PUBLIC NOTICE

The Boston Redevelopment Authority ("BRA"), pursuant to Article 80 of the Boston Zoning Code (the "Code"), hereby gives notice that a Project Notification Form for Large Project Review ("PNF") was filed by 920 Development, LLC (the "Proponent"), on October 6, 2011 for a proposed self-storage facility planned to be built at 280-300 E Street in South Boston (the "Proposed Project").

The Proposed Project consists of a 98,000 square-foot, 4-story self storage facility to be built on a vacant, 1.68-acre parcel at 280-300 E Street, at the intersection of E Street and the proposed Cypher Street Extension. The proposed Project will be contextually designed and the Project site will be extensively landscaped. The Project includes sixteen parking spaces (including two handicap spaces) and three loading bays.

The Proponent will seek the issuance of a Certificate of Compliance by the Director of the BRA in accordance with Section 80B-6 of the Code after completion of Large Project Review under Article 80B of the Code. In the Scoping Determination for such PNF, the BRA may waive further review pursuant to Section 80B-5.3(d) of the Code, if, after reviewing public comments, it finds that such PNF adequately describes the Proposed Project's impacts.

The PNF, filed October 6, 2011, may be reviewed in the following locations except on legal holidays:

Office of the Secretary of the BRA
Room 910
Boston City Hall
Boston, MA 02201
(Monday through Friday, 9:00AM to 5:00PM)

Boston Public Library

Central Library
700 Boylston Street
Copley Square, Boston, MA 02116
Mon, Tue, Wed, Thu 9:00AM to 9:00PM
Fri, Sat 9:00AM to 5:00PM

South Boston Branch
646 East Broadway
South Boston, MA 02127
Mon and Thu 10:00AM to 8:00PM
Tue and Wed 12:00PM to 6:00PM
Fri and Sat 9:00AM to 5:00PM

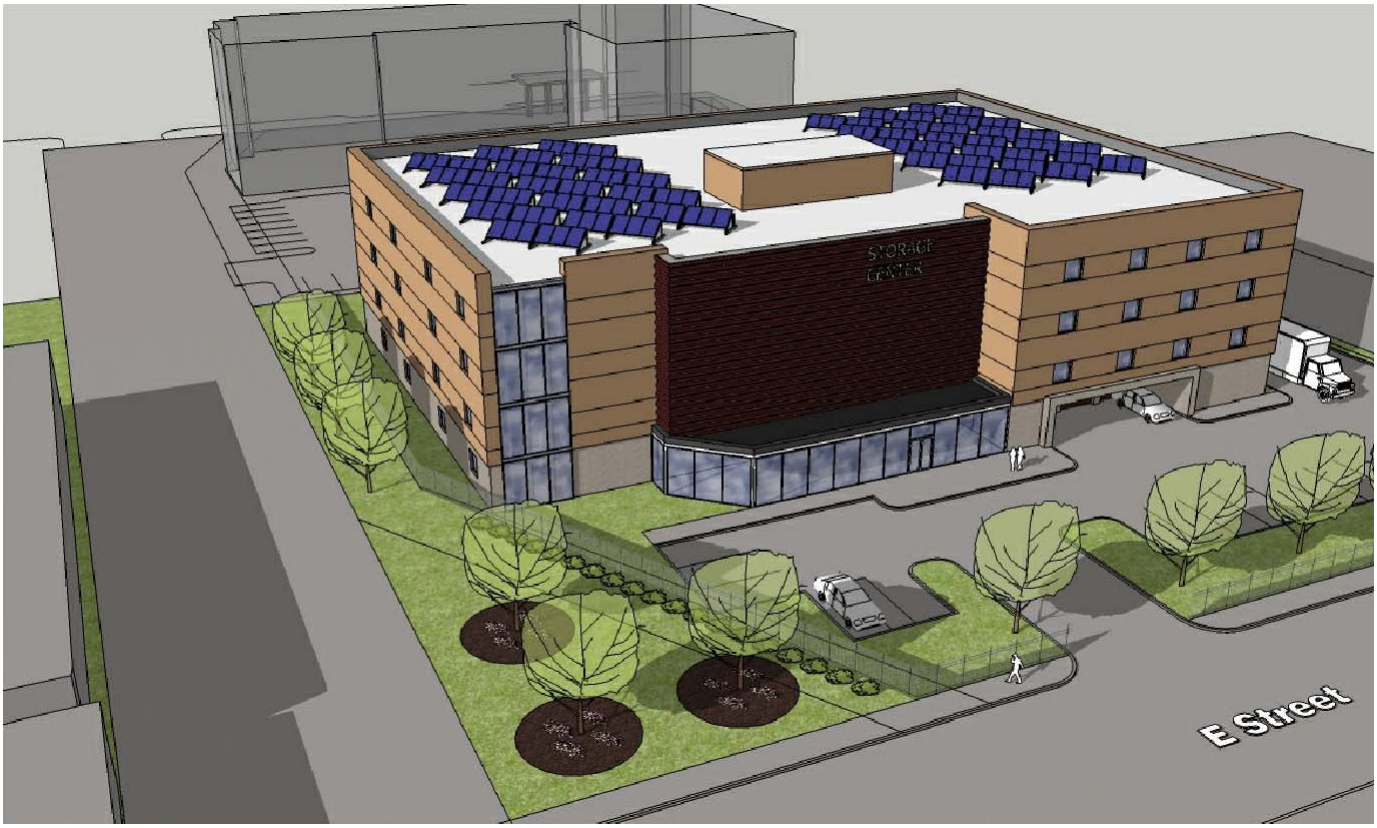
Public comments on the PNF should be transmitted in writing to the Office of the Secretary of the BRA, Attn: Mr. Geoff Lewis, Senior Project Manager at the address stated above by Friday, November 4, 2011.

BOSTON REDEVELOPMENT AUTHORITY
Brian Golden, Executive Director / Secretary

Expanded Project Notification Form

Submitted Pursuant to Article 80 B of the Boston Zoning Code

E Street Self Storage Facility



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

Submitted by:
920 Development LLC
800 Technology Center Drive
Stoughton, MA 02072

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

In Association with:
Group One Partners, Incorporated
Brennan, Dain, Le Ray & Wiest, Torpy & Garner, P.C.
Vanasse & Associates, Inc.
Meridian Land Services, Inc.
H.W. Moore Associates, Inc.
McArdle Gannon Associates, Inc.

October 6, 2011

Expanded
Project Notification Form

Submitted Pursuant to Article 80 of the Boston Zoning Code

Self Storage Facility

Submitted to:

BOSTON REDEVELOPMENT AUTHORITY
One City Hall Square
Boston, MA 02201

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October 6, 2011

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Introduction/Project Description

1.0 INTRODUCTION / PROJECT DESCRIPTION

1.1 Introduction

920 Development, LLC (the Proponent) proposes to redevelop the 73,268 square-foot (1.68-acre) vacant parcel it owns at 380-400 E Street, at the intersection of E Street and the proposed Cypher Street Extension in South Boston. See Figure 1-1. The site is currently vacant.

The Proponent plans to construct a 4-story, 54-foot high, self storage facility that will incorporate the latest sustainable building elements. The building will include approximately 98,000 square feet of gross floor area. Approximately 16 on-site parking spaces are proposed, with access to the site taking place from E Street. The building will be contextually designed and the site will be extensively landscaped.

The proposed self storage facility is in keeping with the character of the surrounding warehouse/industrial area and will be a welcome amenity for the nearby residential neighborhoods. The proposed project will generate very little traffic and will serve as a perfect transitional use between the working industrial areas north of West First Street and the St. Vincent's residential neighborhood.

Because it exceeds 50,000 square feet of gross floor area, the project is subject to Large Project Review under Article 80 of the Boston Zoning Code. This Expanded PNF is intended to initiate that review and a comprehensive public process.

1.2 Project Identification

Address/Location:	380-400 E Street South Boston, MA 02127
Developer:	**920 Development LLC** 800 Technology Center Drive Stoughton, MA 02072 (781) 344-5656 Louis Cabral, Manager
Architects:	**Group One Partners, Incorporated** 21 West Third Street Boston, MA 02127 617-268-7000 Harry Wheeler, Principal

Legal Counsel:	**Brennan, Dain, Le Ray & Wiest, Torpy & Garner, P.C.** 120 South Street Boston, MA 02111 (617) 542-4800 Donald W. Wiest
Permitting Consultants:	**Epsilon Associates, Inc.** 3 Clock Tower Place, Suite 250 Maynard, MA 01754 (978) 897-7100 David Hewett
Transportation and Parking Consultants:	**Vanasse & Associates, Inc.** 10 New England Business Center Drive, Suite 314 Andover, MA 01810 (978) 474-8800 Jeffrey S. Dirk, P.E., PTOE
Surveyor:	**Meridian Land Services, Inc.** 31 Old Nashua Road Amherst, NH 03031 (603) 673-1441 Michael Hammer
Civil Engineer	**H.W. Moore Associates, Inc.** 112 Shawmut Avenue Boston, MA 02118 (617) 357-8145 Fred Keylor
Geotechnical Consultant:	**Mcardle Gannon Associates, Inc.** 1125 Main Street Hanover , MA , 02339 (781) 982-2881 John Gannon

1.3 Project Description

1.3.1 Project Site

The Project Site is a vacant 1.68-acre parcel located at 380-400 E Street in South Boston as shown on Figure 1-2. Beginning approximately 300 feet north from intersection of E Street and West First Street, the project site extends northeast for approximately 310 feet along East Street. The site is approximately 237 feet deep, extending approximately half the distance from E Street to D Street. The site is generally surrounded by low-rise warehouses and other industrial type uses. First Vehicle Services operates a large facility to the north on E Street. A large warehouse building extends for almost 1,000 feet along the opposite side of E Street. Ryder Truck Rental operates a service yard immediately to the south of the Project site at the intersection of E Street and West First Street. The lot behind (*i.e.*, west of) the Project Site is currently vacant. The Teamsters Union operates an office on the northwest corner of the intersection of Cypher and D Street, and an aerial lift rental company (Shaughnessy and Ahern) occupies the southeast corner. The nearest residential areas are to the south on the south side of West Second Street, approximately 520 feet south of the Project site.

1.3.2 Proposed Development

As described above, the proposed Project includes the construction of a 98,000 square-foot self storage facility. The facility will be four stories (54 feet) high (not including the mechanical penthouse). There are no minimum lot size, lot width, frontage, or side- or rear-yard setback requirements applicable to the Proposed Project. The Proposed Project's compliance with the applicable dimensional requirements is summarized in Table 1-1 below.

Table 1-1 Project Dimensions

	Code Requirement	Proposed Project
Site Area	N/a	73,268 square feet (1.68 acres)
Gross Floor Area per Article 2A	N/a	98,000 square feet
Floor Area Ratio (FAR) per Article 2A	2.0	1.34
Number of Floors	N/a	4
Zoning Height (to top of roof beam of highest occupied floor)	65 feet	54 feet
Approximate Number of Storage Units	N/a	700
Number of Off-street Parking Spaces	Set via Large Project Review	16 (including 2 Handicap spaces)
Front Yard Setback	Set via Large Project Review.	69.8 feet

In addition to storage units, the first floor will also include a small office and an approximately 1,000 square-foot retail showroom that will sell moving and storage supplies. Floors 2 through 4 will be solely for storage units. The roof will have a 14-foot high mechanical penthouse near its center and solar panels that will help to offset the building's electrical demand. The building will be built on a pier-supported slab foundation and will not have any underground component. Floor plans are shown on Figures 1-3.

The proposed building will be contextually designed and the site will be extensively landscaped. The building's facades will include a mix of materials and colors, including steel and masonry. The building will also be fenestrated with floor to ceiling windows in the front stair well and punched windows in other areas. The rear wall, which will face the rear of any future development on D Street, will be a "green wall" with living plants growing in an attached support structure. Figures 1-4 through 1-7 depict the building elevations and Figures 1-8 through 1-11 are artist's renderings of the proposed building.

The site will be landscaped with extensive plantings along E Street. The southern portion of the project site is crossed by an easement owned by Massport that will accommodate the proposed future extension of Cypher Street between D and E Streets. This area will be planted to maintain a neat appearance but will not be extensively landscaped.

The Project includes sixteen parking spaces (including two handicap spaces) and three loading bays. While the site will have two entrances from E Street, the northern entrance will be kept gated (or closed with a removable section of fence) and will only be for occasional use by larger trucks needing space to back directly into the loading dock.

1.4 Consistency with Zoning

As shown in Section 1.1, above, the Project as designed is consistent with the dimensional provisions of the newly-adopted Article 68 of the Boston Zoning Code, the South Boston Neighborhood District, which was approved by the Boston Zoning Commission on September 14, 2011, and signed by Mayor Menino on September 15, 2011. The Project's principal use as a self storage facility is also consistent with the new Article 68, pursuant to which warehousing uses are allowed by right. The Project will, however, require a variance for the proposed location of its accessory parking.

The Project will also be designed to be fully consistent with Article 37, Green Buildings, of the Boston Zoning Code in that it will be sustainably designed and "certifiable" under the US Green Building Council's Leadership in Energy and Environmental Design (LEED) program. One key feature of the Project will be a rooftop solar installation that will help meet the Project's energy demand. Chapter 5 presents detailed information on the project's sustainable features.

1.5 Public Benefits

The Project will include numerous benefits to the neighborhood and the City of Boston, including:

- Replacement of a vacant, derelict lot with a new attractive, sustainably designed development.
- The creation of an excellent, low traffic, transitional use that will serve as a buffer between the industrial area to the north and the residential area to the south.
- The provision of a needed service close to the residential area of South Boston.
- The creation of new construction jobs and permanent jobs.
- Increased property tax revenue for the City of Boston.

1.6 Legal Information

1.6.1 Legal Judgments Adverse to the Proposed Project

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

1.6.2 History of Tax Arrears on Property

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

1.6.3 Site Control / Public Easements

The Proponent owns the project site. There is an approximately 50-foot wide easement along the southern edge of the site owned by Massport that will accommodate the proposed future extension of Cypher Street between D and E Street. The Boston Water and Sewer Commission (BWSC) maintains 72-inch and a 42-inch drain lines between D and E Street that cross the eastern edge of the site. Service poles and wires cross over the far eastern edge of the site. The easements are shown on the Site Survey included as Appendix A.

1.7 Anticipated Permits

Because the proposed project will not receive any state permits, state funding, or involve any state land transfers, it will not be subject to review under the Massachusetts Environmental Policy Act (MEPA).

Permits and approvals likely to be required for the Project are listed in Table 1-2.

Table 1-2 List of Anticipated Permits

AGENCY	APPROVAL
Local	
Boston Redevelopment Authority	Article 80 Large Project Review Article 37 Green Buildings
Boston Civic Design Commission	Design Approval (possible, may not be required)
Boston Board of Appeal	Variance for location of accessory parking
Boston Water and Sewer Commission	Water and Sewer Connection Permits Temporary Construction Dewatering Permit General Service Application Site Plan Review
Boston Transportation Department	Construction Management Plan Transportation Access Plan Agreement
Boston Public Improvement Commission/Boston Department of Public Works	Street/Sidewalk Repair Plan Permits for street occupancy and opening permit
Boston Fire Department	Approval of Fire Safety Equipment
Boston Inspectional Services Department	Building Permit
Joint Committee on Licenses	Flammable Storage License
State	
Department of Environmental Protection, Division of Water Pollution Control	Self-certification for sewer discharges
Department of Environmental Protection	Self-certification for mechanical equipment pursuant to the Environmental Results Program
Federal	
Environmental Protection Agency	NPDES Notice of Intent for Construction - Stormwater

1.8 Schedule

Construction is expected to begin in the spring of 2012 and take approximately eight months.

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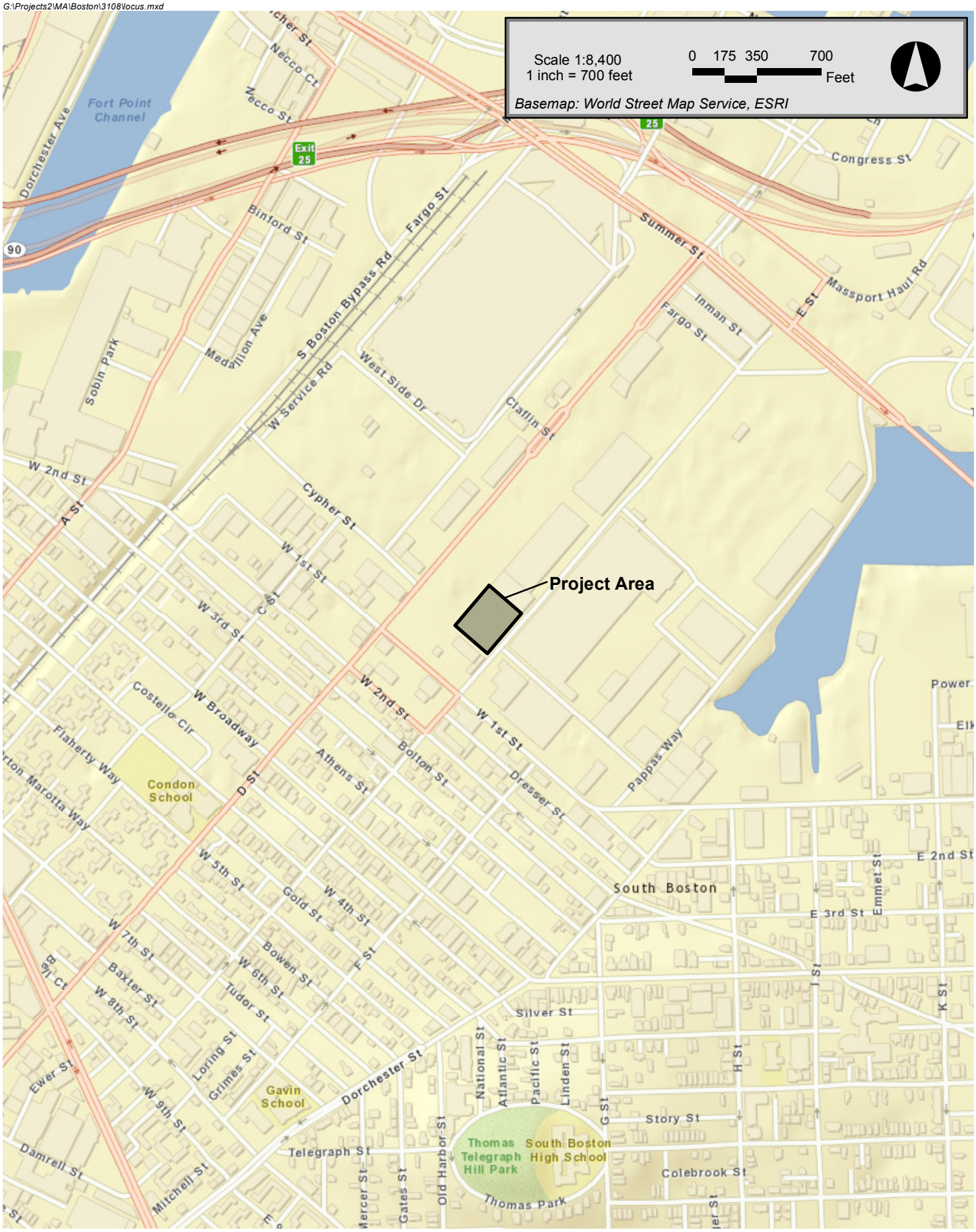


920 Development, LLC Self Storage Facility Boston, MA

Epsilon ASSOCIATES INC.

Figure 1-1
Street Locus

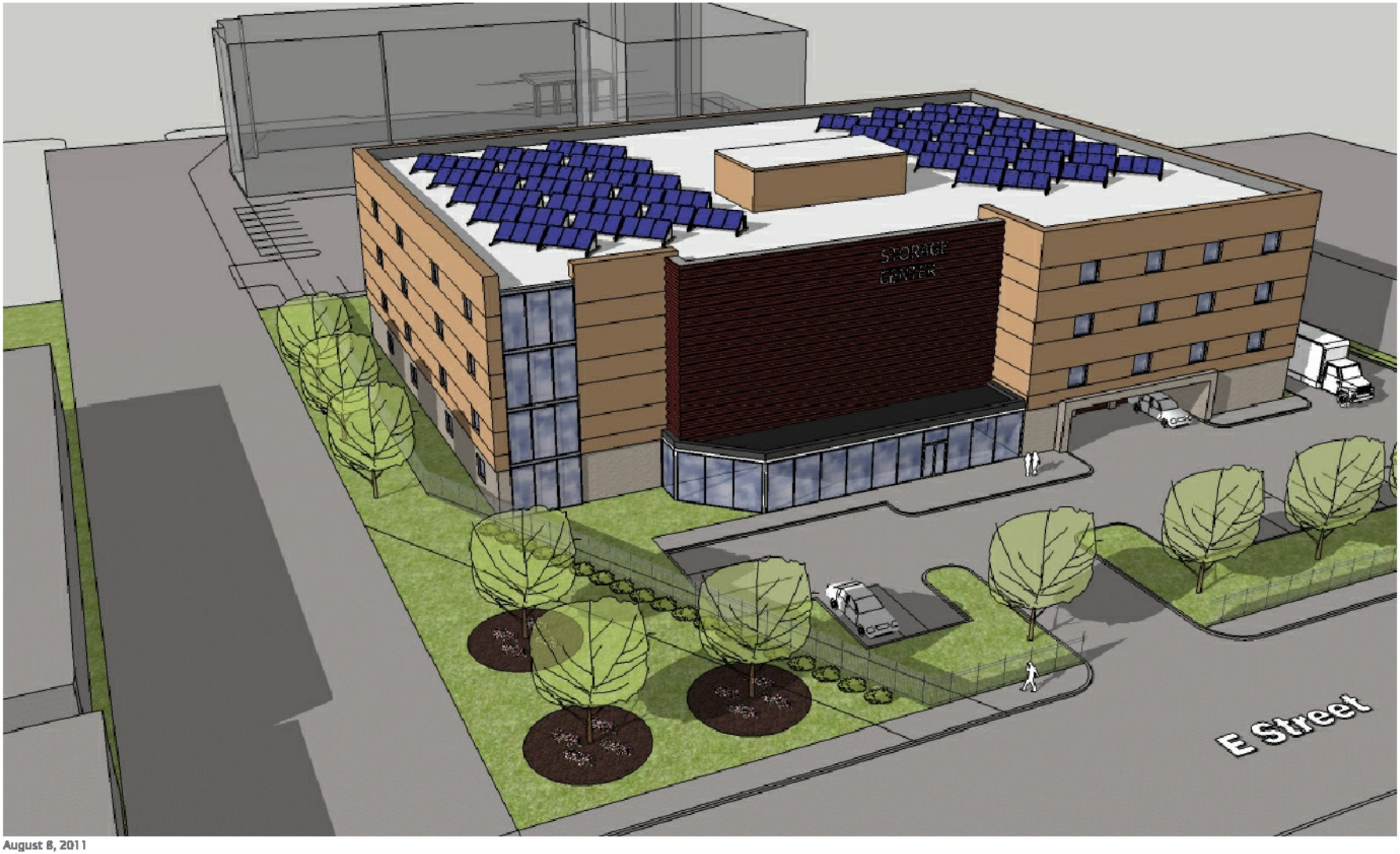
August 8, 2011

Proposed Self Storage Facility
E Street
Boston, MA

PROJECT RENDERING
REAR FACING EAST

Group One Partners, Incorporated
21 West Third Street
Boston, MA 02127
617.268.7000 ph
617.268.0003 f
www.grouponeinc.com

Figure 1-10
Project Rendering – Rear Facing East

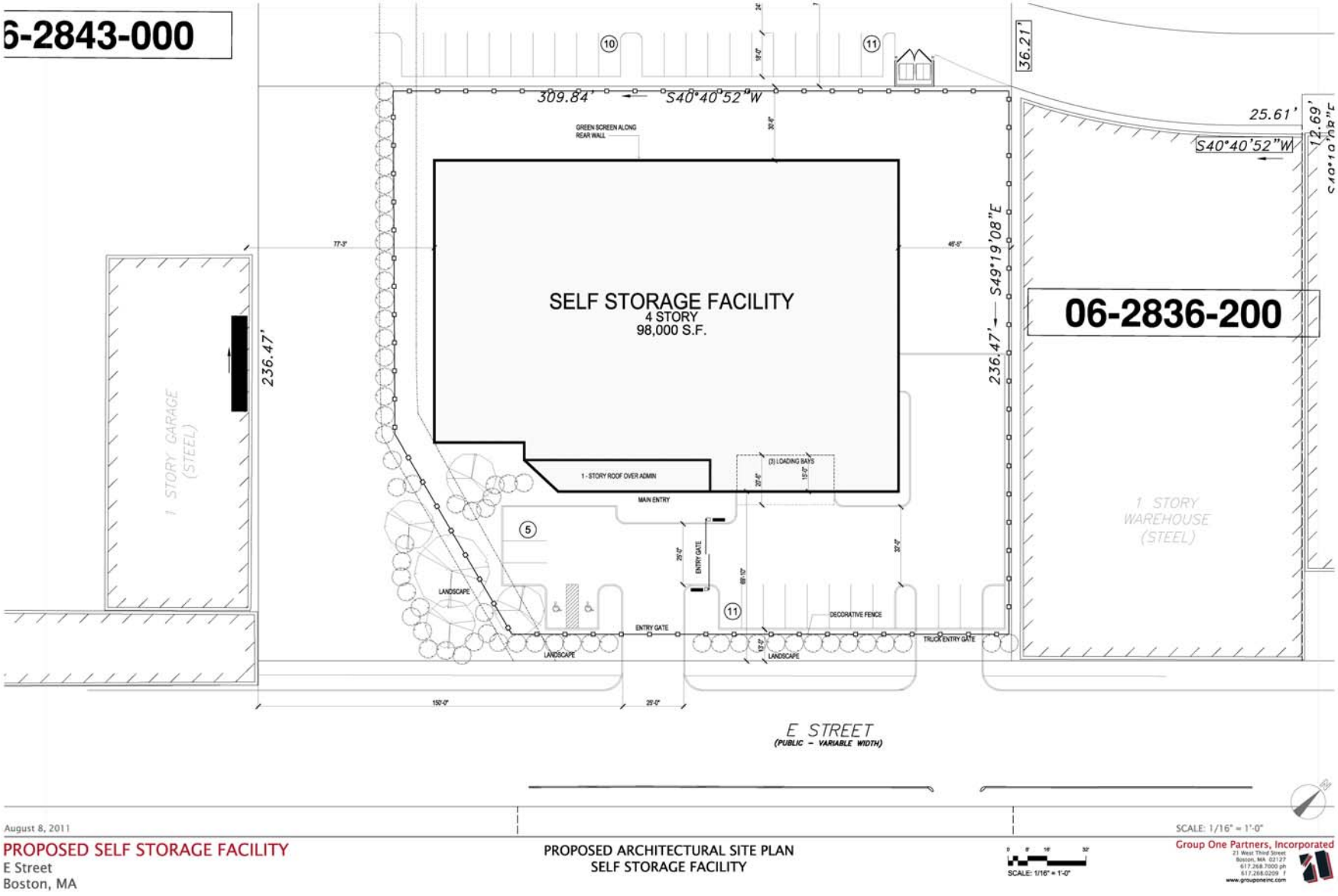


August 8, 2011

Proposed Self Storage Facility
E Street
Boston, MA

PROJECT RENDERING
AERIAL

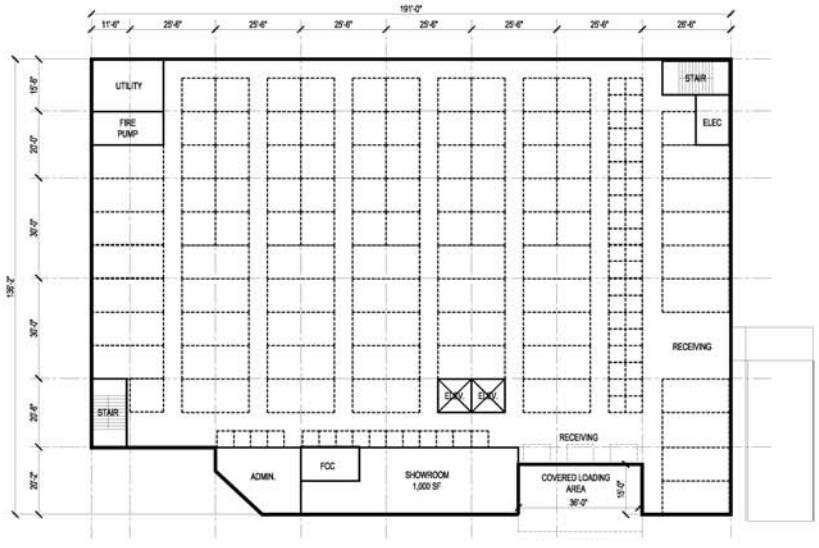
Group One Partners, Incorporated
21 West Third Street
Boston, MA 02127
617.268.2009 ph
617.268.0208 f
www.grouponeinc.com



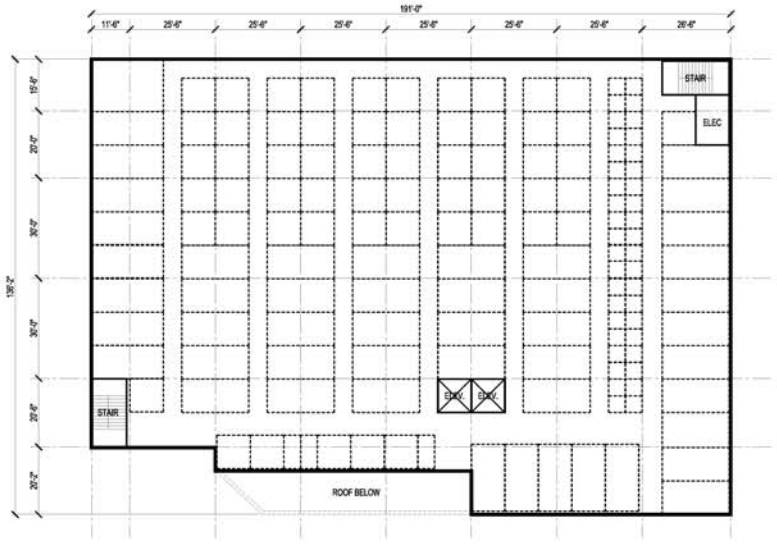
920 Development, LLC Self Storage Facility Boston, MA

Epsilon Associates Inc.

