

NEEDHAM PLANNING BOARD

Wednesday, November 4, 2020

7:15 p.m.

Virtual Meeting using Zoom

Meeting ID: **826-5899-3198**

(Instructions for accessing below)

To view and participate in this virtual meeting on your phone, download the “Zoom Cloud Meetings” app in any app store or at www.zoom.us. At the above date and time, click on “Join a Meeting” and enter the following Meeting ID: **826-5899-3198**

To view and participate in this virtual meeting on your computer, at the above date and time, go to www.zoom.us click “Join a Meeting” and enter the following ID: **826-5899-3198**

1. ANR Plan – Boston Ventures International LLC, Petitioner, (Property located at 23 Dwight Road, Needham, MA).
2. Public Hearing:
 - 7:20 p.m. Amendment to Major Project Site Plan Special Permit No. 2012-07: TripAdvisor LLC, 400 First Avenue, Needham, MA, Petitioner. (Property located at 400 First Ave, Needham, Massachusetts). Regarding TripAdvisor Fuel Cell power.
 - 7:40 p.m. 390 Grove Street Definitive Subdivision: Elisabeth Schmidt-Scheuber, 390 Grove Street, Needham, MA, Petitioner, (Property located at 390 Grove Street, Needham, MA). *Please note this is a re-noticed hearing that began on February 4, 2020 and is continued from the July 21, 2020, August 11, 2020 and September 8, 2020 Planning Board meetings and will be further continued to the December 15, 2020 Planning Board meeting.*
3. Review of Draft 40B Guidelines.
4. Minutes.
5. Correspondence.
6. Report from Planning Director and Board members.

(Items for which a specific time has not been assigned may be taken out of order.)

TOWN OF NEEDHAM
MASSACHUSETTS



PLANNING BOARD

500 Dedham Avenue
Needham, MA 02492
781-455-7550

APPLICATION FOR ENDORSEMENT OF PLAN
BELIEVED NOT TO REQUIRE APPROVAL

Submit three (3) copies. One copy to be filed with the Planning Board and one with the Town Clerk as required by Section 81-P, Chapter 41 of the General Laws. This application must be accompanied by the **Original Tracing** and **three (3) copies of the plan**.

To the Planning Board:

The undersigned, believing that the accompanying plan of land in the Town of Needham does not constitute a subdivision within the meaning of the Subdivision Control Law, for the reasons outlined below, herewith submits said plan for a determination and endorsement that Planning Board approval under the Subdivision Control Law is not required.

1. Name of Applicant BOSTON VENTURES INTERNATIONAL LLC

Address 32 HICKORY RD WENDELEY MA 02482

2. Name of Engineer or Surveyor ROBERT BIRBO

Address 10 HAMMILL ST WALTHAM MA 02453

3. Deed of property recorded in DEDMAN / NORFOLK Registry,
Book 37026, Page 382

4. Location and description of property 23 DWIGHT RD NEEDHAM MA
02492 43984 LOT 5 & F1

5. Reasons approval is not required (check as applicable):

☒ a) Every lot shown has the area and frontage required by the Zoning By-Law on a way, as defined by Section 81-L, Chapter 41 of the General Laws.

b) Land designated _____ shall not be used as separate building lot(s) but only together with adjacent lots having the required area and frontage.

c) Lot(s) having less than required frontage or area resulted from a taking for public purpose or have been recorded prior to 3/26/1925, no land is available to make up the deficiency and the frontage and land area of such lots are not being reduced by the plan.

d) _____

(If the applicant is not the owner, written authorization to act as agent must be attached)

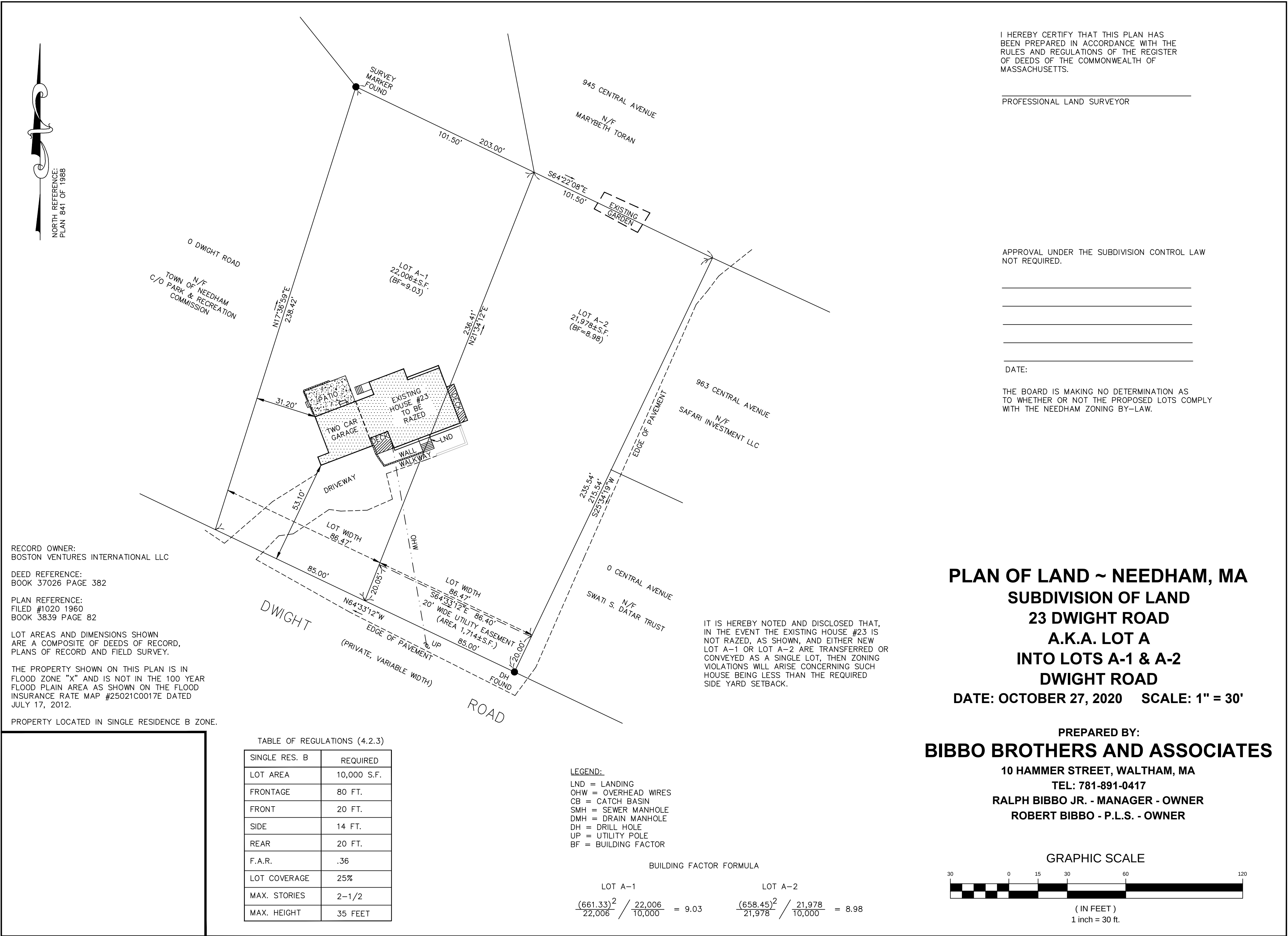
Signature of Applicant Paul Grier

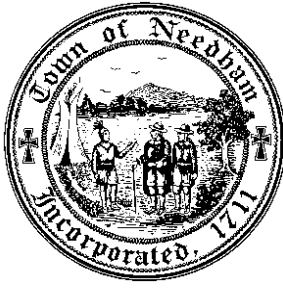
Address 22 HUNTER'S RUN, NO. PROV, RI 02904

By PAUL ALBERT NERI "MANAGER" (agent)

Application accepted this _____ day of _____ 20____
as duly submitted under the rules and regulations of the Planning Board.

By _____





LEGAL NOTICE
Planning Board
TOWN OF NEEDHAM
NOTICE OF HEARING

In accordance with the provisions of M.G.L., Chapter 40A, S. 11, and the Needham Zoning By-Laws, Sections 7.4, and Section 4.2 of Major Site Plan Special Permit No. 2012-07 dated October 16, 2012, amended and restated April 2, 2013, and amended on September 17, 2013, January 6, 2015, April 28, 2015, November 10, 2015 and April 25, 2016, the Needham Planning Board will hold a public hearing on Wednesday, November 4, 2020 at 7:20 PM Zoom Web ID Number 826-5899-3198 (further instructions for accessing are below), regarding the application of TripAdvisor, LLC, 400 First Avenue, Needham, MA, for a Special Permit under Site Plan Review, Section 7.4 of the Needham Zoning By-Law.

The subject property is located at 400 First Avenue, Needham, MA, shown on Assessor's Map No. 300 as Parcel 28 containing 13.68 acres in the New England Business Center Zoning District. The requested Major Project Site Plan Special Permit Amendment would, if granted, permit the Petitioner to install a fuel cell on site. The purpose of this project is to reduce electrical and heating costs while also reducing emissions of greenhouse gases and other air pollutants. The fuel cell would be mounted on a structural steel platform spanning the loading dock area across B street from the Coca-Cola bottling facility. The platform will be screened using aluminum louvers specifically designed for mechanical screening.

In accordance with the Zoning By-Law, Section 7.4, a Major Project Site Plan Review is required. In accordance with Major Project Site Plan Special Permit No. 2012-07, Section 4.2, as amended, further site plan review is required.

To view and participate in this virtual hearing on your phone, download the "Zoom Cloud Meetings" app in any app store or at www.zoom.us. At the above date and time, click on "Join a Meeting" and enter the following Meeting ID: 826-5899-3198

To view and participate in this virtual hearing on your computer, at the above date and time, go to www.zoom.us click "Join a Meeting" and enter the following ID: 826-5899-3198

The application may be viewed at this link: <https://www.needhamma.gov/planningapplication>. Interested persons are encouraged to attend the public hearing and make their views known to the Planning Board. This legal notice is also posted on the Massachusetts Newspaper Publishers Association's (MNPA) website at (<http://masspublicnotices.org/>).

NEEDHAM PLANNING BOARD

Needham Times: October 15, 2020 and October 22, 2020.

Original

TOWN OF NEEDHAM
MASSACHUSETTS



500 Dedham Avenue
Needham, MA 02492
781-455-7550

PLANNING BOARD

APPLICATION FOR SITE PLAN REVIEW

Project Determination: (circle one) **Major Project** Minor Project

This application must be completed, signed, and submitted with the filing fee by the applicant or his representative in accordance with the Planning Board's Rules as adopted under its jurisdiction as a Special Permit Granting Authority. Section 7.4 of the By-Laws.

Location of Property 400 First Avenue.
Name of Applicant Trip Advisor LLC.
Applicant's Address 400 First Avenue
Phone Number

Applicant is: Owner _____ Tenant X _____
Agent/Attorney _____ Purchaser _____

Property Owner's Name Needham Travel Properties LLC.
Property Owner's Address 1370 Avenue of the Americas, 21st floor, New York, NY
Telephone Number 212-585 4540

Characteristics of Property: Lot Area 73,835 SF Present Use Office
Map #300.0 Parcel #0028 Zoning District New England
Business Center

Description of Project for Site Plan Review under Section 7.4 of the Zoning By-Law:

- Installation of fuel cell power plant on a structural steel platform spanning the loading dock area

Signature of Applicant (or representative)

Address if not applicant _____

Telephone # _____

Owner's permission if other than applicant _____

David Ledy

SUMMARY OF PLANNING BOARD ACTION

Received by Planning Board _____

Date _____

Hearing Date _____

Parties of Interest Notified of Public Hearing _____

Decision Required by _____

Decision/Notices of Decision sent _____

Granted _____

Original

Denied _____ Fee Paid _____ Fee Waived _____
Withdrawn _____

NOTE: Reports on Minor Projects must be issues within 35 days of filing date.

Original

TOWN OF NEEDHAM
MASSACHUSETTS

500 Dedham Avenue
Needham, MA 02492
781-455-7550

RECEIVED TOWN CLERK
NEEDHAM, MA 02492

SEP 25 AM 9:46



PLANNING BOARD

APPLICATION FOR SITE PLAN REVIEW

Project Determination: (circle one) Major Project Minor Project

This application must be completed, signed, and submitted with the filing fee by the applicant or his representative in accordance with the Planning Board's Rules as adopted under its jurisdiction as a Special Permit Granting Authority. Section 7.4 of the By-Laws.

Location of Property 400 First Avenue, Needham, MA
Name of Applicant Walter Bonola
Applicant's Address 101 East River Drive, East Hartford, CT
Phone Number 860.250.3776

Applicant is: Owner _____ Tenant _____
Agent/Attorney X Purchaser _____

Property Owner's Name: Needham Travel Property LLC
Property Owner's Address 1370 Avenue of the Americas, 21st Floor, New York, NY
Telephone Number 212-581-4540

Characteristics of Property: Lot Area 73835 SF Present Use Office
Map # 700 Parcel # 028 Zoning District New England Business center

Description of Project for Site Plan Review under Section 7.4 of the Zoning By-Law:

Installation of fuel cell power plant
on structural steel platform over
loading dock area

Signature of Applicant (or representative) Walter Bonola

Address if not applicant _____

Telephone # 860.250.3776

Owner's permission if other than applicant David Ledy

SUMMARY OF PLANNING BOARD ACTION

Received by Planning Board _____ Date _____
Hearing Date _____ Parties of Interest Notified of Public Hearing _____
Decision Required by _____ Decision/Notices of Decision sent _____
Granted _____
Denied _____ Fee Paid _____ Fee Waived _____
Withdrawn _____

NOTE: Reports on Minor Projects must be issued within 35 days of filing date.



Doosan Fuel Cell America, Inc.
101 East River Dr
East Hartford, CT 06108
T - 860 727 2200

September 3, 2020

BY FEDEX AND ELECTRONIC MAIL

Needham Planning Board Members
500 Dedham Ave
Needham, MA 02492
Attn: Lee Newman, Planning Director

Re: Normandy Real Estate Partners
Major Project Special Permit No. 2012-07
Application for Further Site Plan Review

400 First Ave, Needham, MA (Map 300, Parcel 28)

Dear Planning Board Members,

The purpose of this letter is to provide the Planning Board with additional information in connection with the above-described Project. This application for further site plan review of Major Site Plan Special Permit No. 2012-07 dated October 16, 2012, amended and restated April 2, 2013, and amended on September 17, 2013, January 6, 2015, April 28, 2015 and November 10, 2015. I have structured this letter to conform to the review criteria for Site Plan Review, as set forth in Section 7.5.6 of the Zoning By-Law. As fuel cell technology may be new to some members of the board, I have also included a brief description of Doosan's Model 400 fuel cell system and the purpose of this project.

