# PROJECT NOTIFICATION FORM WAREHOUSE BUILDING ADDITION THE ECONOMY PLAZA 875 MORTON STREET MATTAPAN, MA 02126

May, 2013



Project Notification Form Warehouse Building Addition The Economy Plaza May 2013

SUBMITTED TO: BOSTON REDEVELOPMENT AUTHORITY ONE CITY HALL SQUARE BOSTON, MA 02201

SUBMITTED PURSUANT TO ARTICLE 80 OF THE BOSTON ZONING CODE

#### **SUBMITTED BY:**

FOUR BROTHERS TRUST ECONOMY PLUMBING AND HEATING SUPPLY COMPANY 875 MORTON STREET MATTAPAN, MA 02126

#### **PREPARED BY:**

FS ENGINEERS, INC. 2 CLOCK TOWER PLACE, SUITE 630, MAYNARD, MA 01754

**IN ASSOCIATION WITH:** THERMO-MECHANICAL SYSTEMS, Corporation

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SECTION 1.0 SUMMARY & PROJECT DESCRIPTION

# **1.1 Project Identification**

Project Name:	Warehouse Building Addition
Address/Location:	The Economy Plaza, 875 Morton Street, Mattapan, MA
Proponent:	Economy Plumbing and Heating Supply (617) 522-3222 Claudio Poles, President

#### PROJECT TEAM

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### **1.2 Introduction**

#### 1.2.1 Warehouse Building Addition – The Economy Plaza

The Economy Plumbing and Heating Supply Company (the "Proponent") is pleased to submit this Project Notification Form ("PNF") in accordance with Article 80 Large Project Review process for the proposed warehouse building addition ("Project"). This is pursuant to Section 80B of the Boston Zoning Code ("Code"). With this submission, the Proponent requests that the Boston Redevelopment Authority ("BRA") issue a Scoping Determination for Large Project Review.

The project proponent met informally with the BRA in January 2012, and had preliminary discussions on the proposed project. Subsequent to that meeting, on January 17, 2012, the proponent filed a Notice of Intent with the BRA to expand the current operation into the proposed building addition.

The Economy Plaza is located at 875 Morton Street in Mattapan section of Boston. The facility houses the Economy Plumbing and Heating Supply Company ("EPHSC"). EPHSC's business operations include retail sales, as well as warehouse storage, to support wholesale, retail, and mail order sales for plumbing and heating supplies. The primary business clients include plumbing and general contractors and individual do-it-yourself home owners. The existing building currently consists of the sales counter area, administrative and sales offices, training area, and storage warehouse. Formerly, the building was a neighborhood grocery store. In 2002, the current owner purchased the grocery store and associated parking area and converted the building into the retail store for plumbing and heating supplies. In 2006, a new steel building addition on slab on grade was constructed to expand warehouse storage space including areas for conference room, administration office, and training center, etc. The original grocery store building is a concrete block and brick structure on slab on grade.

#### **1.2.2 Project Summary**

EPHSC is planning to expand its present retail sales and warehousing facility at 875 Morton Street, Mattapan, MA. The proposed expansion will include the construction of a 72,632+/- square feet single story steel building, parking, and associated utilities. The proposed addition will be attached to the south wall of the existing steel warehouse building and the former grocery building.

The existing available capacity of the warehouse facility at the Economy Plaza is presently at the limit of demand for storage capacity. Additional warehouse storage space must be made available to sustain business growth. The proposed building addition will allow expansion of present inventory and facilitate bulk quantity purchasing of stock. Bulk purchasing will allow EPHSC to realize a more sustainable margin in today's highly competitive supply business marketplace. In addition to warehouse space, the proposed building addition will also have room for future office space for expanded full-time workforce. See Figures 1-1 to 1-3 for Project location locus maps. See Section 1.5 – Project Description for more information.

## **1.3 Sustainable Initiatives**

#### 1.3.1 Energy Conservation and Renewable Energy

EPHSC has taken steps to decrease its energy demand and improve energy efficiency throughout its existing facilities. EPHSC has implemented many of the available energy efficiency procedures and protocols in their heating and plumbing system when the existing steel building addition was constructed. EPHSC tracks the environmental and financial results of improvement programs, reviews and improves existing programs, and identifies new improvement projects. It oversees the environmental strategies to ensure continuous improvement through various trending methods and control activities. The goal is to promote energy conservation while operating economically and efficiently.

By creating and managing more sustainable energy systems and reducing its greenhouse gas emissions, EPHSC will align itself with City of Boston goals for environmental programs and green technologies. The Executive Order of Mayor Thomas M. Menino entitled "An Order Relative to Climate Action in Boston" (April 13, 2007) outlines sustainable practices adopted by the city including reduction of greenhouse gasses and improvement of overall energy efficiency for buildings. According to <u>Climate: Change</u> (the City of Boston's Climate Action Plan - December 2007), "78% of Boston's greenhouse gas emissions are related to buildings" (e.g. heating, cooling, and electricity). Within the report, the City of Boston encourages "all sectors of the community to use energy more efficiently in their facilities and…create environments that are more energy-efficient." The proposed addition will meet this challenge and reduce greenhouse gas emissions through the process of energy conservation and implementation of renewable energy system including, solar, hybrid geothermal, and radiant heating technologies.

#### **1.3.2 Sustainable Infrastructure**

Focused on environmental goals, EPHSC evaluated its existing infrastructure and performed upgrades, replacements, and systems maintenance in a manner that addressed obsolescence and allowed for efficiencies during future initiatives. EPHSC achieved demand-side energy savings through standardizing the use of energy-efficient lighting fixtures, translucent building siding, state of the art heating systems technology, water-saving plumbing fixtures, and installing building automation systems controls to reduce the consumption of energy during off peak periods.



# Existing 875 Morton Street Site

# **Proposed Building Site**

AERIAL PHOTOGRAPH FIGURE 1-2 NOT TO SCALE FS ENGINEERS, INC. 2 CLOCK TOWER PLACE, SUITE 630 MAYNARD, MA 01754 TEL. (978) 298 - 5956 FAX. (978) 298 - 5104

875 MORTON STREET MATTAPAN, MASSACHUSETTS SOURCES: City of Boston EGIS Public Web Viewer

# **1972 Building**

# Proposed **Addition Site**

100 Mago

SITE LOCATION ASSESSOR'S MAP

FIGURE 1-3

NOT TO SCALE

Wooddate

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ENGINEERS, INC. FS 2 CLOCK TOWER PLACE, SUITE 630 MAYNARD, MA 01754 TEL. (978) 298 - 5956 FAX. (978) 298 - 5104

875 MORTON STREET MATTAPAN, MASSACHUSETTS

A.S.

Morton St

2006 Building Addition

SOURCES City of Boston EGIS Public Web Viewer

## **1.4 Project Description**

#### 1.4.1 Summary of Project Need

The existing EPHSC warehouse and sales facilities at the Economy Plaza is approaching its operating limits. In order to accommodate demand and business growth EPHSC is in immediate need of additional warehouse space and sales and processing areas. The proposed building will allow expansion of present inventory and significantly increase sales.

