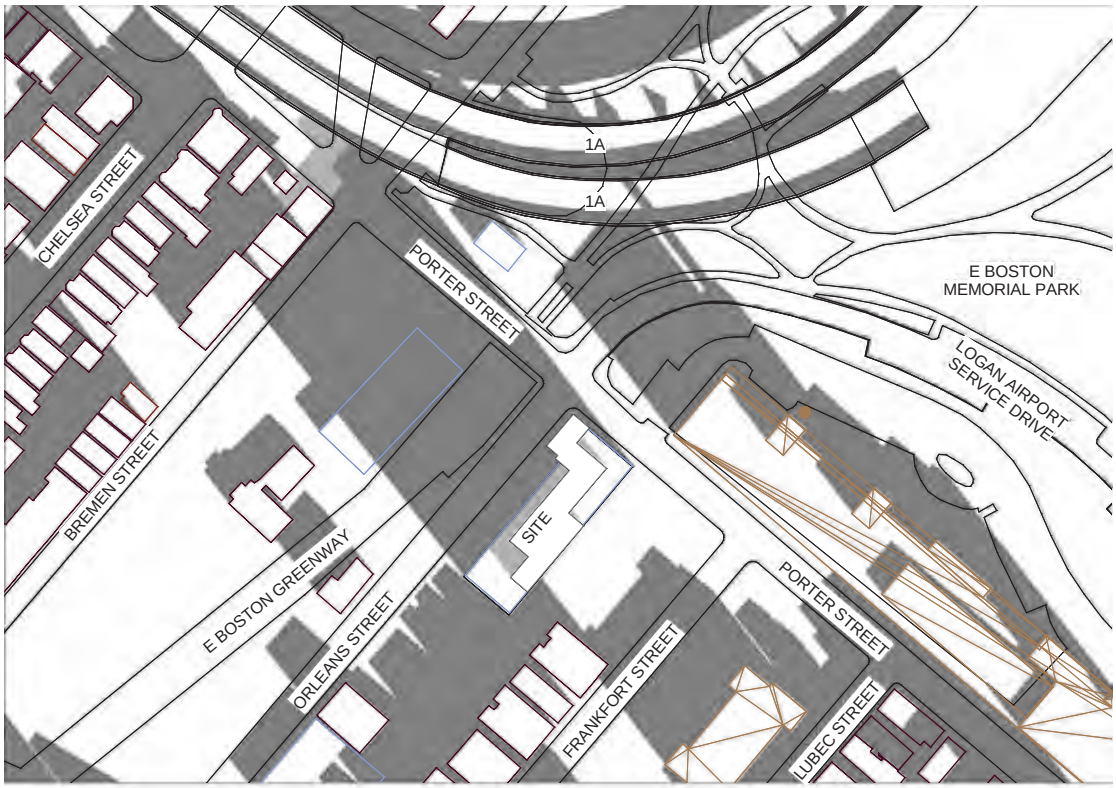
Loftel Boston
151 Porter Street Boston, MA 02128

JOB #:	1454
SCALE:	As indicated
DATE:	02/13/2014
DWN BY:	Author
CROSS REF:	