Fuel Cell System and Project Goals

Doosan's PureCell® Model 400 is a stationary phosphoric acid fuel cell (PAFC) power plant intended for distributed generation (DG) and combined heat and power (CHP) applications. It is capable of producing ultra-clean, reliable electric power (460 kW in the first year and greater than 400 kW continuously for 10 years), and over 1.78 MMBtu/h of useful thermal energy. This heat can be used for space heating, hot water applications, and for driving an absorption chiller to provide cooling. With an optional grid-independent switchboard and controls, the Model 400 can also provide backup power when the electric utility service fails. As long as natural gas is available, electric power and heat can be generated.

Natural gas is first converted to hydrogen in the fuel processing system (FPS) through a process known as catalytic steam reformation. Hydrogen and air are then supplied to four phosphoric acid fuel cell stacks, in which hydrogen and oxygen combine electrochemically to produce direct current (DC) electricity, heat, and water. Finally, alternating current (AC) electricity is produced through



Doosan Fuel Cell America, Inc.
101 East River Dr
East Hartford, CT 06108
T - 860 727 2200

an on-board DC to AC inverter. Heat generated in the fuel cell process generates steam, which is returned to the FPS for use in the steam reformation process.

The purpose of this project is to reduce electrical and heating costs while also reducing emissions of greenhouse gases and other air pollutants. The fuel cell will provide 460 kw of clean renewable electric power and 1.8 million BTU/hour of available thermal energy to the building infrastructure reducing Trip Advisor's reliance on Electric Grid power and significantly reducing consumption of Natural gas for heating the facility. The system will also allow TripAdvisor to qualify for various state and utility green energy incentives.

Site Plan Review Criteria

The following are the criteria for the Planning Board to consider during the site plan review process pursuant to Section 7.4.6 of the Zoning By-Law, and the description of how this Project meets those criteria.

a) Protection of adjoining premises against seriously detrimental uses by provision for surface water drainage, sound and sight buffers and preservation of views, light, and air;

Adjoining premises will be protected against any seriously detrimental uses of the proposed project by minimizing new impervious soil, screening with louvers, and acoustical levels that meet all state of Massachusetts airborne noise requirements.

The fuel cell will be mounted on a structural steel platform spanning the loading dock area across B street from the Coca-Cola bottling facility. The platform will be screened using aluminum louvers specifically designed for mechanical screening. The louvers and the platform steel will be painted to match adjacent building envelope materials. The cooling module and purge gas manifold will be placed on the ground adjacent to the generator fuel tank and will be screened using the existing cedar fencing and an additional twenty feet of new fencing. Any landscaping plants removed for construction will be replaced once construction is complete.

An acoustical study is included as part of this application. The acoustical study shows the project will be in compliance with all State of Massachusetts airborne noise requirements at all nearby properties.

b) Convenience and safety of vehicular and pedestrian movement within the site and on adjacent streets, the location of driveway openings in relation to traffic or to adjacent streets and, when necessary, compliance with other regulations for the handicapped, minors and the elderly;



Doosan Fuel Cell America, Inc.
101 East River Dr
East Hartford, CT 06108
T - 860 727 2200

The proposed fuel cell will be mounted on a structural steel platform spanning the loading dock area some twenty feet in the air. The cooling module and purge gas manifold will be placed on the ground adjacent to the generator fuel tank and will be screened using the existing cedar fencing and an additional twenty feet of new fencing. The structural supports for the steel platform will be constructed in a manner to allow adequate pedestrian and vehicular traffic on the existing sidewalks adjacent to the loading dock and will be protected by 12" concrete filled steel bollards. The proposed project will have no impact to vehicular or pedestrian movement within the site or on the adjacent streets.

c) Adequacy of the arrangement of parking and loading spaces in relation to the proposed uses of the premises;

The proposed project will have no impact on the arrangement of parking and loading spaces on the premises. During operation it is expected that a Doosan service vehicle will visit the project location approximately once per month, having no impact on the adequacy of parking and loading for the existing facility.

d) Adequacy of the methods of disposal of refuse and other wastes resulting from the uses permitted on the site;

Any waste generated during normal servicing of the fuel cell system will be disposed of by Doosan's technicians in accordance with all state and federal laws. A minimal amount of material is expected to be generated through normal replacement of internal components. This waste generation will not have an adverse impact on the facilities ability to dispose of refuse and waste. The fuel cell system does not produce any hazardous waste.

e) Relationship of structures and open spaces to the natural landscape, existing buildings and other community assets in the area and compliance with other requirements of this By-Law;

The fuel cell will be mounted on a structural steel platform spanning the loading dock area across B street from the Coca-Cola bottling facility. The platform will be screened using aluminum louvers specifically designed for mechanical screening. The louvers and the platform steel will be painted to match adjacent building envelope materials. The cooling module and purge gas manifold will be placed on the ground adjacent to the generator fuel tank and will be screened using the existing cedar fencing and an additional twenty feet of new fencing. Any landscaping plants removed for construction will be replaced once construction is complete.

f) Mitigation of adverse impacts on the Town's resources including the effect on the Town's water supply and distribution system, sewer collection and treatment, fire



Doosan Fuel Cell America, Inc.
101 East River Dr
East Hartford, CT 06108
T - 860 727 2200

protection, and streets; and may require when acting as the Special Permit Granting Authority or recommend in the case of minor projects, when the Board of Appeals is Town of Needham MA Zoning By-Law, printed April 2018 215 acting as the Special Permit Granting Authority, such appropriate conditions, limitations, and safeguards necessary to assure the project meets the criteria of a through f.

The proposed project will not have an adverse effect on the Town's resources, including the Town's water supply and distribution system, sewer collection and treatment, fire protection and streets.

The proposed project will connect to the towns water system and use approximately 3,000 gallons per year of water at a maximum flow of 2 gallons per minute, a minor impact to the Town's water system. The Fuel Cells are certified by CSA international to meet strict ANSI/CSA FC-1 2014 safety standards to protect against risks from electrical, mechanical, chemical, and combustion safety hazards. This project has been designed in accordance with NFPA 853 for the safe installation of stationary fuel cell systems. An emergency response plan will be shared with the fire marshal as part of the building permit application process. The proposed project will have no appreciable generation of motor vehicle traffic, with approximately one service vehicle visiting per month.

The fuel cell system will provide 460 kW of clean renewable electric power and 1.8 million BTU/hour of available thermal energy to the building infrastructure reducing Trip Advisor's reliance on electric grid power and significantly reducing consumption of natural gas for heating the facility all without combustion of any kind. With heat and electricity utilized the installation will achieve a total efficiency of 78% and utilizing state of Massachusetts and power company incentives will result in a significant long term cost savings to Trip Advisor and a reduction in their carbon footprint.

The addition of this system will have a positive impact on the Town, both from improving the financial performance of a key employer in town and providing a reduction in carbon footprint.

If you have any questions, please do not hesitate to contact me.

Respectfully Submitted,
Doosan Fuel Cell America, Inc.

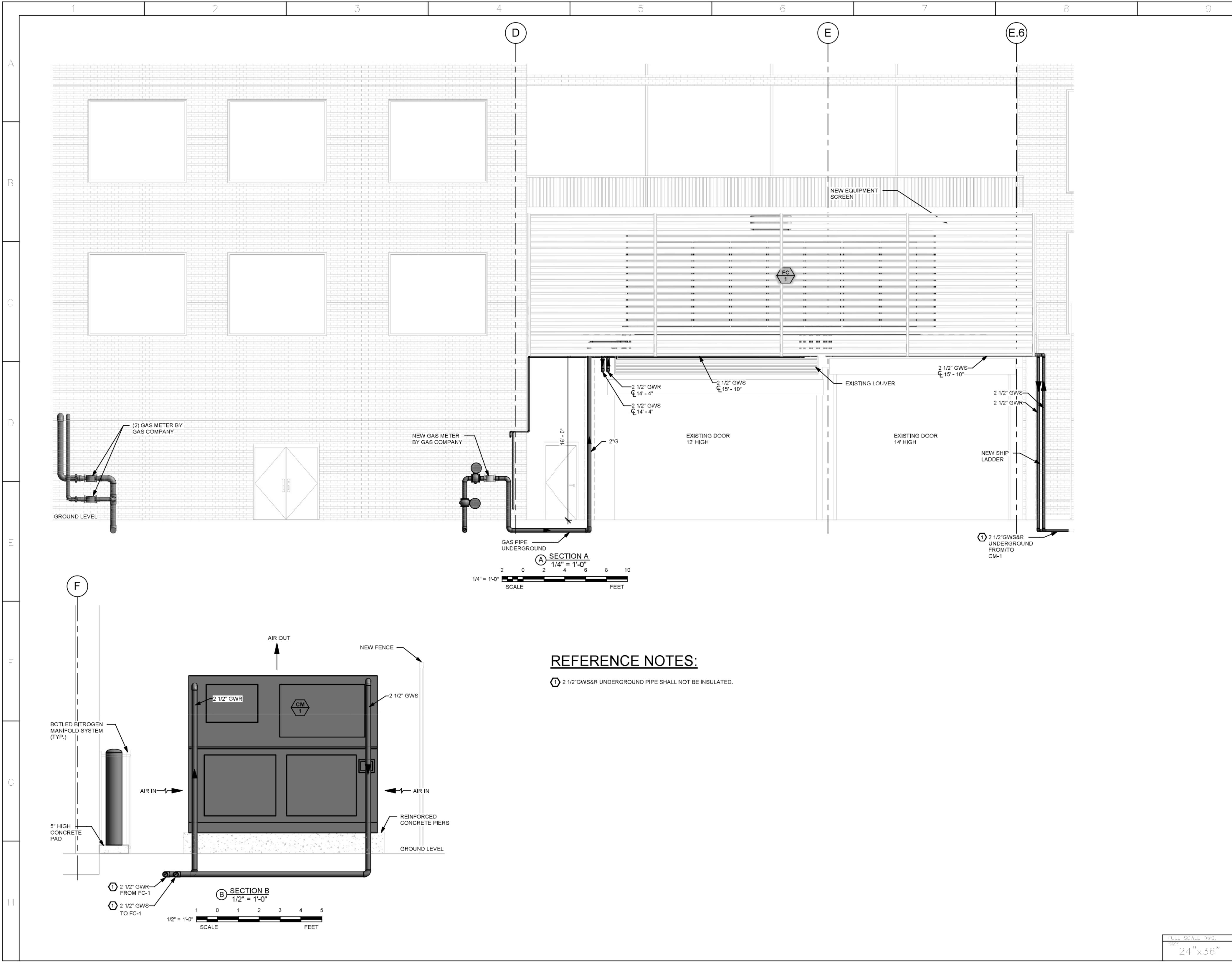
Walter Bonola
Installation Project Manager
Walter.bonola@doosan.com
Doosan Fuel Cell America, Inc.



Doosan Fuel Cell America, Inc.
101 East River Dr
East Hartford, CT 06108
T - 860 727 2200

Trip Advisor Planning Board Attachments

- 1 – Signed application
- 2 – DRB presentation documents M-700.00a2 and M-703.00a2
- 3 – Full set of “For Permit” Construction drawings
- 4 – Acoustical test report dated August 25, 2020
- 5 – Copy of Planning Board Fee check (PDF)



OWNER

CHIN

DOOSAN FUEL CELL

PROJECT NAME

TRIP ADVISOR
FUEL CELL INSTALLATION
400 1ST AVE, NEEDHAM, MA 02494

KEY PLAN

ISSUE

DATE

DESCRIPTION

15-01-2020

CONSTRUCTION DOCUMENTS

REV. #

DATE

ISSUE DESCRIPTION

1

2 1/2" GWS&R UNDERGROUND FROM TO CM-1

RCM Technologies
The Source of Smart Solutions

SECTION SHEET-1

101 FELLOWSHIP ROAD
UNIT 43
UWCHLAND, PA 19480

SECTION SHEET-1

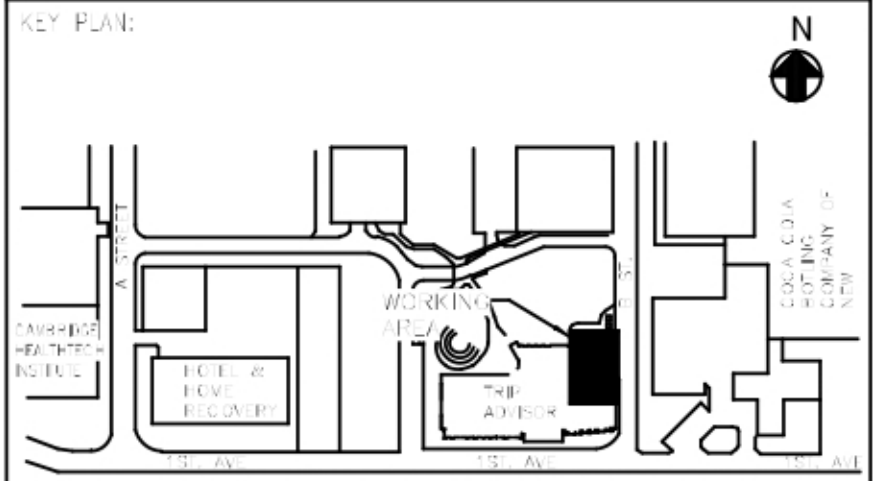
24"x36"