EPHSC established business at this location in 2002 at the former grocery store which is a concrete block and brick structure. In response to business and sales growth, in 2006 EPHSC constructed the steel addition adjoining the existing concrete and brick structure. This addition provided additional warehouse space, sales counters, administration offices, conference room, and training center. The growth in business has outpaced the storage and administration facilities available to support the business operations yet again. EPHSC evaluated several options including constructing/renting warehouse facility at remote location. The logistics of sales to local plumbing and heating businesses and storage at remote location was found to be less than ideal. This would also require frequent shipping of material between the on-site and off-site warehouses. All of will demand more man-power, equipment, utility and fuel expenses, fixed expenses, etc.

In 2010, EPHSC purchased the subject parcel of property adjoining to the south of the Economy Plaza parcel to expand its operations. This location is ideally situated to resolve storage and warehousing needs as well as serving the local plumbing and heating businesses and "do-it-yourself" home owners.

#### 1.4.2 Project Site

The proposed building addition site is located to the south and adjacent to the current Economy Plaza location at 875 Morton Street in Mattapan District of Boston, Massachusetts. The parcel is rectangular in shape and consists of approximately 2.8 acres of land. The property is bounded by residential properties to the south and east, an MBTA commuter rail line and a rail station to the west, and Economy Plaza to the north. The Morton Village residential apartment complex abuts the property to the south. See Figures 1-1 through 1-3 for Project location locus maps.

The site is currently a vacant land covered by overgrown vegetation. Fill material from off-site source was evenly deposited on the entire site resulting in approximately 6.5 feet high plateau relative to the surrounding surface grade. The plateau drops down to the roadway grade to the south and east, to the tracks to the west, and to the outside grade level of Economy Plaza to the north. The majority of the site is covered with tall grass and weeds with a few trees along the west property line. There is a 25 foot wide right-of-way located along the eastern property boundary that provides vehicular and pedestrian access to the Morton Village apartment complex from

Morton Street and Henrici Street. A 54 inch diameter storm drain with invert located about 15 feet below surrounding grade traverses the southern portion of the site. The storm drain crosses the property from south to east within a 15 foot wide Boston Water and Sewer Commission (BWSC) storm water drainage easement.

#### 1.4.3 Building Program

The proposed warehouse will consist of a single story steel building on slab on grade. Approximate foot print of the building is 72,632 +/- square feet. The building will be fitted with vertical storage selves. There will be a mezzanine section along the South East side of the building. The approximate height of the building is 28.0 feet from existing grade. Programmed spaces within the building will also include staff offices, equipment storage, toilets, conference room, etc. Primary staff entrance to the warehouse will be from the 25 foot access right-of-way that connects Morton Street to the Morton Village. There will be loading docks and truck access driveway along the western building wall. The proposed steel building at Economy Plaza. Supplies will be brought from the proposed warehouse to the sales counters via forklift or manually. See Figures 1-4 through 1-11 for site plan, internal layout, and outside elevations.

#### **1.4.4 Approximate Project Dimensions**

Table 1-1 below represents approximate dimensions of the Project.

#### Table 1-1 Proposed Project Square Footage Table

Proposed Warehouse Addition	Square Feet	Program and Comments
Level 1 (Ground Floor)	72,632	Warehouse and Storage
Mezzanine	23,862	Warehouse and Storage
Total Warehouse Footage	96,747	
Covered Loading Dock Area	3,808	

Note: Gross Areas listed

#### **1.4.5 Project Schedule**

Project construction is expected to commence in the  $3^{rd}$  Quarter of 2013. Project construction is expected to conclude in the  $3^{rd}$  Quarter of 2014.







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# **1.5 Project Objectives**

The following are the primary objectives of this Project:

- Support Business Growth The proposed building addition will ensure that adequate supply inventory is available to meet growing customer needs. Currently, the existing warehouse capacity at the Economy Plaza has reached its limit. It is anticipated that with the growing demand on additional warehousing and associated support (sales support staff area, conference room, rest rooms, utilities, etc.) additional capacity will be needed to sustain business growth.
- Create New Jobs Business growth will translate into the need for additional personnel to support operations at the facility. It is anticipated that projected growth will demand the addition of 30 or more full-time inside-sales personnel to the present staff. The additional staff needs will be provided by the local community which will be a benefit to the local community.
- Support Local Economic Activities The proposed warehouse addition is in response to the increased local demand for plumbing supplies. EPHSC is committed to doing business in the local community and grow with the community. The increased economic activities will benefit the local economy.
- Energy Efficiency The proposed building addition will employ the latest energy saving technologies. EPHSC is evaluating the latest energy conserving and renewable energy systems for the new addition. These systems may include Solar (PV and Thermal), Hybrid Geothermal, and Radiant Heating Technologies. EPHSC has utilized one or more of the systems mentioned in the steel building addition completed in 2007. Combining various systems into a single integrated process will reduce fuel consumption and the impact on the carbon footprint.

# **1.6 Project Benefits**

#### **1.6.1 Direct Project Benefits**

Job Creation and Retention - The building addition project will create construction jobs in addition to generating highly-skilled long-term sales, operations, and maintenance jobs. During the approximately twelve month construction phase of the Project, it is anticipated that thirty construction jobs will be created. Once the Project is complete, the EPHSC operations will require approximately thirty new long-term sales, operations, warehousing and maintenance jobs.

- Contribute to Local Economy The expansion of operation at the Economy Plaza will add to the local tax base. The benefit of increased economic activities at the plaza will also benefit the surrounding local businesses.
- Contribute to Local Employment As noted above, jobs will be added during the construction phase and also for the long-term facility operation. A portion of the employed personnel during construction and subsequently during the facility operations will be from the local communities.
- Reduced Environmental Impact Meeting the project objectives of implementing renewable energy such as, solar and geothermal, and radiant heating system will help EPHSC to shrink its carbon footprint per unit of storage space through lesser greenhouse gas emissions and lower its impact on the local environment.
- Reduced Local Utility Impact The proposed use of energy efficient systems will lower energy demand per unit of storage space on the local system. This will subsequently decrease EPHSC's impact on the locally taxed energy infrastructure.
- Reduced Energy Costs Meeting the project objectives of implementing renewable energy such as, solar and geothermal, and radiant heating system will decrease its energy costs per unit of storage space.

#### **1.6.2 Annual Property Taxes**

EPHSC pays property tax to the City of Boston. The new addition will increase the property value thus increasing the local property tax base. It is anticipated that based upon the size of the proposed addition, the property tax compared to the tax on the existing property will be approximately double.

#### **1.6.3 Other Economic Benefits**

EPHSC is involved in local community through support of local community, cultural, and social activities. EPHSC contributes to the cause that benefits local fire and police departments. EPHSC also contributes to the local economy through employment of Boston residents and the purchase of goods and services from Boston businesses.

### **1.7 Anticipated Permits, Reviews, and Approvals**

Table 1-2 below catalogs the permits, reviews, and approvals anticipated throughout the project permitting process.