Figure 1-2
Architectural Site Plan



GROUND FLOOR PLAN - LEVEL 1 (25,175 GSF)



TYPICAL FLOOR PLAN - LEVELS 2 THRU 4 (24,275 GSF)

August 8, 2011

PROPOSED SELF STORAGE FACILITY
E Street
Boston, MA

PROPOSED FLOOR PLANS
SELF STORAGE FACILITY

0 8' 16' 32'
SCALE: 1/16" = 1'-0"

SCALE: 1/16" = 1'-0"

Group One Partners, Incorporated
21 West Third Street
Boston, MA 02127
617.268.7000 ph
617.268.0209 f
www.grouponeinc.com

Figure 1-4

Proposed Elevation – East Side

August 8, 2011

PROPOSED SELF STORAGE FACILITY
E Street
Boston, MA

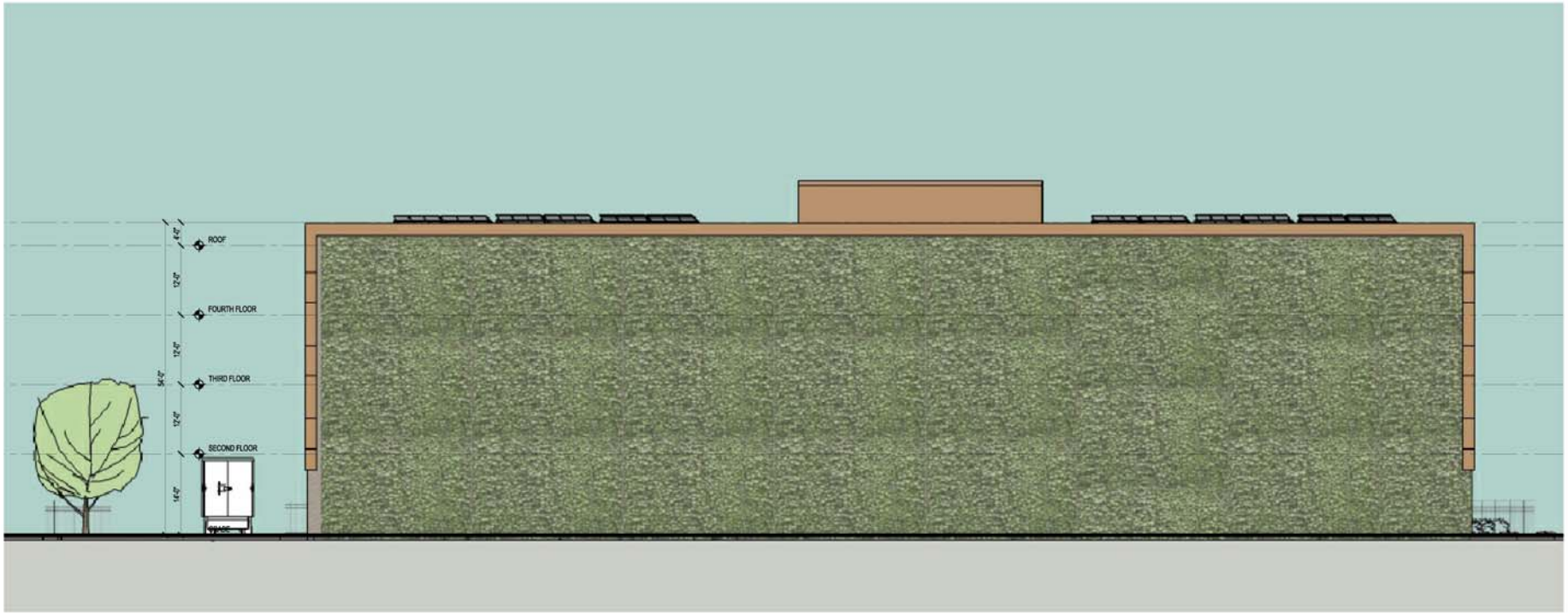
PROPOSED ELEVATIONS
RIGHT SIDE

SCALE: 1/8" = 1'-0"

SCALE: 1/8" = 1'-0"

Group One Partners, Incorporated
21 West Third Street
Boston, MA 02127
617.268.7000 ph
617.268.0209 f
www.grouponeinc.com

Figure 1-5
Proposed Elevation – North Side



August 8, 2011

PROPOSED SELF STORAGE FACILITY
E Street
Boston, MA

PROPOSED ELEVATIONS
REAR

SCALE: 1/8" = 1'-0"

SCALE: 1/8" = 1'-0"

Group One Partners, Incorporated
21 West Third Street
Boston, MA 02127
617.268.7000 ph
617.268.0209 f
www.grouponeinc.com

Figure 1-6
Proposed Elevation – West Side

August 8, 2011

PROPOSED SELF STORAGE FACILITY
E Street
Boston, MA

PROPOSED ELEVATIONS
LEFT SIDE

SCALE: 1/8" = 1'-0"

SCALE: 1/8" = 1'-0"

Group One Partners, Incorporated
21 West Third Street
Boston, MA 02127
617.268.7000 ph
617.268.0209 f
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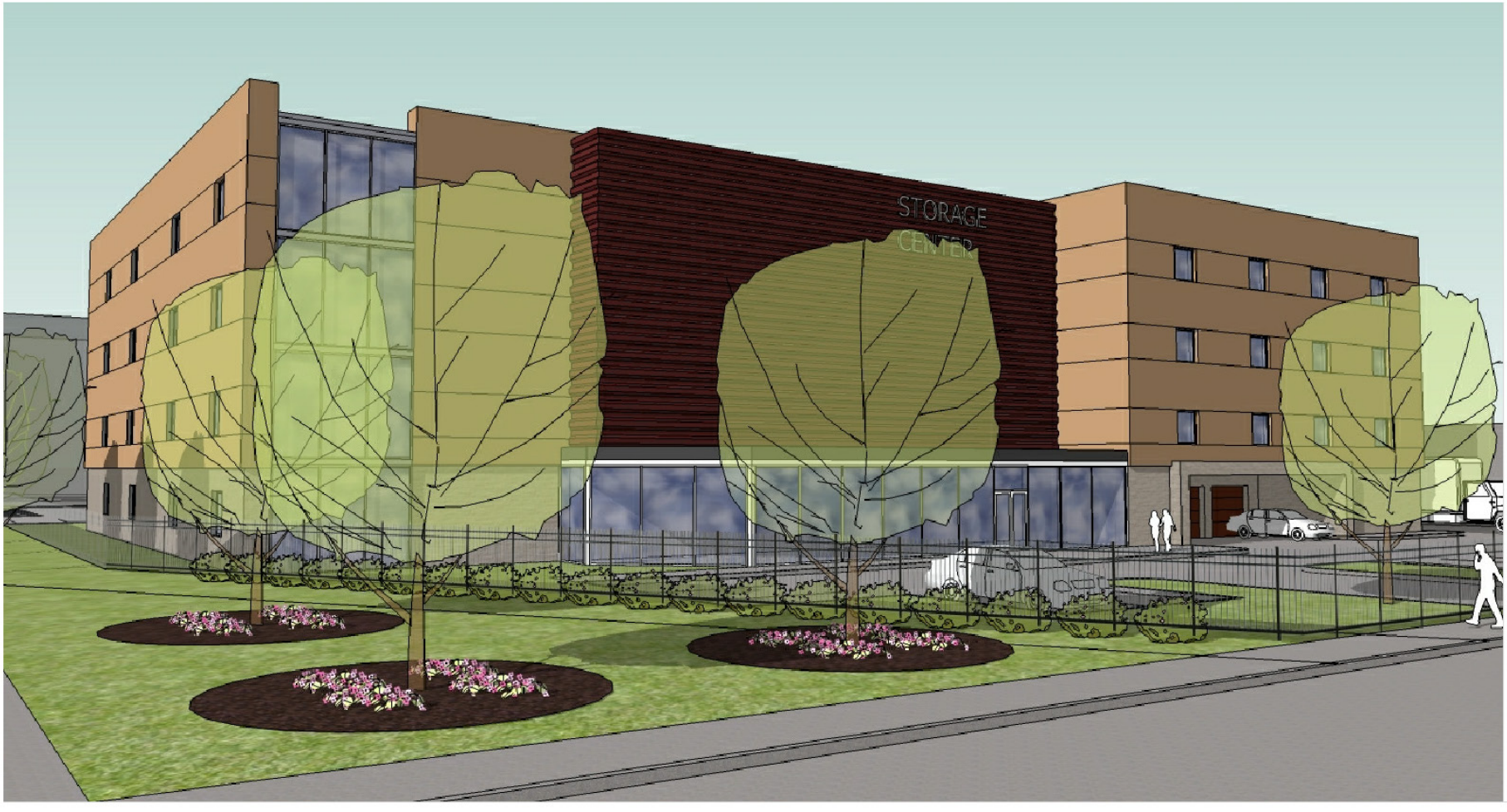
Figure 1-7
Proposed Elevation – South Side



August 8, 2011

Proposed Self Storage Facility
E Street
Boston, MA

PROJECT RENDERING
E STREET FACING NORTH

Group One Partners, Incorporated
21 West Third Street
Boston, MA 02127
617.268.7000 ph
617.268.0203 f
www.grouponeinc.com

Figure 1-8
Project Rendering – E Street Facing North

August 8, 2011

Proposed Self Storage Facility
E Street
Boston, MA

PROJECT RENDERING
E STREET FACING SOUTH

Group One Partners, Incorporated
21 West Third Street
Boston, MA 02127
617.268.7000 ph
617.268.0203 f
www.grouponeinc.com

Figure 1-9
Project Rendering – E Street Facing South

Section 2.0

Transportation

2.0 TRANSPORTATION

2.1 Introduction

Vanasse & Associates, Inc. (VAI) conducted a Traffic Impact Assessment (TIA) to determine the potential impacts on the transportation infrastructure associated with the development of the proposed Project. This study presents a comprehensive assessment of the transportation infrastructure serving the Project with respect to: i) access requirements; ii) potential off-site improvements; and iii) safety considerations; and it identifies and analyzes existing and future traffic conditions both with and without the Project along E Street, and at the intersections of D Street at Cypher Street and Summer Street at Fargo Street.

2.1.1 Project Description

The Project will entail the construction of a four (4) story, 98,000± square foot (sf) self-storage facility to be situated on a 1.68- acre parcel of land located along the north side of E Street in Boston, Massachusetts. The Project site is generally bounded by commercial properties to the north and west; E Street and commercial properties to the south; and E Street to the east. A right-of-way for the proposed future Cypher Street extension to be constructed by the Massachusetts Port Authority (Massport) crosses the Project site to the south. Access to the Project will be provided by way of a new driveway that will intersect the north side of E Street in the southern portion of the Project site. An additional access point is proposed in the northern portion of the Project site that will be used on an as-needed basis to accommodate the occasional large truck that may access the Project. This access will be closed at all other times and will be designed with a mountable curb along E Street and a removable fence section at the property line. On-site parking will be provided for 16 vehicles, not including two (2) positions within the loading dock area. Figure 2-1 depicts the Project site in relation to the existing roadway network.

2.1.2 Study Methodology

This study was prepared in consultation with the City of Boston and the Massachusetts Department of Transportation (MassDOT) and was performed in accordance with the Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs (EEA)/MassDOT Guidelines for Environmental Impact Report/Environmental Impact Statement Traffic Impact Assessments (TIAs). Furthermore, the study was conducted pursuant to the standards of the Traffic Engineering and Transportation Planning professions for the preparation of such reports.

The traffic study was conducted in three distinct stages. The first stage involved an assessment of existing conditions in the study area and included an inventory of roadway geometrics, pedestrian and bicycle facilities and public transportation services; observations of traffic flow; collection of peak period traffic, pedestrian and bicycle volumes; and a review and analysis of motor vehicle crash data.

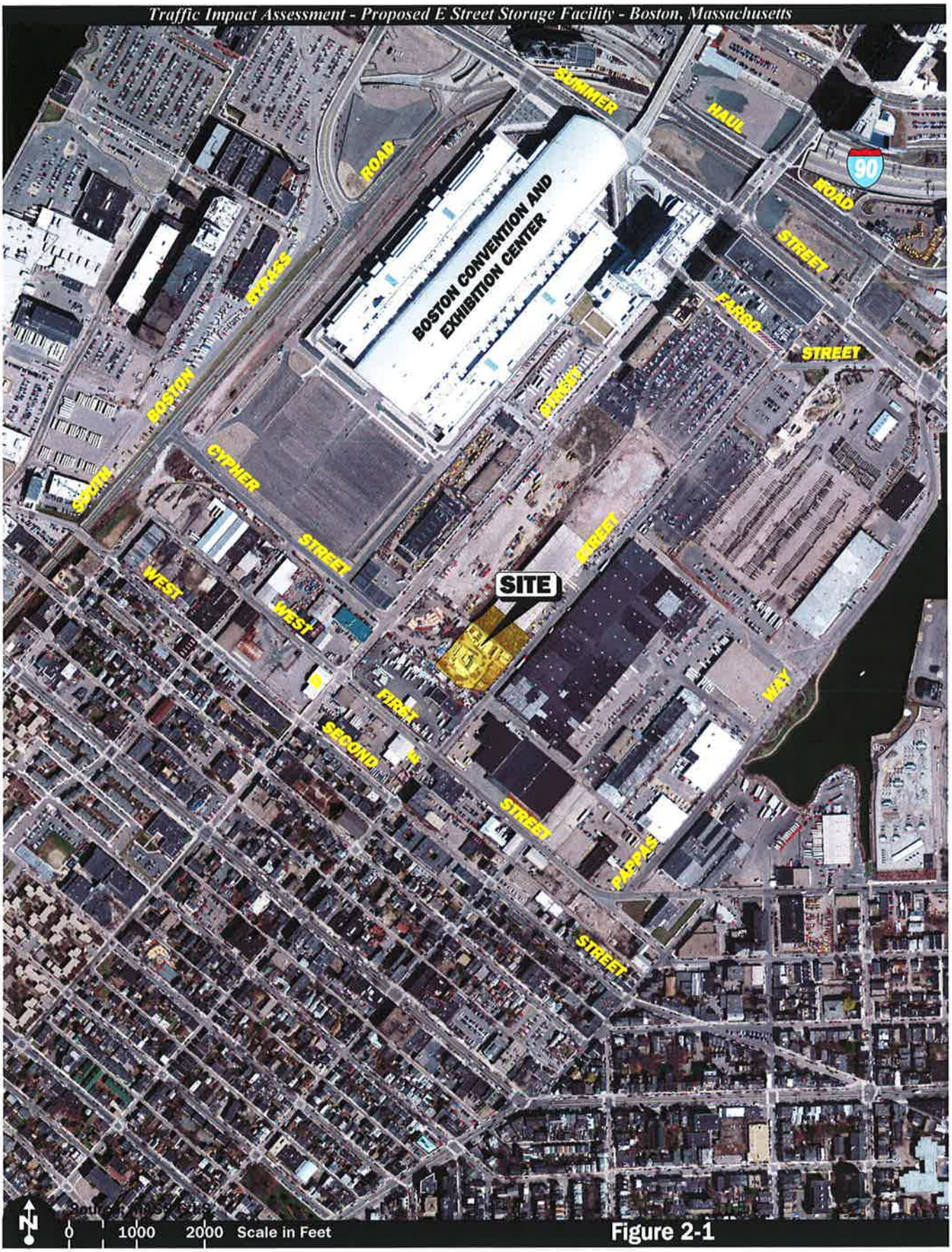


Figure 2-1

Site Location Map

Vanasse & Associates, Inc.
Transportation Engineers & Planners

In the second stage of the study, future traffic conditions were projected and analyzed. Specific travel demand forecasts for the Project were assessed along with future traffic demands due to expected traffic growth independent of the Project. A five-year time horizon was selected for analyses consistent with state guidelines for the preparation of TIAs. The traffic analysis conducted in stage two identifies existing or projected future roadway capacity, traffic safety, and site access issues.

The third stage of the study presents and evaluates measures that are designed to address existing and projected impacts on the transportation infrastructure, if any, and provides specific recommendations for improvements where necessary to accommodate the Project.

2.2 Existing Conditions

A comprehensive field inventory of existing conditions within the study area was conduced in May and June 2011. The field investigation consisted of an inventory of existing roadway geometrics; pedestrian and bicycle facilities; public transportation services; traffic, pedestrian and bicycle volumes; and operating characteristics; as well as posted speed limits and land use information within the study area. The study area for the Project was selected to contain the major roadways providing access to the Project site (D Street, E Street, and Summer Street), as well as the two major intersections located along these roadways through which the Project-related traffic will travel: D Street at Cypher Street and Summer Street at Fargo Street.

2.2.1 Roadways

D Street

D Street is a 2-lane urban minor arterial roadway under City jurisdiction that traverses the study area in a general northeast-southwest alignment between Dorchester Avenue and Seaport Boulevard. Within the study area, D Street provides two 11 to 20-foot wide travel lanes separated by a double-yellow centerline or raised median, with on-street parking provided along both sides of the roadway north of Cypher Street, and additional travel lanes provided at major intersections. Sidewalks are provided continuously along both sides of the roadway, with marked crosswalks provided at multiple locations between West First Street and Summer Street. Illumination is provided by way of street light mounted on steel poles. Land use along D Street within the study area consists of the Boston Convention and Exhibition Center (BCEC) and a mix of commercial and residential properties.

Summer Street

Summer Street is a 4-lane urban principal arterial roadway under City jurisdiction that traverses the study area in a general northwest-southeast alignment between East First Street and Tremont Street. Within the study area, Summer Street provides two 11- to 21.5-foot wide travel lanes per direction separated by a raised median, with additional turning lanes

provided at major intersections. Sidewalks are provided continuously along both sides of the roadway, with crosswalks provided at World Trade Center Avenue, D Street, Pumphouse Road and Pappas Way within the study area. Illumination is provided by way of street lights mounted on concrete poles. Land use along Summer Street within the study area consists of the BCEC and commercial properties.

E Street

E Street is a 34.5-foot wide, paved, urban collector roadway under City jurisdiction that accommodates 2-way travel and traverses a general northeast-southwest alignment between Old Colony Avenue and Fargo Street. There is no marked centerline or shoulders along E Street within the immediate study area. Sidewalks are provided intermittently along the east side of E Street. Illumination is provided by way of street light mounted on wood poles. Land use along E Street within the study area consists of commercial properties.

2.2.2 Intersections

D Street at Cypher Street

Cypher Street and a private driveway intersect D Street from the west and east, respectively, to form this 4-legged intersection under flashing signal control. The D Street northbound approach consists of an 11-foot wide general-purpose travel lane with a 1-foot wide marked shoulder provided. The D Street southbound approach consists of a 21-foot wide general-purpose travel lane with metered, on-street parking provided. The directions of travel along D Street are separated by a double-yellow centerline. The Cypher Street eastbound approach consists of a13-foot wide general-purpose travel lane with a 2-foot wide marked shoulder provided and vehicles approaching D Street under stop control (flashing "red" signal indications; however, a STOP-sign is not provided). The directions of travel along Cypher Street are separated by a double-yellow centerline. The private driveway consists of a 45-foot wide paved drive that accommodates two-way travel with no marked centerline or shoulders provided and vehicles exiting under stop control (similar to Cypher Street, flashing "red" signal indications; however, a STOP-sign is not provided). Sidewalks are provided along both sides of D Street and along the north side of Cypher Street. Metered, on-street parking is permitted along both sides of D Street north of the intersection. Illumination is provided by way of street lights mounted on wood poles. Land use in the vicinity of the intersection consists of the BCEC and commercial properties. The traffic control signal at the intersection currently provides flashing "yellow" indications for the D Street approaches and flashing "red" indications for both Cypher Street and the private driveway. Marked crosswalks and pedestrian traffic signal equipment are not provided at the intersection.

Summer Street at Fargo Street

Fargo Street and a private driveway intersect Summer Street from the south and north, respectively, to form this four-legged intersection under STOP-sign control. The Summer Street eastbound approach consists of a 10-foot wide left-turn lane and two 11- to 11.5-foot wide general-purpose travel lanes, with a 3-foot wide marked shoulder provided. The Summer Street westbound approach consists of two 11- to 21-foot wide general-purpose travel lanes with no marked shoulder provided. The directions of travel along Summer Street are separated by a raised median. Fargo Street consists of a 38-foot wide paved roadway that accommodates 2-way travel with no marked centerline or shoulders provided and vehicles approaching Summer Street under STOP-sign control. The private driveway consists of a 24-wide drive that accommodates two-way travel and serves a small parking lot. Vehicles exiting the driveway are under stop control; however, a STOP-sign is not provided. Sidewalks are provided along both sides of Summer Street with a marked crosswalk provided across Fargo Street. Bus stops are located on both sides of Summer Street east of the intersection. Illumination is provided by way of street lights mounted on concrete poles. Land use in the vicinity of the intersection consists of commercial properties and areas of open space.

2.2.3 Existing Traffic Volumes

In order to determine existing traffic-volume demands and flow patterns within the study area, manual turning movement counts (TMCs) and vehicle classification counts were completed in May 2011 during the weekday morning (7:00 to 9:00 AM) and evening (4:00 to 6:00 PM) peak periods at the two study area intersections while public schools were in regular session. These time periods were selected for analysis purposes as they are representative of the peak traffic volume hours for both the Project and the adjacent roadway network.

In order to evaluate the potential for seasonal fluctuation of traffic volumes within the study area, MassDOT weekday seasonal traffic volume factors for Group 6 roadways (urban arterials, collectors and Rural arterials, the MassDOT functional classification for D Street and Summer Street) were reviewed.[1] Based on a review of this data, it was determined that traffic volumes for the month of May are approximately nine percent above average-month conditions. In order to provide a conservative (above average) analysis scenario, the May traffic volumes were not adjusted downward to average-month conditions. The 2011 Existing traffic volumes are graphically depicted on Figure 2-2 for the weekday morning and evening peak hours.

A review of the peak-period traffic counts indicates that the weekday morning peak hour generally occurs between 7:30 and 8:30 AM, with the weekday evening peak-hour generally occurring between 5:00 and 6:00 PM.

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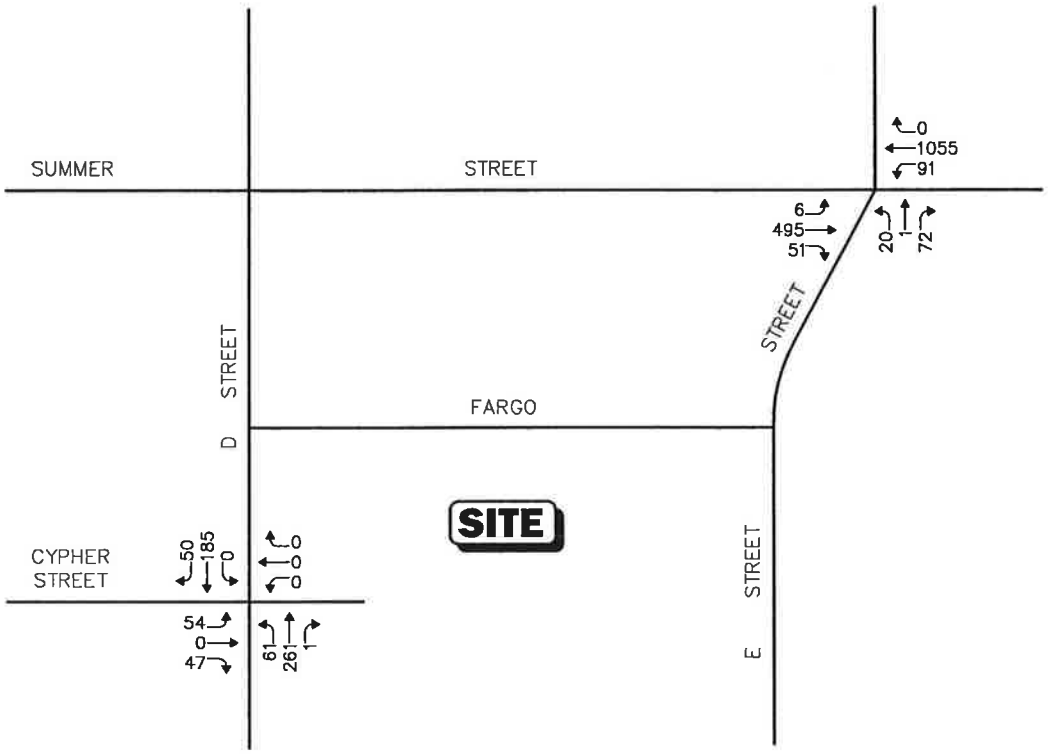
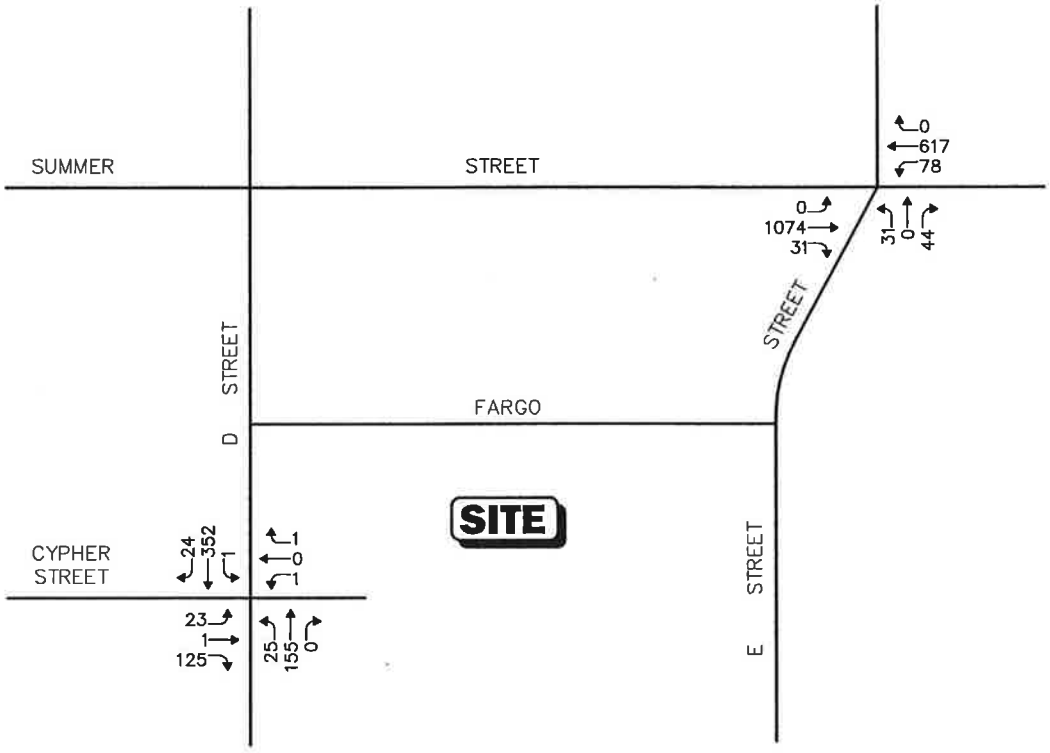
1 *MassDOT Traffic Volumes for the Commonwealth of Massachusetts;* 2007 Weekday Seasonal Factors; Group 6 – Urban Arterials, Collectors & Rural Arterials.

WEEKDAY MORNING PEAK HOUR



WEEKDAY EVENING PEAK HOUR



Not To Scale

Figure 2-2

2011 Existing
Peak Hour Traffic Volumes

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2.2.4 Pedestrian and Bicycle Facilities

A comprehensive field inventory of pedestrian and bicycle facilities within the study area was undertaken in May and June 2011. The field inventory consisted of a review of the location of sidewalks and pedestrian crossing locations along the study roadways and at the study intersections, as well as the location of existing and planned future bicycle facilities. Pedestrian and bicycle counts were conducted in May 2011 at the two study area intersections in conjunction with the traffic count program described above during the weekday morning (7:00 to 9:00 AM) and evening (4:00 to 6:00 PM) peak periods.

Pedestrian Facilities

Sidewalks are generally provided along both sides of D Street and Summer Street, and along the north side of Cypher Street, with marked crosswalks provided for crossing D Street at multiple locations between Cypher Street and Summer Street, and across Fargo Street at its intersection the Summer Street. Figure 2-3 depicts the 2011 Existing weekday morning and evening peak-hour pedestrian volumes within the study area. As can be seen on Figure 2-3, the largest pedestrian volumes were observed crossing Fargo Street at its intersection with Summer Street, with 20 pedestrians observed during the weekday morning peak-hour and 59 pedestrians observed during the weekday evening peak-hour.