SKD12



1 Existing Shadow. Winter Solstice 9am
1" = 200'-0"



2 Proposed Shadow. Winter Solstice 9am
1" = 200'-0"

EXISTING SHADOW

PROPOSED SHADOW

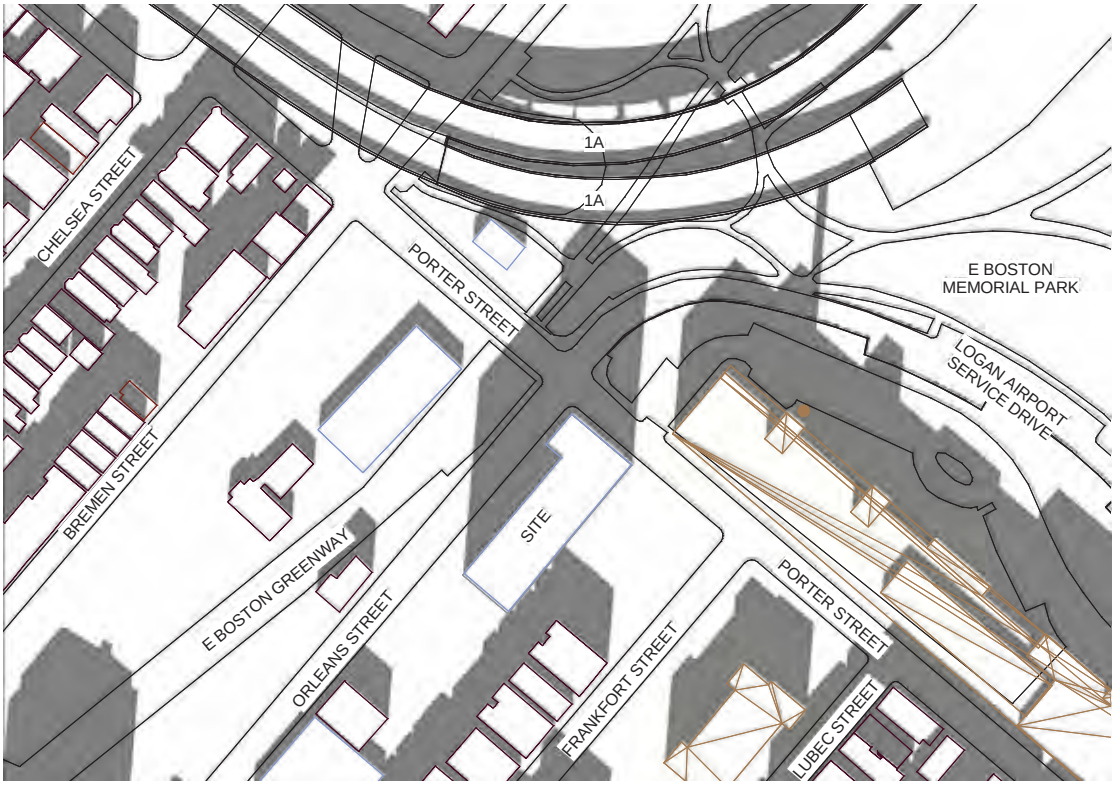
DEREK RUBINOFF ARCHITECT

Winter Solstice. December 21. 9am.

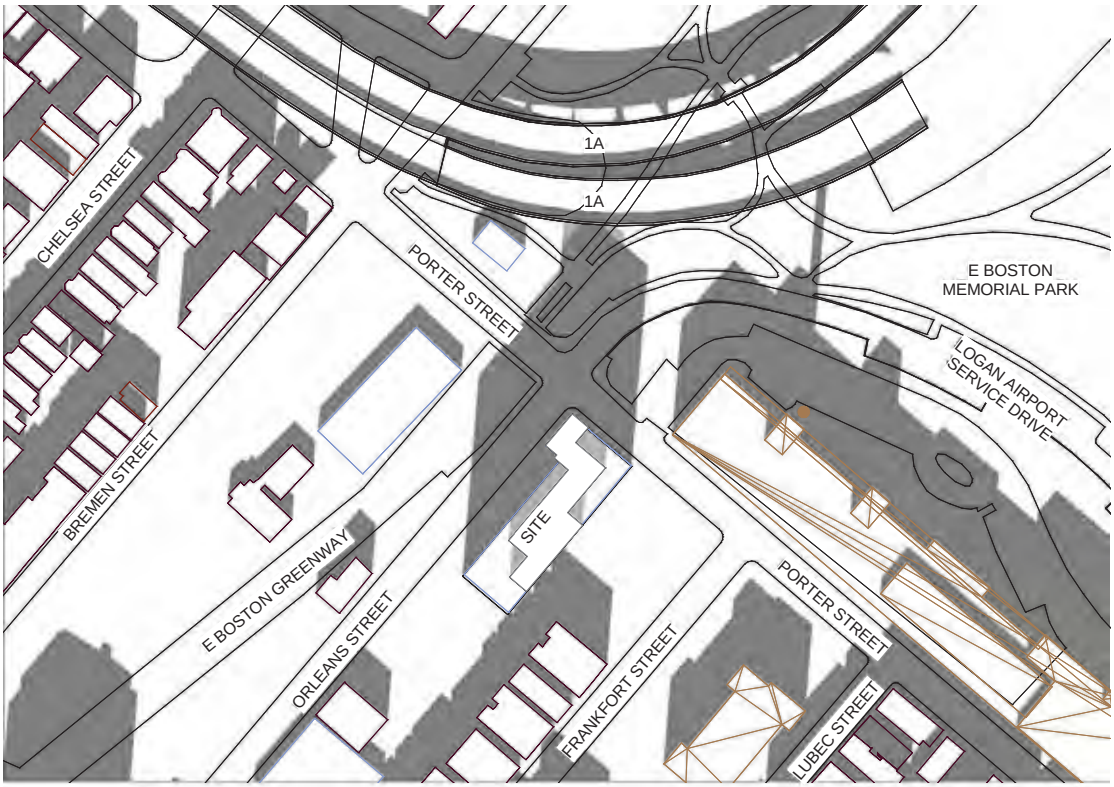
Loftel Boston
151 Porter Street Boston, MA 02128