M-700.00



DOOSAN FUEL CELL

TRIP ADVISOR
FUEL CELL INSTALLATION
400 1ST AVE, NEEDHAM, MA 02494



REV.	DATE	DESCRIPTION
1	08-01-2020	CONSTRUCTION DOCUMENTS
2		
3		
4		
5		
6		
7		
8		
9		
10		



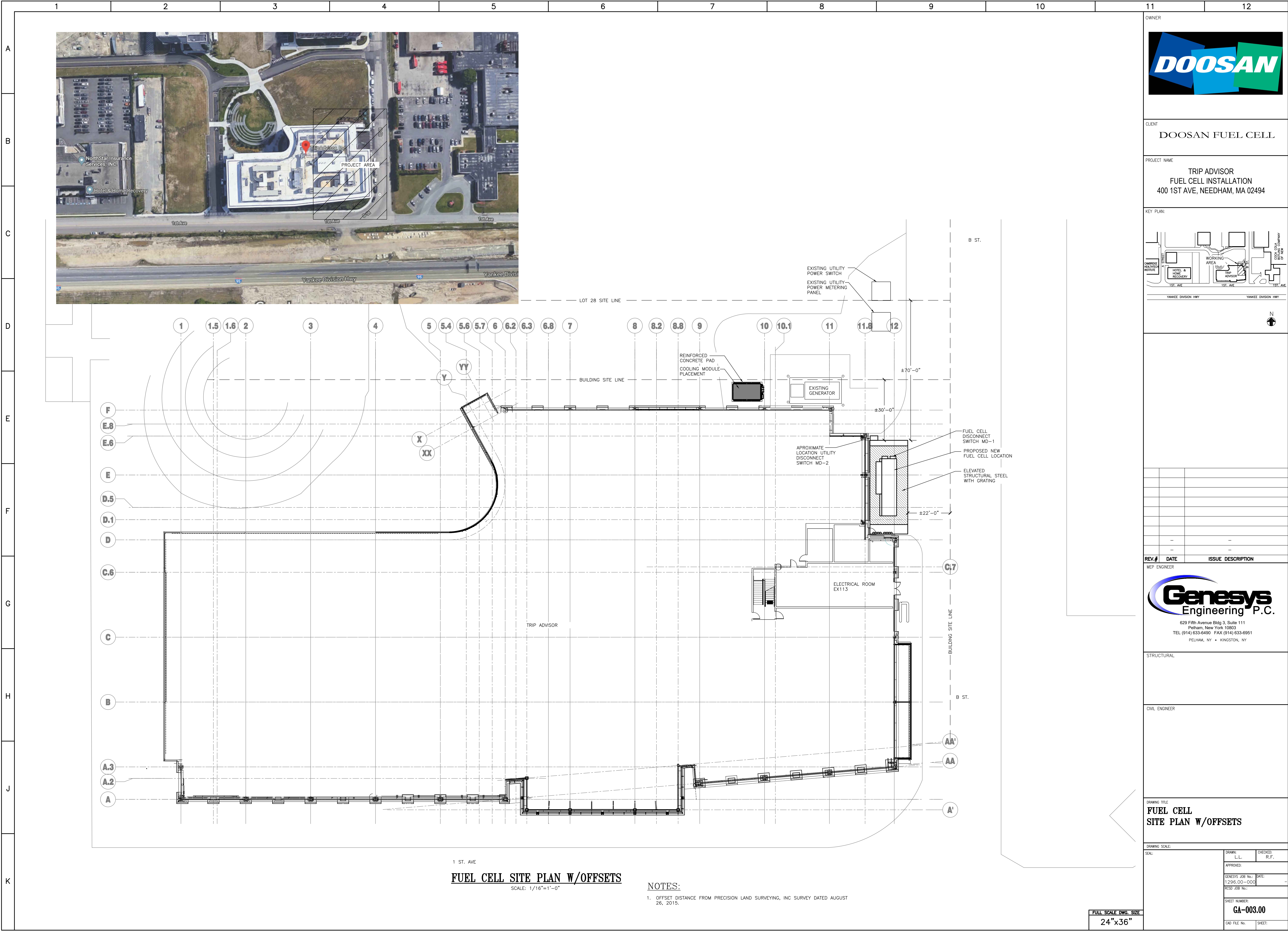
RST Technical Services, LLC
101 FELLOWSHIP ROAD
UNIT 43
UWCHLAND, PA 19480

COORDINATION DRAWING

REV.	DATE	DESCRIPTION
1	08-01-2020	CONSTRUCTION DOCUMENTS
2		
3		
4		
5		
6		
7		
8		
9		
10		

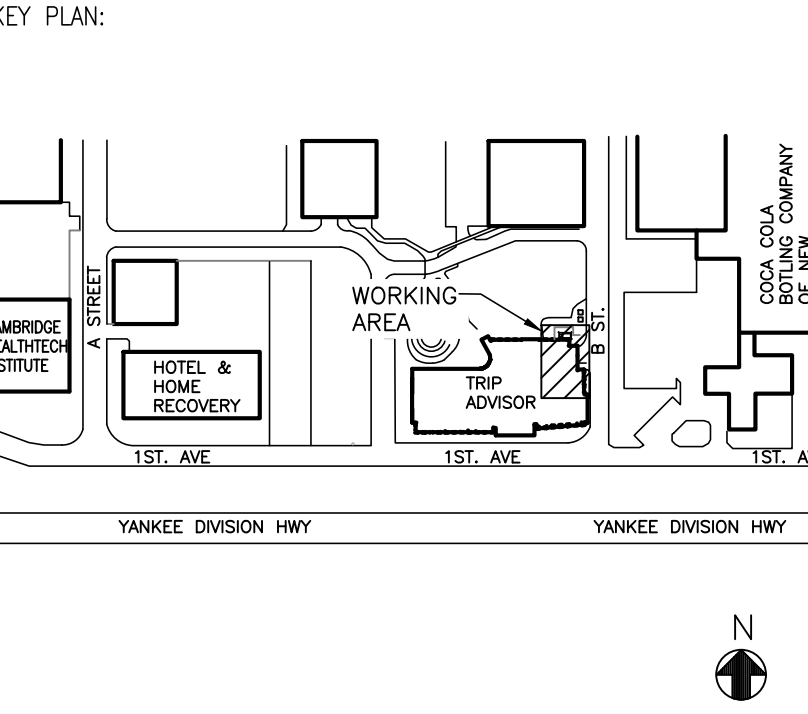
COORDINATION DRAWING
N.T.S.

24"x36"



CLIENT
DOOSAN FUEL CELL

PROJECT NAME
TRIP ADVISOR
FUEL CELL INSTALLATION
400 1ST AVE, NEEDHAM, MA 02494



REV.#	DATE	ISSUE DESCRIPTION

MEP ENGINEER

629 Fifth Avenue Bldg 3, Suite 111
Pelham, New York 10963
TEL (914) 633-6490 FAX (914) 633-6951
PELHAM, NY • KINGSTON, NY

STRUCTURAL

CIVIL ENGINEER

DRAWING TITLE
**FUEL CELL
SITE PLAN W/OFFSETS**

DRAWING SCALE:		DRAWN: L.L.	CHECKED: R.F.
SEAL:		APPROVED:	
		GENESYS JOB No.:	DATE:
		1296.00-000	
		PCSD JOB No.:	
		SHEET NUMBER:	
		GA-003.00	
		CAD FILE No.	SHEET:

FUEL CELL SITE PLAN W/OFFSETS
SCALE: 1/16"=1'-0"

- NOTES:
1. OFFSET DISTANCE FROM PRECISION LAND SURVEYING, INC SURVEY DATED AUGUST 26, 2015.

FULL SCALE DWG. SIZE
24"x36"

Prepared For: Doosan Fuel Cell America Inc.

Point of Contact: Walter Bonola

**Prepared by: Acoustical Technologies Inc.
 50 Myrock Avenue
 Waterford, CT 06385-3008**

**Subject: Trip Advisor LLC
 460 KW Fuel Cell
 Airborne Noise Assessment
 At 400 1st Avenue, Needham, MA**

Author: Carl Cascio

Date: August 25, 2020

Revision: 1

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Country of Origin is the United States of America

Summary

This document makes a positive acoustic assessment that should assist in meeting any acoustic noise concerns during the operation of a Doosan 460 KW fuel cell at the Trip Advisor LLC site at 400 1st Avenue in Needham, MA. An acoustic assessment plan was developed and executed to acquire airborne acoustic information useful in explaining and mitigating the potential airborne noise issues associated with Trip Advisor LLC's operation of the Doosan 460 KW fuel cell. It is important to show that the airborne noise generated by the fuel cell will not significantly impact the facility's neighbors.

The airborne noise levels expected to be generated by the Doosan fuel cell operating at the Needham site were simulated by exciting a set of six co-located speakers at the fuel cell Cooling and Power Module positions. The six speakers produced an overall airborne noise level that was 16 to 20 dB higher than the levels measured for a similar Doosan Power Module installed at New Britain High School in New Britain, CT and the quiet retrofitted blower Cooling Module installed in Brooklyn, NY. One-third octave band analysis showed the speakers to be near the New Britain fuel cell airborne noise levels at frequencies up to 250 Hertz where the airborne noise levels were low and to exceed the fuel cell signature by 16 dB at higher frequencies where the fuel cell signature was higher in noise level. Airborne noise levels with the speakers operating were measured at distances from 5 to 134 meters from the proposed Cooling and Power Module locations at the Trip Advisor LLC site. The speakers produced A-weighted overall sound pressure levels of approximately 86 dBA at 5 meters and 82 dBA at 10 meters (ref. 20 microPascals) from the proposed fuel cell Power Module location. The airborne noise levels from the speakers at nearby property lines were measured at levels from 50 to 59 dBA. Residential measurement locations to the west were very quiet with levels estimated to be below 46 dBA with the fuel cell on. Analysis of the speaker data indicated propagation losses from 10 to 32 dB from the fuel cell location to the nearby Industrial property lines. The source level at 10 meters from the operation of a Doosan Power Module at New Britain High School was then used as a basis for making the Needham Power Module airborne noise estimates. The source level at 5 feet from the operation of a Doosan quiet Cooling Module in Brooklyn NY was used as a basis for making the Needham Cooling Module airborne noise estimates. These two components were then combined to produce estimates of the new Trip Advisor fuel cell's overall noise level.

Operation of the Doosan fuel cell should produce noise levels that are well below the Massachusetts Noise Code limit of 10 dBA above the background at all of the nearby Industrial and Residential property lines. All the expected maximum values (worse case between speaker locations) are shown in Table 4 below. On B Street the maximum airborne noise values are expected to be below 56 dBA at the closest location, below the 60 dBA allowed with the minimum 50 dBA measured background noise. Operation of the Doosan fuel cell will have no acoustic impact at all of the industrial and residential properties adjacent to the Trip Advisor site. No acoustic issues are expected during 24-hour operation of the fuel cell.

The Massachusetts's Noise Code (Reference 1) also calls for review of acoustic issues associated with prominent discrete tones. Operation of the fuel cell is expected to meet the discrete tone (no peak greater than 3 dB) requirement for the fuel cell's octave band noise signature.

Introduction

Acoustical Technologies Inc. was tasked as part of a Doosan site permitting process with an assessment of potential acoustic issues associated with fuel cell airborne noise reaching the properties adjacent to the Trip Advisor LLC site at 400 1st Avenue in Needham, MA.

Responding to a request from Walter Bonola, a site visit was made on August 18, 2020. During the visit, a survey of the airborne noise levels produced by a set of speakers simulating the airborne noise produced by a Doosan Fuel Cell was made in order to identify potential airborne noise issues. Airborne noise measurements were taken to quantify the propagation of the simulated fuel cell airborne noise to the adjacent properties. Background airborne noise levels were also made with the speakers off. This document provides an acoustic assessment to assist in meeting acoustic noise concerns during the permitting process for the siting of a 460 KW Doosan fuel cell at 400 1st Avenue in Needham, MA.

Development of the Acoustic Assessment Plan

The purpose of this effort is to acquire acoustic information useful in explaining the potential airborne noise issues associated with the 24-hour operation of a Doosan 460 KW fuel cell at the Trip Advisor facility. The site at 400 1st Avenue in Needham, MA is located in an Industrial Zone near Interstate I95 and is surrounded by a Residential Zone to the west, Commercial and Residential Zones (SRB) to the north, a Flood Zone to the south and the town of Newton to the east. (The Needham zoning map is given below.) It is important to determine whether the airborne noise generated by the Doosan fuel cell will impact these neighbors.

The acoustic impact is assessed in the following way. The 460-kW fuel cell is yet to be installed so there is no way to measure fuel cell operating airborne noise levels at the new site. The fuel cell airborne noise has been measured at other sites and both overall and octave band airborne noise data for Doosan 400-KW and 460-KW fuel cells are available (References 2, 3 and 4). The only difference between the 400 and 460-KW fuel cells is the electrical output of the cell stacks. The rest of the machine including fans and fan noise remain the same between the 400 and 460 KW models. Using this data, a set of six speakers have been programmed through a set of octave and one-third octave band filters to generate a noise spectrum similar to that of the new fuel cell. (It is assumed that the Cooling and Power Module noise in the measured units are similar to the new unit.) This spectrum will then be played through an audio amplifier to create the electrical voltage necessary to drive the six speakers. In order to overcome the potentially high background noise at the site the speaker output will be increased to a level more than 15 dB higher than the overall noise level measured on an existing fuel cell at a distance of 10 meters. With the six speakers on, this approach then follows the traditional “What is the airborne noise level at the neighbor’s property line?”. The six speakers were run and airborne measurements made near the proposed fuel cell location and at several of the nearest neighbor’s property lines. This measured site data can also be used to estimate noise levels at other neighbor’s property lines. The Town of Needham Noise Ordinance and the State of Massachusetts’s Noise Code will be consulted to assess the impact of the measured and estimated acoustic levels. Because of the closeness of the Trip Advisor fuel cell site to the nearest property line noise mitigation may be recommended if the airborne noise estimated for the fuel cell comes near or exceeds the airborne noise requirements at the neighbors’ property lines.

Acoustic Measurement Program

The acoustic data necessary to assess the impact of the 460 KW Doosan Fuel Cell are described below: Airborne sound pressure measurements were conducted at the Trip Advisor LLC site on and near 400 1st Avenue on August 18, 2020 during the daylight and evening hours. This testing established both background airborne noise levels and simulated airborne noise levels with the speakers operating. The overall A-weighted airborne noise measurements were made with an ExTech model 407780A Digital Sound Level Meter (s/n 140401544) that had been calibrated prior to, during and just after the test with a Quest model QC-10 Calibrator (s/n Q19080194). Measurements were taken with A-weighting (frequency filtering that corresponds to human hearing) with the sound level meter in a Slow response mode. For reference noise level changes of 1 dB are equal to airborne sound pressure changes of 12.2 per cent. All measurements were made with the microphones at a height above ground between five and six feet.

At the Trip Advisor LLC site “speaker on” and background airborne noise measurements were taken at the following twelve nearby properties in the Industrial and Residential Zones:

Location	Business	Distance	Zone
A - 400 1st Avenue	Trip Advisor	5 & 10 meters	Industrial
B - 400 1st Avenue	Trip Advisor	5 & 10 meters	Industrial
P1 – 80 B Street	Residence Inn South	62 / 70 meters	Industrial
P2 – 80 B Street	Residence Inn North	69 / 84 meters	Industrial
P3 – 9 B Street	Coca-Cola West	60 / 50 meters	Industrial
P4 – 9 B Street	Coca-Cola Mid	33 / 22 meters	Industrial
P5 – 9 B Street	Coca-Cola East	66 / 71 meters	Industrial
P6 – 300 1 st Avenue	Mitt Comm	106 / 119 meters	Industrial
P7 – 235 A Street	Garage North	119 / 134 meters	Industrial
P8 – 235 A Street	Garage South	86 / 100 meters	Industrial
P9 – 81 Highland Terrace	Residence	740 / 755 meters	Residential SRB
P10 – 275 2 nd Avenue	Condominiums	440 / 454 meters	Residential SRB
P11 – 220 Hunting Road	Residence	262 / 252 meters	Residential
P12 – 228 Hunting Road	Residence	260 / 250 meters	Residential

The nearest residential area is more than 250 meters to the west across Interstate I95 behind a highway noise barrier and is sufficiently distant that the simulated fuel cell noise could not be heard. Background measurements were taken in the two closest residential zone areas (P9-P12).