Agency	Permit, Review, or Approval
Boston Redevelopment Authority	Article 80 Large Project Review
Boston Fire Department	Life Safety and Fire Protection review
Boston Water and Sewer Commission	Water and Sewer construction permits General Service application Site Plan Review Utility Easement approval
Boston Inspectional Services	Building permit

#### **Table 1-2 Anticipated Permits, Reviews and Approvals**

### **1.8 Zoning**

The proposed Project site is located within the Morton Village Neighborhood Shopping Sub-district. The reference zoning map is 8C: Greater Mattapan Neighborhood District, Neighborhood Shopping sub-district. The property involved can be further identified as Lot B, City of Boston Assessor's Ward 18, Parcel 00760-00. The project has been designed generally to comply with applicable zoning requirements. A detailed zoning analysis is included as Appendix B. Any relief from the zoning requirements will be indentified on the project zoning analyses presented on the plans.

#### **1.9 Public Review Process**

The Boston Redevelopment Authority (BRA) has appointed a contact person to assist in the public review of the Project. The Proponent had several meetings with the BRA as well as public and city regulatory agencies and will continue an open and inclusive public process. Table 1-3 below provides a list of meetings that have been held on the Project.

#### Table 1-3 Community, Public, City Agency Meetings

Date	Group	Location
1-10-12	Boston Redevelopment Authority, Lance Campbell	Boston City Hall, Boston
Aug-2012	Boston Water and Sewer Comm.	Harrison Avenue, Boston
Monthly	WSSVNA	

EPHSC reviewed the preliminary plans with the City of Boston Water and Sewer Commission (BWSC). Based upon the preliminary review, the plans were revised to incorporate BWSC recommendations.

Plans for the Economy Plumbing Supply warehouse expansion project have been introduced and presented to the members of the West Selden Street & Vicinity Neighborhood Association (WSSVNA) at each monthly meeting starting with the January 23, 2012 meeting and through the February 2013 meeting. Details regarding the proposed use of the expanded warehouse were described, including proposed dimensions and layout of the building and planned vehicle access and egress.

Questions posed by the membership were answered and explained using every available detail about the project and its impact on the surrounding community. Overall, the reaction from the members of the WSSVNA has been one of support and encouragement. We propose to continue this deliberate communication process with the community as the design for this project continues to develop and to interactively adapt our development plans with the concerns and aspiration of the community.

SECTION 2.0 ASSESSMENT OF DEVELOPMENT REVIEW COMPONENTS

## 2.1 Urban Design

#### 2.1.1 Introduction

The proposed addition and the existing building will form a cohesive structure. The goal of the project is to integrate the overall development with the surrounding neighborhoods through improvements to pedestrian access from Morton Street, realignment of roadway access to the Morton Village apartments and site beautification along the periphery of the property. The combination of these design principles will enhance the physical image of the Economy Plaza as well as improve quality of the neighborhood.

#### 2.1.2 Urban Design Principles

The proposed building addition is designed in the context of current and future development along Morton Street. It is in this context that important urban planning principles become the guidelines for its design. These principles include:

- Transforming the Economy Plaza, Morton Street, and Morton Village apartment area image;
- Complementing existing context, i.e. massing, scale and materials;
- Creating a clear and welcoming sense of arrival;
- Enhancing open green space opportunities;
- Integrating sustainable design principles and operations; and
- Planning for future long-term growth and transformation.

#### 2.1.3 Existing Context and Project Location

The current Morton Street edge is defined by varying building setbacks and urban densities. The buildings have different vintages and styles. Morton Street edge will be the primary arrival zone. It is also a significant point of arrival for Morton Village apartment complex. The proponent thus decided to transform the Morton Street image through planning and various street level improvements, such as plantings and landscaping.

The proposed addition to the existing building will better define the area between the Morton Village apartments and the existing warehouse building. Currently, this area is vacant and overgrown with vegetation. The proposed development will conform to the desired balance of density and open space enhancements. The development will also better define and enhance access from Henrici Street to the benefit of the neighborhood and Morton Village apartments.

The proposed warehouse building addition will abut the existing warehouse to the south and will be of same overall height as the existing building. (See Section 2.1.4 and Figures 2-1 through 2-3.) The Project will closely border the Morton Village apartment building to the south. To the east are single family residences and to the west across the MBTA railroad are also single family

residences. MBTA/Commuter station and railroad abuts the property to the west. The general configuration of commercial and residential buildings will continue to capitalize on the unique characteristics of the area and will provide relief for neighbors, pedestrians, and shoppers.

#### 2.1.4 Height and Massing

The height and massing are primarily dictated by the projected volume of warehouse space required within the building envelope. The height of the building will be approximately 28.0 feet to the top of the roof line. The existing staff parking along Morton Street will be maintained. Additional parking spaces will be provided along the east side of the proposed building addition. The west side facing the MBTA railroad tracks will provide the truck access to the loading docks.

HVAC system will be located on the building roof. Supplemental solar energy panels, if viable, may be also located on the roof.

The Project's height and massing are consistent and compatible with the scale and density of the existing development along Morton Street and the vicinity. The massing of the proposed addition also establishes a relationship with the scale and massing of the existing Economy Plaza to the north and Morton Village apartments to the south.

See Figures 2-1 and 2-3 for aerial and perspective views.

#### 2.1.5 Material and Image

Simple massing and a minimal material palette are proposed for the Project. White metal panels will be featured establishing a relationship with the existing warehouse structure. The building's simple form conforms to its utilitarian function while softening the visual impact to the neighborhood.

From the east, the appearance would be of continuation of the existing warehouse building. From the south, tall trees will obscure the building somewhat throughout the year except for in winter. The west facade of the proposed addition conforms and complements the other architectural statements along the MBTA railroad. At night, the facility will be minimally illuminated to render the structure unobtrusive.

#### 2.1.6 Vehicular Access and Circulation

Normal staff access and deliveries for EPHSC will be via existing entrances located along Morton Street. Loading docks are located along the MBTA railroad side of the existing facility. A loading dock is planned on the west side of the proposed addition to accommodate deliveries of products and supplies of materials to support ongoing operations.

#### 2.1.7 Site Improvements

Lighting and landscaping improvements are proposed along the new building addition frontage and along the right of way from Morton Street to the Morton Village apartment complex to improve safety and aesthetic qualities. The median island at the access from Morton Street will be improved to enhance area image.







## 2.2 Sustainable Design

#### 2.2.1 Introduction

The proposed warehouse building addition represents EPHSC's commitment to environmental responsibility and aligns itself with the City of Boston's forward-thinking approach to sustainable development. The Project will meet, to the extent practical, the challenges set forth in the City of Boston's Climate Action Plan – December 2007, as discussed in Section 1.3.1.

#### 2.2.2 HVAC System Summary

The proposed warehouse addition will be heated minimally keeping the demand on energy use to minimum. Demand on hot water will also be minimal due to the projected use. EPHSC is evaluating several renewable energy alternatives including, passive and active solar energy and geothermal systems. In addition, a thorough review will be completed to select the most suitable method to heat or cool the internal space from available technologies, i.e., radiant heat, forced hot air, etc.