JOB #:	1454
SCALE:	As indicated
DATE:	02/13/2014
DWN BY:	Author
CROSS REF:	

SKD13



1 Existing Shadow. Winter Solstice 12pm
1" = 200'-0"



2 Proposed Shadow. Winter Solstice 12pm
1" = 200'-0"

EXISTING SHADOW

PROPOSED SHADOW

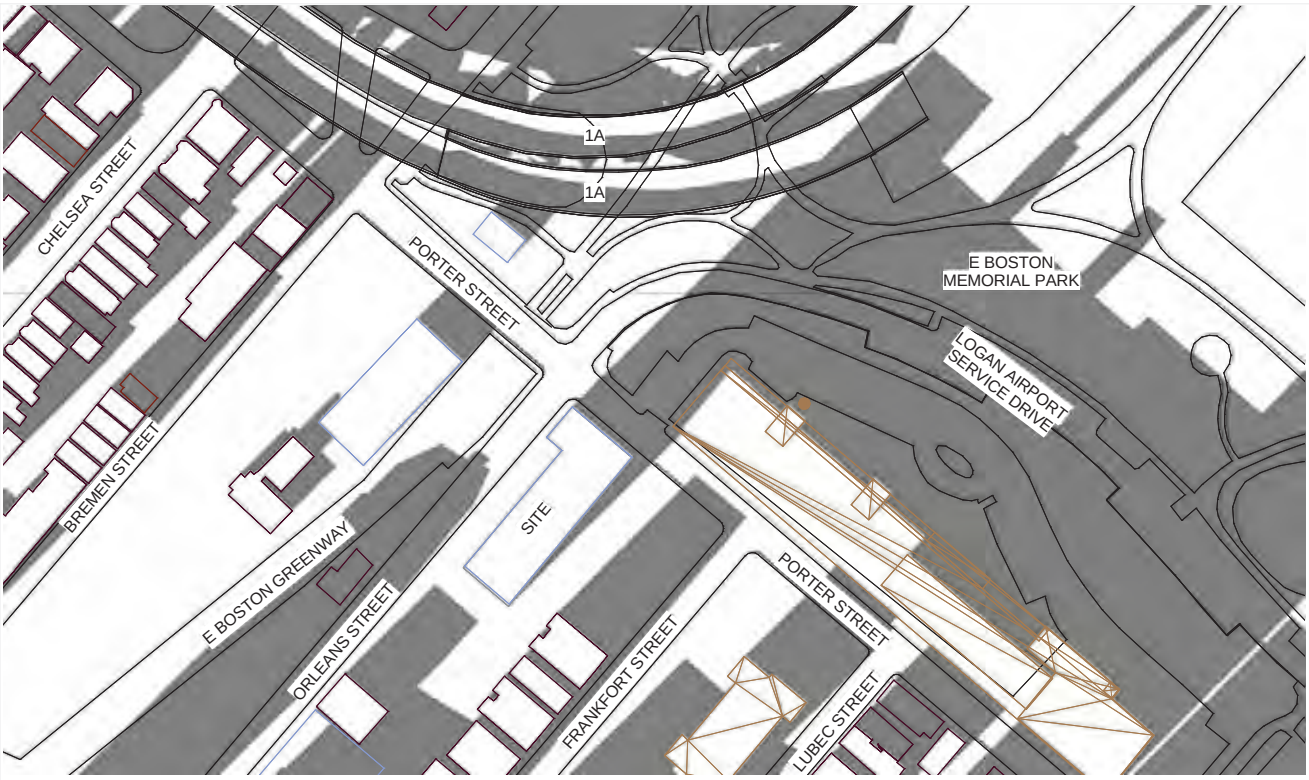