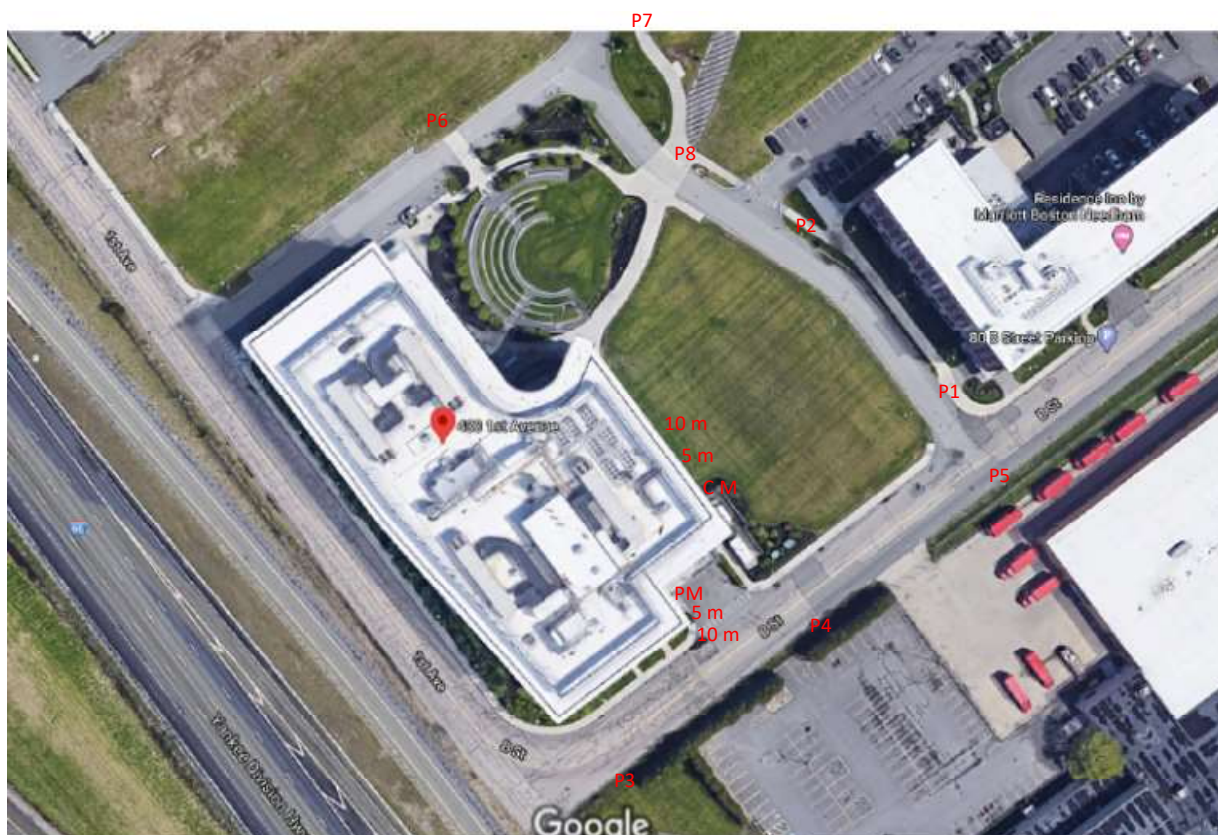
See the Google satellite map in Figure 1 for the approximate microphone measurement locations. Measurements near the proposed operating Cooling and Power Module sites at speaker positions A and B, respectively, were taken with the ExTech sound level meter. Figures 2, 3 and 4 provide photographs of the site locations for the Cooling and Power Modules as well as two sound level meter positions. At all the locations, a one-minute record of the acoustic noise was taken for the speakers in the “on” condition at the start and at the end of the property line airborne noise measurements. There is a very slight decrease of about 0.5 dB in sound output from the speakers as they warm up at the Cooling Module location. There was no change in level for the Power Module. Five minutes of background airborne noise data were also recorded at all the positions.

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Figure 1. Trip Advisor LLC Site Map in Needham, MA from Google Maps

400 1st Ave

Travel Advisor Sensor Locations



Airborne noise measurements taken outside are corrupted by rain and wind so a day was selected when the winds were expected to be 10 miles per hour or less. Table 1 provides the weather data at Boston Airport (closest data to Needham) for the acoustic measurements on August 18, 2020. Measurements were taken over the period from 10:30 am until 11:30 am for the Cooling Module location and from 2:15 pm to 3:15 pm for the Power Module. Background data were taken from 11:30 am until 1 pm, from 4:45 pm to 5:45 pm and then again from 8 pm to 10 pm. The table below shows the temperature and wind speeds in hourly intervals. Wind conditions were good for most of the day with a few wind gusts of up to 22 mph from 2 pm to 3 pm. Acoustic measurements were suspended during the wind gusts and these short periods did not affect the operating and background airborne noise measurements. There was no rain during the testing on August 18. The motor vehicle traffic from Interstate I95 generated most of the background noise at the locations closest to the highway. The other locations (shielded by buildings) were reasonably quiet. At night the cicada at most locations and water sprinklers near the parking garage added additional background noise. Motor traffic along the nearby roads was light but many of the measurements near B Street had to be delayed until no traffic was present. Background noise levels at all of the measurement positions were acceptable with levels from 48 to 59 dBA. The locations closest to Interstate I95 had the highest levels with these locations seeing 4 to 5 dB noise reductions at night when less motor traffic was present on Interstate I95.

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Figure 2. Doosan Cooling Module Location at the Trip Advisor LLC Site in Needham



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Figure 3. Doosan Power Module Location at the Trip Advisor LLC Site in Needham

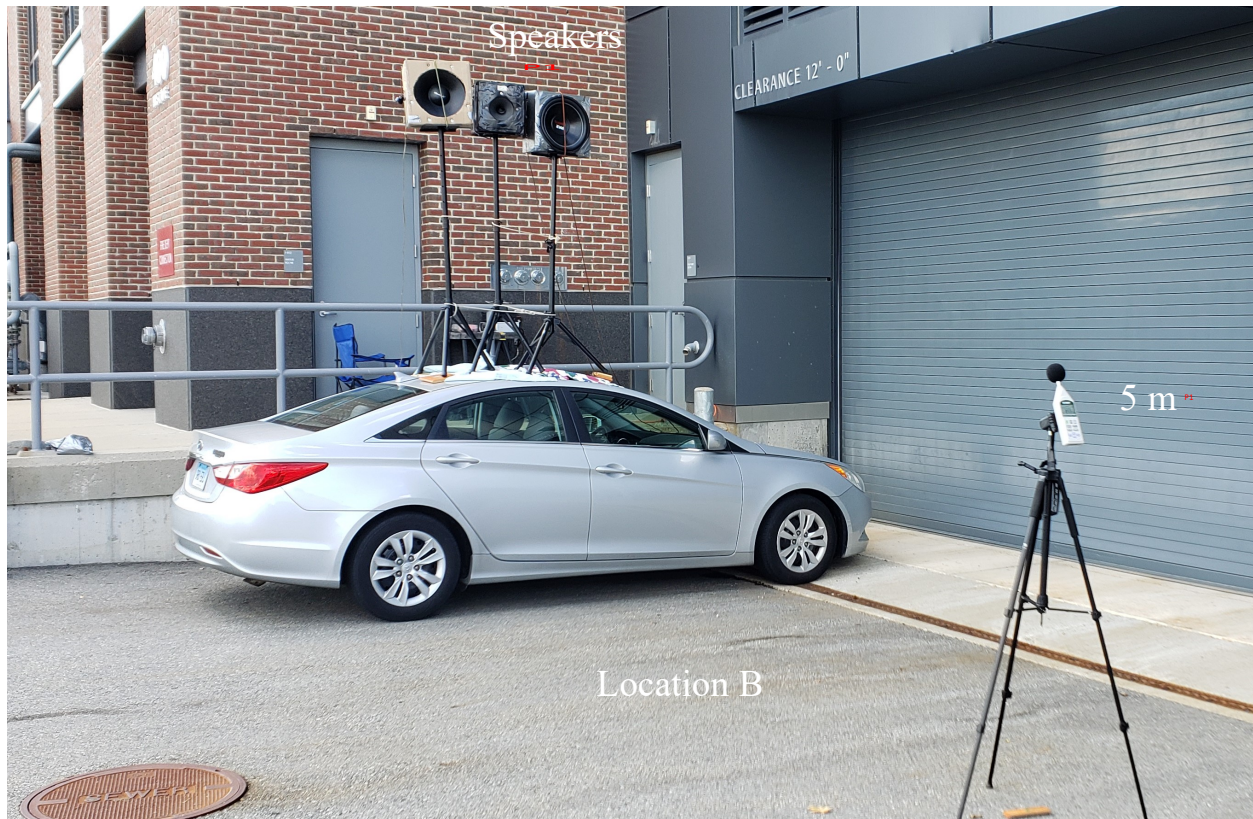


Figure 4. Trip Advisor LLC Building with Sound Level Meter at Location P8



Table 1. Approximate Needham Weather Data on August 18, 2020

<https://www.wunderground.com/history/daily/us/ma/boston/KBOS/date/2020-8-18>

Time (EST)	Temp. (°F)	Humidity (%)	Barometer (in HG)	Wind Speed (mph)	Wind Gust (mph)	Wind Direction	Condition
7:54 AM	67 F	87 %	29.78 in	10 mph	0 mph	SW	Partly Cloudy
8:54 AM	71 F	78 %	29.78 in	9 mph	0 mph	W	Fair
9:54 AM	76 F	67 %	29.79 in	8 mph	0 mph	W	Fair
10:54 AM	78 F	56 %	29.77 in	13 mph	0 mph	W	Fair
11:54 AM	80 F	52 %	29.77 in	9 mph	0 mph	WSW	Fair
12:54 PM	83 F	38 %	29.76 in	9 mph	0 mph	WSW	Fair
1:54 PM	82 F	35 %	29.76 in	14 mph	21 mph	W	Partly Cloudy
2:54 PM	84 F	31 %	29.75 in	14 mph	22 mph	W	Mostly Cloudy
3:54 PM	83 F	34 %	29.74 in	13 mph	0 mph	W	Partly Cloudy
4:54 PM	84 F	33 %	29.74 in	14 mph	0 mph	W	Partly Cloudy
5:54 PM	83 F	28 %	29.75 in	17 mph	0 mph	W	Fair
6:54 PM	81 F	30 %	29.77 in	13 mph	0 mph	W	Fair
7:54 PM	79 F	36 %	29.79 in	10 mph	0 mph	W	Partly Cloudy
8:54 PM	77 F	42 %	29.82 in	10 mph	0 mph	NW	Mostly Cloudy
9:54 PM	74 F	48 %	29.84 in	7 mph	0 mph	WNW	Fair
10:54 PM	73 F	51 %	29.85 in	6 mph	0 mph	WNW	Fair
11:54 PM	72 F	53 %	29.84 in	7 mph	0 mph	W	Fair

Data Analysis

This section analyzes the airborne noise levels measured at the Needham Trip Advisor LLC site and then estimates the source level and transmission loss to nearby property lines expected during actual fuel cell operation. These estimated levels will be compared to the noise requirements in the Massachusetts noise code. Both background noise levels at the Needham Trip Advisor LLC site and the measured speaker operating noise levels are reported in Table 2. The background data are used to correct the measured operating airborne noise levels providing estimates of only the speaker noise contribution at each location. Table 3 reports estimated fuel cell equipment operating noise levels individually for both the Cooling Module and the Power Module. Comparing these Trip Advisor LLC fuel cell estimated levels with the state noise code will identify which nearby locations do or do not meet the airborne noise requirements.

The complete set of overall A-weighted airborne noise levels that were measured in Needham are provided in Table 2 for the conditions with the speakers on and off. Figure 5 is a map showing the Needham zoning districts in the Trip Advisor area. The range from the speakers to the microphone locations that are shown in Table 2 were calculated using Google Maps. The estimates of the range in meters to each location are given in Table 2 and also in Table 3. Each value is the range to the center of Cooling and Power Module locations, respectively. The closest measurement location is P4 on B Street, which is about 33 meters to the Cooling Module and 22 meters to the Power Module. The Residence Inn and other Coca Cola property lines are 50 to 84 meters away. Other neighboring industrial properties are more than 100 meters away.

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P12, the closest residential home is 250 meters away due west at 228 Hunting Street. Airborne noise at this and other residential locations could not be heard when the speakers were operating. The residential noise background noise levels were in the 48 to 53 dBA range.

Table 2. Measured Overall Sound Pressure Levels in dBA ref 20 microPascals

Location	Range in Meters	Speakers Cooling Module	Background L90	Bkgd Corrected	Speakers Power Module	Background L90	Bkgd Corrected
Speaker East	5	74.7	53.2	74.7	85.7	55.8	85.7
Speaker East	10	69.2	53.8	69.1	82.0	55.0	82
Speaker South	5	88.8	51.5	88.8	83.8	55.9	83.8
Speaker South	10	-	-	-	79.3	56.7	79.3
P1-Res Inn S	62/70	60.4	55.0	58.9	58.7	52.2	56.3
P2-Res Inn N	69/84	59.7	54.2	58.3	56.0	51.6	41
P3-CocaCola E	60/50	60.7	59.1	55.6	64.7	54.0	64.2
P4-CocaCola M	33/22	60.4	55.0	58.9	71.7	51.4	71.6
P5-CocaCola W	66/71	59.0	54.1	57.3	64.0	50.7	63.6
P6-MittCom	106/119	56.0	55.0	49.2	54.3	50.0	-
P7-Garage N	119/134	56.2	55.3	49	57.2	50.3	52.7
P8-Garage S	86/100	56.8	56.1	< 45	55.5	50.8	-
P9-81 Highland	740/755		48.1	4:53 pm		-	
P10-275 2 nd Av	440/454		-			48.4	8:10 pm
P11-220Hunting	262/252		53.0	5:40 pm		52.9	10:05 pm
P12-228Hunting	260/250		51.9	5:36 pm		-	

A comparison of the airborne noise produced at 10 meters by the Doosan fuel cell at the New Britain High School site (Reference 2) with the airborne noise produced by the speakers at the Montville Water Authority site (Reference 3) is shown in Figure 6. The speakers slightly exceed the fuel cell airborne noise for frequencies below 250 Hertz and greatly exceed the fuel cell airborne noise at the middle frequencies where the fuel cell airborne noise levels are the highest. The speaker levels are lower above 2.5 KHertz. The noise levels are about 6.3 and 7.1 dB higher for the speakers at Site A and Site B locations, respectively, as compared to what is expected from the Doosan 400 KW fuel cell that was measured at New Britain High School in New Britain, CT. The 6 to 7 dB differences in level were then subtracted from the Montville measured speaker levels to estimate the Montville fuel cell's acoustic signature at each location.