The proposed system will provide the following important benefits:

- Reduce Carbon Footprint
- Energy Efficiency and Operating Cost Savings
- Lower Air Emissions
- Best Available Control

#### 2.2.3 Design

As evidenced by its initiatives undertaken discussed in Section 1.3.1, EPHSC considers LEED qualification important and relevant to the Project.

The Project will comply with Article 37 of the Boston Zoning Code. Appendix B provides a draft LEED 2009 for New Construction (LEED 2009 NC) checklist that is being used to address other sustainability issues that may be attainable for this particular project. The proposed warehouse will incorporate to the extent practical various sustainable design and energy recovery measures namely:

- Energy Efficient Building Envelope
- Energy Efficient Lighting System

#### 2.2.4 Light Pollution Reduction

The design intent of this standard is to minimize light trespass from the building and site, reduce sky-glow, improve nighttime visibility, and reduce impacts on nocturnal environments. The EPHSC may reduce light pollution by including partial or full cutoff type luminaries for the site or building mounted lights and providing automatic light controls and specific architectural configurations for interior lighting. A schematic lighting plan is included as Figure 2-XX.

## **2.3 Transportation**

#### 2.3.1 Vehicle Traffic

The proposed warehouse building addition will require approximately thirty new full time employees and is not expected to have any impact on the surrounding transportation network: Morton Street, Henrici Avenue, or any other local or regional roadways. New staff parking spaces are proposed along the east side of the proposed building addition. Existing staff and customer parking area is located to the north of the plaza between the building and Morton Street.

#### 2.3.2 Service and Loading

Trucks will need to access the warehouse periodically for deliveries and shipments of supplies and materials. All regular shipments and deliveries to support ongoing operations will occur at the existing and new loading docks at the west side of the warehouse building along the railroad tracks. Trucks will enter the facility via the Morton Street entrance. Normal staff access will also occur at the existing access from Morton Street.

#### 2.3.3 Bicycle Facilities

EPHSC will look into providing sheltered and secured bicycle parking at the facility for a total of approximately 5 bicycles. Currently, one employee commutes by bicycle once in a while. EPHSC will provide these amenities to encourage cycling as a healthy, inexpensive and environmentally positive alternative to driving alone.

#### **2.3.4 Construction Period Impacts**

During construction of the warehouse addition, the impacts to the transportation network and to the community are expected to be minor. The Project is located within a busy residential commercial use area along Morton Street. The majority of the work will be staged on the property to minimize any effects on pedestrian, bicycle and vehicle operations in the area. See Section 2.5 - Construction Management Plan for more information on managing impacts. Prior to commencing construction, EPHSC will submit a Construction Management Plan (CMP) to the Boston

Transportation Department for review and approval.

## **2.4 Environmental Protection**

#### 2.4.1 Wind

The proposed warehouse addition is designed to be of similar height and massing to buildings in the vicinity of the Project Site. The building itself will be approximately 28 feet above grade.

Vertical deflection of upper winds usually results from buildings of 300 feet or more in height. As the height of the Project is approximately 28.0 feet above grade, it is not anticipated that the Project will deflect upper level winds. Channeling of airflows and induced turbulence usually occurs in high-density areas or urban street canyons. The Project does not create a canyon effect and is not expected to result in increased wind speeds.

Based on the height of the Project and its similar massing to surrounding buildings, the Project is not expected to cause significant material impacts to upper level or pedestrian level winds.

#### 2.4.2 Daylight

The Project site is located within a dense urban environment surrounded by buildings of similar height and massing as the proposed Project. The Project is set back approximately 75 feet from the property line to the east and several hundred feet from Morton Street to the north. The site is immediately bordered to the south and east by buildings of similar or taller heights. Due to the existing configuration of the Project site, minimal impacts to daylight obstruction are anticipated.

#### 2.4.3 Shadow

The proposed Project site is located in a densely urban area. As the proposed warehouse building addition will be surrounded by and adjacent to structures of similar or taller heights and similar massing, any shadow impact will be comparable to the neighboring buildings. It is anticipated that the proposed warehouse building addition will not create significant net new shadow coverage on public ways or open spaces in the area.

#### 2.4.4 Solar Glare

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

#### 2.4.5 Air Quality

It is not anticipated that the Project will have significant potential long term air quality impacts. The proposed addition is expected to contribute to an increase of about thirty full-time employees. However, the potential long-term air quality impacts will be limited to emission from vehicular traffic.

#### 2.4.6 Noise

The Project site is located along Morton Street and MBTA commuter railroads which are the sources for much of the ambient noise in the area. In addition, the ambient noise levels around the Project site are elevated due to the urban nature of the area. As discussed in detail below, the noise levels from the Project will be below Massachusetts Department of Environmental Protection and City of Boston standards in relationship to background noise conditions.

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

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

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

*Noise Regulations and Criteria:* The primary set of regulations relating to the potential increase in noise levels is the City of Boston Zoning District Noise Standards (City of Boston Code – Ordinances: Section 16–26 Unreasonable Noise and City of Boston Air Pollution Control Commission Regulations for the Control of Noise in the City of Boston). According to the city code, the noise limits are 60dBA from 7:00am to 6:00pm Monday through Saturday and 50dBA all day Sunday and from 6:00pm to 7:00am Monday through Saturday.

The Massachusetts Department of Environmental Protection (MassDEP) regulates community noise by its Noise Policy: DAQC policy 90-001. The MassDEP policy limits source sound levels to a 10-dBA increase in the ambient measured noise level at the Project property line and at the nearest residences.

The proponent expects the principal noise emissions from the building to be from the mechanical building systems and from activity sound generated within the building. The building mechanical system will most likely be located off-center to the north on the roof away from Morton Village apartments which are the closest residences. A combination of equipment noise control (duct silencers, low-noise fans, and compressors) and noise barrier screens will be used to ensure compliance of the building mechanical systems with applicable noise regulations. The exterior building envelope will be selected to minimize noise migration from inside the building.

#### 2.4.7 Flood Hazard Zones / Wetlands

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the site located in the City of Boston - Community Panel Number 250286 0022 C indicates the FEMA Flood Zone Designations for the site area. The map shows that the Project is located in a Zone C, Area of Minimal Flooding. The site does not contain wetlands.

#### 2.4.8 Geotechnical/Groundwater

Generally, the site is overlain with approximately 6 to 8 ft of miscellaneous fill which formed an elevated plateau over much of the site. The fill unit is underlain by a continuous deposit of natural glacial till, which is underlain by weathered bedrock. Glacial till is approximately 10 to 12 feet below the ground surface and bedrock is approximately 12 to 15 ft below the ground surface.

Groundwater level measurements obtained at monitoring wells installed on and in the vicinity of the Project have been reviewed to develop an understanding of groundwater conditions and considerations for below-grade construction design and planning. Groundwater levels vary with season and other local influences, and groundwater levels ranging between 12.6 and 15.4 feet below grade were recorded in the past.

**Foundation Methodology:** The surficial fill and organic soils are not suitable for foundation support. It is anticipated that the proposed foundations would need to extend at least to the naturally deposited glacial till/bedrock, depending upon the structure loads. For the slab on grade design being considered, the foundation system most feasible is spread footings on compacted structural fill, extending to till,

*Excavation Support:* For construction, a temporary excavation support system that is compatible with subsurface conditions will be designed in order to provide adequate support and protection of the adjacent streets and utilities. It is anticipated that in general, the excavation support systems will consist of benching and sloping open excavations per OSHA trenching guidelines.