DEREK RUBINOFF ARCHITECT

Winter Solstice. December 21. 12pm.

Loftel Boston
151 Porter Street Boston, MA 02128

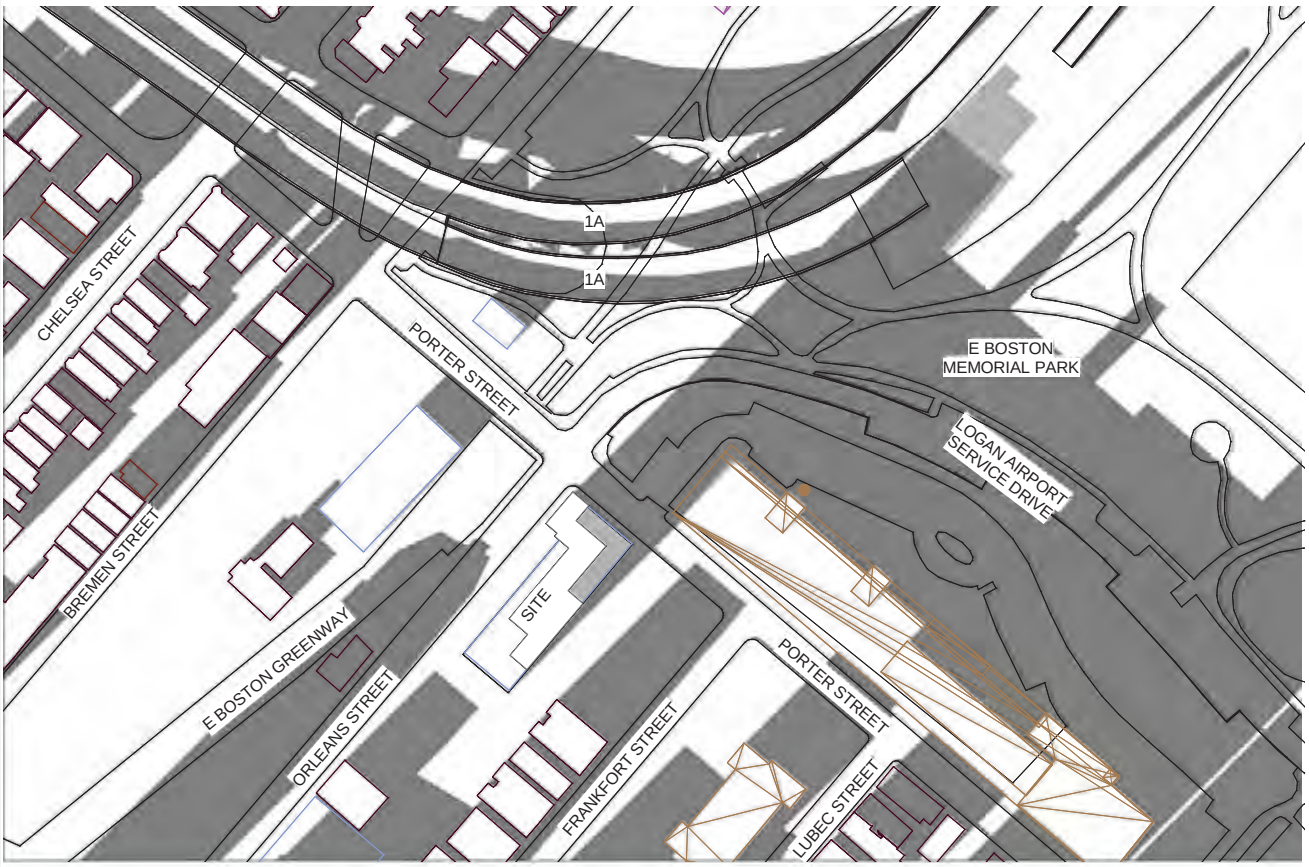
JOB #:	1454
SCALE:	As indicated
DATE:	02/13/2014
DWN BY:	Author
CROSS REF:	