Bicycle Facilities

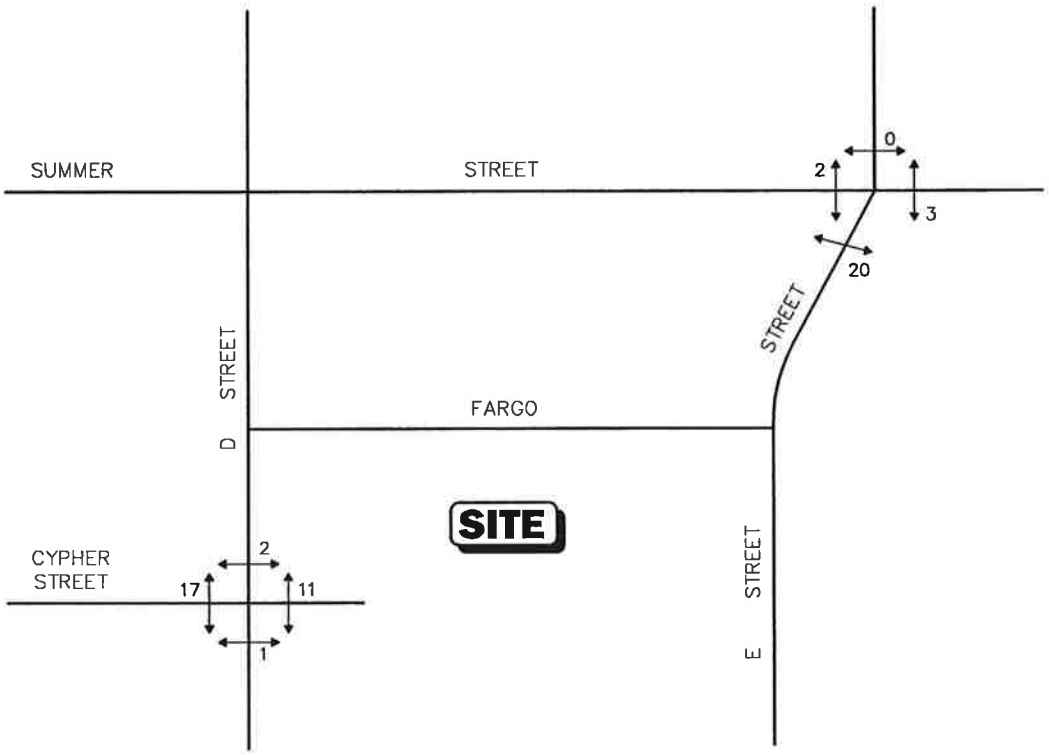
Currently, there are no formal bicycle accommodations provided within the study area; however, sections of D Street, E Street, Summer Street and Fargo Street appear to provide sufficient width (combined travel lane and shoulder, where present) to support bicycle travel in a shared travelled-way configuration. Figure 2-4 depicts the 2011 Existing weekday morning and evening peak-hour bicycle volumes. As can be seen on Figure 2-4, the largest bicycle volumes were reported along Summer Street, with 28 bicyclists recorded traversing the Summer Street/Fargo Street intersection during the weekday morning peak-hour and 32 recorded during the weekday evening peak-hour.

2.2.5 Public Transportation Services

The study area is served by a number of public transportation services provided by the Massachusetts Bay Transportation Authority (MBTA), including fixed-route bus service and service on the Silver Line. The MBTA operates the following three public bus routes within the study area:

- Route 4 - North Station/Tide Street – via World Trade Center.
- Route 7 - City Point/Otis Street – via Summer Street
- Route 171 - Dudley Station/Airport Station – via Andrew Station and Airport Terminals.

WEEKDAY MORNING PEAK HOUR



WEEKDAY EVENING PEAK HOUR

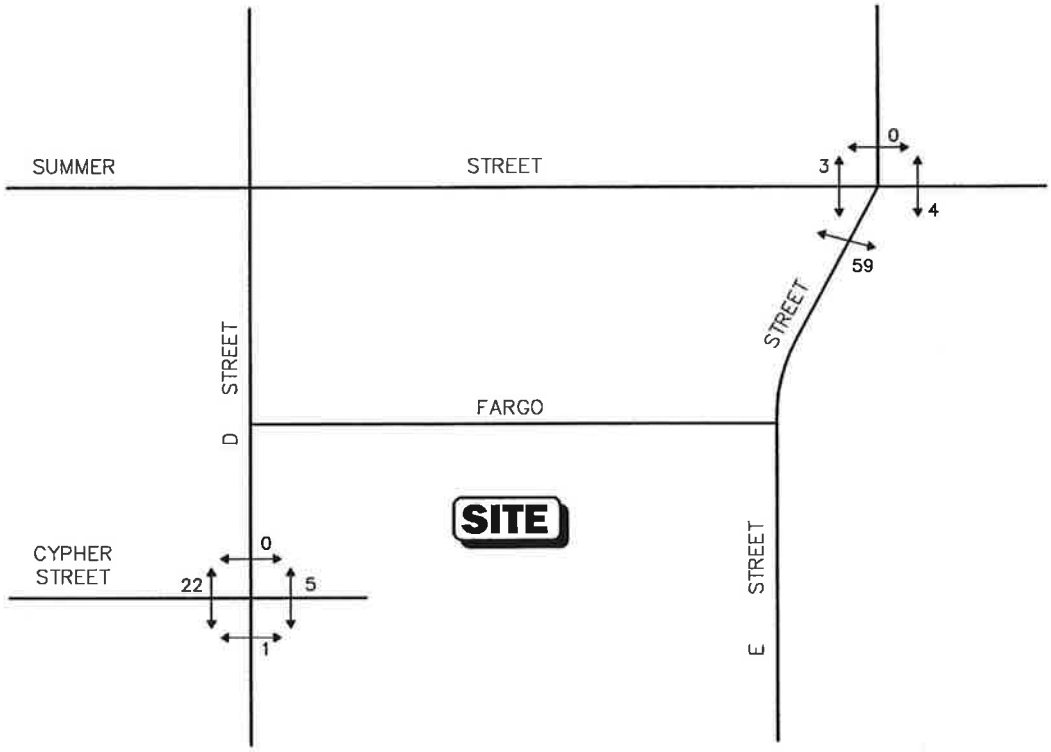


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Figure 2-3

2011 Existing
Peak Hour Pedestrian Volumes

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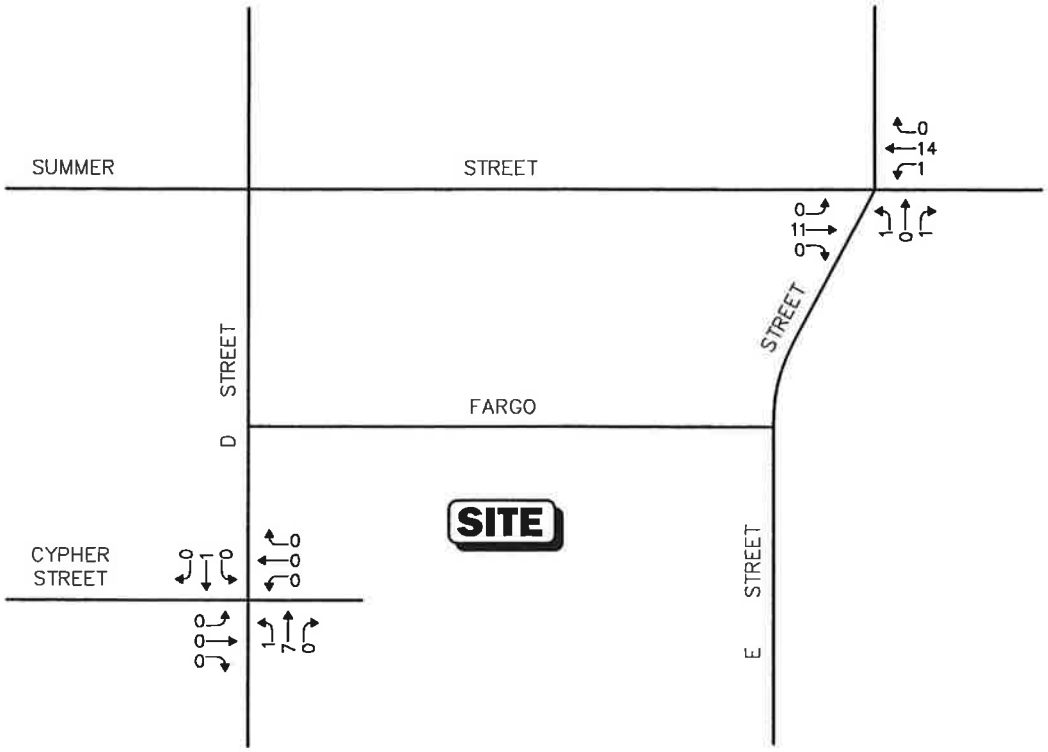
WEEKDAY MORNING PEAK HOUR



WEEKDAY EVENING PEAK HOUR

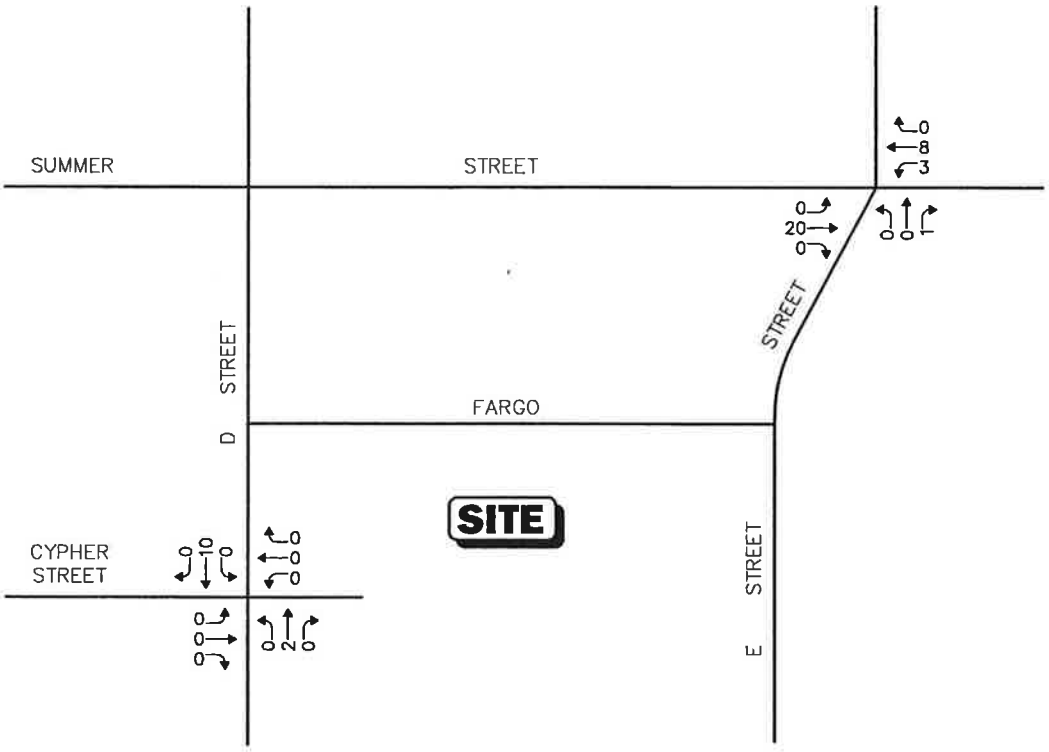


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Figure 2-4

2011 Existing
Peak Hour Bicycle Volumes

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The closest bus stop to the Project site is located at the Summer Street/Fargo Street intersection and is served by bus Routes 4 and 7. Bus Route 171 provides service along D Street; however, there are currently no bus stops located proximate to the Project site. The Silver Line service operates along Seaport Boulevard and provides a stop at the World Trade Center in the vicinity of Summer Street. The MBTA service map, schedules and fare information are provided in the Traffic Appendix (bound separately).

2.2.6 Spot Speed Measurements

Vehicle travel speed measurements were performed on E Street in the vicinity of the project site using a calibrated pulse radar gun. A total of 100 measurements were performed, with 50 measurements taken in each direction of travel. Table 2-1 summarizes the vehicle travel speed measurements.

Table 2-1 Vehicle Travel Speed Measurements

	E Street	
	Northbound	Southbound
Mean Travel Speed (mph)	26	27
85th Percentile Speed (mph)	30	30
Posted Speed Limit (mph)	-	-

As can be seen in Table 2-1, the mean (average) vehicle travel speed along E Street was found to be approximately 27 miles per hour (mph). The average measured 85th percentile vehicle travel speed, or the speed at which 85 percent of the observed vehicles traveled at or below, was found to be approximately 30 mph. The 85th percentile speed is used as the basis of engineering design and in the evaluation of sight distances, and is often used in establishing posted speed limits.

2.2.7 Motor Vehicle Crash Data

Motor vehicle crash information for the study area was provided by the MassDOT Highway Division Safety Management/Traffic Operations Unit for the most recent 3-year period available (2006 through 2009, inclusive) in order to examine motor vehicle crash trends occurring within the study area. Based on a review of the MassDOT data, there were no reported crashes at the study area intersections over the three-year review period.

2.3 Future Conditions

Traffic volumes in the study area were projected to the year 2016, which reflects a 5-year planning horizon consistent with State traffic study guidelines. Independent of the Project, traffic volumes on the roadway network in the year 2016 under No-Build conditions

include all existing traffic and new traffic resulting from background traffic growth. Anticipated Project-generated traffic volumes superimposed upon the 2016 No-Build traffic volumes reflect 2016 Build traffic volume conditions with the Project.

2.3.1 Future Traffic Growth

Future traffic growth is a function of the expected land development in the immediate area and the surrounding region. Several methods can be used to estimate this growth. A procedure frequently employed estimates an annual percentage increase in traffic growth and applies that percentage to all traffic volumes under study. The drawback to such a procedure is that some turning volumes may actually grow at either a higher or a lower rate at particular intersections.

An alternative procedure identifies the location and type of planned development, estimates the traffic to be generated, and assigns it to the area roadway network. This procedure produces a more realistic estimate of growth for local traffic; however, potential population growth and development external to the study area would not be accounted for in the resulting traffic projections.

To provide a conservative analysis framework, both procedures were used, the salient components of which are described below.

Specific Development by Others

A list of approved projects that would have an impact on future traffic volumes within the study area was obtained from the Boston Redevelopment Authority (BRA) and are listed below:

Residential Development, 154 West Second Street, Boston, Massachusetts – This project consists of the development of a 75-unit residential condominium community with 101 parking spaces to be located at 154 West Second Street in Boston, Massachusetts.

Phase II Residential Development, 3 Dorchester Street, Boston, Massachusetts – This project consists of the second phase of the residential development located at 3 Dorchester Street in Boston, Massachusetts, and consists of the construction of 23 residential units.

Commercial Development, 307 Dorchester Avenue, Boston, Massachusetts – This project consists of the development of a 45,000-sf wholesale distribution center with 29 parking spaces to be located at 307 Dorchester Street in Boston, Massachusetts.

Commercial Development, 316-322 Summer Street, Boston, Massachusetts – This project consists of the development of a commercial building that will encompass 132,000 sf of office space, a 5,000-sf restaurant and 2,500 sf of retail space to be located at 316-322 Summer Street in Boston, Massachusetts.

Residential Development, 319-321 A Street Rear, Boston, Massachusetts - This project consists of the development of a 184-unit residential apartment building to be located at 319-321 A Street Rear in Boston, Massachusetts.

Residential Development, 360 West Second Street, Boston, Massachusetts – This project consists of the development of a 25-unit residential apartment building with 25 parking spaces to be located at 360 West Second Street in Boston, Massachusetts.

Commercial Development, 368 Congress Street, Boston, Massachusetts – This project consists of the redevelopment of the existing building located at 368 Congress Street in Boston, Massachusetts, to accommodate a 120-room hotel and 5,000 sf of retail/restaurant space.

Mixed-Use Development, 48-63 Melcher Street, Boston, Massachusetts – This project consists of the phased construction of a mixed-use development that will encompass residential, office and retail space totaling 219,950 sf to be located at 48-63 Melcher Street in Boston, Massachusetts.

Channel Center – Midway – Phase III Mixed-Use Development, Boston, Massachusetts – This project consists of the rehabilitation and renovation of three buildings totaling 150,000 sf to include residential, office and research and development uses to be located at 5, 7, and 9 Channel Center Street in Boston, Massachusetts.

Congress Street Hotel, Boston, Massachusetts – This project consists of the development of a 24-story, approximately 505-room hotel to be located at 399 Congress Street in Boston, Massachusetts.

Distillery Project, Boston, Massachusetts – This project consists of a mixed-use development to be located at 516-524 East Second Street in Boston, Massachusetts, which will encompass residential and commercial uses, a greenhouse and two art galleries with 147 parking spaces.

Fan Pier, Boston, Massachusetts - This project consists of the phased development of 2.9 million sf of office, residential, retail, restaurant and hotel space, and a cultural center to be located off Old Northern Avenue and in the waterfront area of Boston, Massachusetts.

Residences at 371-401 D Street, Boston, Massachusetts – This project consists of the development of a 585-unit residential condominium community with 724 parking spaces to be located at 371-401 D Street in Boston, Massachusetts.

Seaport Square – Parcel A Development, Boston, Massachusetts – This project consists of the construction of an approximately 81,600sf building to be located off Sleeper Street in Boston, Massachusetts, to include 34 residential units and 27,200 sf of retail space with 31 parking spaces.

Waterside Place Phase I, Boston, Massachusetts – This project consists of the initial phase of the Waterside Place development to be located off Congress Street in Boston, Massachusetts, and will consist of 372,300 sf of space encompassing retail uses, a grocery store and 235 residential units with 275 parking spaces.

West Square, Boston, Massachusetts – This project consists of the development of a 245-unit residential condominium community and 3,600 sf of retail space to be located off D Street in Boston, Massachusetts.

Pier 4, Boston, Massachusetts – This project consists of an approximately 1.1 million-sf mixed-use development which will include office space, a hotel, residential units, and retail and restaurant space to be located off Old Northern Avenue and in the waterfront area of Boston, Massachusetts.

Traffic volumes associated with the these projects by others were estimated using trip-generation statistics published by Institute of Transportation Engineers (ITE)[2] for the appropriate land use or were obtained from their respective traffic studies, and were assigned onto the study area roadway network based on existing traffic patterns where no other information was available. No other developments were identified at this time that are expected to result in an increase in traffic within the study area beyond the background traffic growth rate. The relevant background development traffic volume networks are provided in the Traffic Appendix.

General Background Traffic Growth

A review of recently completed studies performed within the study area was undertaken in order to determine general traffic growth trends in the study area. Based on this review, a 0.5 percent per year compounded annual background traffic growth rate was determined to be appropriate to account for future traffic growth and presently unforeseen development within the study area.

2.3.2 Planned Roadway Improvements

The City of Boston was contacted to determine if there were any planned roadway improvement projects expected to be completed within the study area. Based on these discussions, no roadway improvements outside of routine maintenance activities were identified to be planned within the study area at this time.

Massport has proposed to construct the Cypher Street Extension which will extend Cypher Street between D Street and E Street, and will be located immediately south of the Project site. The existing traffic signal at the D Street/Cypher Street intersection and the Project site

2 *Trip Generation*, 8th Edition; Institute of Transportation Engineers; Washington, DC; 2008.

have both been designed to accommodate the proposed future extension of Cypher Street. As a defined timeline for the construction of the Cypher Street Extension was not available, this project was not included in the future conditions analyses (No-Build or Build).

2.3.3 No-Build Traffic Volumes

The 2016 No-Build condition peak hour traffic-volumes were developed by applying the 0.5 percent per year compounded annual background traffic growth rate to the 2011 Existing peak-hour traffic volumes and then superimposing the peak-hour traffic volumes associated with the identified specific developments by others. The resulting 2016 No-Build weekday morning and evening peak-hour traffic volumes are depicted on Figure 2-5.

2.3.4 Project-Generated Traffic

Design year (2016 Build) traffic volumes for the study area roadways were determined by estimating Project-generated traffic volumes and assigning those volumes on the study roadways. The following sections describe the methodology used to develop the anticipated traffic characteristics for the Project.

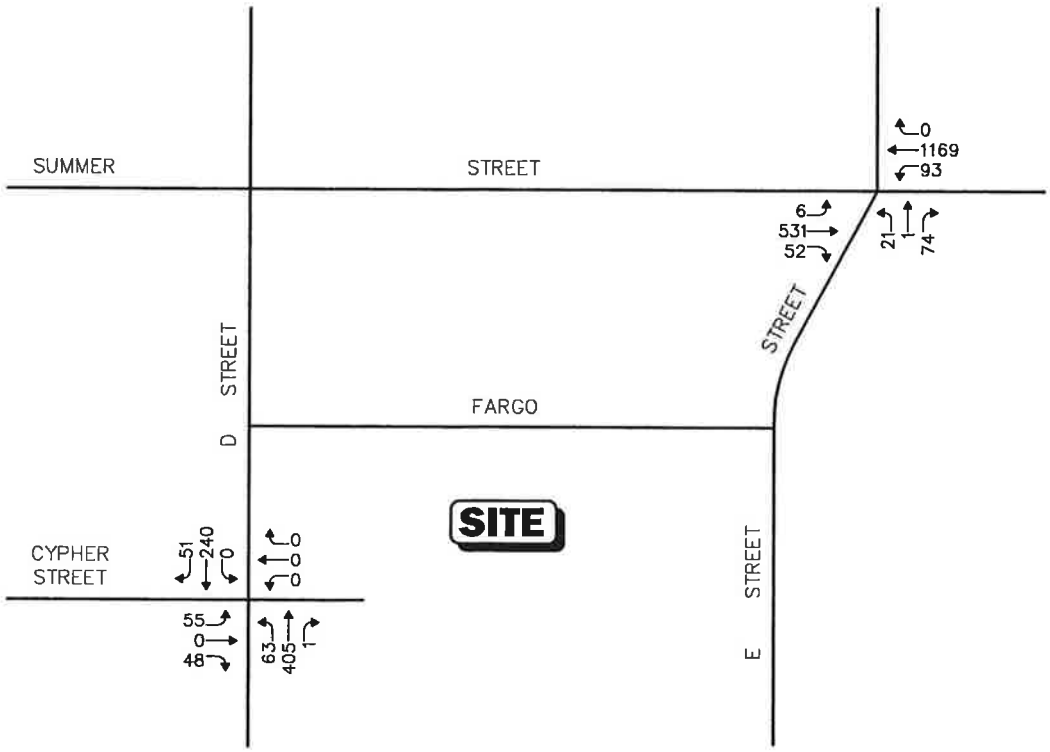
As proposed, the Project will entail the construction of a 98,000± sf self-storage facility. In order to develop the traffic characteristics of the Project, trip-generation statistics published by the ITE[3] for a similar land use as that proposed was used. ITE Land Use Code (LUC) 151, Mini-Warehouse, was used to develop the traffic characteristics of the Project. Given the nature of the proposed use and the limited volume of traffic expected to be generated, it was assumed that all trips associated with the Project would consist of vehicular traffic. Table 2-2 summarizes the anticipated traffic characteristics of the Project.

Table 2-2 Trip Generation Summary

Time Period/Direction	Vehicle Trips Self-Storage Facility (98,000sf)*
Average Weekday Daily:	
Entering	123
Exiting	123
Total	246
Weekday Morning Peak Hour	
Entering	9
Exiting	6
Total	15

3 Ibid.

WEEKDAY MORNING PEAK HOUR



WEEKDAY EVENING PEAK HOUR

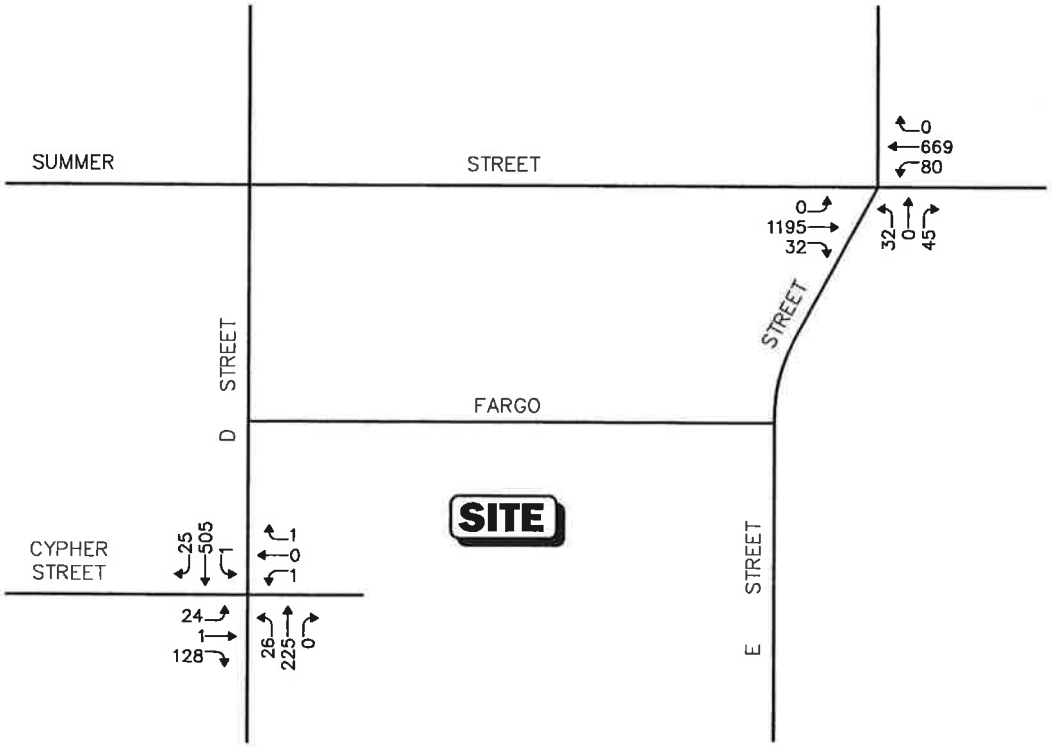


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Figure 2-5

2016 No-Build
Peak Hour Traffic Volumes

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Table 2-2 Trip Generation Summary (Continued)

Time Period/Direction	Vehicle Trips Self-Storage Facility (98,000sf)[a]
Weekday Evening Peak Hour	
Entering	13
Exiting	12
Total	25

[a] ITE LUC 151, Mini-Warehouse.

Project Generated traffic Volume Summary

As can be seen in Table 2-2, the Project is expected to generate approximately 246 vehicle trips (2-way, 24-hour volume) on an average weekday (123 entering and 123 exiting), with approximately 15 vehicle trips (nine entering and six exiting) expected during the weekday morning peak-hour and 25 vehicle trips (13 entering and 12 exiting) during the weekday evening peak-hour. It should be noted that the Project will generate slightly higher traffic volumes during the Saturday midday peak-hour (approximately 39 vehicle trips); however, traffic volumes on the adjacent roadway network are lower on a Saturday when compared to weekday traffic volume conditions.

2.3.5 Vehicle Trip Distribution and Assignment

The directional distribution of generated trips to and from the Project was developed based on a review of the existing traffic patterns within the study area and the trip distribution patterns reflected in recently completed studies within in the study area. The general trip distribution pattern for the Project is graphically depicted on Figure 2-6, with Figure 2-7 depicting the assignment of Project-related traffic on to the study area roadway network.

2.3.6 Build Traffic Volumes

The 2016 Build condition traffic-volumes consist of the 2016 No-Build traffic volumes with the anticipated Project-generated traffic added to them. The resulting 2016 Build condition weekday morning and evening peak-hour traffic volumes are graphically depicted on Figure 2-8.

A summary of peak-hour projected traffic-volumes increases external to the study area that is the subject of this assessment is shown in Table 2-3. These volumes are based on the expected increases resulting from the Project.