The 10-meter New Britain fuel cell airborne noise levels for the Power Module were used with the Needham transmission loss data to estimate the expected Trip Advisor site Power Module airborne noise for nearby neighbors at the Needham property lines. The Cooling Module noise level was taken from the quiet retrofitted blower unit data in Reference 4. Adding the Needham transmission loss data to the Sound Sense measurements provided the Cooling Module estimates.

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Figure 5. Needham Zoning Map Showing Speaker Location at Positions A & B

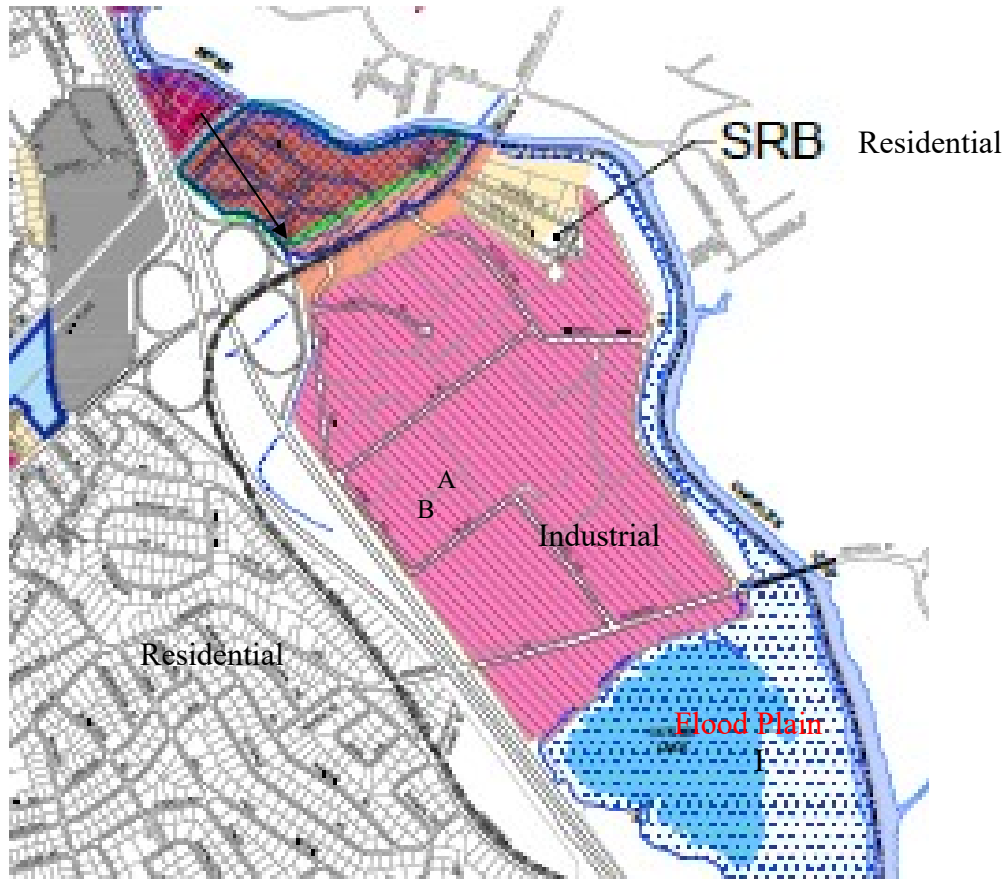
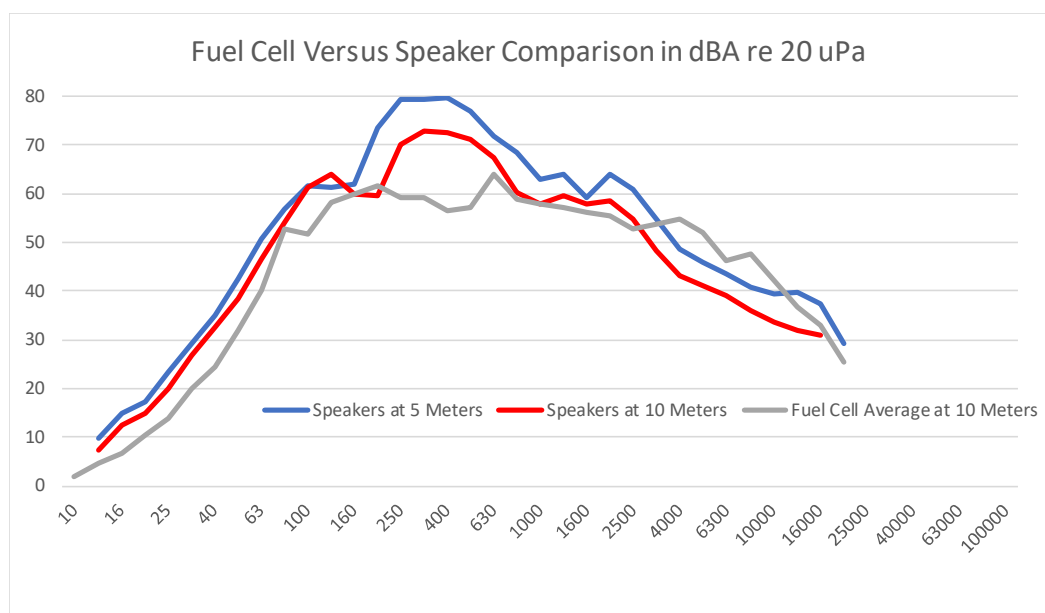


Figure 6. The Six Speakers Generate Airborne Noise Above That of a Single Fuel Cell



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The estimated airborne noise levels to be produced by the Doosan Trip Advisor fuel cell modules are shown in Table 3. For each of the eight locations the Needham measurements are corrected to account for the higher speaker levels. The fuel cell noise correction at the Site A Cooling Module location is estimated to be 20 dB because the speaker levels are that much higher than the retrofitted blower noise levels. The speakers at the Site B Power Module were estimated to be 16 dB higher than the New Britain High School Power Module measurements. The two modules' contributions are combined in Table 4 to create a total overall fuel cell estimate.

The measurements at the Trip Advisor LLC site were taken at various distances from the speakers and then background corrected. Close to the speakers on B Street the maximum airborne noise values to the south east are expected to be below 56 dBA at the closest location. This level is due to the Power Module located directly across the street from the measurement position. Besides the adjacent Coca Cola property, the other industrial properties are expected to be below 41 dBA from the Power Module. All the industrial properties are expected to be below 40 dBA from the Cooling Module due to its quiet design, the amount depending on how close the locations are to the Cooling Module. The residential properties to the north and west are all expected to have airborne noise levels due to the Trip Advisor fuel cell that are below 46 dBA.

Table 3. Trip Advisor LLC Overall Sound Pressure Levels in dBA ref. 20 microPascals

Location	Range in Meters	Speakers Cooling	Correction	Cooling Mod Estimated SPL in dBA	Speakers Power	Correction	Power Mod. Estimated SPL in dBA
P1-Res Inn S	62/70	58.9	-20	38.9	56.3	-16	40.3
P2-Res Inn N	69/84	58.3	-20	38.3	41	-16	25.0
P3-CocaCola E	60/50	55.6	-20	35.6	64.2	-16	48.2
P4-CocaCola M	33/22	58.9	-20	38.9	71.6	-16	55.6
P5-CocaCola W	66/71	57.3	-20	37.3	63.6	-16	47.6
P6-MittCom	106/119	49.2	-20	29.2	-	-16	<39
P7-Garage N	119/134	49	-20	29	52.7	-16	36.7
P8-Garage S	86/100	< 45	-20	<25	-	-16	<40

Table 4. Expected Airborne Noise Levels from Operating a Doosan Fuel Cell (ref. 20 µPA)

P1	P2	Residence		P10	P12	
42.7 dBA	38.5dBA	Inn		41 dBA	45 dBA	Residential
Coca	Cola	Coca	MittComm	Parking	Garage	
P3	P4	P5	P6	P7	P8	Industrial
48.4 dBA	55.7 dBA	48 dBA	39.4 dBA	37.4 dBA	40.1 dBA	

Allowable Noise Levels

The Massachusetts regulation for the control of noise provides in [M.G.L. Chapter 111, Section 142A-M](#) (Reference 1) the requirements for noise emission in Massachusetts. *The Exterior Noise Code* states: ***A noise source will be considered to be violating the Department's noise regulation (310 CMR 7.10) if the source:***

- 1. Increases the broadband sound level by more than 10dB(A) above ambient, or*
- 2. Produce a "puretone" condition – when any octave band center frequency sound pressure level exceeds the two adjacent center frequency sound pressure levels by 3 decibels or more.*

These criteria are measured both at the property line and at the nearest inhabited residence. "Ambient" is defined as the background A-weighted sound level that is exceeded 90% of the time, measured during equipment operating hours. "Ambient" may also be established by other means with consent of the Department.

Reference 5 discusses the interpretation of this policy indicating that:

A new noise source that would be located in an area that is not likely to be developed for residential use in the future, or in a commercial or industrial area with no sensitive receptors may not be required to mitigate its noise impact in those areas, even if projected to cause noise levels at the facility's property line to exceed ambient background by more than 10dB(A).

The Town of Needham Charter states in Section 3.8 its Noise Regulations as follows:

Except in an emergency, construction activity conducted pursuant to a building permit, which causes noise that extends beyond the property line, shall be limited to the hours of 7AM to 8PM unless authorized by rules or regulations adopted by the Select Board. The penalty for violation of this regulation shall be a \$50 fine.

The Massachusetts state ordinance will be used to evaluate the noise generated by the Doosan Fuel Cell. Following sections discuss the broadband sound and the pure tone data using the results obtained from the New Britain, Montville and Brooklyn fuel cell measurements as well as the Needham Trip Advisor speaker measurements.

The north eastern part of the Needham zoning map is given in Figure 5. As stated above, the Needham Trip Advisor LLC site at 400 1st Street is located in an Industrial Zone. This site is adjacent to a Residential Zone to the west and Commercial and Residential Zones to the north. The closest residence is at the Residence Inn 60 meters to the east in the Industrial Zone. The closest home is 250 meters away at 228 Hunting Street in a Residential Zone. The acoustic estimates from positions P1 and P2 in Table 4 show that the fuel cell noise is expected to drop below a level of 43 dBA between distances of 62 and 84 meters. (The levels in Table 4 are generated by combining the background corrected Cooling Module and Power Module estimates found in Table 3.) The fuel cell noise will be well below the 10 dBA increase allowed over the background noise. (The measured L90 background noise varied from 51 to 55 dBA at the two Residence Inn measurement locations.) While the afternoon and evening measurements on one

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day are not fully representative of the likely variation in background noise, it is not expected that the background noise would ever drop below a level of 33 dBA thereby making the fuel cell noise 10 dBA higher than the background. Using the Needham speaker measurements, the airborne noise level expected at the other Industrial Zone property lines (at distances of 22 to 134 meters) should be below a level of 56 dBA. These levels are all below the maximum of 60 dBA allowed for background noise levels of 50 dBA, the minimum measured in the Industrial Zone. Other nearby residential properties at greater distances are also expected to be well below the Residential Zone background noise of 48 dBA measured in the Residential Zone. For example, at 250 meters the fuel cell noise is expected to be approximately 45 dBA at 228 Hunting Street, well below the background noise

Prominent Discrete Tones

The Massachusetts regulation for the control of noise states in [M.G.L. Chapter 111, Section 142A-M](#) that a puretone octave band level cannot exceed the two adjacent band levels by more than 3 decibels.

To address the discrete tone issue, we use measured data from the testing of a similar Doosan fuel cell in Montville CT (Reference 3). The data is an average that was measured at 5 meters from the fuel cell at three positions surrounding the fuel cell and is shown in Table 5 below. The noise levels at 10 meters from the Cooling Module, the dominant noise source, were about 5 dB lower (but data at only two locations was available). These airborne noise levels using the standard Cooling Module and not the quiet Brooklyn one, are 7 dB higher but still low enough to meet the Massachusetts noise code of less than a 10 dBA increase over the background noise.

Table 5. Measured Airborne Noise Levels from the Montville Doosan Fuel Cell (ref. 20 μ PA)

Octave	Band	Center	Frequency	in	Hertz		At	5	Meters
31.5	63	125	250	500	1000	2000	4000	8000	16000
Octave	Band	Level	In	dBA					
26.1	53.1	62.5	65	65.4	62.8	59.8	58.4	50.6	38.3
	Highest	Difference	in	dB					
			2.5	2.6	3.0	3.0			

In reviewing Table 5, it is clear that the airborne noise levels drop significantly below 125 Hertz and above 4000 Hertz. The peaks in the 125 to 4000 Hertz bands where the noise levels are highest show only minor differences that do not exceed the 3 dB limit in the Massachusetts noise code. There should be no concern about puretone issues. The sound generated by the fuel cell is more typical of random noise as produced by the cooling module with some lower level tones from the fans in the Power Module.

The fuel cell noise decreases in propagating to the nearby properties as the range increases. The highest property line background corrected speaker level was measured at 56 dBA at Position 4, the property line right adjacent to the Power Module. Because of the increasing reduction in

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noise level with distance to the other industrial property lines the expected fuel cell noise levels will fall below 43 dBA for the other industrial properties. The residential properties to the west should all be lower than a level of 46 dBA. The residential properties to the north are at least twice as far away and will have even lower noise levels. All the expected maximum values (worse case between speaker locations) are shown in Table 4 above. All of the property line estimates will meet the requirement on not exceeding the background by more than 10 dBA. Operation of the Doosan fuel cell should have no acoustic impact at all of the industrial and residential properties adjacent to the Trip Advisor site. No acoustic issues are expected during 24-hour operation of the fuel cell.

Conclusions

The purpose of this effort is to evaluate the acoustical environment at the proposed Trip Advisor LLC fuel cell site in Needham, MA. This has been accomplished and the results show that the operation of a Doosan 460 KW fuel cell will meet all of the State of Massachusetts airborne noise requirements at all the nearby properties in the Industrial Zone. All residences to the west are also expected to meet all the noise requirements because they are at least 250 meters away from the new fuel cell. Residential properties to the north are even further away (440 meters or more) and will not be affected by the fuel cell 's airborne noise. The adjacent Residence Inn property to the east can be as close as 62 meters from the new fuel cell. Airborne noise from the fuel cell will reach levels of 42 dBA at the Residence Inn property line. This is well below the background noise levels of 51 to 55 dBA measured at the Residence Inn property line.