SKD14



1 Existing Shadow. Winter Solstice 3pm

1" = 200'-0"



EXISTING SHADOW

PROPOSED SHADOW

2 Proposed Shadow. Winter Solstice 3pm

1" = 200'-0"

DEREK RUBINOFF ARCHITECT

Winter Solstice. December 21. 3pm.

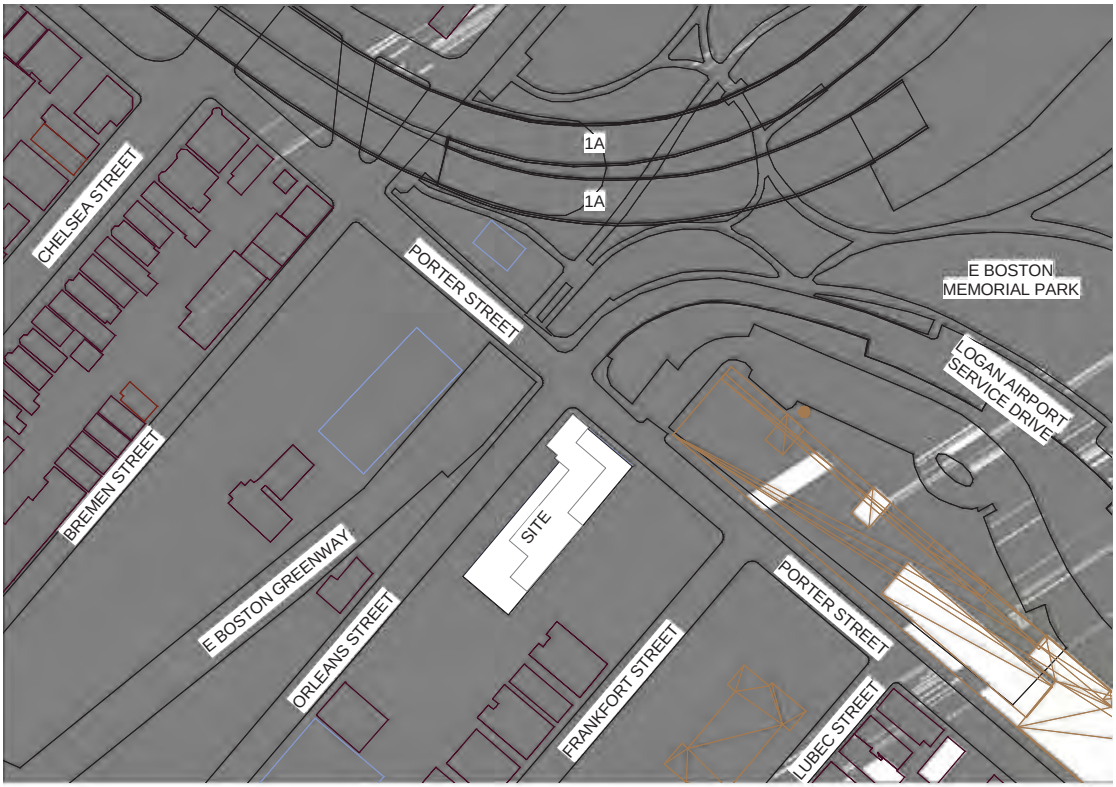
Loftel Boston

151 Porter Street Boston, MA 02128

JOB #:	1454
SCALE:	As indicated
DATE:	02/13/2014
DWN BY:	Author
CROSS REF:	