Legend:

XX	Entering Trips
(XX)	Exiting Trips

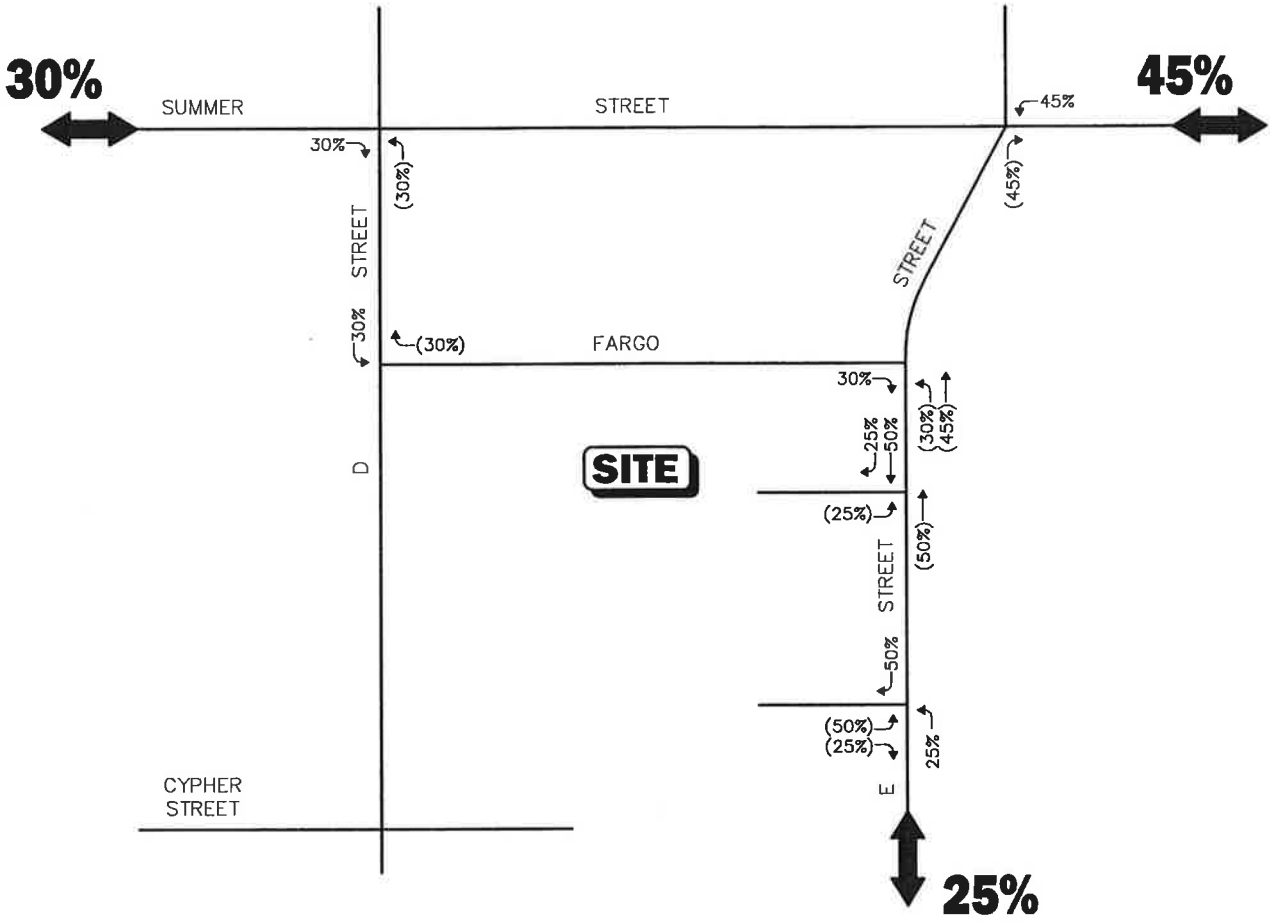

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Figure 2-6

Trip Distribution Map

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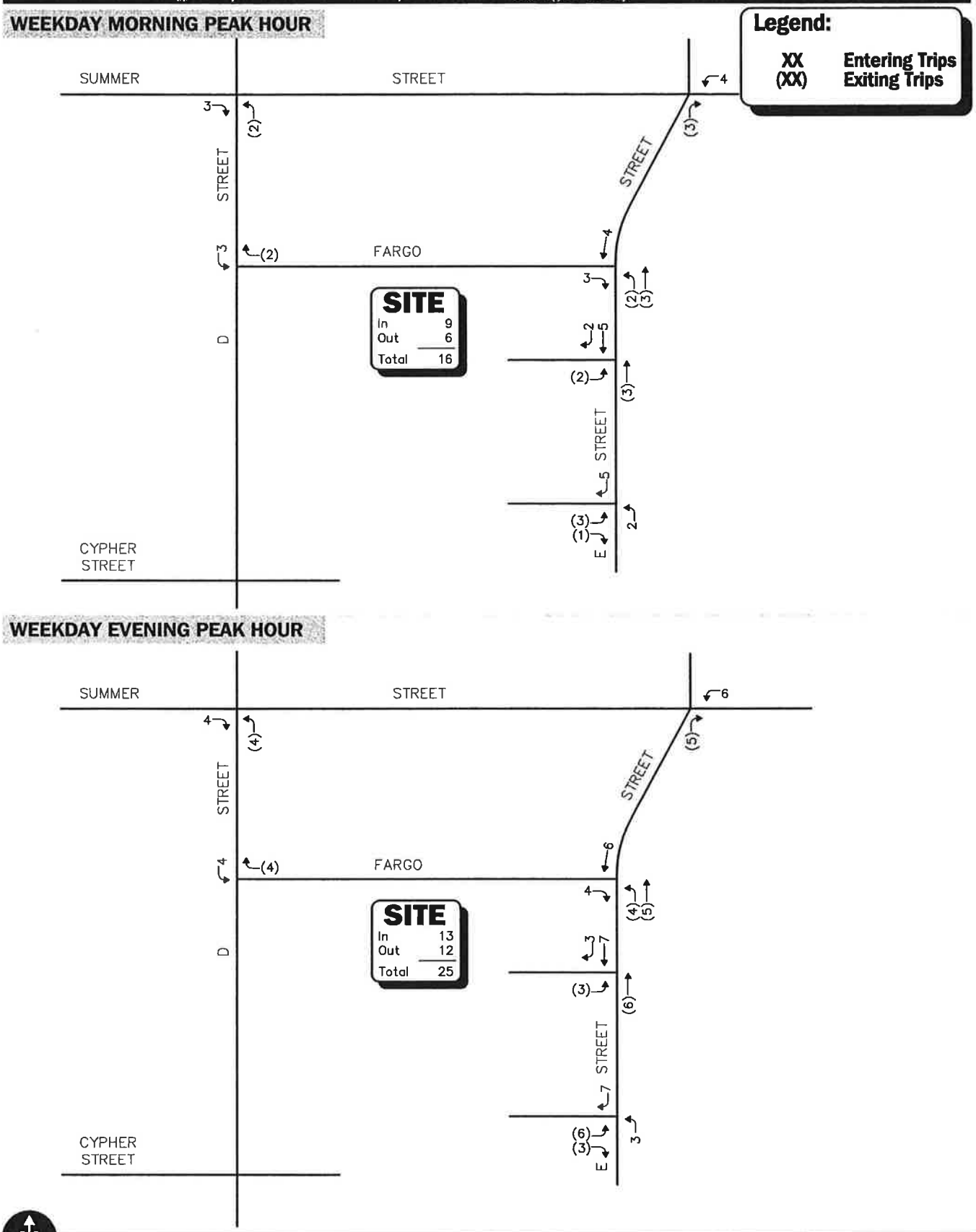

Figure 2-7

Project-Generated Peak Hour Traffic Volumes

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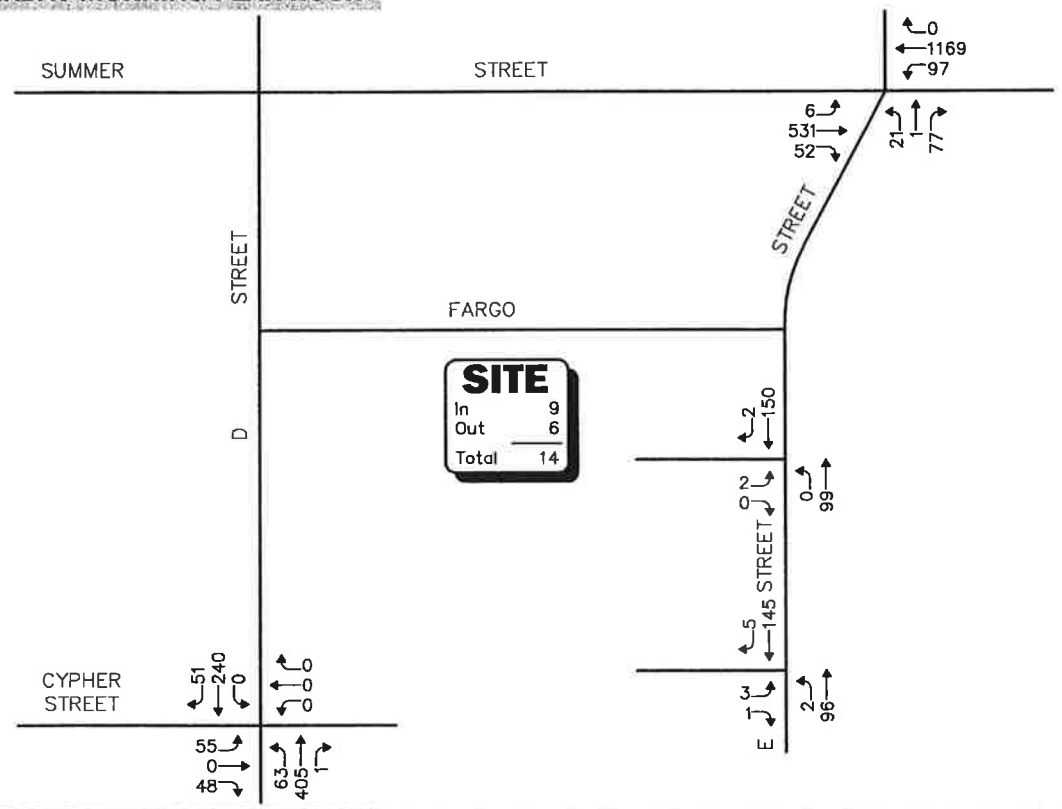
WEEKDAY MORNING PEAK HOUR



WEEKDAY EVENING PEAK HOUR

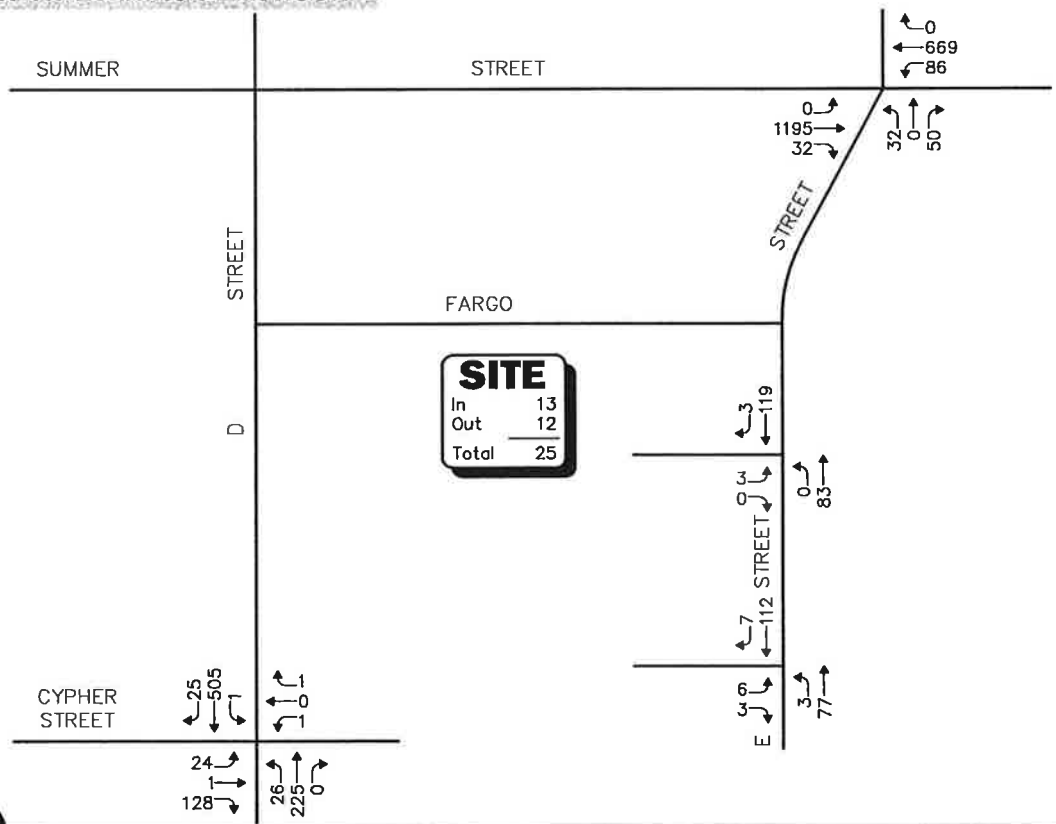


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Figure 2-8

2016 Build
Peak Hour Traffic Volumes

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Transportation Engineers & Planners

Table 2-3 Peak Hour Traffic Volumes Increases

Location/Peak Hour	2016 Existing	2016 No-Build	2016 Build	Volume Increase Over No-Build	Percent Increase Over No-Build
Summer Street, east of Fargo St.					
Weekday Morning	1,713	1,867	1,874	7	0.4
Weekday Evening	1,813	1,989	2,000	11	0.6
E Street, south of the Project site:					
Weekday Morning	235	241	244	3	1.2
Weekday Evening	184	189	195	6	3.2

As shown in Table 2-3, Project-related traffic volume increases external to the study area that is the subject of this assessment were shown to range from 0.4 to 3.2 percent, with vehicle increases ranging from 3 to 11 vehicles during the peak periods. Such increases are relatively minor and within the range of normal daily and seasonal traffic volume fluctuations.

2.4 Traffic Operations Analysis

To assess the potential impact of the Project on the roadway network, traffic operations and vehicle queue analyses were performed at the study area intersections under 2011 Existing, 2016 No-Build and 2016 Build conditions. Capacity analyses provide an indication of how well the roadway facilities serve the traffic demands placed upon them, with vehicle queue analyses providing a secondary measure of the operational characteristics of an intersection or section of roadway under study.

In brief, six levels of service are defined for each type of facility. They are given letter designations ranging from A to F, with a level-of-service (LOS) "A" representing the best operating conditions and a LOS "F" representing congested or constrained operations. A LOS "E" is representative of a transportation facility that is operating at its design capacity, with a LOS "D" generally defined as the limit of "acceptable" traffic operations. Since the level-of-service of a traffic facility is a function of the flows placed upon it, such a facility may operate at a wide range of levels of service depending on the time of day, day of week, or period of the year. The Synchro© intersection capacity analysis software, which is based on the analysis methodologies and procedures presented in the 2000 Highway Capacity Manual (HCM)[4] for signalized and unsignalized intersections, was used to complete the level-of-service and vehicle queue analyses.

4 *Highway Capacity Manual,* Transportation Research Board; Washington, DC 2000.

2.4.1 Analysis Results

Level-of-service and vehicle queue analyses were conducted for 2011 Existing, 2016 No-Build and 2016 Build conditions for the two study area intersections The results of the intersection capacity and vehicle queue analyses are summarized in Table 2-4, with the detailed analysis results presented in the Traffic Appendix.

The following is a summary of the level-of-service and vehicle queue analyses for the intersections within the study area.

D Street at Cypher Street

Under 2011 Existing conditions, the critical movements at this unsignalized intersection (all movements from Cypher Street) were shown to operate at LOS C during the weekday morning peak-hour and at LOS B during the weekday evening peak-hour. Under 2016 No-Build and Build conditions, the critical movements were shown to continue to operate at LOS C during the weekday morning peak-hour and to degrade to LOS C during the weekday evening peak-hour as a result of traffic volume increases independent of the Project. Vehicle queues at the intersection were shown to range from 0 to 39 feet (approximately 2 vehicles) during the peak periods, with no increases shown to result from the addition of Project-related traffic.

Summer Street at Fargo Street

Under 2011 Existing conditions, the critical movements at this unsignalized intersection (all movements from Fargo Street) were shown to operate at LOS D during the weekday morning peak-hour and at LOS F during the weekday evening peak-hour. Under 2016 No-Build and Build conditions, the critical movements were shown to degrade to LOS E during the weekday morning peak-hour as a result of traffic volume increases independent of the Project and to continue to operate at LOS F during the weekday evening peak-hour. Vehicle queues at the intersection were shown to range from 0 to 195 feet (approximately 8 vehicles) during the peak periods, with no significant increase shown to result from the addition of Project-related traffic (less than1 vehicle).

E Street at the Project Driveways

Under 2016 Build conditions, all movements at the Project driveway intersections with E Street were shown to operate at LOS B or better during both weekday morning and evening peak hours with negligible vehicle queuing.

Table 2-4 Unsignalized Intersection Level of Service and Vehicle Queue Summary

	2011 Existing				2016 No-Build				2016 Build			
Unsignalized Intersection/ Peak Hour/Movement	Demand (a)	Delay (b)	LOS (c)	Queued 95th	Demand	Delay	LOS	Queue 95th	Demand	Delay	LOS	Queue 95th
D Street at Cypher Street:												
Weekday Morning:												
Cypher Street EB LT/TH/RT	101	16.4	C	22	103	23.3	C	35	103	23.3	C	35
Private Driveway WB LT/TH/RT	0	0.0	A	0	0	0.0	A	0	0	0.0	A	0
D Street NB LT/TH/RT	323	2.1	A	5	469	1.9	A	5	469	1.9	A	5
D Street SB LT/TH/RT	235	0.0	A	0	291	0.0	A	0	291	0.2	A	0
Weekday Evening:												
Cypher Street EB LT/TH/RT	149	12.5	B	27	153	15.6	C	39	153	15.6	C	39
Private Driveway WB LT/TH/RT	2	13.3	B	1	2	16.1	C	2	2	16.1	C	2
D Street NB LT/TH/RT	180	1.4	A	2	251	1.4	A	3	251	1.3	A	3
D Street SB LT/TH/RT	377	0.0	A	0	531	0.0	A	0	531	0.0	A	0
Summer Street at Fargo Street:												
Weekday Morning:												
Summer Street EB LT	6	11.0	B	1	6	11.8	B	1	6	11.8	B	1
Summer Street EB TH/RT	546	0.0	A	0	583	0.0	A	0	583	0.0	A	0
Summer Street WB LT/TH/RT	1,146	1.6	A	10	1,262	1.6	A	10	1,266	1.7	A	11
Fargo Street NB LT/TH/RT	93	29.7	D	54	96	39.3	E	73	99	40.0	E	76
Weekday Evening:												
Summer Street EB LT	0	0.0	A	0	0	0.0	A	0	0	0.0	A	0
Summer Street EB TH/RT	1,105	0.0	A	0	1,272	0.0	A	0	1,227	0.0	A	0
Summer Street WB LT/TH/RT	695	2.7	A	14	749	3.1	A	17	755	3.4	A	19
Fargo Street NB LT/TH/RT	75	>50.0	F	133	77	>50.0	F	181	82	>50.0	F	195

Table 2-4 Unsignalized Intersection Level of Service and Vehicle Queue Summary (Continued)

	2011 Existing				2016 No-Build				2016 Build			
Unsignalized Intersection/ Peak Hour/Movement	**Demand**	**Delay**	**LOS**	**Queued 95th**	**Demand**	**Delay**	**LOS**	**Queue 95th**	**Demand**	**Delay**	**LOS**	**Queue 95th**
E Street at the North Project Drive:												
Weekday Morning:												
Project Drive EB LT/RT	--	--	--	--	--	--	--	--	2	10.1	B	0
E Street NB LT/TH	--	--	--	--	--	--	--	--	99	0.0	A	0
E Street SB TH/RT	--	--	--	--	--	--	--	--	152	0.0	A	0
Weekday Evening:												
Project Drive EB LT/RT	--	--	--	--	--	--	--	--	3	9.7	A	0
E Street NB LT/TH	--	--	--	--	--	--	--	--	83	0.0	A	0
E Street SB TH/RT	--	--	--	--	--	--	--	--	122	0.0	A	0
E Street at the South Project Drive:												
Weekday Morning:												
Project Drive EB LT/RT	--	--	--	--	--	--	--	--	4	9.8	A	0
E Street NB LT/TH		--	--	--	--	--	--	--	98	0.2	A	0
E Street SB TH/RT	--	--	--	--	--	--	--	--	150	0.0	A	0
Weekday Evening:	--											
Project Drive EB LT/RT		--	--	--	--	--	--	--	9	9.5	A	1
E Street NB LT/TH	--	--	--	--	--	--	--	--	80	0.3	A	0
E Street SB TH/RT	--	--	--	--	--	--	--	--	119	0.0	A	0

a Demand in vehicles per hour.
b Average control delay per vehicle (in seconds).
c Level-of-Service.
d Queue length in feet.
EB = eastbound; WB = westbound; NB = northbound; SB = southbound; LT = left-turning movements; TH = through movements; RT = right-turning movements

2.5 Sight Distance Evaluation

Sight distance measurements were performed at the Project driveway intersections with E Street in accordance with MassDOT and American Association of State Highway and Transportation Officials (AASHTO)[5] standards. Both stopping sight distance (SSD) and intersection sight distance (ISD) measurements were performed. In brief, SSD is the distance required by a vehicle traveling at the design speed of a roadway, on wet pavement, to stop prior to striking an object in its travel path. ISD or corner sight distance (CSD) is the sight distance required by a driver entering or crossing an intersecting roadway to perceive an on-coming vehicle and safely complete a turning or crossing maneuver with on-coming traffic. In accordance with AASHTO and MassDOT standards, if the measured ISD is at least equal to the required SSD value for the appropriate design speed, the intersection can operate in a safe manner. Table 2-5 presents the measured SSD and ISD at the subject intersections.

Table 2-5 Sight Distance Measurements

Intersection/Sight Distance Measurement	Required Minimum (Feet)[a]	ISD[b]	Measured (Feet)
E Street at the north Project Driveway			
Stopping Sight Distance:			
E Street approaching from the north	200	--	400+
E Street approaching from the south	200	--	400+
Intersection Sight Distance:			
Looking to the north from the Project driveway	200	290/355[b]	400+
Looking to the south from the Project driveway	200	290/355[b]	400+
E Street at the south Project Driveway			
Stopping Sight Distance:			
E Street approaching from the north	200	--	400+
E Street approaching from the south	200	--	400+
Intersection Sight Distance:			
Looking to the north from the Project driveway	200	290/355[b]	400+
Looking to the south from the Project driveway	200	290/355[b]	400+

a. Recommended minimum values obtained from A Policy on Geometric Design of Highways and Streets, Fifth Edition; American Association of State Highway and Transportation Officials (AASHTO); 2004; and based on a 30 mph approach speed on E Street.

b. Values shown are the intersection sight distance for a vehicle turning right/left exiting a roadway under STOP control such that motorists approaching the intersection on the major street should not need to adjust their travel speed to less than 70 percent of their initial approach speed.

5 *A Policy on Geometric Design of Highway and Streets,* Fifth Edition; American Association of State Highway and Transportation Officials (AASHTO); 2004.

As can be seen in Table 2-5, the available lines of sight for motorists traveling along E Street approaching the Project driveways (SSD) and for motorists exiting the Project (ISD) were found to exceed the recommended minimum sight distance requirements for a 30 mph approach speed along E Street, consistent with the measured 85th percentile vehicle travel speed.

2.6 Recommendations and Conclusions

2.6.1 Conclusions

The Project is expected to generate approximately 246 vehicle trips (two-way, 24-hour volume) on an average weekday (123 entering and 123 exiting), with approximately 15 vehicle trips (9 entering and 6 exiting) expected during the weekday morning peak-hour and 25 vehicle trips (13 entering and 12 exiting) during the weekday evening peak-hour. Such increases would not be readily apparent on the roadway network and are within the range of normal daily and seasonal traffic volume fluctuations.

In order to assess the impact of the Project on the roadway network, traffic operations and vehicle queue analyses were performed at the study intersections under 2011 Existing, 2016 No-Build and 2016 Build conditions. This analysis indicates that the Project will not have a material impact on motorist delays or vehicle queuing over No-Build conditions, with no changes in level-of-service shown to occur as a result of the addition of Project-related traffic. The Project driveway intersections with E Street were shown to operate at a LOS B or better during the peak periods with negligible vehicle queuing.

Based on the TIA, the existing transportation infrastructure affords sufficient capacity to accommodate the additional traffic that may result from the Project in a safe and efficient manner.

2.6.2 Recommendations

A detailed transportation improvement program has been developed for the Project that is designed to provide safe and efficient access to the Project while minimizing impacts to motorists traveling along adjacent roadways. The following improvements have been recommended as a part of this evaluation and will be completed subject to receipt of all necessary rights, permits and approvals, and will be formalized in the Transportation Access Plan Agreement (TAPA) to be executed between the Project proponent and the Boston Transportation Department (BTD).

Project Access

Access to the Project will be provided by way of a new driveway that will intersect the north side of E Street in the southern portion of the Project site. An additional access is proposed in the northern portion of the Project site that will be used on an as-needed basis to accommodate the occasional large truck that may access the Project. This access will be

closed at all other times and will be designed with mountable curb along E Street and a removable fence section at the property line. The following recommendations are offered with respect to the design and operation of the Project driveways and the Project site:

- The Project driveways should be a minimum of 24 feet in width.
- Vehicles exiting the Project site should be placed under STOP-sign control with illumination (lighting) provided.
- All signs and pavement markings to be installed as a part of the Project shall conform to the applicable standards of the Manual on Uniform Traffic Control Devices (MUTCD).[6]
- Signs and landscaping adjacent to the Project driveways and within the Project site should be designed and maintained so as not to restrict lines of sight.
- The north Project driveway should be suitably designed to reflect its limited use on an occasional basis by large trucks that may access the site. Sloped curbing should be used to define the driveway limit along E Street. The driveway should be flush with the sidewalk along the Project frontage and the extension of the driveway between the back of the sidewalk and the parking area within the Project site should be constructed of a suitable stabilized base material that will support occasional truck access to the Project. The perimeter fence that will bound the Project site along E Street should be designed to accommodate periodic use of the north Project driveway and be secured at all other times.

Off-Site

Cypher Street Extension

The Project has been designed to accommodate the proposed future construction of the Cypher Street Extension by Massport, allowing for the installation of a sidewalk along the south side of the Project site and appropriate corner radii to be constructed at the E Street/Cypher Street Extension intersection.

D Street at Cypher Street

No improvements appear to be required at this intersection to accommodate Project-related traffic. Independent of the Project, it is suggested that a STOP-sign be installed on the Cypher Street approach to D Street in order to reinforce the flashing "red" signal

6 *Manual on Uniform Traffic Control Devices* (MUTCD); Federal Highway Administration; Washington, DC; 2003.

indications. It is expected that crosswalks, wheelchair ramps and pedestrian traffic signal equipment will be installed at the intersection in conjunction with the proposed future construction of the Cypher Street Extension by Massport.

Summer Street at Fargo Street

An analysis of operating conditions at the unsignalized intersection of Summer Street at Fargo Street indicates that the Fargo Street approach currently operates under constrained conditions (LOS F) during the weekday evening peak-hour under 2011 Existing conditions, independent of the Project. In order to improve operating conditions at the intersection, it is suggested that a double-yellow centerline be provided on Fargo Street approaching Summer Street and that separate left and right-turn lanes be marked. In addition, a STOP-line should be provided in advance of the crosswalk across Fargo Street. It appears that these improvements can be completed within the confines of the existing paved area on Fargo Street.

With implementation of the above recommendations, safe and efficient access will be provided to the Project and the Project can be constructed with minimal impact on the roadway system.

2.6.3 Construction Management Plan (CMP)

An important component of the transportation plan for the Project is an effective series of measures that are designed to minimize traffic flow and safety impacts during the Project's construction phase. Summarized below are several measures which the Project proponent and the general contractor will undertake during the construction phase of the Project.

- The Project proponent and the general contractor will coordinate with BTD regarding all transportation-related construction impacts of the Project.

- Designated truck routes will be established to govern how trucks access the Project site. The goal of this commitment is to have construction trucks use only the regional highway system (I-90), the South Boston By-Pass Road and Summer Street, and to avoid travelling through residential areas to the extend practical.

- Secure fencing and sidewalk staging protection (if necessary) will be provided in areas affected by construction to protect nearby pedestrian and vehicular traffic. Gate entrances into the construction area will be determined jointly with BTD.

- During construction activities, as required by BTD, a police detail will be employed to manage pedestrian and vehicle traffic at the construction access to the Project site.

- Secure on-site storage will be provided for tools and equipment in an effort to minimize construction-related vehicle trips to the site.

- Full or partial street closures will be avoided to the extent possible. Should a partial street closure be necessary in order to off-load construction materials and/or complete construction-related activities, the closure will be limited to off-peak periods as defined by the BTD. Police details will be used as required by the BTD. Prior to the implementation of any planned construction activities within the public right-of-way, the contractor will submit to BTD for review and approval a traffic and pedestrian management plan.

- Construction worker parking will be provided within the Project site and expressly prohibited along E Street or within residential neighborhoods.

- The general contractor will implement appropriate measures to encourage ridesharing by employees and subcontractors working on the Project.

With implementation of the above elements of the CMP, construction-related impacts associated with the Project will be appropriately managed and safe and efficient access for vehicles, pedestrians and bicyclists will be maintained.

Section 3.0

Environmental Component

3.0 ENVIRONMENTAL COMPONENT

3.1 Wind

Epsilon Associates Inc. (Epsilon) has made a qualitative review of the wind environment in the vicinity of the proposed Project and the impact that the Project may have on pedestrian level wind conditions. In Epsilon's opinion, the proposed Project is unlikely to result in any significant adverse pedestrian level wind impacts on the site or in the surrounding area.

Tall buildings, especially those that protrude significantly above their surroundings, often cause increased local wind speeds at the pedestrian level. Typically, wind speeds increase with elevation. Taller buildings can intercept the faster winds that exist at higher elevations and deflect them down to the pedestrian level. The funneling of wind through gaps between buildings and the acceleration of wind around corners of buildings may also cause increases in wind speed. Conversely, buildings that are surrounded by others of equivalent height tend to be protected from prevailing upper-level winds; therefore, they do not intercept and deflect the faster winds downward and no significant changes to the local pedestrian-level wind environment occur.

Predominantly consisting of filled tidelands, the project area is very flat. Dorchester Heights, approximately 1,000 to the south, is the nearest higher elevation. The proposed Project will be 54 feet high (as measured per Boston Zoning Code Article 2A, and not including the small mechanical penthouse in the center of the roof). The surrounding area is built up generally with low-rise 1- and 2-story warehouse/industrial development, up to approximately 25 feet high. .

The prevailing winds in Boston vary with the season. In the colder months (fall, winter, and spring), winds are generally out of the northeast and northwest. Spring and fall are transitional, but winds are stronger in the spring than in the fall. Strong northwest winds can be particularly uncomfortable on cold winter days. Warmer summer winds generally come from the southwest. Based upon wind data gathered at Logan International Airport, the average wind speed at pedestrian level is 9.4 mph in the winter, 9.2 mph in the spring, 7.4 mph in the summer, and 8.2 mph in the fall.[1]

Because the relatively low height of the proposed building will not intercept higher level winds, and because the proposed building is not significantly taller than the surrounding buildings, the proposed Project is not expected to induce undue wind impacts or cause any significant change in pedestrian level wind patterns.