References

- 1) 1) Massachusetts Noise Laws, Exterior Noise Codes,
https://www.newenglandsoundproofing.com/town_noise_code
- 2) New Britain High School Fuel Cell Acoustic Assessment, Acoustical Technologies Inc.,
August 8, 2018
- 3) Montville Fuel Cell Test Report, Acoustical Technologies Inc., July 13, 2020
- 4) Acoustic Findings - 55 Meserole Street - Brooklyn NY – Verizon - Fluid Coolers Blower
Retrofit., Sound Sense, May 17, 2017
- 5) Noise Pollution Policy Interpretation - Mass.gov,
[www.mass.gov > files > documents > 2018/01/31 > noise-interpretation](http://www.mass.gov/files/documents/2018/01/31/noise-interpretation)
- 6) Town of Needham, General By-Laws, Charter, pg 34
[www.needhamma.gov > Town-Bylaws-Charter-PDF](http://www.needhamma.gov/Town-Bylaws-Charter-PDF)



**Town of Needham
Design Review Board
Application Review Form**

Applicant Name: Deerborn Fuel Cell

Property Location: Trip Avenue, 400 First Avenue

Type(s) of Application: (Circle all that apply)

Sign ☒ Façade work ☐ Exterior Lighting ☒ Landscaping

Major/Minor Planning Board or Site Plan Review

Zoning Board of Appeals Review

Application Fee Due: 25
Send to: Planning & Community Development
Town of Needham
500 Dedham Avenue, Suite 118
Needham, MA 024924
ATTENTION: Elisa Litchman

Fee Explanation (if necessary):

Application Fee Amount Received: \$0 Not received yet 08-13-20 RMD

Mailing Address for Reviewed/Stamped Applications to be Returned:

6/16/2020

NEEDHAM DESIGN REVIEW BOARD • RECOMMENDED ACTION • APPROVAL: _____ APPROVAL WITH CONDITIONS: _____ <u>08-10-20 DRB Sec. RMD</u> DISAPPROVAL: _____ DATE: _____



TOWN OF NEEDHAM

DESIGN REVIEW BOARD

Public Service Administration Building
590 Dedham Avenue
Needham, MA 02492
Application and Report

stamp "approved with conditions"

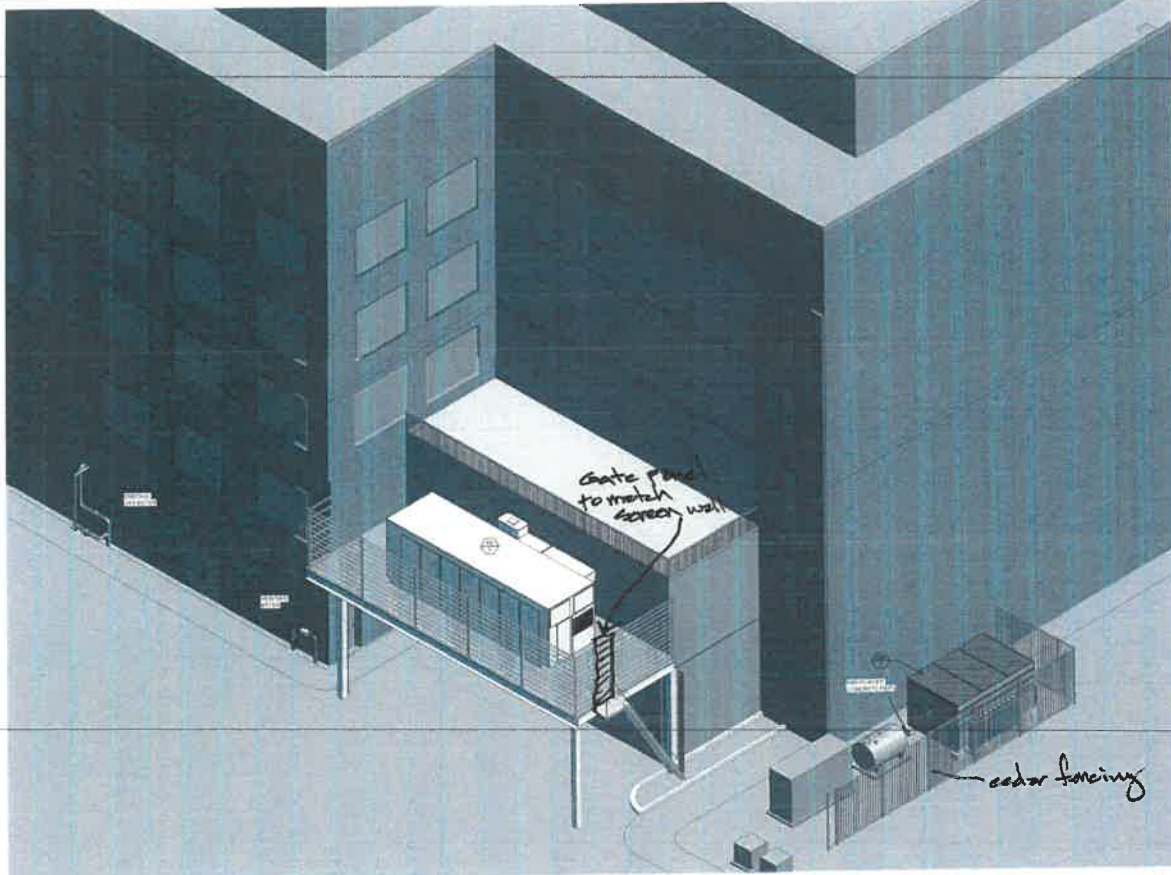
Location: 400 First Avenue Date: June 2, 2020
Owner: US Realty Advisors, LLC
Address: 1370 Avenue of the Americas, New York, New York. 10019
Street City State Zip
Telephone: 212.581.4540
Applicant: Doosan Fuel Cell America, Inc.
Address: 101 East River Drive, East Hartford, CT 06074
Street City State Zip
Telephone: 860.250.3776
Designer/Installer: Willdan Genesys Engineering
Address: 628 Fifth Ave. Bldg. 3 Suite 111 Pelham, NY 10803
Street City State Zip
Telephone: 914.833.6490

Type of Application
☐ Sign
☐ Minor Project
☐ Exterior Alterations
☐ Major Project
☐ Preliminary
☐ Final
☐ Flexible Subdivision
☐ Planned Residential Development
☐ Residential Compound

Brief description of sign or project:

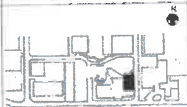
Installation of a Doosan Model 400 fuel cell power plant on a structural steel platform over the loading dock area. powerplant and associated equipment to be fully screened with screening painted to match building envelope.

NEEDHAM	
DESIGN REVIEW BOARD	
• RECOMMENDED ACTION •	
APPROVAL:	
APPROVAL WITH CONDITIONS:	X
08-10-20	
DISAPPROVAL:	
DATE:	



DOOSAN FUEL CELL

TRIP ADVISOR
FUEL CELL INSTALLATION
400 1ST AVE, NEEDHAM, MA 02454



RCM Technologies
The Power of Local Solutions

RST Technical Services, LLC
1000 CENTRE STREET, SUITE 200
NEEDHAM, MA 02454

COORDINATION DRAWING

M-703.03

COORDINATION DRAWING
NEEDHAM

DESIGN REVIEW BOARD

• RECOMMENDED ACTION •

APPROVAL: _____

APPROVAL WITH CONDITIONS: _____

See Notations [Install a gate that
Matches the Screen panel]

DISAPPROVAL: _____

DATE: 08-10-20 DRB Sec. RMD



DOOSAN FUEL CELL

TRIP ADVISOR
FUEL CELL INSTALLATION
400 1ST AVE NEEDHAM, MASSACHUSETTS



RCM Technologies
The Smartest Security Solution

RST Technical Services, LLC
100 MILLBURN AVE
MILBURN, NJ 07041
(973) 970-1000

M-700 00

REFERENCE NOTES:
① DOOSAN FUEL CELL INSTALLATION

NEEDHAM DESIGN REVIEW BOARD

• RECOMMENDED ACTION •

APPROVAL: _____

APPROVAL WITH CONDITIONS: _____

08-10-20 DRB Sec.