SKD15

1 Existing Shadow. Winter Solstice 6pm
1" = 200'-0"



2 Proposed Shadow. Winter Solstice 6pm
1" = 200'-0"

EXISTING SHADOW

PROPOSED SHADOW

DEREK RUBINOFF ARCHITECT

Winter Solstice. December 21. 6pm.

Loftel Boston
151 Porter Street Boston, MA 02128

JOB #:	1454
SCALE:	As indicated
DATE:	02/13/2014
DWN BY:	Author
CROSS REF:	

SKD16

APPENDIX B – LEED CHECKLIST

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

Project Checklist

Project Name: Loftel Boston
Date: 23-Feb-15

Y	?	N			
		1	Credit	Integrative Process	1

11	1	20	**Location and Transportation**		32
		16	Credit	LEED for Neighborhood Development Location	16
1			Credit	Sensitive Land Protection	1
		2	Credit	High Priority Site	2
3		2	Credit	Surrounding Density and Diverse Uses	5
5			Credit	Access to Quality Transit	5
1			Credit	Bicycle Facilities	1
	1		Credit	Reduced Parking Footprint	1
1			Credit	Green Vehicles	1

0	9	1	**Sustainable Sites**		10
Y			Prereq	Construction Activity Pollution Prevention	Required
	1		Credit	Site Assessment	1
	2		Credit	Site Development - Protect or Restore Habitat	2
		1	Credit	Open Space	1
	3		Credit	Rainwater Management	3
	2		Credit	Heat Island Reduction	2
	1		Credit	Light Pollution Reduction	1

5	2	4	**Water Efficiency**		11
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
		2	Credit	Outdoor Water Use Reduction	2
4	2		Credit	Indoor Water Use Reduction	6
		2	Credit	Cooling Tower Water Use	2
1			Credit	Water Metering	1

22	2	9	**Energy and Atmosphere**		33
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
4	2		Credit	Enhanced Commissioning	6
18			Credit	Optimize Energy Performance	18
		1	Credit	Advanced Energy Metering	1
		2	Credit	Demand Response	2
		3	Credit	Renewable Energy Production	3
		1	Credit	Enhanced Refrigerant Management	1
		2	Credit	Green Power and Carbon Offsets	2

4	3	6	**Materials and Resources**		13
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
2	3		Credit	Building Life-Cycle Impact Reduction	5
		2	Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
		2	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
		2	Credit	Building Product Disclosure and Optimization - Material Ingredients	2
2			Credit	Construction and Demolition Waste Management	2

6	3	7	**Indoor Environmental Quality**		16
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
		2	Credit	Enhanced Indoor Air Quality Strategies	2
		3	Credit	Low-Emitting Materials	3
1			Credit	Construction Indoor Air Quality Management Plan	1
		2	Credit	Indoor Air Quality Assessment	2
1			Credit	Thermal Comfort	1
1	1		Credit	Interior Lighting	2
2	1		Credit	Daylight	3
1			Credit	Quality Views	1
	1		Credit	Acoustic Performance	1

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

2	1	1	**Regional Priority**		4
1			Credit	Regional Priority: Optimize Energy Performance (Point Threshold:8)	1
	1		Credit	Regional Priority: Rainwater Management (Point Threshold:2)	1
1			Credit	Regional Priority: Indoor Water Use Reduction (Point Threshold:4)	1
		1	Credit	Regional Priority: Specific Credit	1

50	22	54	**TOTALS**	Possible Points:	126

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

CONTACT DETAILS

TEL +1 617 330 8000
FAX +1 617 330 8127

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160 Federal Street
Boston, MA, 02110

www.colliers.com