[1] Durgin, Frank. Draft Project Impact Report, Charlesview Redevelopment, July 24, 2009, pp. 4-1 – 4-28.

In the winter, fall, and spring, prevailing winds are from the northwest. This means that the site will be largely shielded by urban development (which is typically much taller than the proposed building) that stretches all the way to the high ground of Beacon Hill. The entrance and parking area on the Project site itself will be shielded by the proposed building. Warmer summer winds will come from the southwest and will be shielded by the urban development of similar height that extends back to the Southeast Expressway and beyond.

3.2 Shadow

3.2.1 Introduction and Methodology

A shadow impact analysis was conducted for the hours of 9:00 am, 12:00 noon, and 3:00 pm during the summer solstice (June 21), autumnal equinox (September 21), and the winter solstice (December 21). The vernal equinox shadow impacts were studied as if March 21 were still in Standard Time, meaning they are studied during the time periods of 10:00 am, 1:00 pm, and 4:00 pm. Impacts at 6:00 pm during the summer and autumn were also examined. The study used the applicable Altitude and Azimuth data for Boston presented in Appendix B of the BRA's 2006 Development Review Guidelines.

The shadow analysis presents existing shadow as well as net new shadow from the Project to illustrate the incremental impact of the Project. For the purposes of clarity, new shadow is shown in a dark gray tone while existing shadow is shown in light gray. Results of the shadow impact study are discussed in the following sections, and are supported by Figures 3.2-1 through 3.2-14.

3.2.2 Results

Because the proposed Project's relatively low height, new shadow from the Project will be limited to the immediate surrounding public ways and sidewalks of E Street and the proposed future Cypher Street Extension. Some additional new shadow will be cast on portions of the vacant parcel immediately to the west, the warehouse building immediately to the north, and the warehouse on the east side of E Street. No new shadow from the Project is anticipated on any open spaces, significant pedestrian areas, or public transportation locations. Results for each of the 14 time periods studied are presented below.

Vernal Equinox (March 21)

There are no significant shadow impacts during the vernal equinox. At 9:00 AM, shadows will extend slightly across the western lot line into the vacant parcel on D Street "behind" the Project site. At noon, shadows will be confined to the Project site itself. At 3:00 PM, shadows will extend onto the blank sheet metal side and roof of the adjacent warehouse to the north.

Summer Solstice (June 21)

There are no significant shadow impacts during the summer solstice. At 9:00 AM, shadows will barely extend beyond the western lot line. At noon and 3:00, shadows will be confined to the Project site itself. At 6:00, shadows will extend across E Street and fall on the warehouse/distribution building to the east.

Autumnal Equinox (September 21)

There are no significant shadow impacts during the autumnal equinox. At 9:00 AM, shadows will extend across the western lot line into the vacant parcel on D Street. At noon, shadows will be confined to the Project site itself. At 3:00 PM, shadows will extend onto the side of the adjacent warehouse to the north. At 6:00, the area will be dark enough such that new shadow is not expected to be noticeable.

Winter Solstice (December 21)

Shadows are longest in December, but again will not be significant. At 9:00 AM, shadows will extend well across the western lot line into the vacant parcel behind the Project site, but will not reach D Street. At noon, shadows will extend onto the side of the adjacent warehouse to the north. At 3:00, shadows will extend across E Street and fall on the warehouse/distribution building to the east.

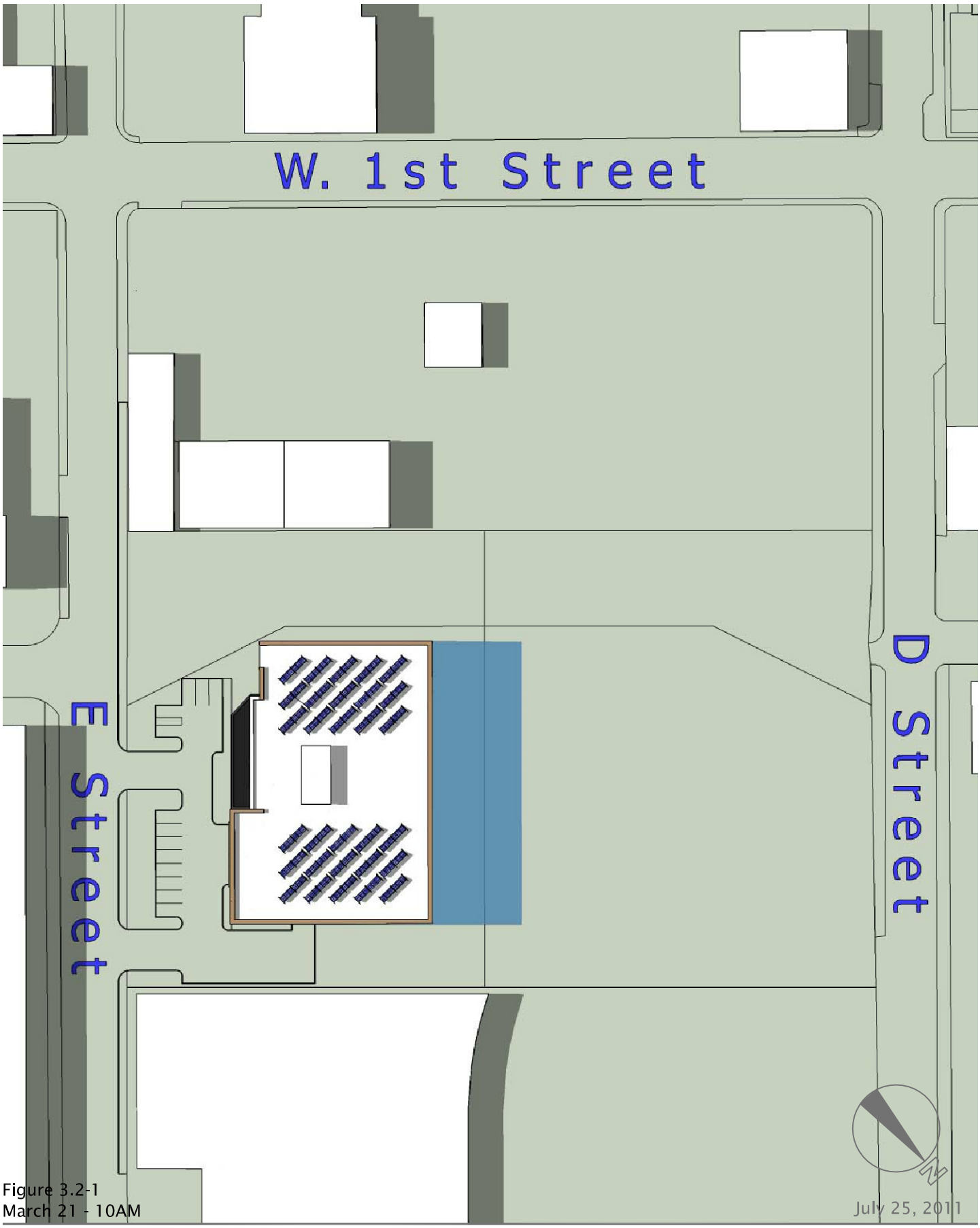


Figure 3.2-1
March 21 - 10AM

Storage Center

E Street
Boston, MA

Group One Partners, Incorporated
21 West Third Street
Boston, MA 02127
617.268.7000 ph
617.268.0209 f
www.grouponeinc.com

Figure 3.2-2
March 21 - 1PM

Storage Center

E Street
Boston, MA

Group One Partners, Incorporated
21 West Third Street
Boston, MA 02127
617.268.7000 ph
617.268.0209 f
www.grouponeinc.com

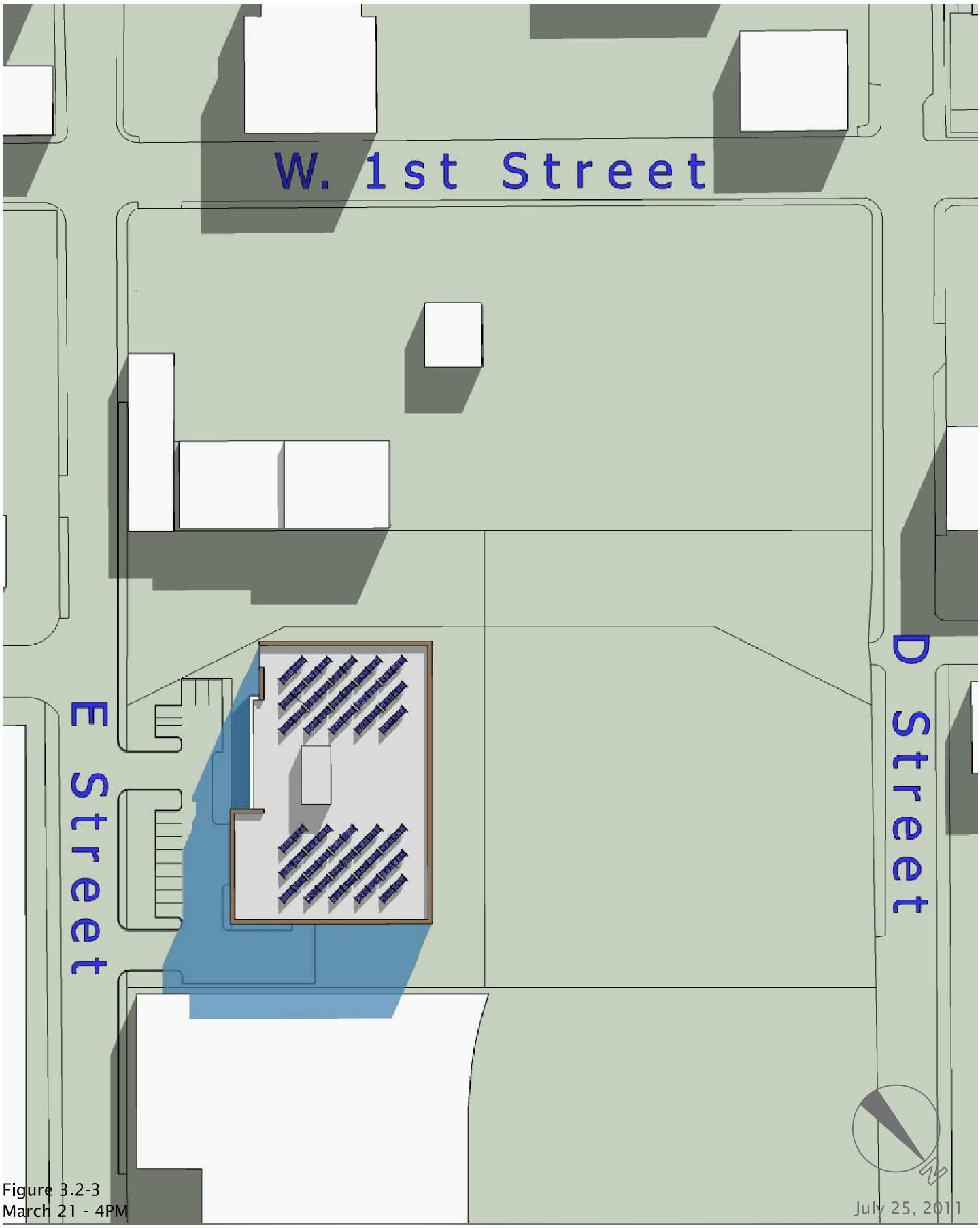


Figure 3.2-3
March 21 - 4PM

Storage Center

E Street
Boston, MA

Group One Partners, Incorporated
21 West Third Street
Boston, MA 02127
617.268.7000 ph
617.268.0209 f
www.grouponeinc.com

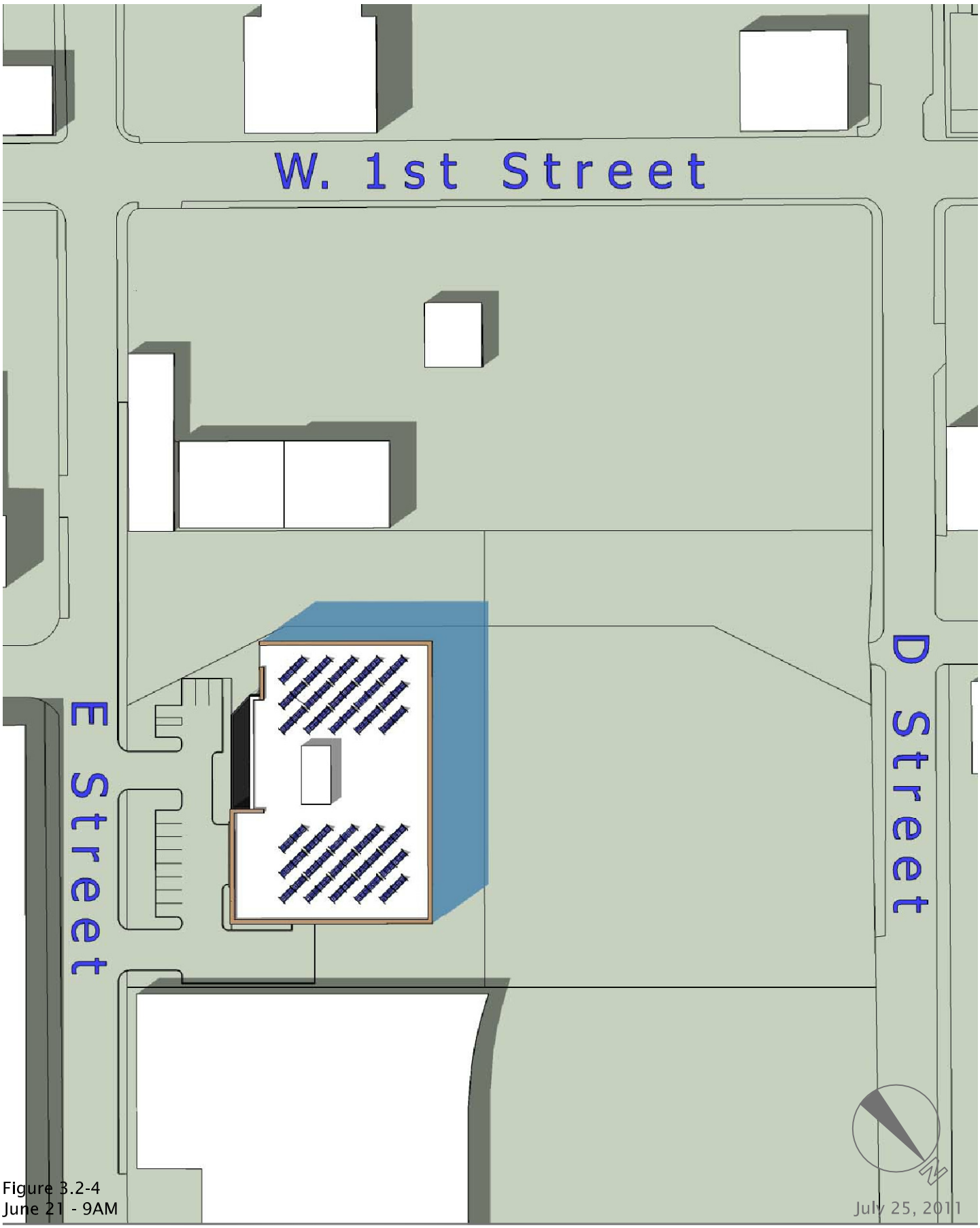


Figure 3.2-4
June 21 - 9AM

Storage Center

E Street
Boston, MA

Group One Partners, Incorporated
21 West Third Street
Boston, MA 02127
617.268.7000 ph
617.268.0209 f
www.grouponeinc.com

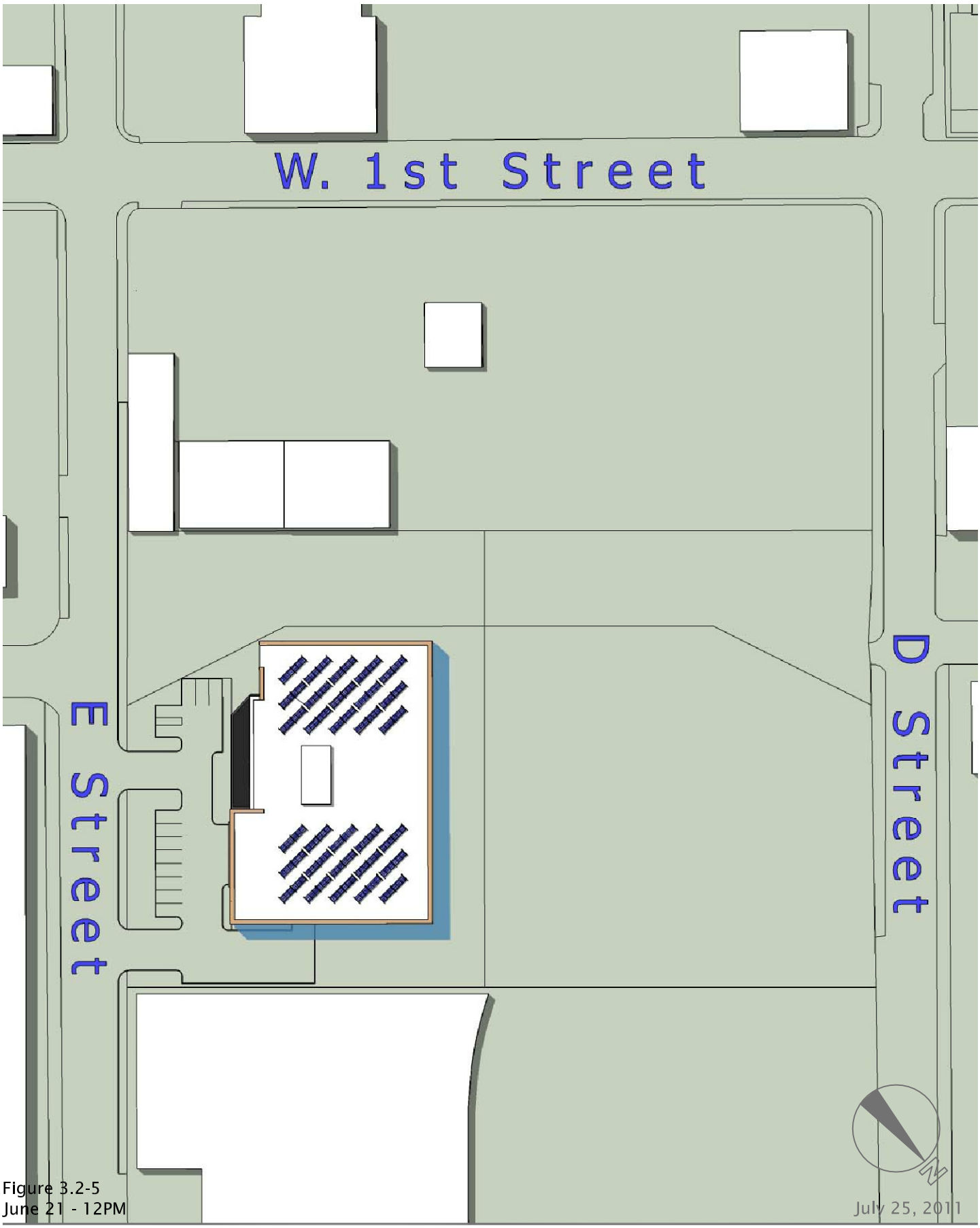


Figure 3.2-5
June 21 - 12PM

Storage Center

E Street
Boston, MA

Group One Partners, Incorporated
21 West Third Street
Boston, MA 02127
617.268.7000 ph
617.268.0209 f
www.grouponeinc.com

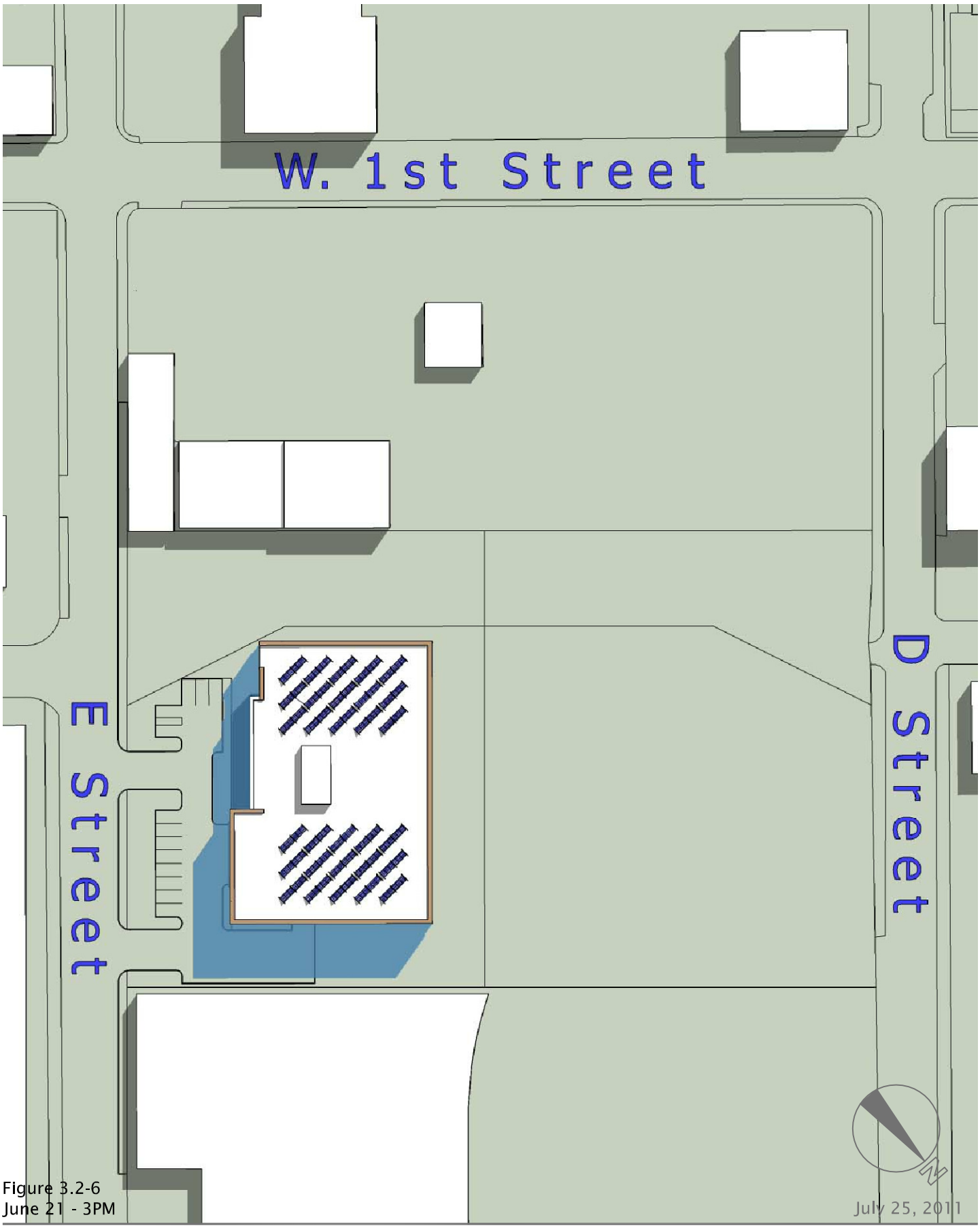


Figure 3.2-6
June 21 - 3PM

Storage Center

E Street
Boston, MA

Group One Partners, Incorporated
21 West Third Street
Boston, MA 02127
617.268.7000 ph
617.268.0209 f
www.grouponeinc.com

Figure 3.2-7
June 21 - 6PM

Storage Center

E Street
Boston, MA

Group One Partners, Incorporated
21 West Third Street
Boston, MA 02127
617.268.7000 ph
617.268.0209 f
www.grouponeinc.com

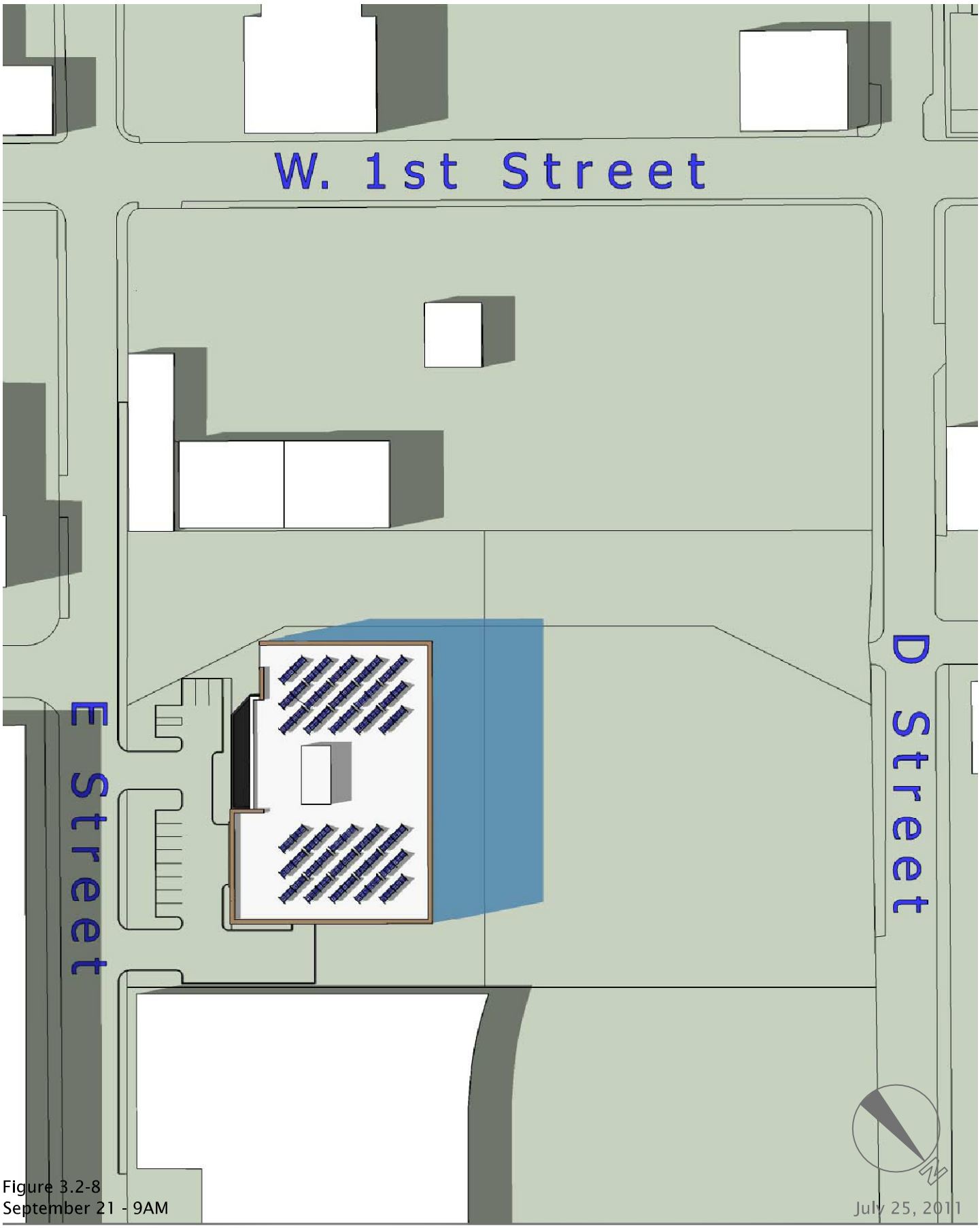


Figure 3.2-8
September 21 - 9AM

Storage Center

E Street
Boston, MA

Group One Partners, Incorporated
21 West Third Street
Boston, MA 02127
617.268.7000 ph
617.268.0209 f
www.grouponeinc.com