DISAPPROVAL: _____

DATE: _____



NEEDHAM
DESIGN REVIEW BOARD

• RECOMMENDED ACTION •

APPROVAL: Mark Gueary

APPROVAL WITH CONDITIONS: _____

DISAPPROVAL: _____

DATE: 8.10.20

NEEDHAM

DESIGN REVIEW BOARD

• RECOMMENDED ACTION •

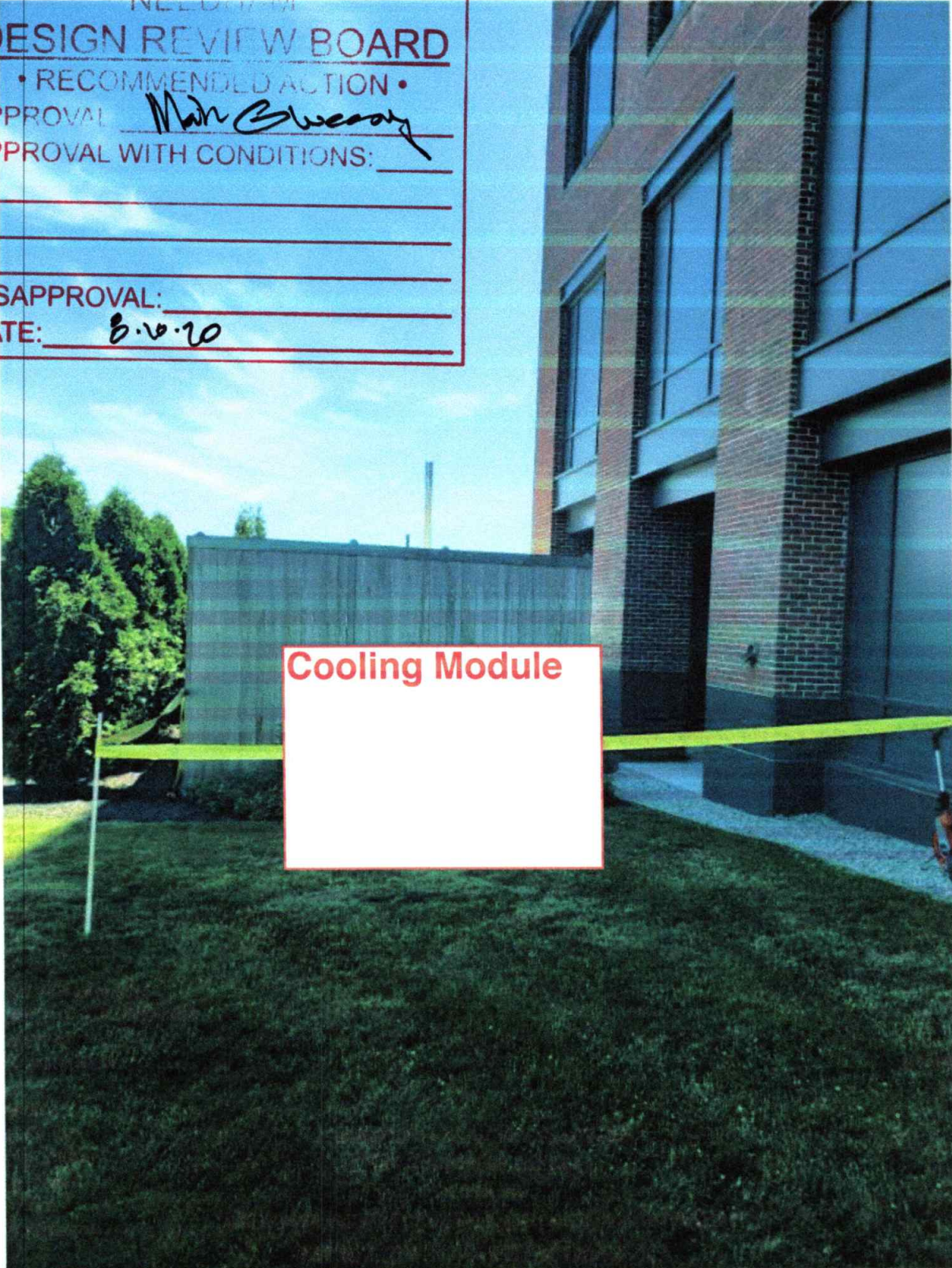
APPROVAL Mark Gueary

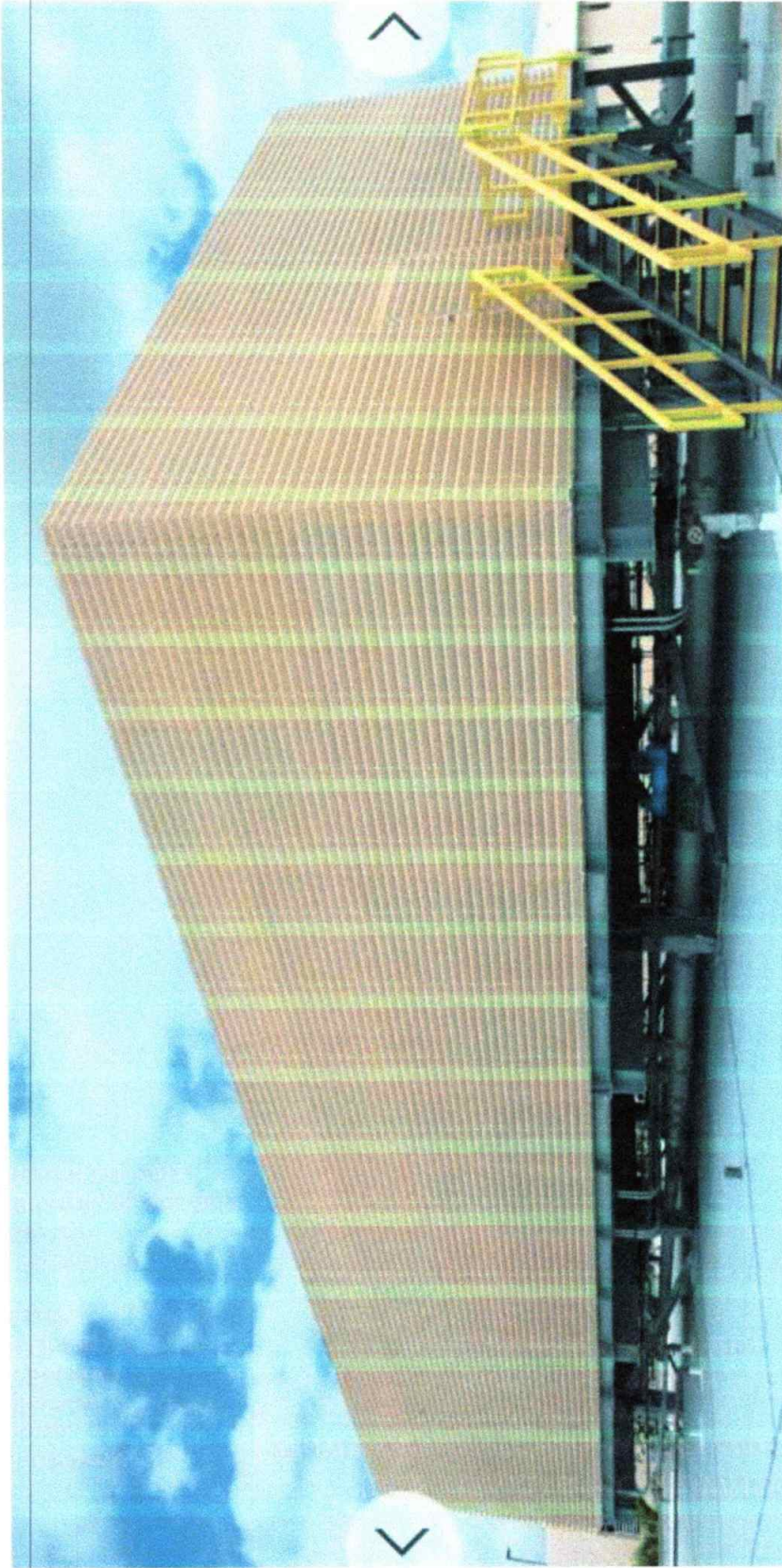
APPROVAL WITH CONDITIONS: _____

DISAPPROVAL: _____

DATE: 8.10.20

Cooling Module





NEEDHAM

DESIGN REVIEW BOARD

• RECOMMENDED ACTION •

APPROVAL: W. C. Green

APPROVAL WITH CONDITIONS: _____

DISAPPROVAL: _____

DATE: 8.10.10

DESIGN

• RECOMMENDED ACTION •

APPROVAL: _____

APPROVAL WITH CONDITIONS: _____

DISAPPROVAL: _____

DATE: _____

From: [Dennis Condon](#)
To: [Alexandra Clee](#); [Anthony DelGaizo](#); [David Roche](#); [John Schlittler](#); [Timothy McDonald](#); [Richard P. Merson](#)
Cc: [Lee Newman](#); [Elisa Litchman](#); [Carys Lustig](#); [Tara Gurge](#)
Subject: RE: Request for comment - 400 First Ave, Trip Advisor, Fuel Cell, Special Permit Amendment
Date: Tuesday, September 15, 2020 9:09:23 AM
Attachments: [image001.png](#)
[image002.png](#)
[image005.jpg](#)

Hi Alex,

We are okay with this project proceeding with the process, but will request additional information regarding fire department emergency response procedures, fire systems to be provided, exposure to immediate surroundings & evacuation plan of building occupants prior to final NFD approval.

In general, to support the issuance of a building/fire permits the following, but not limited to, will be required:

- 1) Fire sprinkler system below new elevated equipment platform.
- 2) Automatic fire detection system, early warning alarms protecting the fuel cells/process equipment.
- 3) Protection of all exposed gas piping/equipment from mechanical and unforeseen impacts.
- 4) Protection of elevated platform vertical support columns from unforeseen vehicle/equipment impacts.
- 5) Adequate clearances to be maintained with unobstructed access to fire pumper sprinkler wall connection
- 6) Safety signs as directed by NFD.
- 7) Twice per year fire system testing & maintenance reports.

Thanks,
Dennis

Dennis Condon
Chief of Department
Needham Fire Department
Town of Needham
(W) 781-455-7580
(C) 508-813-5107
Dcondon@needhamma.gov



Follow on Twitter: Chief Condon@NeedhamFire



Watch Needham Fire Related Videos on YouTube @ Chief Condon



From: Alexandra Clee <aclee@needhamma.gov>

Sent: Thursday, September 10, 2020 2:47 PM

To: Anthony DelGaizo <ADelgaizo@needhamma.gov>; David Roche <droche@needhamma.gov>; John Schlittler <JSchlittler@needhamma.gov>; Dennis Condon <DCondon@needhamma.gov>; Timothy McDonald <tmcdonald@needhamma.gov>; Richard P. Merson <RMerson@needhamma.gov>

Cc: Lee Newman <LNewman@needhamma.gov>; Elisa Litchman <elitchman@needhamma.gov>; Carys Lustig <clustig@needhamma.gov>; Tara Gurge <TGurge@needhamma.gov>

Subject: Request for comment - 400 First Ave, Trip Advisor, Fuel Cell, Special Permit Amendment

Dear all,

The Planning Board will be holding a hearing on an Amendment to the 2012-07 Special permit issued for 66B Street, 360 First Avenue, 410 First Avenue and 37 A Street. The requested proposal is specific to 400 First Ave and consists of a request to add fuel cell power plant on a steel platform over loading dock area. More information is included in the attached documents.

The hearing is scheduled for October 6, 2020. If you wish to comment, please submit your comment by Wednesday September 30, so that the Petitioner has time to address any concerns or questions in advance of the hearing.

Thanks, alex.

Alexandra Clee
Assistant Town Planner
Town of Needham
500 Dedham Avenue
Needham, MA 02492
781-455-7550 Ext 271
Needhamma.gov

**** Please note: I will not be in the office on Mondays. I will reply to you on Tuesdays, Wednesdays, Thursdays and Fridays.**

From: [David Roche](#)
To: [Dennis Condon](#); [Alexandra Clee](#); [Anthony DelGaizo](#); [John Schlittler](#); [Timothy McDonald](#); [Richard P. Merson](#)
Cc: [Lee Newman](#); [Elisa Litchman](#); [Carys Lustig](#); [Tara Gurge](#)
Subject: RE: Request for comment - 400 First Ave, Trip Advisor, Fuel Cell, Special Permit Amendment
Date: Wednesday, September 16, 2020 9:20:30 AM
Attachments: [image001.png](#)
[image002.png](#)

Alex,

My comments are basically the same as the fire Chiefs at this point, we will be receiving stamped detailed plans during the permit submittal that we can also approve or ask for additional information before the issuance of the Building Permit.

Dave Roche

From: Dennis Condon <DCondon@needhamma.gov>
Sent: Tuesday, September 15, 2020 9:09 AM
To: Alexandra Clee <aclee@needhamma.gov>; Anthony DelGaizo <ADelgaizo@needhamma.gov>; David Roche <droche@needhamma.gov>; John Schlittler <JSchlittler@needhamma.gov>; Timothy McDonald <tmcdonald@needhamma.gov>; Richard P. Merson <RMerson@needhamma.gov>
Cc: Lee Newman <LNewman@needhamma.gov>; Elisa Litchman <elitchman@needhamma.gov>; Carys Lustig <clustig@needhamma.gov>; Tara Gurge <TGurge@needhamma.gov>
Subject: RE: Request for comment - 400 First Ave, Trip Advisor, Fuel Cell, Special Permit Amendment

Hi Alex,

We are okay with this project proceeding with the process, but will request additional information regarding fire department emergency response procedures, fire systems to be provided, exposure to immediate surroundings & evacuation plan of building occupants prior to final NFD approval.

In general, to support the issuance of a building/fire permits the following, but not limited to, will be required:

- 1) Fire sprinkler system below new elevated equipment platform.
- 2) Automatic fire detection system, early warning alarms protecting the fuel cells/process equipment.
- 3) Protection of all exposed gas piping/equipment from mechanical and unforeseen impacts.
- 4) Protection of elevated platform vertical support columns from unforeseen vehicle/equipment impacts.
- 5) Adequate clearances to be maintained with unobstructed access to fire pumper sprinkler wall connection
- 6) Safety signs as directed by NFD.
- 7) Twice per year fire system testing & maintenance reports.

Thanks,

Dennis

Dennis Condon
Chief of Department
Needham Fire Department
Town of Needham
(W) 781-455-7580
(C) 508-813-5107
Dcondon@needhamma.gov



Follow on Twitter: Chief Condon@NeedhamFire



Watch Needham Fire Related Videos on YouTube @ Chief Condon



From: Alexandra Clee <aclee@needhamma.gov>

Sent: Thursday, September 10, 2020 2:47 PM

To: Anthony DelGaizo <ADelgaizo@needhamma.gov>; David Roche <droche@needhamma.gov>;
John Schlittler <JSchlittler@needhamma.gov>; Dennis Condon <DCondon@needhamma.gov>;
Timothy McDonald <tmcdonald@needhamma.gov>; Richard P. Merson
<RMerson@needhamma.gov>

Cc: Lee Newman <LNewman@needhamma.gov>; Elisa Litchman <elitchman@needhamma.gov>;
Carys Lustig <clustig@needhamma.gov>; Tara Gurge <TGurge@needhamma.gov>

Subject: Request for comment - 400 First Ave, Trip Advisor, Fuel Cell, Special Permit Amendment

Dear all,

The Planning Board will be holding a hearing on an Amendment to the 2012-07 Special permit issued for 66B Street, 360 First Avenue, 410 First Avenue and 37 A Street. The requested proposal is specific to 400 First Ave and consists of a request to add fuel cell power plant on a steel platform over loading dock area. More information is included in the attached documents.

The hearing is scheduled for October 6, 2020. If you wish to comment, please submit your comment by Wednesday September 30, so that the Petitioner has time to address any concerns or questions in advance of the hearing.

Thanks, alex.

Alexandra Clee
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From: [Tara Gurge](#)
To: [Alexandra Clee](#)
Cc: [Timothy McDonald](#)
Subject: RE: Request for comment - 400 First Ave, Trip Advisor, Fuel Cell, Special Permit Amendment
Date: Wednesday, September 30, 2020 11:33:50 AM
Attachments: [image002.png](#)
[image003.png](#)

Alex –

Here are the Public Health Division comments for the Planning Board's hearing on the Amendment to the 2012-07 Special permit issued for 66B Street, 360 First Avenue, 410 First Avenue and 37 A Street. See comments below:

- Please have applicant ensure that the proposed fuel cell power plant along with back-up generator noise produced would be minimal and not cause a public health nuisance concern to neighboring properties. (Noise ordinance – Noise produced shall not be more than 10 decibels above background noise.)
- Proper safety barriers are installed on the ground surrounding the generator fuel tank.

Please let us know if you need additional information or have any follow-up questions on those requirements.

Thanks,



TARA E. GURGE, R.S., C.E.H.T., M.S.
ASSISTANT PUBLIC HEALTH DIRECTOR
Needham Public Health Division
Health and Human Services Department
178 Rosemary Street
Needham, MA 02494
Ph- (781) 455-7940; Ext. 211/Fax- (781) 455-7922
Mobile- (781) 883-0127
Email - tgurge@needhamma.gov
Web- www.needhamma.gov/health



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[Follow Needham Public Health on Twitter!](#)

From: Alexandra Clee <aclee@needhamma.gov>

Sent: Thursday, September 10, 2020 2:47 PM

To: Anthony DelGaizo <ADelgaizo@needhamma.gov>; David Roche <droche@needhamma.gov>; John Schlittler <JSchlittler@needhamma.gov>; Dennis Condon <DCondon@needhamma.gov>; Timothy McDonald <tmcDonald@needhamma.gov>; Richard P. Merson <RMerson@needhamma.gov>

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Subject: Request for comment - 400 First Ave, Trip Advisor, Fuel Cell, Special Permit Amendment

Dear all,

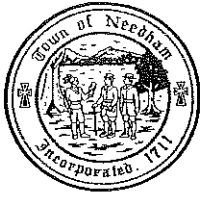
The Planning Board will be holding a hearing on an Amendment to the 2012-07 Special permit issued for 66B Street, 360 First Avenue, 410 First Avenue and 37 A Street. The requested proposal is specific to 400 First Ave and consists of a request to add fuel cell power plant on a steel platform over loading dock area. More information is included in the attached documents.

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Thanks, alex.

Alexandra Clee
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**TOWN OF NEEDHAM, MASSACHUSETTS
PUBLIC WORKS DEPARTMENT
500 Dedham Avenue, Needham, MA 02492
Telephone (781) 455-7550 FAX (781) 449-9023**

October 6, 2020

Needham Planning Board
Needham Public Service Administration Building
Needham, MA 02492

RE: Amendment to Major Project Special Permit No. 2012-07
400 First Avenue- Normandy Real Estate

Dear Members of the Board,

The Department of Public Works has completed its review of the above referenced request for an Amendment to a Special Permit. The submitted documents request to construct a stationary Fuel Cell Power Plant intended to distribute heat and power for the site and reduce reliance on electrical grid power.

The review was conducted in accordance with the Planning Board's regulations and standard engineering practice. The documents submitted for review are as follows:

1. Application Form for Site Plan Review completed by the applicant.
2. One letter to Planning Board Members, dated September 3, 2020, with the following attachments:
 - a. DRB Presentation documents M-700.00a2 and M-703.00a2;
 - b. Full set of "For Permit" Construction Drawings;
 - c. Acoustical test report dated August 25, 2020

Our comments and recommendations are as follows:

- We have no comment or objection to the proposed amendment

If you have any questions regarding the above, please contact our office at 781-455-7538.

Truly yours,

Thomas Ryder
Assistant Town Engineer

**MAJOR PROJECT SITE PLAN SPECIAL PERMIT
Amendment
November 4, 2020**

**Normandy Real Estate Partners
Application No. 2012-07**

**(Original Decision dated October 16, 2012, amended and restated April 2, 2013, amended
September 17, 2013, January 6, 2015, April 28, 2015, November 10, 2015 and April 25, 2016)**

(Filed during the Municipal Relief Legislation, Chapter 53 of the Acts of 2020)

DECISION of the Planning Board (hereinafter referred to as the Board) on the petition of TripAdvisor LLC, 400 First Avenue, Needham, MA, (hereinafter referred to as the Petitioner), for property located at 400 First Avenue, Needham, Massachusetts. The property is shown on Assessor's Map 300 as Parcel 28 containing 13.68 acres in the New England Business Center Zoning District.

This Decision is in response to an application submitted to the Board and recorded with the Town Clerk on September 25, 2020, with a corrected application recorded with the Town Clerk on October 9, 2020, by the Petitioner to amend the Original Decision dated October 16, 2012, amended and restated April 2, 2013 (Section 3.38), amended September 17, 2013, January 6, 2015, April 28, 2015, November 10, 2015 and April 25, 2016. The requested amendment would, if granted, permit the Petitioner to install a fuel cell on site. The purpose of this project is to reduce electrical and heating costs while also reducing emissions of greenhouse gases and other air pollutants. The fuel cell would be mounted on a structural steel platform spanning the loading dock area fronting B street across from the Coca-Cola bottling facility. The platform will be screened using aluminum louvers specifically designed for mechanical screening.