*Groundwater Conditions:* Groundwater level measurements obtained at monitoring wells installed on and in the vicinity of the Project have been reviewed to develop an understanding of groundwater conditions and considerations for below-grade construction design and planning.

Groundwater levels vary with season and other local influences, and groundwater levels ranging between 12.6 and 15.4 ft below grade were recorded in the past. The proposed structure will be slab on grade. The foundation elements that are required to extend down to competent soils, below the groundwater level, will be solid, discontinuous, discrete elements that will not cause the groundwater to raise, pond or be lowered.

Roof runoff from the Project will be directed to an underground infiltration system to the south side of the proposed building. The infiltration system will likely consist of plastic chambers surrounded by crushed stone and wrapped in geotextile. The system has been sized to retain and infiltrate a volume of stormwater greater than 1" of rainfall over the entire roof area. Supporting design calculations are noted on the schematic site plan. See Figure 2-4 for schematic site plan.

#### 2.4.9 Water Quality

The proposed Project will be designed and constructed to protect surface and ground waters from negative impact to water quality both during and post construction. The site of the proposed Project is currently 100% unpaved and overgrown vacant land. Approximately 78,000 s.f. of this unpaved area will be replaced with a new building. Runoff from the new building roof, which is not subjected to parking lot pollutants such as sand and salt, will likely be free of sediments and will be able to be infiltrated into the ground. Runoff from the proposed building will be directed to a new infiltration system to the south of the project site.

Stormwater runoff from the site during construction will be monitored and is expected to be minimal. It will be controlled through the use of sedimentation barriers, catch basin silt sacks, stabilized construction entrances and other appropriate Best Management Practices (BMP's). These BMP's will serve to protect water quality by preventing sediment laden runoff from leaving the work area and entering the existing stormwater system and ultimately Boston Harbor.

Post construction runoff from the parking lots will be treated and infiltrated on site to the maximum extent feasible as outlined in the February 2008 Massachusetts Stormwater Handbook. The use of low impact development techniques such as bio-retention parking lot islands, underground infiltration chambers, proprietary pre-treatment units, and deep sump catch basins will be evaluated for their effectiveness for treating runoff from the site.

#### 2.4.10 Solid and Hazardous Wastes

Testing of soil and groundwater is planned in advance of construction to characterize materials to be excavated; to support planning for off-site disposition of soils and management of construction dewatering effluent; and to identify environmental regulatory requirements, if applicable.

*Construction Waste and Disposal:* Solid waste generated by construction will consist of excavated material and debris. Excavated material will be composed of miscellaneous fill and

underlying natural deposits. Excavation and off-site disposition will be conducted in accordance with a Soil Management Plan developed for the Project and included as part of the Construction Documents. The Soil Management Plan will describe procedures for identification, management and off-site transport of any contaminated soils. Management of soil during excavation and construction will be conducted in accordance with applicable local, state, and federal laws and regulations.

Construction dewatering will be conducted in accordance with a Groundwater Management Plan that will be included as part of the Construction Documents. The Groundwater Management Plan will describe the procedures for maintenance of groundwater levels and for the treatment (if necessary) and discharge of effluent from dewatering activities.

*Solid Waste Generation and Recycling:* The Project will generate solid waste from employee and staff maintenance offices such as wastepaper, cardboard, glass bottles, aluminum cans, etc. Recycling of this material will be encouraged and managed through recycling program. There are staging areas in the existing building for recycling bins that will accommodate the recyclable material from the new warehouse addition.

#### 2.4.11 Rodent Control

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

#### 2.4.12 Wildlife Habitat

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

## **2.5 Construction Management Plan**

A Construction Management Plan (CMP) will be submitted to the Boston Transportation Department (BTD) for review and approval prior to issuance of a building permit. The CMP will define truck routes which will help minimize the impact of trucks on local streets. The construction contractor will be required to comply with the details and conditions of the approved CMP.

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

#### 2.5.1 Construction Schedule and Coordination

Construction of the Project is estimated to last approximately 18 months. Initial site work is expected to begin during the 3<sup>rd</sup> Quarter of 2013.

Typical construction hours will be from 7:00 am to 6:00 pm, Monday through Friday, with most shifts ordinarily ending at 3:30 pm. No sound-generating activity will occur before 7:00 am. If longer hours, additional shifts, or Saturday work is required, the Construction Manager will place a work permit request to the Boston Air Pollution Control Commission and BTD in advance. Notification should occur during normal business hours, Monday through Friday. It is noted that some activities such as finishing activities could run beyond 6:00 pm to ensure the structural integrity of the finished product. (Certain components must be completed in a single pour and placement of concrete cannot be interrupted.)

Proper planning with the City, neighborhood and developers of other projects under construction in the area will be essential to the successful construction of the Project. The construction contractor will be responsible for coordinating construction activities during all phases of construction with City of Boston agencies to minimize potential scheduling and construction conflicts with other ongoing construction projects in the area.

#### 2.5.2 Construction Staging and Public Safety

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

Although specific construction and staging details have not been finalized, the Proponent and its construction management consultants will work to ensure that staging areas will be located to minimize impacts to pedestrian and vehicular flow. Secure fencing and barricades will be used to isolate construction areas from pedestrian traffic adjacent to the site. In addition, sidewalk areas and walkways near construction activities will be well marked and lighted to protect pedestrians and ensure their safety. If required by BTD and the Boston Police Department, police details will be provided to facilitate traffic flow. Construction procedures will be designed to meet all Occupational Safety and Health Administration (OSHA) safety standards for specific site construction activities.

#### 2.5.3 Construction Employment and Worker Transportation

The number of workers required during the construction period will vary, with an estimated average daily work force ranging from approximately 10 to 20. The Proponent will make reasonable good-faith efforts to have at least 50 percent of the total employee work hours for Boston residents, at least 25 percent of total employee work hours for minorities and at least 10 percent of the total employee work hours for women. To reduce vehicle trips to and from the construction site, minimal construction worker parking will be available at the site and all workers will be strongly encouraged to use public transportation and ridesharing options. The Proponent and contractor will work aggressively to ensure that construction workers are well informed of the public transportation options serving the area. Five bus routes currently service the area, and the Project site is next to the Morton Street train station on the Fairmount Line. Space on-site will be made available for workers' supplies and tools so they do not have to be brought to the site each day.

#### 2.5.4 Construction Truck Routes and Deliveries

The construction team will manage deliveries to the site during morning and afternoon peak hours in a manner that minimizes disruption to traffic flow on adjacent streets. The construction team will provide subcontractors and vendors with Construction Vehicle & Delivery Truck Route Brochures in advance of construction activity. "No Idling" signs will be included at the loading, delivery, pick-up and drop-off areas.

Truck traffic will vary throughout the construction period depending on the activity. Construction truck routes to and from the Project site for contractor personnel, supplies, materials, and removal of excavations will be coordinated by the Proponent with the BTD and established in the CMP. These routes will be mandated as a part of subcontractors' contracts for the Project. Traffic logistics and routing are planned to minimize community impacts.