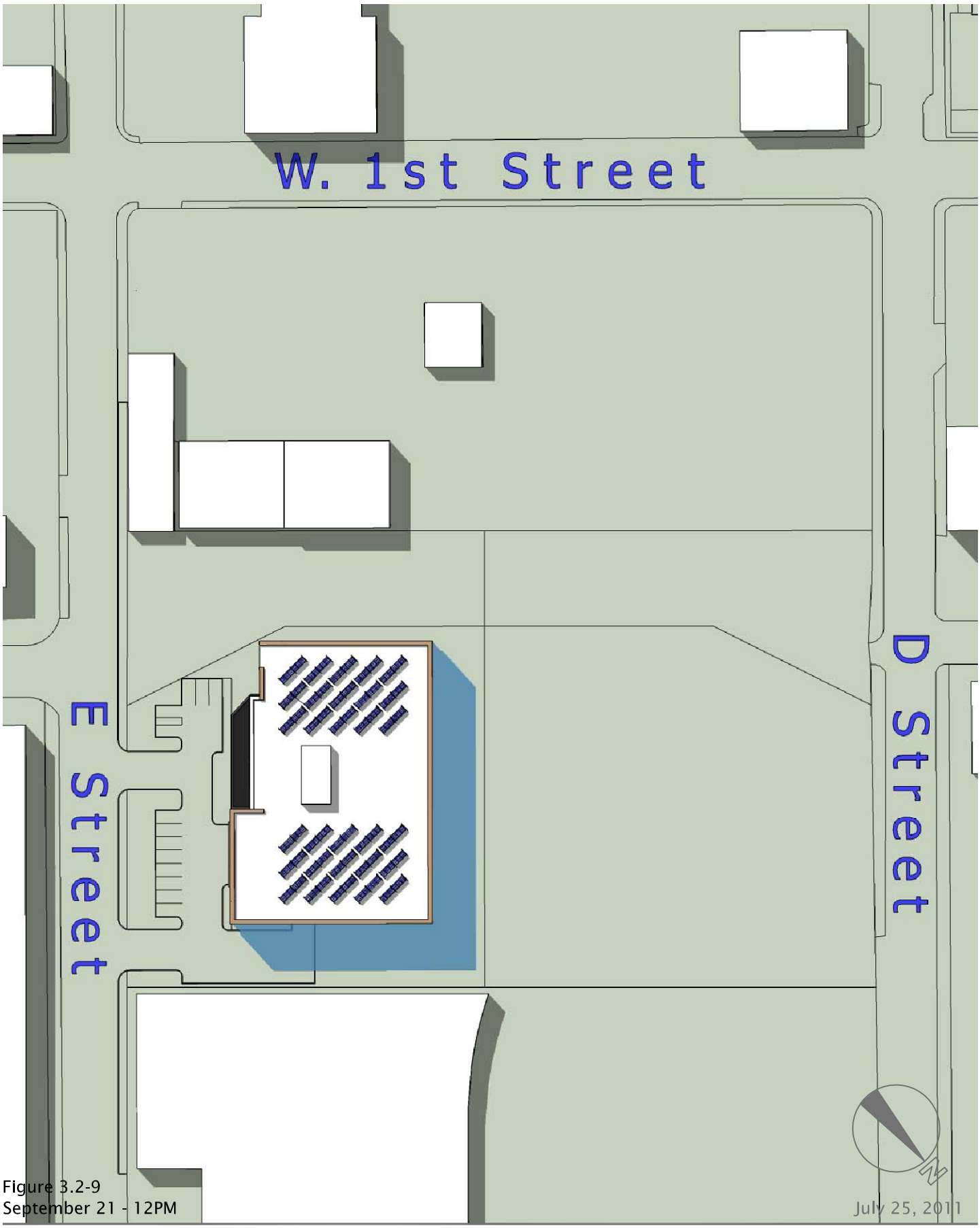


Figure 3.2-9
September 21 - 12PM

Storage Center

E Street
Boston, MA

Group One Partners, Incorporated
21 West Third Street
Boston, MA 02127
617.268.7000 ph
617.268.0209 f
www.grouponeinc.com

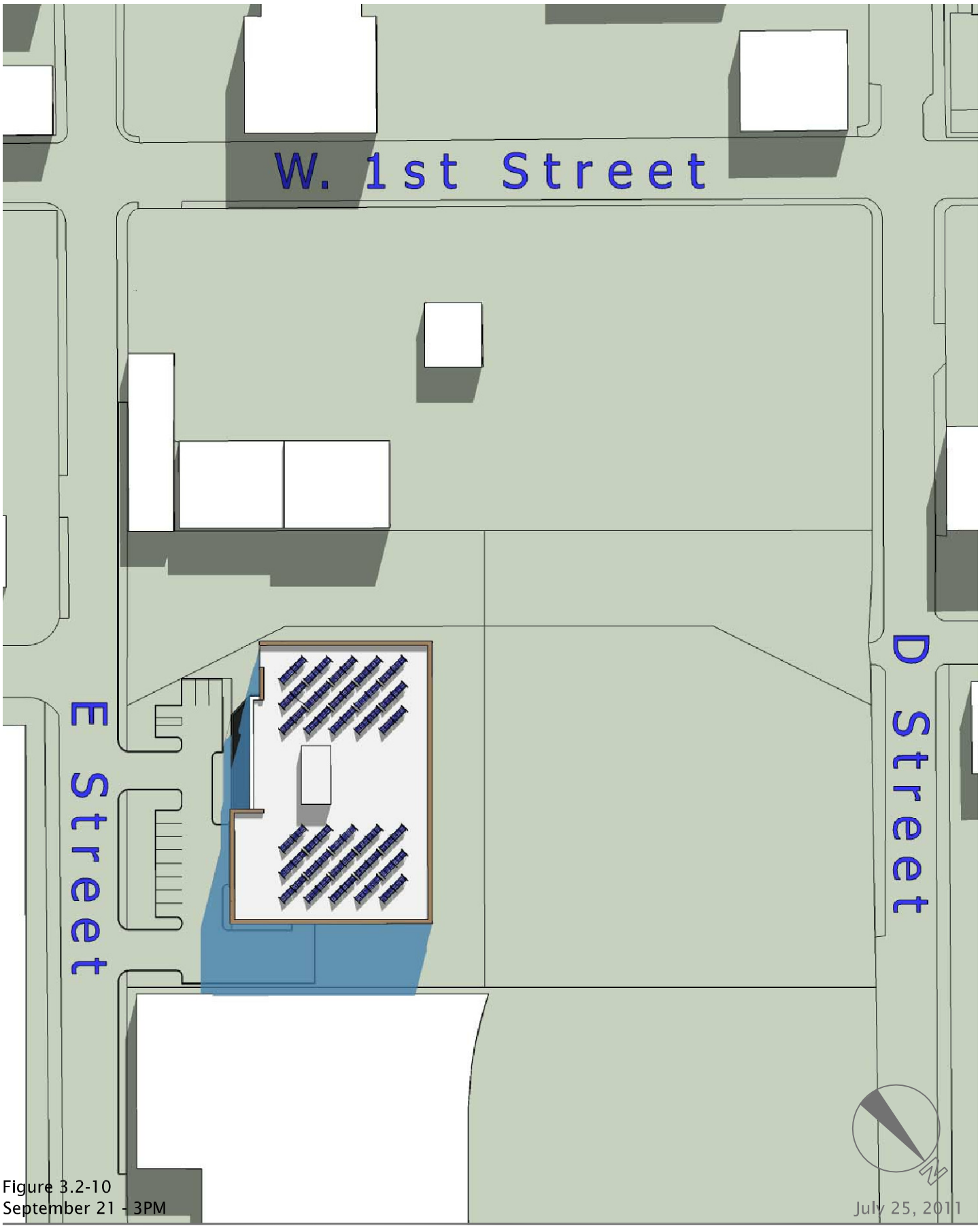


Figure 3.2-10
September 21 - 3PM

Storage Center

E Street
Boston, MA

Group One Partners, Incorporated
21 West Third Street
Boston, MA 02127
617.268.7000 ph
617.268.0209 f
www.grouponeinc.com

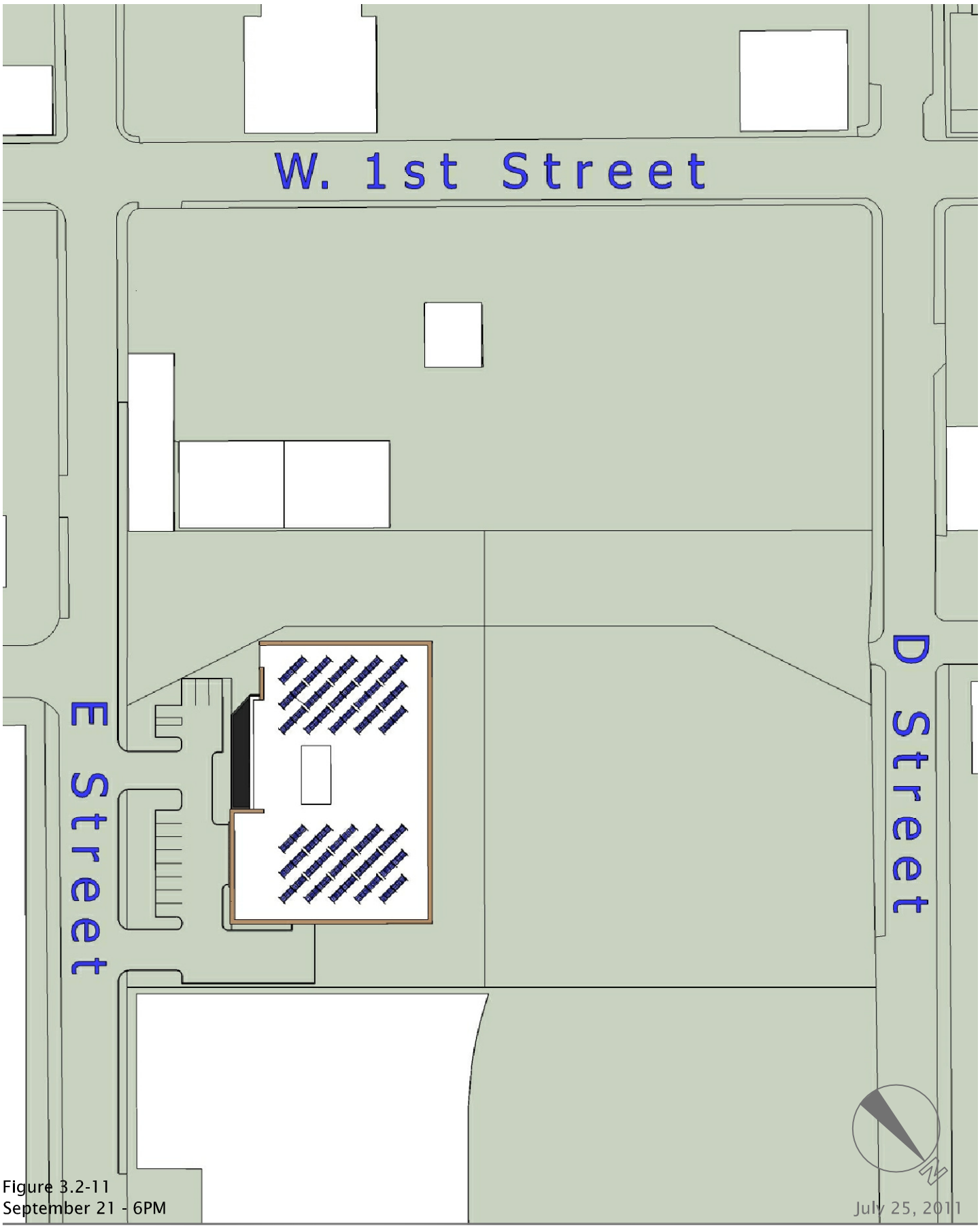


Figure 3.2-11
September 21 - 6PM

Storage Center

E Street
Boston, MA

Group One Partners, Incorporated
21 West Third Street
Boston, MA 02127
617.268.7000 ph
617.268.0209 f
www.grouponeinc.com

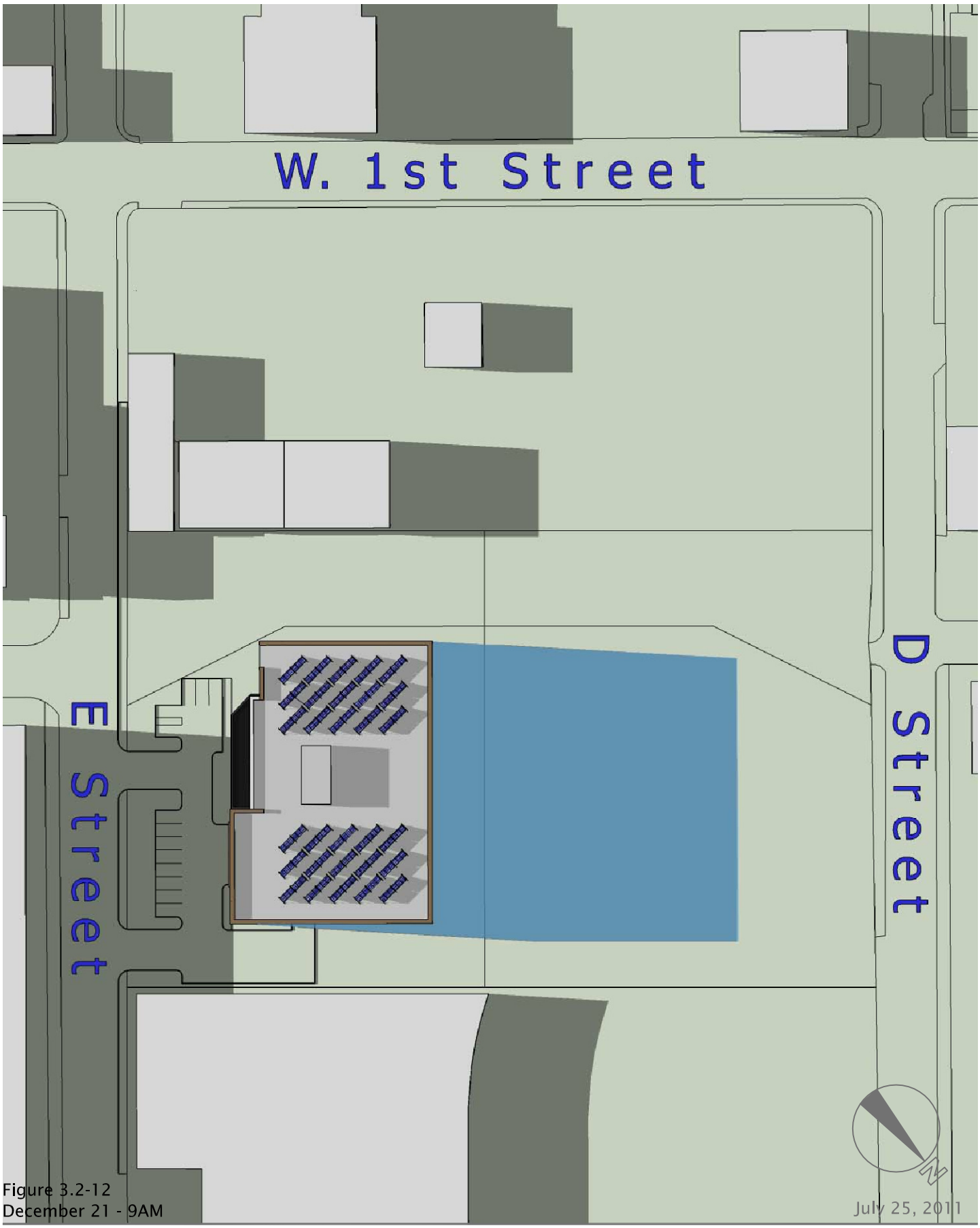


Figure 3.2-12
December 21 - 9AM

Storage Center

E Street
Boston, MA

Group One Partners, Incorporated
21 West Third Street
Boston, MA 02127
617.268.7000 ph
617.268.0209 f
www.grouponeinc.com

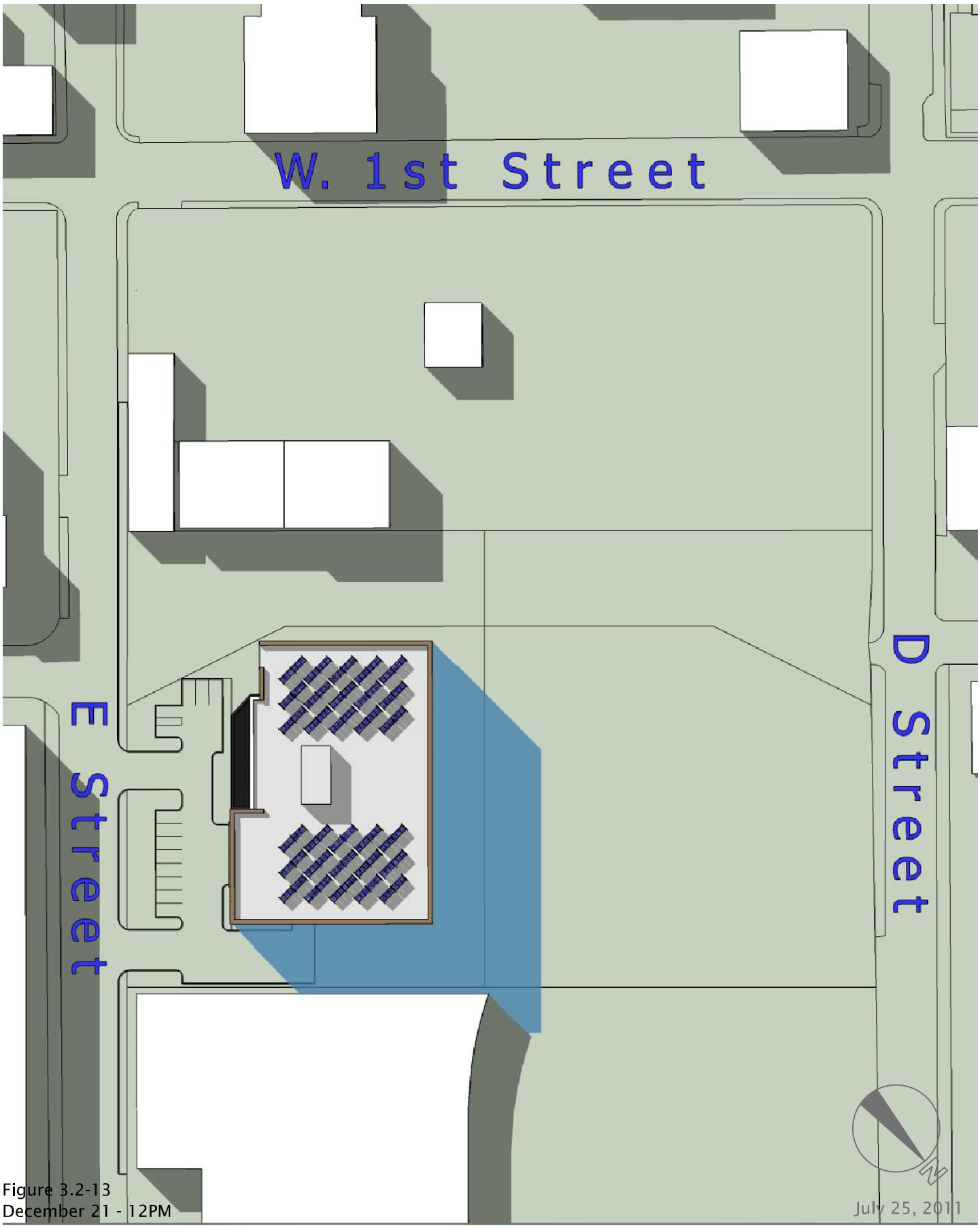


Figure 3.2-13
December 21 - 12PM

Storage Center

E Street
Boston, MA

Group One Partners, Incorporated
21 West Third Street
Boston, MA 02127
617.268.7000 ph
617.268.0209 f
www.grouponeinc.com

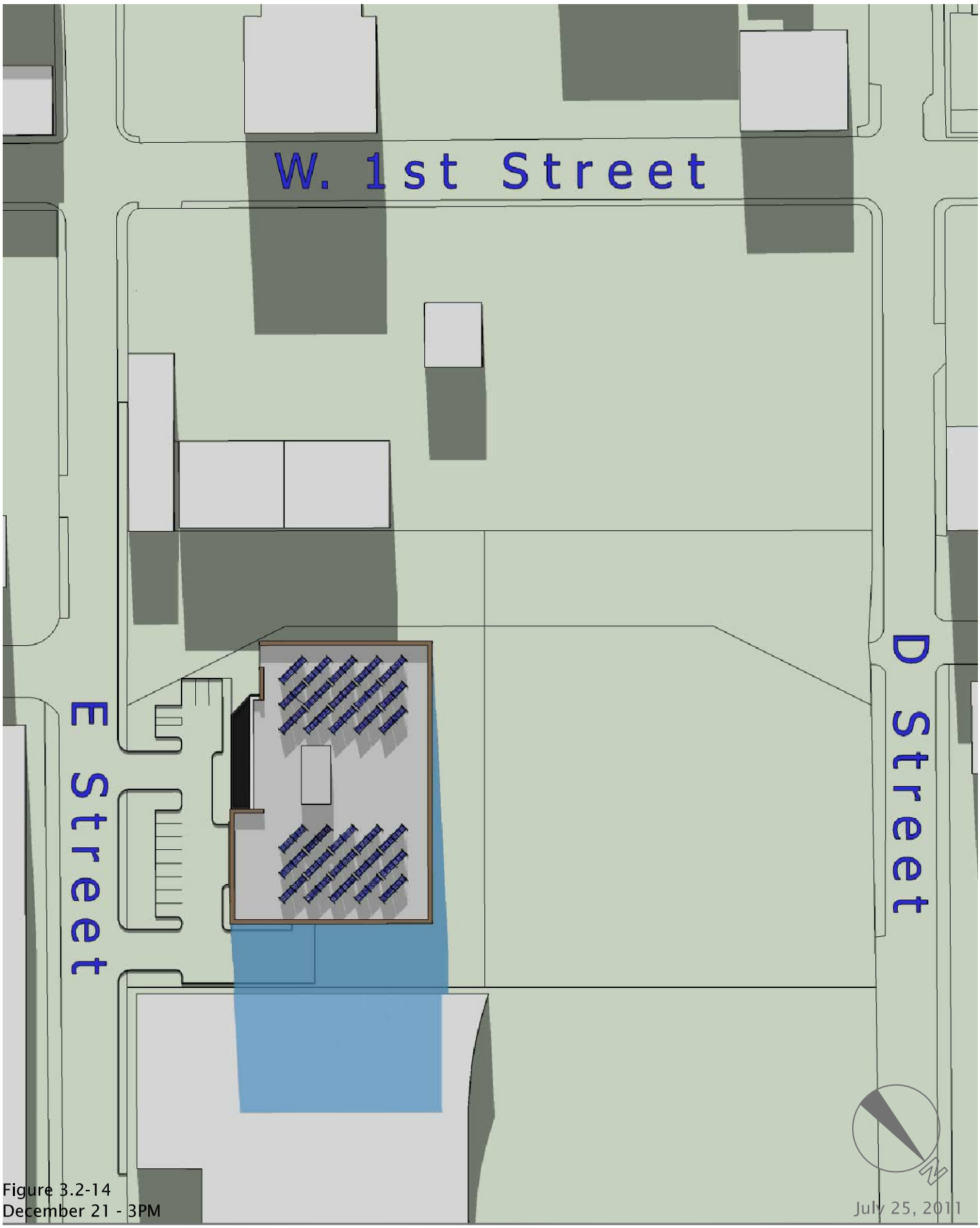


Figure 3.2-14
December 21 - 3PM

Storage Center

E Street
Boston, MA

Group One Partners, Incorporated
21 West Third Street
Boston, MA 02127
617.268.7000 ph
617.268.0209 f
www.grouponeinc.com

3.3 Daylight

3.3.1 Introduction

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 daylight analysis for the Project considers the existing, as-of-right and proposed conditions, and typical daylight obstruction values of the surrounding area.

Because the Project site is currently vacant, the proposed Project will necessarily increase daylight obstruction; however, the resulting conditions will be typical of the area, and daylight obstruction will not be significant.

3.3.2 Methodology

The daylight analysis was performed using the Boston Redevelopment Authority Daylight Analysis ("BRADA") computer program[2]. This program measures the percentage of sky-dome that is obstructed by a project and is a useful tool in evaluating the net change in obstruction from existing to build conditions at a specific site.

Using BRADA, a silhouette view of the building is taken at ground level from the middle of the adjacent city streets or pedestrian ways centered on the proposed building. The façade of the building facing the viewpoint, including heights, setbacks, corners and other features, is plotted onto a base map using lateral and elevation angles. The two-dimensional base map generated by BRADA represents a figure of the building in the "sky dome" from the viewpoint chosen. The BRADA program calculates the percentage of daylight that will be obstructed on a scale of 0 to 100 percent based on the width of the view, the distance between the viewpoint and the building, and the massing and setbacks incorporated into the design of the building; the lower the number, the lower the percentage of obstruction of daylight from any given viewpoint.

The analysis compares four conditions: Existing Conditions; As-of-right Conditions; Proposed Conditions; and the context of the area.

A single viewpoint was chosen along E Street (Viewpoint 1) to evaluate daylight obstruction for the proposed conditions. Because there is no building at the site currently; the existing daylight obstruction is zero.

[2] Method developed by Harvey Bryan and Susan Stuebing, computer program developed by Ronald Fergle, Massachusetts Institute of Technology, Cambridge, MA, September 1984.

Based on the Boston Zoning Code, the maximum allowable height of a building at the Project site is 65 feet. The As-of-right conditions are calculated using the maximum allowable height and assuming that the building has no set-back from the street. The As-of-right conditions were not calculated for this Project because they would obviously result in more daylight obstruction than the proposed building, which will be only 54 feet high and set back approximately 65 feet from E Street.

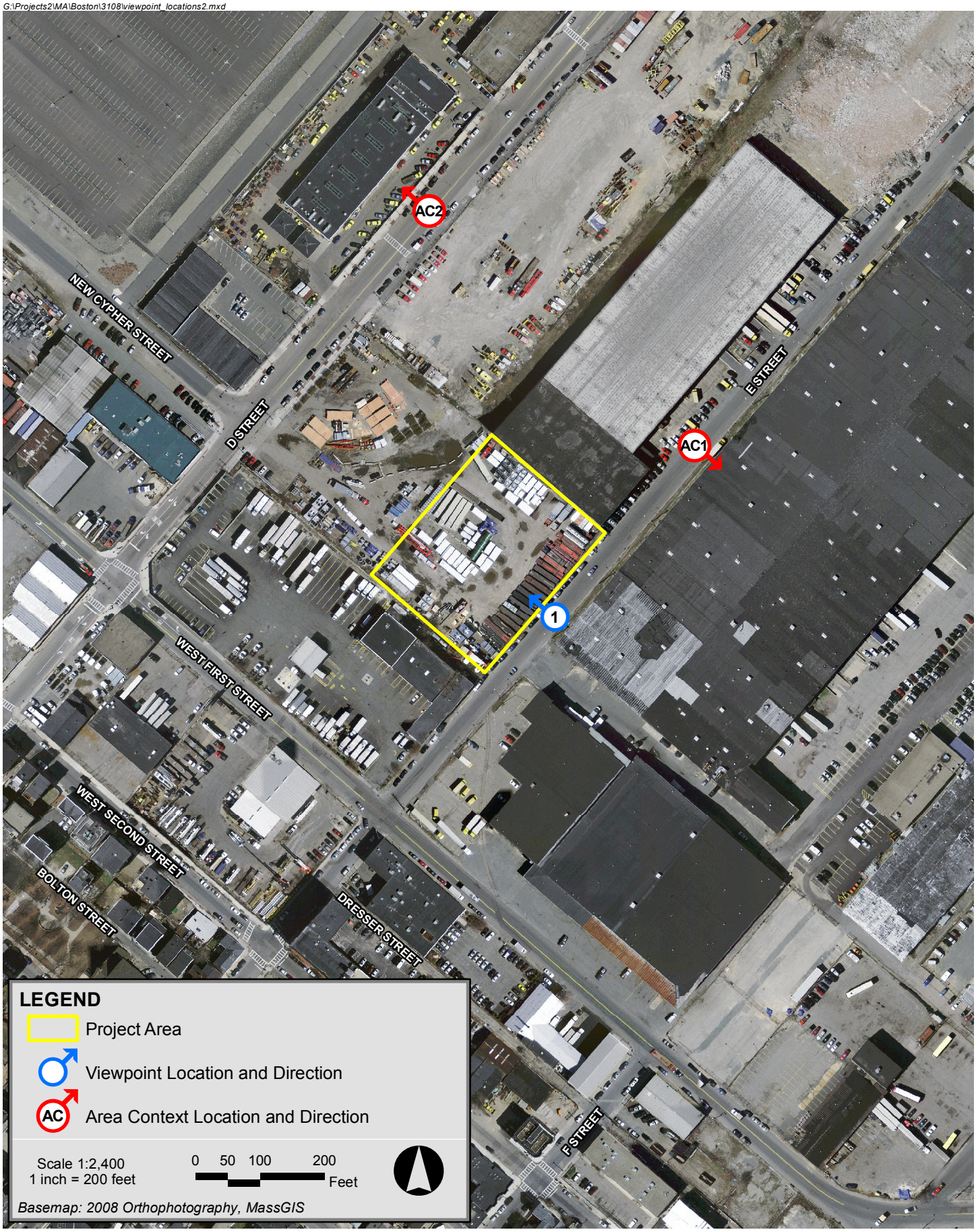
Two area context points were considered in order to provide a basis of comparison to existing conditions in the surrounding area. The viewpoints and area context viewpoints were taken in the following locations and are shown on Figure 3.3-1:

- Viewpoint 1 – View from E Street facing northwest toward the Project site.
- Area Context Viewpoint AC1 - View from E Street facing southeast toward 429-497 E Street.
- Area Context Viewpoint AC2 – View from D Street facing northwest toward 362-370 D Street.

The building analyzed for Area Context Viewpoint AC1 is a very long warehouse that runs along the east edge of E Street. Due to the limitations of the BRADA software, only a portion of the building was analyzed. Daylight obstruction values for the entire building would be similar to the portion analyzed because the building is uniform for the entire length and it does not have any taller or more obstructive façades.

3.3.3 Results

The results for each viewpoint under each alternative condition are described in Table 3-1. Figures 3.3-2 illustrates the BRADA results for each analysis.

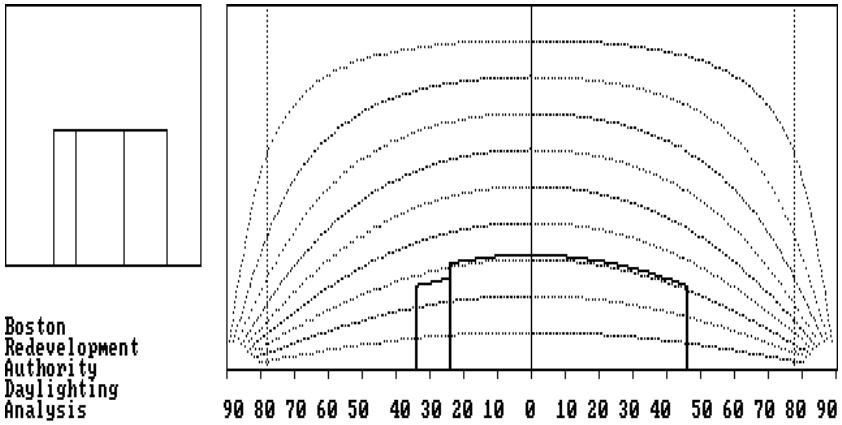


920 Development, LLC Self Storage Facility Boston, MA

Epsilon ASSOCIATES INC.

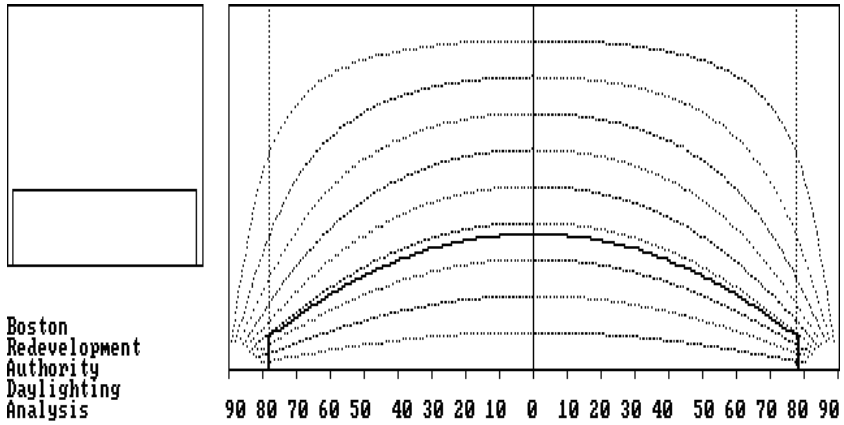
Figure 3.3-1

Viewpoint and Area Context Locations



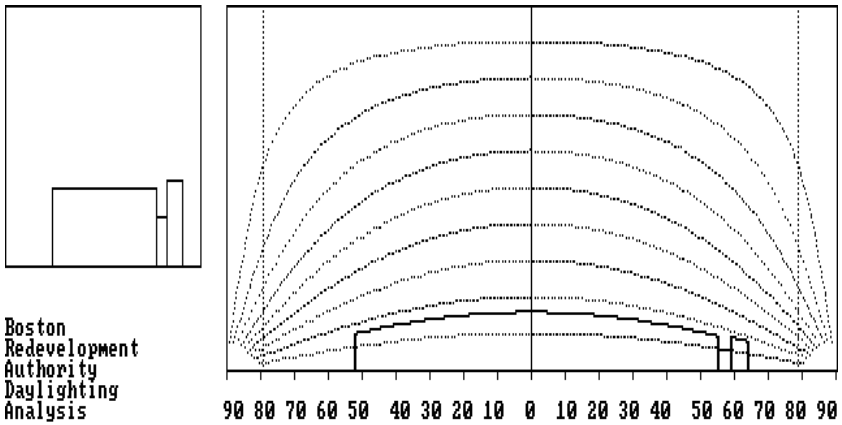
Obstruction of daylight by the building is 15.8 %

Viewpoint 1 – E Street



Obstruction of daylight by the building is 37.1 %

Area Context Viewpoint AC1 – E Street



Obstruction of daylight by the building is 11.7 %

Area Context Viewpoint 2 – D Street

Table 3-1 Daylight Obstruction Values

Viewpoint Locations		Existing Conditions	Proposed
Viewpoint 1	E Street looking Northwest at the Project site	0.0%	15.8%
Area Context Points			
AC1	E Street looking southeast at 429-497 E Street	37.1%	N/A
AC2	D Street looking northwest at 362-370 D Street	11.2%	N/A

E Street – Viewpoint 1

E Street runs along the southeastern edge of the Project site. Viewpoint 1 was taken from the center of E Street, looking directly at the Project site. The Project site is currently vacant and has an existing daylight obstruction value of zero. The development of the Project will increase daylight obstruction values to 15.8%. While this is an increase over existing conditions, the daylight obstruction value for the Project is consistent with other buildings in the Project vicinity, including AC1 and AC2 respectively.

Area Context Views

The Project area is characterized by industrial uses. The buildings in the Project vicinity are predominantly low-rise, ranging between one and ten stories. To provide a larger context for comparison of daylight conditions, obstruction values were calculated for the two Area Context Points described above and shown on Figure 3.3-1. The daylight obstruction values ranged from 11.2% on D Street (AC2) to 37.1% on E Street (AC1). Daylight obstruction values for the Project are fully consistent with the Area Context values.

3.3.4 Conclusions

The daylight analysis conducted for the Project describes existing and proposed daylight obstruction conditions at the Project site and in the surrounding area. The results of the BRADA analysis indicate that while the development of the Project will result in increased daylight obstruction over existing conditions, the resulting conditions will be similar to the daylight obstruction values within the surrounding area and typical of densely built urban areas.

3.4 Solar Glare

The proposed building will not be extensively fenestrated and will not employ reflective glass; therefore, no solar glare impacts are expected.

3.5 Air Quality

The proposed Project is not expected to result in any adverse air quality impacts.

Although the exact mechanical specifications have not yet been determined, the proposed Project will likely include a small natural gas fired boiler (or boilers) and a small diesel fueled emergency generator.

The boiler(s) will provide heating and hot water capability to the facility. As a self-storage facility, heat and hot water usage will be fairly minimal. The boiler(s), if having a rated heat input between 10 and 40 million Btu per hour (MMBtu/hr), will be subject to the Massachusetts' DEP's (MassDEP) Environmental Results Program (ERP) self certification program, and its requirements. If below 10 MMBtu/hr, no certification is required. To assist in dispersing exhaust pollutants, these boilers will be required to exhaust vertically on the roof.

The diesel generator will provide emergency power for stairwell lighting and other systems requiring continuous power. The generator will be located on the roof of the structure, enclosed by an appropriate sound attenuating structure, and exhausting vertically. Emergency generators with an engine power rating of at least 37 kilowatts are also subject to the requirements of the MassDEP ERP self certification program.

Given that these few units will be new, state of the art units, their emissions will be subject to the current emission standards at the time of installation. Numerous prior analyses, some with far more emission units, have shown that emissions from these types of units are typically negligible, and cause no exceedances of the National Ambient Air Quality Standards (NAAQS).

Projected traffic from the proposed Project is estimated to result in approximately 246 trips per day. The peak hour traffic is expected to be weekday evenings and total just 25 trips per hour. This amount of traffic is also considered minimal. Advances in motor vehicle technology (reducing tailpipe emissions) over the past 20 to 30 years, have contributed to major improvements in intersection air quality. Thus, minimal increases in average daily traffic have been shown to produce negligible impacts to intersection air quality. Vehicle idling onsite will be discouraged.

Temporary air quality impacts from fugitive dust may be expected during early phases of construction from Project site preparation activities. Plans for controlling dust during construction will include wetting during periods of high wind, and careful removal of debris by covered trucks. The construction contracts will provide for a number of strictly enforced measures to be utilized by contractors to reduce emissions and minimize impacts.

These are expected to include:

- Using wetting agents where needed on a scheduled basis;
- Using covered trucks;
- Minimizing exposed storage debris on-site;
- Monitoring actual construction practices to ensure that unnecessary transfers and mechanical disturbances of loose materials are minimized;
- Locating aggregate storage piles away from areas having the greatest pedestrian activity where and when possible; and
- Periodic cleaning of streets and sidewalks to minimize dust accumulations.

3.6 Stormwater/Water Quality

3.6.1 Existing Storm Drainage System

Stormwater from the site currently drains to catch basins in E Street which connect to a Boston Water and Sewer Commission (BWSC) 30-inch x 45-inch combined storm sewer in E Street. This combined storm sewer flows south toward West First Street.

3.6.2 Proposed Storm Drainage System Volume

The existing site is compacted gravel and considered to be entirely impermeable. The proposed Project will introduce a significant area of landscaping and pervious surface area. Accordingly post-development runoff will be less, thereby reducing the amount of runoff reaching the BWSC storm drain system.

3.6.3 DEP Stormwater Management Policy Standards

The Massachusetts Department of Environmental Protection's (MassDEP) Stormwater Management Policy addresses non-point source pollution. 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 (the MA Wetlands Protection Act), by municipal conservation commissions. The proposed Project is characterized as a redevelopment project under the DEP standards, and will comply with all of the standards to the maximum extent practicable as required for redevelopment projects.

Standard #1: No new stormwater conveyances may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.

Compliance: The proposed stormwater management system will comply with this Standard; stormwater discharge will be treated prior to connection to the BWSC system. There are no wetland resource areas on the Project site.

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

Compliance: The proposed design will not increase peak discharge rates for all storm events. Because the Project will reduce the area of impervious surface on the Project site, there will be a concomitant reduction in peak discharge rates for all storm events under proposed conditions.

Standard #3: Loss of annual recharge to groundwater should be eliminated or minimized through the use of infiltration measures including environmentally 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 the 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 Project will be designed to include infiltration of stormwater runoff equivalent to a minimum of 1" across the project site consistent with Article 37 of the Boston Zoning Code.

Standard #4: For new development, stormwater management systems must be designed to remove 80% of the average annual load (post-development conditions) of Total Suspended Solids (TSS).

Compliance: The proposed Project is a Redevelopment Project, not "New Development" on a green site. As such, to the extent possible, the Project's stormwater management system will remove as much of the TSS load as is practicable.

Standard #5: Stormwater discharges from areas with higher potential pollutant loads require the use of specific stormwater management BMPs. The use of infiltration practices without pretreatment is prohibited.

Compliance: The Project site is not a Land Use with Higher Potential Pollutant Loads (LUHPPL) as defined by the Stormwater Management Regulations; therefore, this standard is not applicable.

Standard #6: Stormwater discharges to critical areas must utilize certain stormwater management BMPs approved for "critical areas". Critical areas are Outstanding Resource Waters (ORWs), shellfish beds, swimming beaches, cold-water fisheries and recharge areas for public water supplies.

Compliance: The proposed Project does not discharge to a critical area as defined by the Standards.

Standard #7: Redevelopment of previously developed sites must meet the Stormwater Management Regulations to the maximum extent practicable. However, if it is not practicable to meet all the Standards, new stormwater management systems must be designed to improve existing conditions.

Compliance: The proposed Project will meet the Stormwater Management Standards to the maximum extent practicable and will result in reduced stormwater runoff rates and improved water quality.

Standard #8: Erosion and sediment controls must be implemented to prevent impacts during construction or land disturbance activities.

Compliance: Downslope areas will be protected through the installation of staked hay bales or filter fabric fence to be located along the perimeter and/or elsewhere as required to protect and stabilize earthworks. Existing catch basin located in E Street will be fitted with silt sacs which will be maintained for the duration of construction activities. Upon completion of the Project these silt sacs will be removed and properly disposed of.

Standard #9: All stormwater management systems must have an operation and maintenance plan to ensure that systems function as designed.

Compliance: The site shall be maintained by the Project owner to provide a stabilized, maintained surface thereby preventing excess materials from contacting surface runoff and minimizing transport of materials within the drainage systems. An Operation and Maintenance Plan will be prepared for the Project.

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

Compliance: The proposed Project does not have any illicit discharges to the proposed stormwater management system. An Illicit Discharge Compliance Certification will be filed when the project stormwater management system is designed.

3.6.4 City of Boston Groundwater Overlay District

The Project site is not within the Boston Zoning Code Article 32 Groundwater Conservation Overlay District.

3.6.5 Mitigation Measures

The site is densely compacted gravel and considered to impervious. With completion of the proposed Project much of these impervious surfaces will be replaced with pervious landscaped areas. As a consequence, there will not be an increase in runoff rate or volume as a result of the proposed Project but rather a beneficial decrease in stormwater runoff.

The use of subsurface leaching and recharge devices will be reviewed for application specific to this site during the design phase. These devices, generally, can provide limited recharge of surface runoff to subsurface soils in areas where soil and other conditions allow. Necessary investigations of relevant site constraints will be evaluated during the design process and, if appropriate, such devices will be incorporated to the proposed Project.

Erosion and sedimentation control measure such as silt-sacs and hay bales will be installed prior to construction to prevent the discharge of sediments to the City's stormwater drainage system. Erosion control measures will be inspected weekly and repaired/maintained as required to protect existing and proposed stormwater systems

In conjunction with the Site Plan and General Service Application submitted to the BWSC's Engineering Services Division, the Project Proponent will submit a Pollution Prevention Plan identifying existing drainage patterns and areas to be used for storage or treatment of any contaminated soils, groundwater or stormwater.

An Operation and Maintenance Plan for the Project's post-development stormwater management system will be prepared for the Owner to implement detailing cleaning and maintenance schedules.

3.7 Flood Hazard Zones/Wetlands

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) indicates that the project site is not located within an area subject to flooding. Refer to City of Boston, Massachusetts Suffolk County Community – Panel – Numbers 250286 0010 C and 250286 0011 C effective as of April 1, 1982.

3.8 Geotechnical/Groundwater

3.8.1 Subsurface Conditions

Subsurface conditions at the Project site were investigated in 2010 by taking standard penetration tests (SPTs) and split spoon samples at approximately 5-foot intervals to depths of approximately 24 to 36 feet below the ground surface. Analysis of the borings indicates that the site consists of up to 15+/- feet of fill in succession by intermittent organic soils over natural clay and glacial till deposits.[3]

The Project site is not within the Boston Zoning Code Article 32 Groundwater Conservation Overlay District.

3.8.2 Proposed Building Foundations

The proposed building will have a shallow foundation and slab on grade supported by aggregate piers. Aggregate piers (AP) are a ground improvement technique that uses layers of mandrel-compacted crushed stone to stiffen the existing soil matrix. The APs will be driven on a grid beneath, and just beyond, the building footprint. Shallow spread footings and slab on grade will then be constructed on a layer of structural fill place over the AP improved subgrade.

3.8.3 Groundwater Control

Groundwater at the site was between about five to eight feet below the ground surface at the time the borings were taken (February 2010).

Construction dewatering may be necessary to remove groundwater within the excavation and to remove rainwater following periods of precipitation. Measures will be implemented to maintain groundwater levels outside the property limits. Construction dewatering will be performed in accordance with applicable MWRA, EPA, BWSC and Massachusetts DEP regulations and permits. In addition, waterproofing will be provided against the exterior face of any portions of the foundation which extend below observed and predicted groundwater levels as a permanent groundwater cut-off measure.

Groundwater observation wells will be installed in the vicinity of the Project prior to commencement of any site excavation or dewatering to monitor the groundwater levels prior to, during, and following construction.

[3] Subsurface Data Report Proposed Building 380-400 E Street South Boston, MA, prepared by McArdle Gannon Associates, Inc., March 2010.

3.9 Solid and Hazardous Waste

3.9.1 Solid Waste

The Project will generate only minimal amounts of solid waste typical of a self storage/retail operation. Solid waste is expected to include wastepaper, cardboard, glass bottles and food. Recyclable materials will be recycled through a program implemented by building management.

With the exception of typical household hazardous wastes (e.g., cleaning fluids and paint), the Project will not involve the generation, use, transportation, storage, release, or disposal of potentially hazardous materials.

3.9.2 Presence of Oil or Hazardous Materials

WES Associates performed an Environmental Site Assessment (ESA) for the Project site.[4] The ESA evaluated the possible presence of recognized environmental conditions, as that term is defined by ASTM Standard Practice E 1527-05 ("Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process") at the site. The term *recognized environmental conditions* means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis are not recognized environmental conditions.

No recognized environmental conditions were identified at the site. The site was created by filling tidelands with dredged materials from Boston Harbor and fill materials from other unknown sources. The presence of heavy metals and PAHs has been documented in fill materials on properties adjacent to the site. It is possible that these possible contaminants are present at the site and if they are present, they would be considered to be recognized environmental conditions. There is also the possibility that petroleum products from releases that have occurred along the southern and western boundary of the site have impacted the property. If this has occurred, it would be the responsibility of the PRPs of each of the identified disposal sites to undertake MCP required response actions.

[4] Draft Letter Report, WES Associates, Environmental Site Assessment, D and E Street Massport Properties, South Boston, August 2009

3.10 Noise

The proposed Project is not expected to result in any adverse noise impacts at nearby sensitive receptors.

While the details of the mechanical equipment have not yet been precisely determined, operational noise caused by the proposed Project will primarily involve a minimal amount of rooftop mechanical equipment. The equipment will reside in a dedicated, screened penthouse mechanical room which will significantly attenuate noise emissions. Reasonable efforts will be made if necessary to minimize noise impacts from any rooftop equipment, including appropriate exhaust duct silencers, enclosures, and acoustical louvers.

The Project is similar in size to buildings in the surrounding area, and given the Project's urban setting, existing condition sound levels are likely to be relatively high. Therefore, it is anticipated that operational noise levels from the Project will be less than or similar to existing noise levels, and impacts at the nearest residences (approximately 520 feet to the south along West 2nd Street) are expected to be negligible.

Projected traffic from the proposed Project is estimated to result in a maximum of 25 new trips per hour. This increase is considered minimal and will not produce significant noise impacts.

Short-term, intermittent increases in noise levels will occur during project construction, however every reasonable effort will be made to minimize the noise impacts and ensure the project complies with the requirements of the City of Boston noise ordinance. Mitigation measures are expected to include:

- Using appropriate mufflers on all equipment;
- Providing ongoing maintenance of construction equipment;
- Using sound-attenuating enclosures on continuously operating equipment, such as air compressors and welding generators with outdoor exposure;
- Replacing specific construction operations and techniques with less noisy ones where feasible;
- Scheduling equipment operations to keep average levels low, to synchronize noisiest operations with times of highest ambient levels, and to maintain relatively uniform noise levels;
- Turning off idling equipment; and
- Locating noisy equipment at locations that protect sensitive receptors by shielding or distance.

3.11 Construction

A Construction Management Plan in compliance with the City's Construction Management Program will be submitted to the Boston Transportation Department for the Project.

Short-term minor air quality impacts from fugitive dust may be expected during the construction of the Project. Mitigation measures such as the use of wetting agents where needed and removal of spoils from the Project Site using covered trucks will be utilized, as described in Section 3.5.

Noise impacts will be controlled during construction through the use of mufflers on heavy outdoor equipment, as appropriate and exterior construction hour restrictions, as described in Section 3.10.

Construction methodologies that ensure public safety will be employed for the Project. Techniques such as barricades, walkways, and signage will be used. Construction management and scheduling will minimize impacts on the surrounding environment. This will include plans for construction worker commuting and parking, routing plans for trucking and deliveries, and control of noise and dust.

The proposed construction staging plan for the Project will be designed to isolate the construction while providing safe access for pedestrians and automobiles during normal day-to-day activity and emergencies.

3.12 Rodent Control

A rodent extermination certificate will be filed with the building permit application for the Project. Rodent inspection monitoring and treatment will be carried out before, during, and at the completion of all construction work for the each phase of the Project, in compliance with the City's requirements.

3.13 Wildlife Habitat

The Project site is within a heavily developed urban setting. There are no wildlife habitats in or adjacent to the Project Site.

Section 4.0

Urban Design

4.0 URBAN DESIGN

Figures depicting the proposed Project, including a site plan, elevations, and renderings of the building are included in Chapter 2.

4.1 Site Context

The proposed Project will be located at E Street North of the intersection of West 1st Street. Because it links South Boston and the industrial uses along First Street with the Boston Seaport Waterfront, E Street is one of transition and connection. In this particular section, however, the urban context is fairly nondescript with large open underutilized sites of asphalt and warehouses. Nearby buildings range from single stories in height to structures of five stories. Most were originally constructed for industrial or warehouse use. The architectural context is characterized by predominantly masonry exteriors with minimal fenestration and unornamented facades. In terms of scale, the neighborhood works well for vehicular traffic while the pedestrian movement needs to be enhanced. In recent years, the area has shown renewed vitality and continues to do so with the talk of the BCEC expansion. In context, the E Street Storage Structure promises to be an important next step in the overall re-development and connectivity of the area.

Conceptually, the Project has been designed to reflect both its context and its intended use. The building's facades are organized in a rhythm pattern derived from the neighboring buildings but expressed in a contemporary manner. Within this rhythm, the design is intended to evoke a more contemporary industrial look, one that speaks to an innovative design while remaining grounded in its industrial surroundings. By both "fitting in and standing out" at the same time, the Project will be another step in improvement of the E Street corridor and the overall South Boston / Seaport districts.

4.2 Design

4.2.1 Design Concept

The urban context of the proposed Project has been an important factor in determining the overall design approach to the building. The basic bones of the building have been determined by the internal use with a feeling of enclosure and mass. The elevations are organized by a 2-material layering that is common in larger scale industrial buildings with a sensitivity that evokes a more contemporary design and forward thinking façade. At the base of the building the masonry provides a solid grounded feel while providing unique masonry defined openings for the entry doors into the storage building. A 1-story metal and glass structure protrudes from the corner of the building, promoting visibility and a sense of entry. The body is intended to appear strong and bold in nature while still providing punched window openings and large vertical sections of glass to feel as if the skin has been taken away and there is a snapshot into the interior of the body. The window pattern is also set by a geometric rhythm as the building itself is geometric in nature. At the entry, the

corner has been eroded and a special material has been introduced, again to feel as if the building is being broken down and the interior body and skeleton is being exposed. This will also be the focal point of the entry along with the 1-story glass structure below. The last concept is that of sustainability. There is a large green wall that will be planted and maintained for the rear of this structure that is expected to face a future hotel. This will soften the rear wall of the building and again maintain the expression of something special occurring where the metal skin is removed.

4.2.2 Design Overview

Given the location of the project, its height (four stories plus mechanical components), the Project will have a prominent presence on E Street. To reflect the urban context, the building facades are organized by a rhythm and massing that is defined by the neighborhood context. In this rhythm of punched windows within metal panel there are clean lines and full panes of glass.. The building is also organized horizontally by a 2-part layering. There is a prominent corner element that houses the main entry at the ground level that has a metal storefront system angles to face the corner of E Street and West First Street (with large windows designed to enhance transparency). The body of the building is designed to reflect the internal functions that will take place within. The metal panel mass is broken by punched windows and vertical glazing that allows views into the interior. The mechanical components are set back from the façade to minimize its presence. The overall intent of the design is to create a building that is "of" its industrial context but at the same time one that projects a distinctively different architectural character, notably contemporary in feel, as befit its purpose.

4.2.3 Height and Massing

The overall Project is planned to be a four-story building (plus mechanicals). The basic floor height is determined by the dimensions necessary for the building functions: 16'-0" at the ground level and 10'-0" at all typical floors. Additional screening will be provided to further shield roof mounted equipment.

The overall footprint of the structure will be approximately 191 feet by 136 feet, or 25,000 gross square feet overall, and the height is approximately 54 feet to the top of the roof, as measured per Article 2A of the Boston Zoning Code. The massing on the E Street elevation is further articulated by accentuating the corner entry, which gives the building a strong street presence yet helps it fit quite comfortably within its context.

4.2.4 Façade Design, Fenestration, and Building Materials

Relative to its neighboring structures, the Project will sit comfortably on the site. At E Street, the façade is organized around a corner entry that is placed to denote the importance of the corner and be a focal point for the project. The window patterns have a rhythm to it that is clean and yet contemporary in nature. The first floor of the building is

slightly higher than the others (at 16′-0″ vs. 10′-0″), to give it appropriate emphasis, and it is further set off by means of a strong base material and the metal panel skirt that projects past the masonry as if the building is "wrapped" with metal. The mechanical above is set back by the distance of a standard structural grid, which will essentially mask its presence from pedestrian view from the sidewalk below.

This approach to the design of the elevations is consistently applied to the other facades as well. The rear façade has the metal "wrap" removed and the masonry is exposed, again as if the skin has been peeled away. Here a green wall is introduced to provide a filter of the masonry wall and soften the façade that will eventually be facing a hotel structure.

4.3 Site Design

The Project is intended to balance the size of the building footprint with substantial landscaped area. There will be parking and drive aisles provided for vehicular access into and throughout the front of the building. Much of the parking will be controlled by a security gate that will allow those not utilizing the facility to not go beyond a certain point. The side and rear yards will receive landscaping with an emphasis of the landscaping to be provided facing the intersection of E Street and West First Street. This emphasis on landscaping that faces the residential areas of the neighborhoods will provide a softer, more inviting feel to the building an effort to promote pedestrian circulation.

Section 5.0

Sustainability

5.0 SUSTAINABILITY

The proposed Project design team, led by Group One Partners, Inc., are investigating many sustainable design measures for the Project. The Project Team includes LEED Accredited Professionals at Group One and Epsilon Associates.

A preliminary LEED-CS Checklist is attached. In addition, the Project Team will incorporate as many of the Boston Green Building Credits as practicable. At this early stage of the design process, the Project Team is still developing the appropriate specific strategies to earn credits mentioned.

A preliminary discussion of the LEED-CS Checklist follows.

5.1 Sustainable Sites

Construction Activity (Pre-requisite)

A management plan will enforce measures to protect adjacent areas from pollution.

Site Selection (Credit 1)

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

Development Density (Credit 2)

The density of the Project is compatible with the surrounding sites and meets the criteria set forth for density and community connectivity.

Alternative Transportation (Credits 4.1, 4.2)

Public transportation access is available within the required distances and bicycle storage is included.

Alternative Transportation (Credits 4.4)

The project will not exceed the required parking capacity set forth by zoning.

Site Development – Maximize open Space (Credits 5.2)

The open space provided will meet Option 01 and Option 02 for open space percentages.

Stormwater Design (Credits 6.1)

The Project site is currently greater than 50% impervious. The Project proposes to implement a groundwater recharge system which will reduce the rate and volume of storm-water by 25%.

Heat Island Effects – Non Roof (Credits 7.1)

Paving used on the site will have an SRI index of at least 29.

Heat Island Effects - Roof (Credits 7.2)

The roof area shall utilize a TPO material with high Solar Reflectance Index (SRI) values of at least 29.

5.2 Water Efficiency

Water Use Reduction (Pre-requisite)

The project will specify plumbing fixtures that meet the minimum of a 20% reduction in water usage as compared to the baseline for the building.

Water Efficient Landscaping (Credit 1)

Landscaping design and plantings will be selected to reduce irrigation demand by at least 50 percent.

5.3 Energy and Atmosphere

Fundamental Commissioning (Pre-requisite 1)

Building systems will be commissioned in accordance with USGBC requirements.

Minimum Energy Performance (Pre-requisite 2)

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

Fundamental Refrigerant Management (Pre-requisite 3)

No Chlorofluorocarbon based (CFC) refrigerants will be used in the building.

Optimize Energy Performance (Credit 1)

The project will be designed with the goal of exceeding the baseline building standard by 16% over ASHRAE 90.1-2007. This will be demonstrated with a whole building energy model. The project will have efficient mechanical systems.

On-Site Renewable Energy (Credit 2)

Through the implementation of solar panels, approximately five percent of the energy demand of the building will come from renewable resources.

Enhanced Commissioning (Credit 3)

An independent commissioning authority will be engaged to perform design reviews and commission the building systems in accordance with USGBC requirements.

Enhanced Refrigerant Management (Credit 4)

Refrigerant and equipment selections will be evaluated to optimize the balance between ozone-depletion and global warming effects. In addition fire suppression systems will not contain CFC's, HCFC's or Halons.

5.4 Materials and Resources

Storage and Collection of Recyclables (Pre-requisite)

Bins will be provided in the loading area for recyclable materials.

Construction Waste Management (Credit 2)

A waste management plan will be implemented that seeks to divert 50% of waste material removed from the Project Site from landfills through recycling and salvaging.

Recycled Content (Credit 4)

Project Specifications will include and encourage provision of materials with recycled content where possible to have a minimum percentage of recycled goods of 10%.

Regional Materials (Credits 5)

Project Specifications will include and encourage provision of materials manufactured within 500 miles of the Project Site where possible. The selected contractor will also be encouraged to provide regional materials which are extracted, harvested or recovered within 500 miles of the Project Site for a minimum of 10%.

5.5 Indoor Environmental Quality

Minimum Indoor Air Quality (IAQ) Performance (Pre-requisite)

ASHRAE Standard 62.1-2004 will set the standard for minimum indoor air quality.

Environmental Tobacco Smoke Control (Pre-requisite)

The building will be a non-smoking facility.

Construction IAQ Management Plan- During Construction and before Occupancy (Credits 3.1)

Management plans will be implemented pursuant to the requirements for this credit.

Low-Emitting Materials (Credits 4.1, 4.2, 4.3, 4.4)

Materials including adhesives, sealants, paint and carpet will be specified with low volatile organic compounds (VOC) content limits as prescribed by the respective applicable standards.

Controllability of Systems - Lighting (Credit 6.1)

The project will provide individual lighting controls for 90% of the building occupants as well as lighting controls for public and shared occupant spaces.

Controllability of Systems 0 Thermal Comfort (Credit 6.2)

The project will provide individual thermal control systems for more than 50% of the building occupants as well as thermal controls for public and shared occupant spaces.

5.6 Innovation and Design Process

Green Housekeeping (Credit 1.1)

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

LEED Accredited Professional (Credit 2)

The Proponent's architect, Group One Partners Inc, retains LEED accredited professionals on staff that will be dedicated to this project.