See also Section 2.3.4 for more information.

#### 2.5.5 Construction Noise

The Proponent is committed to mitigating noise impacts from Project construction. Construction work will comply with the requirements of the City of Boston Code/Ordinances and the Regulations for Control of Noise in Boston administered by the Boston Environment Department. Every reasonable effort will be made to minimize the noise impact of construction activities.

Construction period noise mitigation measures are expected to include the following:

Instituting a proactive program to ensure compliance with the City of Boston ordinances and

regulations;

- Using appropriate mufflers on all equipment and ongoing maintenance of intake and exhaust mufflers;
- Muffling enclosures on continuously running equipment, such as air compressors and welding generators;
- Replacing specific construction operations and techniques by less noisy ones where feasible;
- Scheduling equipment operations to keep average noise 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 locations by shielding or distance.

#### 2.5.6 Construction Air Quality

Impacts associated with construction activities may generate fugitive dust, which will result in localized increases in airborne particulate levels. Fugitive dust emissions from construction activities will depend on such factors as the properties of the emitting surfaces (e.g., moisture content, and volume of spoils), meteorological variables, and construction practices employed.

To reduce emissions of fugitive dust and minimize impacts on the local environment, the construction work will adhere to a number of strictly enforced mitigation measures. These measures may include the following:

- Using wetting agents regularly to control and suppress dust that may come from the construction materials;
- Fully covering all trucks used for transportation of construction debris;
- Retrofitted equipment and ultra low-sulfur diesel (ULSD) fuel (15 ppm) will be used, in off-road construction equipment;
- Removing construction debris from each site regularly, as needed;
- Monitoring construction practices to ensure that unnecessary transfers and mechanical disturbances of loose materials are minimized and to ensure that any emissions of dust are negligible;
- Providing a wheel wash at all exits from the construction areas; and
- Regular vacuum cleaning of streets and sidewalks in the Project area will be employed to ensure that they remain free of dust and debris from the Project.

#### 2.5.7 Construction Waste

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

facility, per the MassDEP regulations for Solid Waste Facilities, 310 CMR 16.00.

#### 2.5.8 Protection of Utilities

Existing public and private infrastructure located within the public right-of-way will be protected during construction. The installation of proposed utilities within the public way will be in accordance with the BWSC, Boston Public Works Department, the Dig Safe program, and the governing utility company requirements. All necessary permits will be obtained before the commencement of the specific utility installation. Specific methods for constructing proposed utilities where they are near to, or connect with, existing water, sewer and drain facilities will be reviewed by BWSC as part of its Site Plan Review Process.

#### 2.6 Historic and Archaeological Resources

#### 2.6.1 Historic Resources

The Project Site is located within the Greater Mattapan Neighborhood District ("GMND") and is subject to review by the zoning commission. According to the zoning district overlay, the project site is not located within a historic district. If review by the Massachusetts Historic Commission is required, the appropriate project documentation will be submitted.

#### 2.6.2 Archaeological Resources

A review of the National Register and Inventory of Historic and Archaeological Assets of the Commonwealth identified no previously known archaeological resources within the Project site.

#### 2.7 Infrastructure Systems

#### **2.7.1 Introduction**

This section evaluates the infrastructure systems that will support the proposed warehouse addition. Based on initial investigations and consultations with the regulating agencies and utility companies, the existing infrastructure systems in the area appear to be able to accommodate the incremental increase in demand associated with the proposed Project.

The design process for the proposed warehouse building will include the required engineering analyses and will adhere to applicable protocols and design standards, ensuring that the proposed Project is properly supported by and properly uses the City's infrastructure.

The systems discussed below include those owned or managed by the Boston Water and Sewer Commission (BWSC), private utility companies, and on-site infrastructure. There will be close coordination between these entities and the Project team during subsequent reviews and the design

process. All improvements and connections to BWSC infrastructure will be reviewed as part of the BWSC site plan review process. This process includes a comprehensive design review of the proposed service connections, assessment of system demands and capacity and establishment of service accounts. See Figure 2-4 – Schematic Site Plan, for proposed utility connections.

#### 2.7.2 Regulatory Framework

All connections will be designed and constructed in accordance with city, state and federal standards.

- ✤ In the City of Boston, BWSC is responsible for all water, sewer and stormwater systems.
- The Boston Fire Department (BFD) will review the proposed Project with respect to fire protection measures such as Siamese connections and standpipes.
- Design of the site access, hydrant locations, and energy systems (gas, steam and electric) will also be coordinated with the respective system owners.
- New utility connections will be authorized by the Boston Public Works Department through the street opening permit process, as required.

#### 2.7.3 Wastewater

*Existing Wastewater:* Local sewer service in the City of Boston is provided by the BWSC. Wastewater generated in the proposed Project area will be conveyed to the Massachusetts Water Resources Authority (MWRA) facility on Deer Island via interceptor drains.

*Demand/Use:* The proposed addition Project will generate approximately an average of 15 additional gallons per day of wastewater from the proposed building. This wastewater will be mostly generated from restrooms. It is estimated that the peak wastewater generation from the proposed building will not be increased from the current levels in any significant manner. These flow rates were reviewed with BWSC and determined that the existing sewer has capacity to handle these flows.

**Proposed Connection:** As shown on the schematic site plan, the wastewater generated by the Project will be piped to the existing sewer connection. The Proponent will coordinate with the BWSC on the design and capacity of the proposed connection to the sewer system. In addition, the proponent will submit a General Service Application and site plan for review as the proposed Project progresses.

#### 2.7.4 Domestic Water and Fire Protection

*Existing Water Supply System:* The proposed Project is located in Mattapan within the BWSC public water supply service areas. Morton or Henrici Street is served by 4-inch high and low pressure lines. Domestic water demand will be determined by the number of new full time

employees. It is estimated that the proposed Project will add approximately 30 new employees for an average of 75 gallons of water per day with a peak demand of 5 gallons per minute.

Hydrant test data provided by the BWSC is presented in Table 2-1 below.

Date	Location	Static	Residual	Total	Flow
		Pressure	Pressure	Flow	(gpm)
		(psi)	(psi)	(gpm)	At 20 psi <sup>1</sup>
3/12/2004	Henrici Street	78	54	3042	

Table 2-1 Hydrant Test Data

psi = pounds per square inch

The results of the hydrant flow test indicate the actual amount of water (flow) available and the actual pressure (residual) flow provided. These flow metrics are analyzed to establish the quantity of water that will be delivered at 20 psi as a common evaluation point.

*Proposed Connection:* Domestic water service for the project will be unchanged from existing. The existing 4" low pressure water main is in Henrici Street as shown on the site plan.

As shown on the schematic site plan, a fire service will be provided for the building sprinkler system. This service will be connected to the existing 10" high pressure main in Henrici Street.