LEED 2009 for New Construction and Major Renovations

Project Checklist

E Street Storage Building - Boston, MA

Sustainable Sites — Possible Points: 26

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

Water Efficiency — Possible Points: 10

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

Energy and Atmosphere — Possible Points: 35

Y			Prereq 1	Fundamental Commissioning of Building Energy Systems	
Y			Prereq 2	Minimum Energy Performance	
Y			Prereq 3	Fundamental Refrigerant Management	
3		16	Credit 1	Optimize Energy Performance	1 to 19
3	2	2	Credit 2	On-Site Renewable Energy	1 to 7
2			Credit 3	Enhanced Commissioning	2
2			Credit 4	Enhanced Refrigerant Management	2
		3	Credit 5	Measurement and Verification	3
		2	Credit 6	Green Power	2

Materials and Resources — Possible Points: 14

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

Materials and Resources, Continued

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

Indoor Environmental Quality — Possible Points: 15

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

Innovation and Design Process — Possible Points: 6

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

Regional Priority Credits — Possible Points: 4

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

Total — Possible Points: 110

43	17	50	

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

Section 6.0

Historic and Archaeological Resources

6.0 HISTORIC AND ARCHAEOLOGICAL RESOURCES

6.1 Historic Resources in the Project Vicinity

No historic or archaeological resources are located within the Project site; however, the Project site is in the vicinity of several historic resources included in the *Inventory of Historic and Archaeological Assets of the Commonwealth*. Figure 6-1 and Table 6-1 identify historic resources within one-quarter mile of the Project.

Table 6-1 Historic Resources in the Vicinity of the Project Site

Map No.	Name	Address
Properties included in the *Inventory of Historic and Archaeological Resources of the Commonwealth*		
1	Boston Beer Company (demolished)	300-312 D Street & 249 West Second Street
2	Ipswich Mills	154 West Second Street
3		161-163-165-167 West Second Street
4		117 West Third Street
5		264-272 West Broadway
6	Hersey Manufacturing Company	314-330 West Second Street
7		368-370 E Street & 305 West Second Street
8	St. Vincent de Paul Catholic Church	212 West Third Street
9		236 West Third Street
10		242-244 West Third Street
11		256 West Third Street
12	St. Vincent's Rectory	267 West Third Street
13		310 West Third Street
14	S. Boston Gas Light Company (demolished)	3-5 Dorchester Street
15		336-338 E Street
16		363-365 West Broadway & 318-324 E Street
17		373-375 West Broadway & 313-319 E Street
18		366 West Broadway & 328 E Street
19		368-372 West Broadway & 325-327 E Street
20	Albanian Orthodox Church	410 West Broadway
21		397-401 West Broadway
22		403-415 West Broadway
23	US Post Office and Broadway Theater	420-426 West Broadway
24	C Street Area	

The Project site is southeast of the C Street Area. The nearest historic resource within the area is the Hersey Manufacturing Company 314-330 West Second Street situated a block and a half southeast of the Project site. To the southwest of the Project site is the site of the former Boston Beer Company at 300-312 D Street which has been demolished.

6.2 Visual, Wind, and Shadow Impacts

6.2.1 Visual Impacts

The project site is comprised of one-half of a city block between D and E Streets at the end of Cypher Street. The proposed structure is situated at the center of the Project site. The structure will be four-stories in height and will be constructed of masonry with punched window openings. The structure will be surrounded by parking with a landscaped area between the paved area and E Street. The three secondary sides of the building will also be landscaped with grass and trees. The Project site is sufficiently removed from nearby historic resources that it is not expected to have any visual impact on the surrounding historic resources. However, the Project has been designed to be of moderate size, to use masonry materials in keeping with many surrounding properties, and to include landscaping to minimize the visibility of parking and the new construction from the surrounding streets.

6.2.2 Wind Impacts

The proposed project is not expected to cause significant impacts to pedestrian level winds, and is unlikely to affect the setting of nearby historic resources. See Section 3.1.

6.2.3 Shadow Impacts

New shadow generated by the proposed Project is anticipated to have no impact on historic resources. Due to the relatively low height of the new construction and its proximity to larger structures, new shadow created by the project is limited to within and in the immediate vicinity of Project site (See Section 3.2).

6.3 Archaeological Resources

A review of the Inventory of Historic and Archaeological Assets of the Commonwealth determined no previously identified archaeological resources are located within the Project site. Due to the site's previous development and disturbance, it is not expected that the Project site includes archaeological resources.

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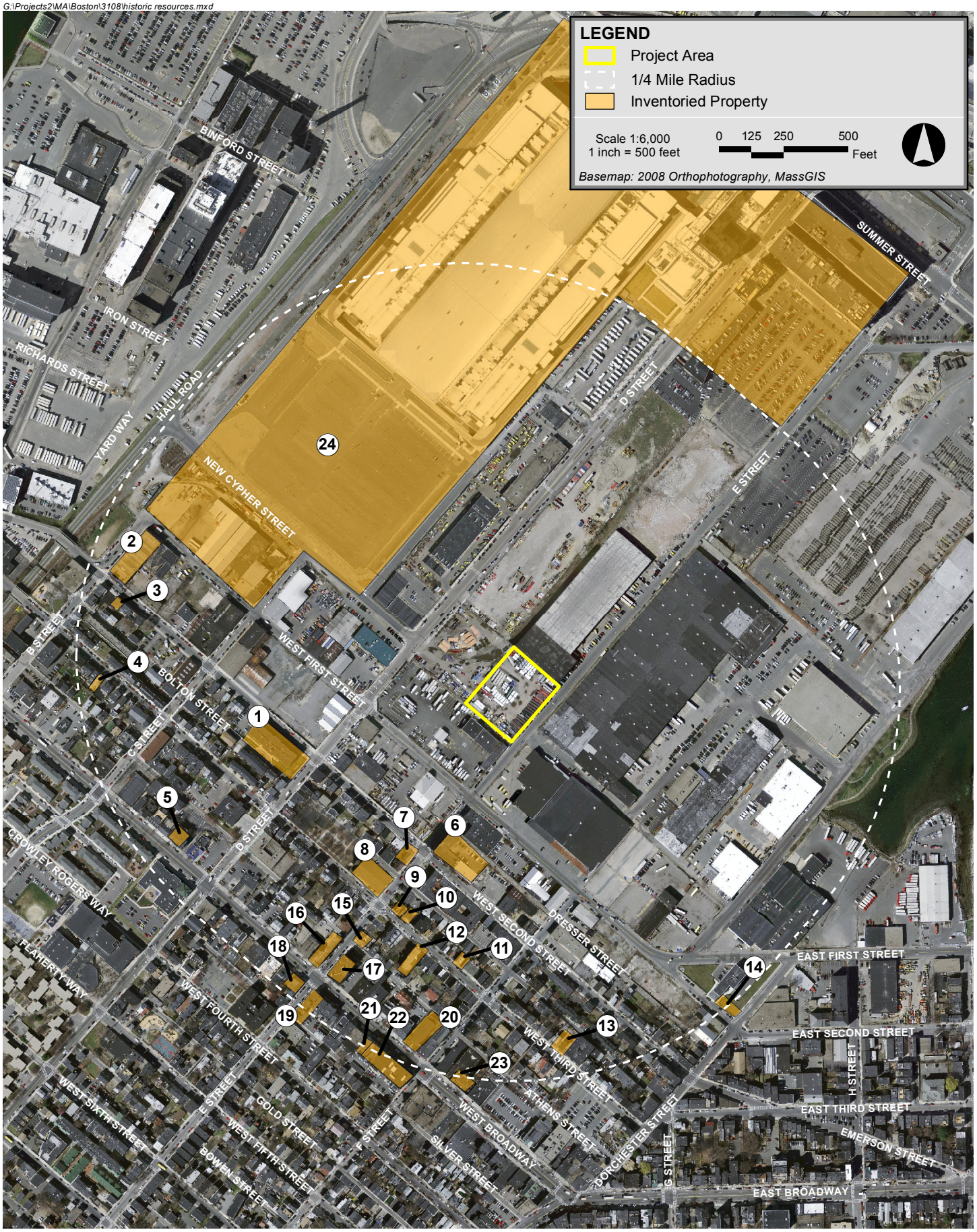

920 Development, LLC Self Storage Facility Boston, MA

Epsilon Associates Inc.

Figure 6-1
Historic Resources

Section 7.0

Infrastructure

7.0 INFRASTRUCTURE

7.1 Introduction and Agency Coordination

The following analysis describes the existing utility systems servicing the Project area, discusses the Project's potential impacts on these utilities, and identifies mitigation measures to address potential impacts.

Proposed connections to the Boston Water and Sewer Commission's (BWSC) water, sewer, and storm drain systems will be designed in conformance with the Commission's design standards, Sewer Use and Water Distribution System Regulations, and Requirements for Site Plans. The Proponent will submit a General Service Application and a site plan to the Commission's Engineering Services Division for review and approval. The site plan will show the location of water mains, sanitary sewers and combined sewers that serve the site, as well as the location of existing and proposed water, sewer, and storm drain connections. In addition, a Pollution Prevention Plan will be submitted specifying best management measures for protecting the BWSC systems during construction.

The Proponent will work closely with impacted utility companies as building design and permitting progress continues. Updated design information on the proposed utility connections will be made available to the BRA as this information becomes available. Sewer, water, storm drainage, electric, and other utilities are discussed below.

7.2 Sanitary Sewer

7.2.1 Existing Sewer Service

The local existing sewer system is owned and maintained by the BWSC, which is part of the Massachusetts Water Resources Authority (MWRA) collection and treatment system. Flows from BWSC sewers are ultimately discharged to MWRA interceptors for conveyance, treatment and disposal through the MWRA Deer Island Wastewater Treatment Plant.

An existing 30-inch x 45-inch BWSC combined storm sewer is situated in E Street abutting the parcel. This storm sewer flows south to an existing 36-inch x 48-inch combined storm sewer in West First Street, which in turn discharges flows to the west. Existing sewers located in the vicinity of the Project site are shown on Figure 7-1.

7.2.2 Projected Wastewater Flows

The sanitary sewage for the Project will connect to the existing BWSC system in E Street subject to final design and approval of the proposed connection. The Project will generate an estimated 160 gpd of sewage, based on 314 CMR 7.00 sewage estimates as calculated in Table 7-1 below and an assumed generation rate of the self storage area.

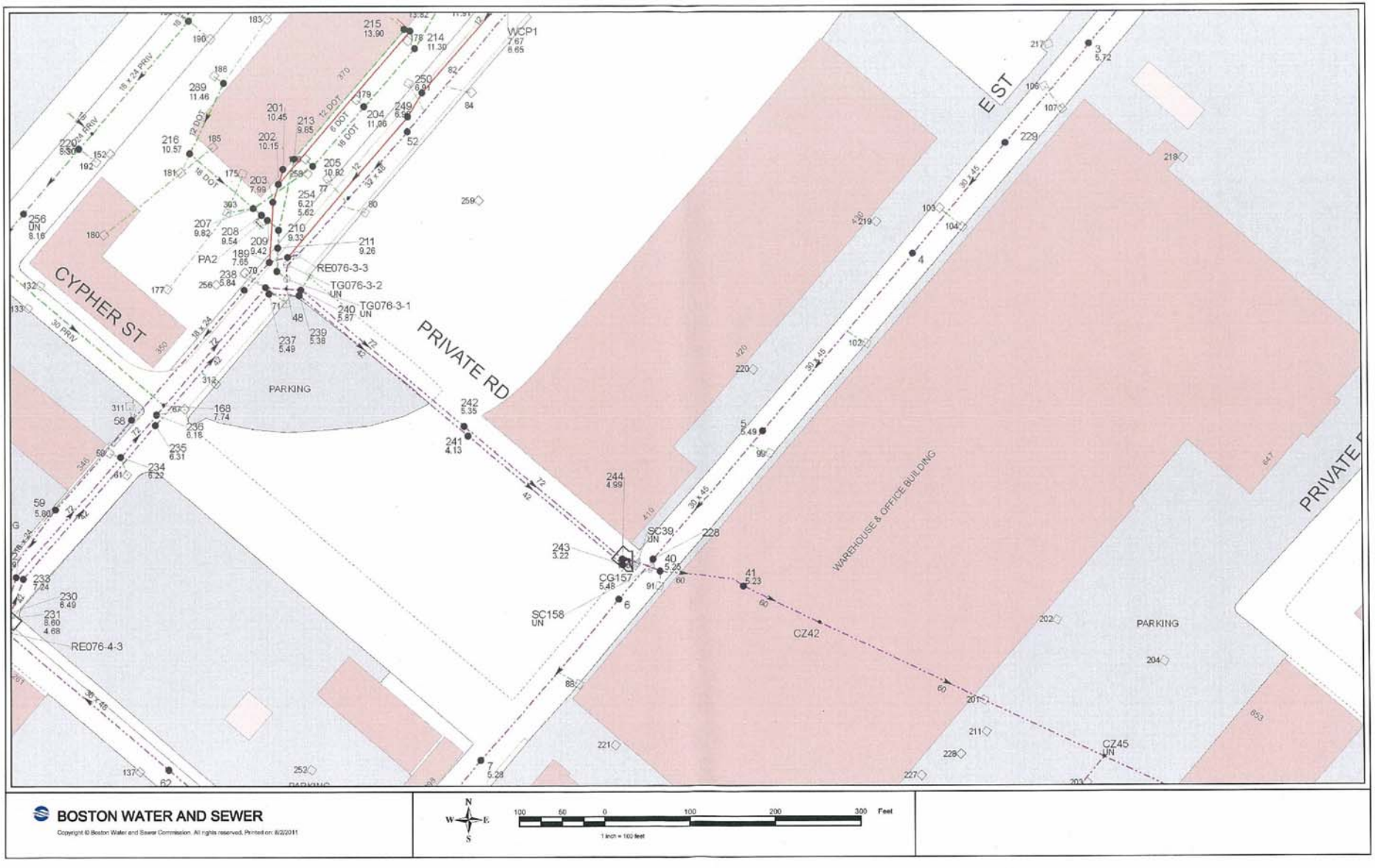

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Figure 7-1

Existing Sewer System

Table 7-1 Project Wastewater Flows

Land Use		314 CMR 7.00 Estimates	Total
Office	300 s.f.	75 gpd/1,000 s.f.	22.5 gpd
Dry Goods Store	700 s.f.	5 gpd/100 s.f.	35 gpd
Self Storage	97,000 s.f.	See Note 1	Say: 100 gpd
Estimated Total	**98,000 s.f.**		**160 gpd**

Note 1: Self Storage is not a listed establishment/use under 314 CMR 7.15. Renters of the self storage units will have access to the bathrooms in the administrative office/dry goods store area of the facility.

The administrative office space and the small retail area will generate less than 100 gallons per day (gpd) based on the prescribed sewage generation rates in 314 CMR 7.00. Self Storage is not a use listed in 314 CMR 7.15 and logically will not generate an appreciable volume of sewage, and therefore100 gpd has been assigned to this use. The administrative office space will contain a unisex restroom for employees and the dry goods/retail area will contain single fixture men's and women's rooms on the ground floor. The single fixture men's and women's rooms will be available for use by renters of the self storage units. In accordance with DEP regulations 314 CMR 7.05 (g), a Sewer Connection Permit from MassDEP is not required. A Certificate of Compliance must be filed with MassDEP for operation of the service connection. It is anticipated that the existing sewer system has ample capacity to convey the Project's modest estimated wastewater flows.

7.2.3 Sewer System Mitigation

A new sewer connection to the existing collection system will be constructed in accordance with BWSC Standards and Regulations and will be made watertight. Any existing sewer connections on site that are not to be used will be cut, made watertight, and abandoned in accordance with applicable BWSC and City standards. Upon completion of the design stage, a site plan and General Service Application will be submitted to the BWSC for approval.

The State Building Code requires the use of water-conserving plumbing fixtures. Water conservation measures such as low-flow toilets and restricted flow faucets will help reduce the Project's domestic water demand and therefore reduce the Project's estimated sewage generation being discharged to the existing BWSC system.

7.3 Water Service

7.3.1 Existing Water Service

The water system consists of a well-developed network of piping throughout the project area. Existing water service to the site is available from the BWSC, which is a member of the MWRA transmission system.

Within E Street in front of the project site there is an existing 12-inch Southern Low Service (SLS) water main in the west side of the street that was installed in 2003. There are existing fire hydrants both north and south of the Project site on E Street. Existing water mains in the vicinity of the Project site are shown on Figure 7-2.

7.3.2 Proposed Water Services

The water services for the Project (domestic and fire protection) will connect to the existing BWSC water system in E Street subject to final design and approval of the proposed connections. The Project will require an estimated 180 gpd of water, based upon the average daily sewage flow and using a water consumption factor of 1.1.

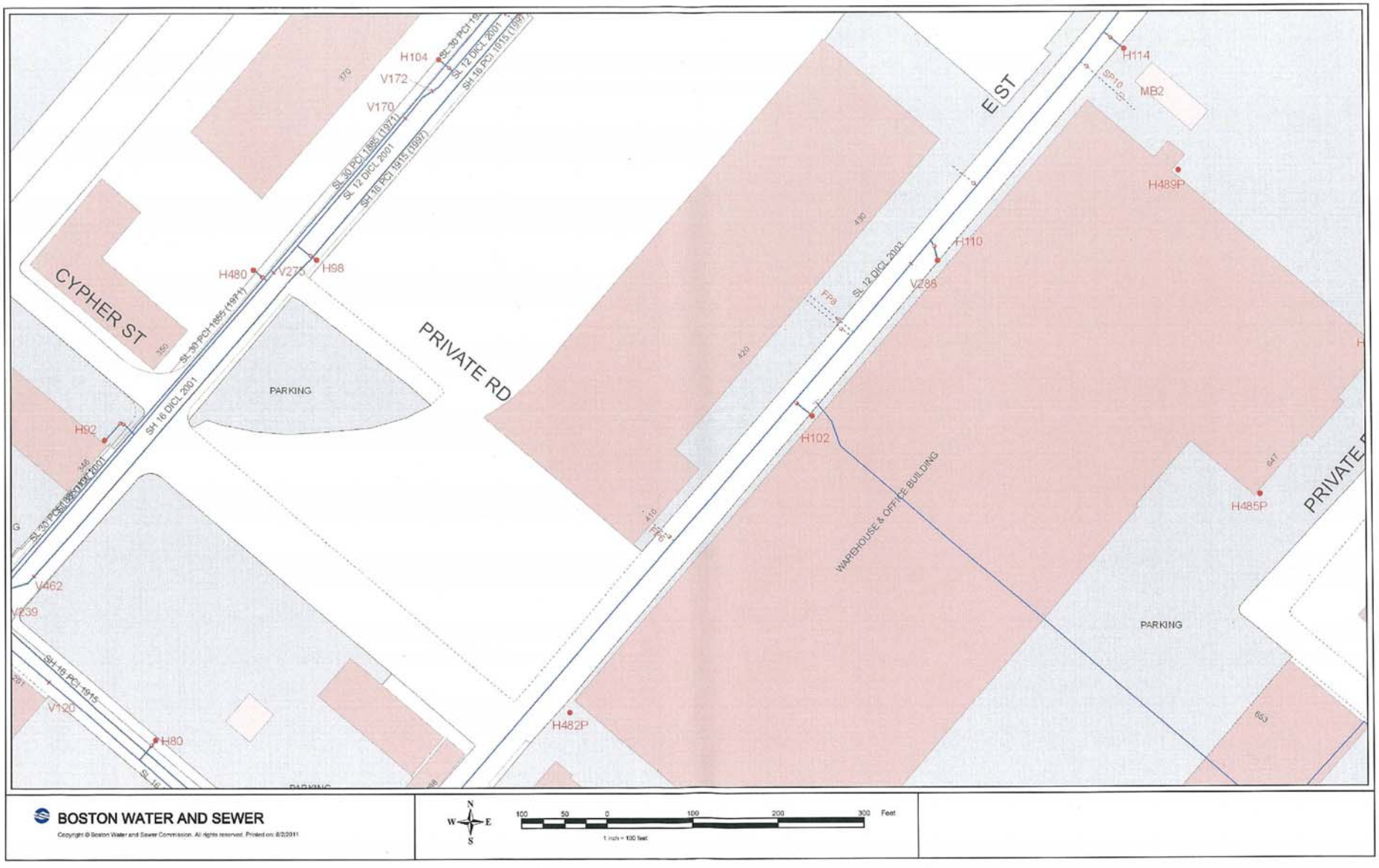
7.3.3 Water Supply Conservation and Mitigation Measures

The State Building Code requires the use of water-conserving plumbing 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. Landscaping for the site will be limited to the E Street frontage and the south side of the site, irrigation requirements will be modest.

The Proponent will arrange to connect the water meter to BWSC's automatic meter reading system. The BWSC will provide a meter transmission unit (MTU) at the Proponent's expense. The Proponent will provide a telephone line and jack near the meter and outside meter reading device. BWSC will connect the telephone line and MTU to the meter and program the MTU.

To prevent cross connections from the building sprinkler systems or other equipment capable of affecting the quality of the water supply, backflow preventors will be installed on appropriate plumbing fixtures. The designs for the devices used to prevent backflow into the potable water supply will be submitted to the BWSC Cross Connection Control Department for review and approval.

Based upon the estimated water usage, the water supply system and the fire protection system for the building will meet the needs of the proposed Project. The proposed Project will comply with the standards of the State Plumbing Code and the National Fire Protection Association. All required fittings for the proposed Project will be installed in accordance with the above codes.



920 Development, LLC Self Storage Facility Boston, MA

Figure 7-2

Existing Water Supply System

A hydrant flow test will be conducted in the vicinity of the Project site by the BWSC Field Services Division. Based on the makeup of the existing buildings in the general area of the Project site, it is anticipated that the water system is adequate and will not be adversely affected by the proposed development.

7.4 Energy Requirements and Service

7.4.1 Existing and Proposed Electric Power

NStar (Boston Edison Company) provides electric service in the City of Boston. There are existing overhead electric lines in E Street and on-site along both the southerly and northerly property lines.

It is anticipated that a new transformer will be located for the proposed building on-site in accordance with all applicable codes and requirements. The electrical, climate control and energy systems for the proposed Project have not yet been designed.

7.4.2 Gas Service

KeySpan (Boston Gas Company) provides gas service in the City of Boston. There is an existing 12-inch gas main in E Street in front of the Project Site. Gas service is anticipated to be available from this source.

The Project's climate control system has not yet been determined. This information will be determined in the final design stages of the Project.

7.4.3 Energy Conservation Measures

The Proponent will install energy efficient lighting, heating, and cooling systems in the design for the building. Applicable standards and regulations will be complied with in regard to the use of energy conservation measures.

7.5 Telephone and Cable Television

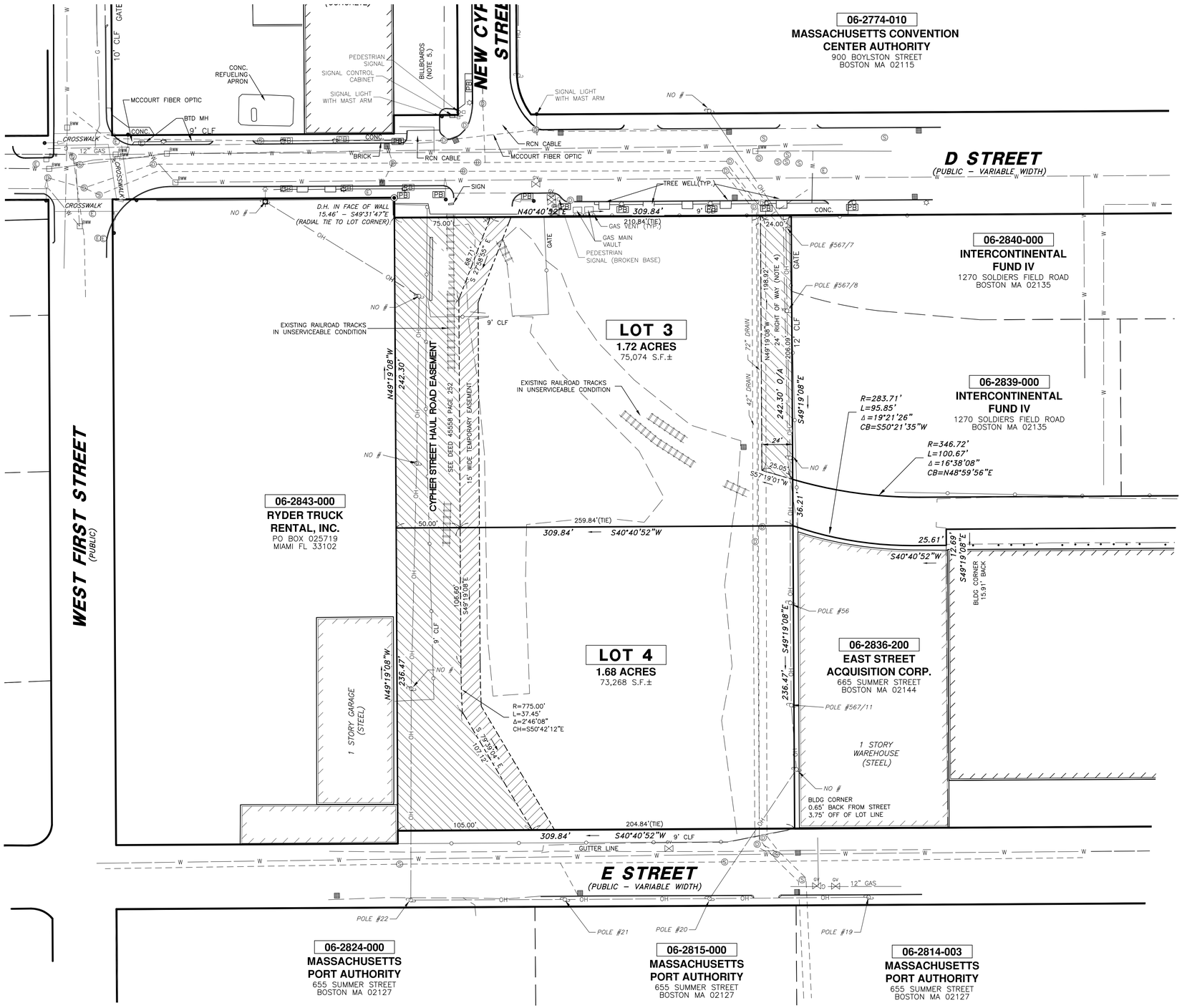
The Proponent will coordinate with telephone and cable representatives regarding these services. There is existing overhead telephone and cable service in E Street in front of the Project Site.

7.6 Utility Protection During Construction

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

Appendix A

Site Survey



NOTES:

1. *THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING SITE CONDITIONS OF LOTS 3 AND 4. THE EXISTING CONDITIONS DEPICTED HEREON WERE COMPILED FROM A FIELD SURVEY BY CUOCO AND CORMIER ENGINEERING ASSOCIATES, INC. DATED 2008 AND MAY NOT ACCURATELY DEPICT THE CURRENT SITE CONDITIONS.*
2. *THE OWNER OF RECORD IS:*
   92 EAST FIRST STREET LLC
   800 TECHNOLOGY CENTER DRIVE
   STOUGHTON MA 02072
   SRD BOOK 4558 PAGE 252 (9/30/09)
3. *ACCORDING TO ZONING MAPS AND CODE OBTAINED THROUGH THE BOSTON REDEVELOPMENT AUTHORITY, THE PARCEL IS ZONED I–2 AND IS SUBJECT TO THE SOUTH BOSTON WATERFRONT INTERIM PLANNING OVERLAY DISTRICT. THERE APPEARS TO BE NO MINIMUM LOT SIZE, FRONTAGE OR SETBACK REQUIREMENTS. MAXIMUMM BUILDING HEIGHT IS REPORTED TO BE 65'/*
4. *LOT 3 IS SUBJECT TO A RIGHT OF WAY TO ECONOMY GROCERS, NOW INTERCONTINENTAL FUND IV, RECORDED IN BOOK 5975 PAGE 585.*
5. *LOTS 3 AND 4 ARE SUBJECT TO EASEMENTS AND RESTRICTIONS SET FORTH IN A DEED RECORDED IN SRD BOOK 45558 PAGE 252.*
6. *BOSTON WATER AND SEWER COMMISION MAINTAINS A 42" AND 72" DRAIN LINE FROM D STREET TO E STREET ACROSS THE EASTERLY PORTION OF LOTS 3 AND 4.*
7. *SERVICE POLES AND WIRES CROSS LOTS 3 AND 4 BETWEEN D STREET TO E STREET.*
8. *THE LOCATION OF SUBSURFACE UTILITIES DEPICTED ON THIS PLAN ARE NOT THE RESULT OF FIELD LOCATIONS AND HAVE BEEN PLOTTED FROM RECORD DRAWINGS, PLANS AND SKETCHES THAT WERE PROVIDED TO CCEAI BY THE OPERATING AUTHORITIES OR FOUND IN THE PUBLIC RECORD. THE ACTUAL LOCATION, NUMBER AND SIZE OF SUBSURFACE LINES ARE PLOTTED FOR INFORMATIONAL PURPOSES AND SHOULD NOT BE USED FOR DESIGN OR CONSTRUCTION.*

REV.	DATE	DESCRIPTION	C/O	DR	CK
D	--	--	--	--	--
C	--	--	--	--	--
B	--	--	--	--	--
A	--	--	--	--	--

EXISTING CONDITIONS SKETCH PLAN
LAND OF

920 EAST FIRST STREET LLC

D STREET AND E STREET
WARD 6
BOSTON, MASSACHUSETTS

SCALE: 1" = 40' MAY 12, 2011

ENGINEERS
LAND SURVEYORS
SCIENTISTS
LAND PLANNERS

MERIDIAN Land Services, Inc.

OFFICE: 31 OLD NASHUA ROAD
AMHERST, NEW HAMPSHIRE 03110
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MERIDIAN@MERIDIANLANDSERVICES.COM

FILE:8653W00.dwg | PROJECT NO. 8563.00 | SHEET NO. 1 OF 1