The Project flow rates were reviewed with BWSC. BWSC indicated that the proposed connections will be acceptable and the existing mains have capacity to handle these flows. Compliance with the standards for the domestic water system service connections will continue to be reviewed as part of BWSC's Site Plan Review Process. The review includes but is not limited to sizing of water supply and fire protection services, calculation of meter sizing, backflow prevention design, and location of hydrants and Siamese connections to conform to BWSC and Boston Fire Department requirements.

#### 2.7.5 Stormwater Management

*Existing Conditions:* The project site is an undeveloped vacant land. Stormwater runoff from smaller storm events is predominantly infiltrates into the ground. For larger storms, the runoff flows off-site into catch basins in Henrici Street to the east, into the tracks to the south, and existing drains to the north and south.

**Proposed Conditions:** Stormwater from the site will be routed to existing infrastructure. As per Section 2.4.8 – Geotechnical/Groundwater, the project will be required to infiltrate 1" of runoff per square foot of new building footprint. Additional run-off from non-roof areas and storms in excess of 1" of rainfall will discharge to the BWSC drain. Because the Project site is currently entirely unpaved, the proposed Project will change the overall area of impervious surface and will

result in an increase in stormwater generation from the site. The introduction of a stormwater infiltration system will result in a decrease in the amount of stormwater discharged from the site and increase the recharge to the aquifer. There will be minor change in the drainage patterns and increased runoff to the BWSC drainage system. The schematic site plan was reviewed with BWSC.

Stormwater management controls will be established in compliance with BWSC. The proposed Project will be designed so as to minimize introduction of peak flows, pollutants, or sediments to existing drainage infrastructure. In conjunction with the site plan and the General Service Application, the proponent will submit a stormwater management plan to the BWSC. Compliance with the standards for the final site design will be reviewed as part of the BWSC Site Plan Review Process.

#### 2.7.6 Anticipated Energy Needs

*Natural Gas Service:* Natural gas for the Project will be provided by National Grid. The building will tie into the existing gas main in existing warehouse building.

*Electrical Service:* EPHSC purchases electricity from NSTAR Electric. Service to the proposed warehouse addition will be extended from the existing warehouse building.

*Telecommunications:* Verizon will provide telephone and telecommunication services to the proposed Project. The Project will receive telecommunication service directly from the existing warehouse building.





APPENDICES

APPENDIX A PHOTOGRAPHS

Project Notification Form Warehouse Building Addition The Economy Plaza May, 2013



View from Morton Street Entrance Looking Southwest



View from Morton Street Entrance Looking West



New Steel Building From Access Road Looking West



New Steel Building From Access Road Looking North



Right of Way to MBTA Station from Morton Street Entrance



From Front Parking Lot Looking North Northeast Toward Morton Street Entrance



From Front Parking Lot Looking East Northeast Toward Morton Street Entrance



New Steel Building From Parking Lot Looking West



Southwest Wall of the Steel Building



New Steel Building and Old Brick Building From Access Road Looking West



From Access Road Looking North Toward the Proposed Lot and Steel Building



From Access Road Looking Northeast Toward the Proposed Lot



From Access Road Looking West Toward the Proposed Lot and Apartment Complex



From Access Road Panoramic View of Apartment Complex, the Proposed Lot, and Steel Building

# APPENDIX B

# ZONING ANALYSIS

# ZONING ANALYSIS

#### **Background:**

The current user of the project site is Economy Plumbing and Heating Supply Company. Economy operates a retail sales business, offering a broad range of plumbing and heating supplies to the local residential, business, and commercial communities.

The proposed use of the herein described project is to be the same as the existing use, that of operating Economy's present business, and the desired expansion of the present building area to support their sales activities.

The proposed project street address is: 875 Morton St. Mattapan Massachusetts

The project Assessors map reference is:

Lot B, Ward 18 Assessors Parcel# 1800760000 Deed Book 47700, Pg. 147

Assessors Parcel # 1800737000 Deed Book 31387, Pg. 34

Plan Bk. 8840, end.

The governing Zoning code is:

#### ARTICLE 60 GREATER MATTAPAN NEIGHBORHOOD DISTRICT (Article inserted on February 27, 1997\*)

The governing zoning map is:

#### City of Boston, Redevelopment Authority 8C Greater Mattapan Neighborhood District

Per Map 8C, the referenced site falls into the Neighborhood Business Sub district of "Neighborhood Shopping Sub district"

The entire existing and proposed sites fall into the above referenced Neighborhood Shopping Sub district zone (NS).

#### **Use Regulation**

Article 2A provides definitions applicable in Neighborhood districts, and in Article 60. From Article 2A:

#### <u>"General Retail Business", a department store, furniture store, general</u> <u>merchandise mart, or other store serving the general retail business needs of a</u> <u>major part of the city, including accessory storage.</u>

Economy Plumbing and Heating Supply is categorized as a "General Retail Business" per the above definition.

The use regulations applicable in Neighborhood Business Sub districts are found in Article 60, section 60-16, Table B.

Table B categorizes: General Retail Business: A (Allowed use) in NS Sub districts , With footnote #8. Further addending the allowed use to 'C" (Conditional).

Excerpted From Table B:

8. Where designated "A," provided that any Proposed Project for a General Retail Business shall be conditional if it: (a) establishes
an occupancy for a General Retail Business having a gross floor area of seventy-five thousand (75,000) or more square feet; or
(b) changes to a General Retail Business the use of a gross floor area of seventy-five thousand (75,000) or more square feet; or
(c) enlarges a General Retail Business so as to increase its gross floor area by seventy-five thousand (75,000) or more square feet; or

Therefore the allowable use of the subject site for the herein described project, having the use classified as General Retail Business is "C": Conditional

#### **Dimensional Regulation**

The Dimensional regulations Applicable in Neighborhood Business Sub districts is found in Article 60, section 60-17, Table F.

For Neighborhood Shopping Sub district NS-1:

#### Excerpted from Table F:

Greater Mattapan Neighborhood District Neighborhood Business Subdistricts Dimensional Regulations Local Neighborhood Shopping Community (NS-1) (NS-2) Maximum Floor Area Ratio: 1 Maximum Building Height: 35 Minimum Lot Size none Minimum Lot Size none Minimum Lot Width: none Minimum Lot Frontage: none Minimum Front Yard : none Minimum Side Yard (4) none Minimum Rear Yard: (5) none

4. In a Neighborhood Business Subdistrict, no side yard is required except in the case of a lot with a side lot line abutting a Residential Subdistrict, which shall have side yards as if it were in such abutting district. Every side yard so required that does not abut a street line shall, along every lot line on which such yard abuts, be at a level no higher than that of the lowest window sill of the lowest room designed for human occupancy or so occupied, and relying upon natural light or natural ventilation from windows opening on such yard.

5. In a Neighborhood Business Subdistrict, every rear yard required by this code that does not abut a street line shall, along every lot line on which such yard abuts, be at a level no higher than the level of the lowest window sill in the lowest room designed for human occupancy or so occupied, and relying upon natural light or natural ventilation from windows opening on such yard.

Therefore, Per notes 4 and 5, from table F above, side and rear setbacks shall comply with the abutting districts.

#### **Abutting Property zoning:**

The abutting property to the South East is "Multi Family Residential (MFR). The abutting property to the South West is 2F-3000 (Two Family Residential) The abutting property to the North West is 3F-6000 (Three Family Residential) The abutting property to the North east is Neighborhood Shopping (NS).

#### By Table D:

Zone Subdistrict	Min. Side Yard	Min. Rear yard	
MFR	15Ft.	30Ft.	
2F-3000	10Ft	30ft.	
3F-6000	7Ft.	30Ft.	

#### Actual Proposed Project Dimensions provided:

Lot coverage Ratio: less than 1 Building Height: 28 Ft. Side yard Setback: Greater than 40 Ft. Rear yard Setback.: 40 Ft. APPENDIX C LEED CHECKLIST



Project Name: Warehouse Building Addition, The Economy Plaza

Project Address: 875 Morton Street, Mattapan, MA 02126

Yes	?	No				
33			Project Totals (Pre-Ce	ertification Estimates)		69 Points
			Certified: 26-32 points	Silver: 33-38 points	Gold: 39-51 points	Platinum: 52-69 points

Yes	?	No			
8			Sustain	able Sites	14 Points
Yes			Prereq 1	Construction Activity Pollution Prevention	Required
1			Credit 1	Site Selection	1
1			Credit 2	Development Density & Community Connectivity	1
		0	Credit 3	Brownfield Redevelopment	1
1			Credit 4.1	Alternative Transportation, Public Transportation	1
1			Credit 4.2	Alternative Transportation, Bicycle Storage & Changing Rooms	1
1			Credit 4.3	Alternative Transportation, Low-Emitting & Fuel Efficient Vehicles	1
1			Credit 4.4	Alternative Transportation, Parking Capacity	1
		0	Credit 5.1	Site Development, Protect or Restore Habitat	1
		0	Credit 5.2	Site Development, Maximize Open Space	1
		0	Credit 6.1	Stormwater Design, Quantity Control	1
		0	Credit 6.2	Stormwater Design, Quality Control	1
		0	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

Yes	?	No	_		
3			Water E	fficiency	5 Points
		0	Credit 1.1	Water Efficient Landscaping, Reduce by 50%	1
		0	Credit 1.2	Water Efficient Landscaping, No Potable Use or No Irrigation	1
1			Credit 2	Innovative Wastewater Technologies	1
1			Credit 3.1	Water Use Reduction, 20% Reduction	1
1			Credit 3.2	Water Use Reduction, 30% Reduction	1





Yes	?	No				
7			Energy	& Atmosp	here	17 Points
Yes Yes Yes			Prereq 1 Prereq 1 Prereq 1	Fundamen Minimum E Fundamen	tal Commissioning of the Building Energy Systems Energy Performance tal Refrigerant Management	Required Required Required
*Note for	EAc1: All L	EED for Ne	w Constructi	on projects re	egistered after June 26, 2007 are required to achieve at least ty	vo (2) points.
5			Credit 1	Optimize E	nergy Performance	1 to 10
				Credit 1.1	10.5% New Buildings / 3.5% Existing Building Renovations	1
				Credit 1.2	14% New Buildings / 7% Existing Building Renovations	2
				Credit 1.3	17.5% New Buildings / 10.5% Existing Building Renovations	3
				Credit 1.4	21% New Buildings / 14% Existing Building Renovations	4
				Credit 1.5	24.5% New Buildings / 17.5% Existing Building Renovations	5
				Credit 1.6	28% New Buildings / 21% Existing Building Renovations	б
				Credit 1.7	31.5% New Buildings / 24.5% Existing Building Renovations	7
				Credit 1.8	35% New Buildings / 28% Existing Building Renovations	8
				Credit 1.9	38.5% New Buildings / 31.5% Existing Building Renovations	9
	-		,	Credit 1.10	42% New Buildings / 35% Existing Building Renovations	10
		0	Credit 2	On-Site Rei	newable Energy	1 to 3
				Credit 2.1	2.5% Renewable Energy	1
				Credit 2.2	7.5% Renewable Energy	2
			1	Credit 2.3	12.5% Renewable Energy	3
1			Credit 3	Enhanced (	Commissioning	1
1			Credit 4	Enhanced F	Refrigerant Management	1
		0	Credit 5	Measurem	ent & Verification	1
		0	Credit 6	<b>Green Pow</b>	er	1



Yes	?	No	_		
5			Materials & Resources		13 Points
Vee	1				
res			Prereq 1	Storage & Collection of Recyclables	Required
		0	Credit 1.1	Building Reuse, Maintain 75% of Existing Walls, Floors & Roof	1
		0	Credit 1.2	Building Reuse, Maintain 95% of Existing Walls, Floors & Roof	1
		0	Credit 1.3	Building Reuse, Maintain 50% of Interior Non-Structural Elements	1
1			Credit 2.1	Construction Waste Management, Divert 50% from Disposal	1
1			Credit 2.2	Construction Waste Management, Divert 75% from Disposal	1
		0	Credit 3.1	Materials Reuse, 5%	1
		0	Credit 3.2	Materials Reuse, 10%	1
1			Credit 4.1	<b>Recycled Content</b> , 10% (post-consumer + 1/2 pre-consumer)	1
1			Credit 4.2	<b>Recycled Content</b> , 20% (post-consumer + 1/2 pre-consumer)	1
		0	Credit 5.1	Regional Materials, 10% Extracted, Processed & Manufactured	1
		0	Credit 5.2	Regional Materials, 20% Extracted, Processed & Manufactured	1
		0	Credit 6	Rapidly Renewable Materials	1
1			Credit 7	Certified Wood	1

Yes ?

10

No

## Indoor Environmental Quality

	_				
Yes			Prereq 1	Minimum IAQ Performance	Required
Yes			Prereq 2	Environmental Tobacco Smoke (ETS) Control	Required
1			Credit 1	Outdoor Air Delivery Monitoring	1
		0	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 & Sealants	1
1			Credit 4.2	Low-Emitting Materials, Paints & Coatings	1
1			Credit 4.3	Low-Emitting Materials, Carpet Systems	1
1			Credit 4.4	Low-Emitting Materials, Composite Wood & Agrifiber Products	1
1			Credit 5	Indoor Chemical & Pollutant Source Control	1
		0	Credit 6.1	Controllability of Systems, Lighting	1
		0	Credit 6.2	Controllability of Systems, Thermal Comfort	1
		0	Credit 7.1	Thermal Comfort, Design	1
		0	Credit 7.2	Thermal Comfort, Verification	1
1			Credit 8.1	Daylight & Views, Daylight 75% of Spaces	1
1			Credit 8.2	Daylight & Views, Views for 90% of Spaces	1

Adobe<sup>®</sup> LiveCycle<sup>™</sup>

15 Points



Yes	?	No		
0			Innovation & Design Process	5 Points
			-	
		0	Credit 1.1 Innovation in Design: Provide Specific Title	1
		0	Credit 1.2 Innovation in Design: Provide Specific Title	1
		0	Credit 1.3 Innovation in Design: Provide Specific Title	1
		0	Credit 1.4 Innovation in Design: Provide Specific Title	1
		0	Credit 2 LEED <sup>®</sup> Accredited Professional	1