After causing notice of the time and place of the public hearing and of the subject matter hereof to be published, posted and mailed to the Petitioner, abutters and other parties-in-interest as required by law, the hearing was called to order by the Chairperson, Jeanne S. McKnight on Tuesday, October 6, 2020 at 7:40 p.m. via remote meeting using Zoom ID 826-5899-3198. The hearing was continued to November 4, 2020 at 7:20 p.m. via remote meeting using Zoom ID 826-5899-3198 to allow for time to receive a corrected application and to re-notice with the proper applicant. Board members Jeanne S. McKnight Martin Jacobs, Paul S. Alpert, Ted Owens and Adam Block were present throughout the proceedings. The record of the proceedings and the submission upon which this decision is based may be referred to in the office of the Town Clerk or the office of the Board.

EVIDENCE

Submitted for the Board's review were the following exhibits:

- Exhibit 1 - Application Form for Site Plan Review completed by the applicant dated October 9, 2020 (as a correction to previously submitted application dated September 25, 2020).
- Exhibit 2 - Letter from Walter Bonola, Installation Project Manager, Doosan Fuel Cell America, Inc. to the Planning Board Members, dated September 3, 2020.
- Exhibit 3 - Design Review Board approval dated August 10, 2020.
- Exhibit 4 - Plan Sheet M-700.00, entitled, "Section Sheet - 1," prepared by RST Technical Services, LLC, 101 Fellowship Road, Unit 43, Uwchland, PA, dated June 1, 2020.
- Exhibit 5 - Plan Sheet M-703.00, entitled, "Coordination Drawing," prepared by RST Technical Services, LLC, 101 Fellowship Road, Unit 43, Uwchland, PA, dated June 1, 2020.
- Exhibit 6 - Plan Sheet GA-003.00, entitled, "Fuel Cell Site Plan with Offsets," prepared by Genesys Engineering, 629 Fifth Avenue, Bldg 3, Suite 111, Pelham, NY, undated.
- Exhibit 7 - Airborne Noise Assessment, prepared by Acoustical Technologies Inc., 50 Myrock Ave, Waterford CT, dated August 25, 2020.
- Exhibit 8 - Interdepartmental Communication (IDC) to the Board from Thomas Ryder, Assistant Town Engineer, dated October 6, 2020; IDC to the Board from Tara Gurge, Health Department, dated September 30, 2020; IDC to the Board from Chief Dennis Condon, Fire Department, dated September 15, 2020; and IDC to the Board from the Building Commissioner, David Roche, dated September 16, 2020

FINDINGS AND CONCLUSIONS

The findings and conclusions made in Major Project Site Plan Special Permit No. 2012-07, dated October 16, 2012, amended and restated April 2, 2013, amended September 17, 2013, January 6, April 28, 2015, November 10, 2015 and April 25, 2016, were ratified and confirmed except as follows:

- 1.1. The property has been the subject of a number of site plan special permit decisions and amendments thereto. The original decision was dated October 16, 2012 and was amended and restated on April 2, 2013 and further amended on September 17, 2013, January 6, 2015, April 28, 2015, November 10, 2015 and April 25, 2016.
- 1.2. The requested amendment would, if granted, permit the Petitioner to install a fuel cell on site. The purpose of this project is to reduce electrical and heating costs while also reducing emissions of greenhouse gases and other air pollutants. The fuel cell would be mounted on a structural steel platform spanning the loading dock area fronting B street across from the Coca-Cola bottling facility. The platform will be screened using aluminum louvers specifically designed for mechanical screening.
- 1.3. The Petitioner describes the Fuel Cell as follows: Doosan's PureCell® Model 400 is a stationary phosphoric acid fuel cell (PAFC) power plant intended for distributed generation (DG) and combined heat and power (CHP) applications. It can produce ultra-clean, reliable electric power (460 kW in the first year and greater than 400 kW continuously for 10 years), and over 1.78 MMBtu/h of useful thermal energy. This heat can be used for space heating, hot water applications, and for driving an absorption chiller to provide cooling. With an optional grid-independent switchboard and controls, the Model 400 can also provide backup power when the

electric utility service fails. As long as natural gas is available, electric power and heat can be generated.

Natural gas is first converted to hydrogen in the fuel processing system (FPS) through a process known as catalytic steam reformation. Hydrogen and air are then supplied to four phosphoric acid fuel cell stacks, in which hydrogen and oxygen combine electrochemically to produce direct current (DC) electricity, heat, and water. Finally, alternating current (AC) electricity is produced through an on-board DC to AC inverter. Heat generated in the fuel cell process generates steam, which is returned to the FPS for use in the steam reformation process.

- 1.4 An acoustical study was included as part of this application (Exhibit 7). The acoustical study shows the project will be in compliance with all State of Massachusetts airborne noise requirements at all nearby properties.
- 1.5 The Petitioner appeared before the Design Review Board on August 10, 2020 and received approval.
- 1.6 Under Section 7.4 of the By-Law and Section 4.2 of Major Project Site Plan Special Permit No. 2012-07, dated October 16, 2012 and last amended April 28, 2015, a Major Project Site Plan Special Permit Amendment may be granted in the New England Business Center Zoning District, if the Board finds that the proposed project complies with the standards and criteria set forth in the provisions of the By-Law. On the basis of the above findings and criteria, the Board finds that the Approved Plan Set, as conditioned and limited herein for Site Plan Review, to be in harmony with the purposes and intent of the By-Law to comply with all applicable By-Law requirements, to have minimal adverse impact and to have proposed a development which is harmonious with the surrounding area.
- 1.7 Adjoining premises will be protected against any seriously detrimental uses of the proposed project by minimizing new impervious soil, screening with louvers, and acoustical levels that meet all state of Massachusetts airborne noise requirements.

The fuel cell will be mounted on a structural steel platform spanning the loading dock area fronting B street across from the Coca-Cola bottling facility. The platform will be screened using aluminum louvers specifically designed for mechanical screening. The louvers and the platform steel will be painted to match adjacent building envelope materials. The cooling module and purge gas manifold will be placed on the ground adjacent to the generator fuel tank and will be screened using the existing cedar fencing and an additional twenty feet of new fencing. Any landscaping plants removed for construction will be replaced once construction is complete.

An acoustical study was included as part of this application. The acoustical study shows the project will be in compliance with all State of Massachusetts airborne noise requirements at all nearby properties.

- 1.8 Convenience and safety of vehicular and pedestrian movement within the site and on adjacent streets and the location of driveway openings in relation to traffic or to adjacent streets has been assured. The proposed fuel cell will be mounted on a structural steel platform spanning the loading dock area some twenty feet in the air. The cooling module and purge gas manifold will be placed on the ground adjacent to the generator fuel tank and will be screened using the existing cedar fencing and an additional twenty feet of new fencing. The structural supports for the steel platform will be constructed in a manner to allow adequate pedestrian and vehicular traffic on the existing side-walks adjacent to the loading dock and will be protected by 12" concrete filled steel

bollards. The proposed project will have no impact to vehicular or pedestrian movement within the site or on the adjacent streets.

- 1.9 Adequacy of the arrangement of parking and loading spaces in relation to the proposed uses of the premises has been assured. The proposed project will have no impact on the arrangement of parking and loading spaces on the premises. During operation it is expected that a Doosan service vehicle will visit the project location approximately once per month, having no impact on the adequacy of parking and loading for the existing facility.
- 1.10 Adequate methods of disposal of refuse and other wastes resulting from the uses permitted on the site have been provided. Any waste generated during normal servicing of the fuel cell system will be disposed of by Doosan's technicians in accordance with all state and federal laws. A minimal amount of material is expected to be generated through normal replacement of internal components. This waste generation will not have an adverse impact on the facilities ability to dispose of refuse and waste. The fuel cell system does not produce any hazardous waste.
- 1.11 The proposed project will not have any adverse impacts on the Town's resources, including the effect on the Town's water supply and distribution system, sewer collection and treatment, fire protection and streets. The site is already developed. The proposed project will not have an adverse effect on the Town's resources, including the Town's water supply and distribution system, sewer collection and treatment, fire protection and streets.

The proposed project will connect to the towns water system and use approximately 3,000 gallons per year of water at a maximum flow of 2 gallons per minute, a minor impact to the Town's water system. The Fuel Cells are certified by CSA international to meet strict ANSI/CSA FC-1 2014 safety standards to protect against risks from electrical, mechanical, chemical, and combustion safety hazards. This project has been designed in accordance with NFPA 853 for the safe installation of stationary fuel cell systems. An emergency response plan will be shared with the Fire Chief as part of the building permit application process. The proposed project will have no appreciable generation of motor vehicle traffic, with approximately one service vehicle visiting per month.

The fuel cell system will provide 460 kW of clean renewable electric power and 1.8 million BTU/hour of available thermal energy to the building infrastructure reducing Trip Advisor's reliance on electric grid power and significantly reducing consumption of natural gas for heating the facility all without combustion of any kind. With heat and electricity utilized the installation will achieve a total efficiency of 78% and utilizing state of Massachusetts and power company incentives will result in a significant long-term cost savings to Trip Advisor and a reduction in their carbon footprint.

The addition of this system will have a positive impact on the Town, both from improving the financial performance of a key employer in town and providing a reduction in carbon footprint.

- 1.12 Relationship of structures and open spaces to the natural landscape, existing buildings and other community assets in the area and compliance with other requirements of the By-Law has been met. The fuel cell will be mounted on a structural steel platform spanning the loading dock area fronting B street across from the Coca-Cola bottling facility. The platform will be screened using aluminum louvers specifically designed for mechanical screening. The louvers and the platform steel will be painted to match adjacent building envelope materials. The cooling module and purge gas manifold will be placed on the ground adjacent to the generator fuel tank and will be

screened using the existing cedar fencing and an additional twenty feet of new fencing. Any landscaping plants removed for construction will be replaced once construction is complete.

- 1.13 Under Section 7.4 of the By-Law, a Major Project Site Plan Review Special Permit Amendment may be granted in the New England Business Center Zoning District, if the Board finds that the proposed development complies with the standards and criteria set forth in the provisions of the By-Law. On the basis of the above findings and conclusions, the Board finds that the proposed development Plan, as conditioned and limited herein for the site plan review, to be in harmony with the purposes and intent of the By-Law, to comply with all applicable By-Law requirements, to have minimal adverse impact and to have promoted a development which is harmonious with the surrounding area.

PLAN MODIFICATIONS

Prior to the issuance of a building permit or the start of any construction pertaining to this Decision, the Petitioner shall cause the Plan to be revised to show the following additional, corrected, or modified information. The Building Inspector shall not issue any building permit for the work proposed in this Decision nor shall he permit any construction activity pertaining to this Decision to begin on the site until and unless he finds that the Plan is revised to include the following additional corrected or modified information. Except where otherwise provided, all such information shall be subject to the approval of the Building Inspector. Where approvals are required from persons other than the Building Inspector, the Petitioner shall be responsible for providing a written copy of such approvals to the Building Inspector before the Inspector shall issue any building permit or permit for any construction on the site. The Petitioner shall submit four copies of the final Plans as approved for construction by the Building Inspector to the Board prior to the issuance of a Building Permit.

1. No Plan Modifications are required.

CONDITIONS AND LIMITATIONS

The plan modifications, conditions and limitations contained in Major Project Site Plan Special Permit No. 2012-07, dated October 16, 2012, amended and restated April 2, 2013, amended September 17, 2013, January 6, April 28, 2015, November 10, 2015 and April 25, 2016, are ratified and confirmed except as modified herein.

DECISION

NOW THEREFORE, by unanimous vote of the Planning Board, the Board votes that:

- 3.1 The plan modifications, conditions and limitations contained in Major Project Site Plan Special Permit No. 2012-07, dated October 16, 2012, amended and restated April 2, 2013, amended September 17, 2013, January 6, April 28, 2015, November 10, 2015 and April 25, 2016 are ratified and confirmed, except as follows:
- 3.2 The proposed fuel cell shall contain the dimensions and shall be located on that portion of the locus exactly as shown on the Plan, as modified by this Decision, and in accordance with the applicable dimensional requirements of the By-Law. Any changes, revisions or modifications to the Plan, as modified by this Decision, shall require approval by the Board.

- 3.3 The proposed fuel cell shall be installed and operated as described in Sections 1.2, 1.3, and 1.4 of this Decision and as further described under Exhibits 1, 2, 3, 4, 5, 6 and 7. Any changes of such above-described use shall be permitted only by amendment of this Approval by the Board.
- 3.4 The Petitioner shall obtain all necessary Federal, state and local permits for the project. The facility shall operate in compliance with all applicable lawful requirements imposed by local, state and/or federal authorities, including those addressing sound attenuation to protect the adjoining properties and nearest inhabited residence.
- 3.5 All construction staging shall be on-site. No construction parking shall be on public streets. Construction parking shall be all on site or a combination of on-site and off-site parking at locations in which the Petitioner can make suitable arrangements. Construction staging plans shall be included in the final construction documents prior to the filing of a Building Permit and shall be subject to the review and approval of the Building Inspector.
- 3.6 The following interim safeguards shall be implemented during construction:
- a. The hours of construction shall be 7:00 a.m. to 5:00 p.m. Monday through Saturday not at all on Sundays and holidays.
 - b. The Petitioner's contractor shall provide temporary security chain-link or similar type fencing around the portions of the project site, which require excavation or otherwise pose a danger to public safety.
 - c. The Petitioner's contractor shall designate a person who shall be responsible for the construction process. That person shall be identified to the Police Department, the Department of Public Works, the Building Inspector and the abutters and shall be contacted if problems arise during the construction process. The designee shall also be responsible for assuring that truck traffic and the delivery of construction material does not interfere with or endanger traffic flow on First Avenue or surrounding streets.
- 3.7 No building permit shall be issued for the proposed project in pursuance of the Special Permit and Site Plan Approval until:
- a. The final plans shall be in conformity with those approved by the Board, and a statement certifying such approval shall have been filed by this Board with the Building Commissioner.
 - b. A construction management and staging plan shall have been submitted to the Police Chief and Building Commissioner for their review and approval.
 - c. The Petitioner shall have recorded with the Norfolk County Registry of Deeds a certified copy of this Decision granting this Special Permit and Site Plan Approval with the appropriate reference to the book and page number of the recording of the Petitioner's title deed or notice endorsed thereon.
- 3.8 The fuel cell installation that is subject to the Special Permits and Site Plan Approval shall not be activated until:
- a. An as-built plan, supplied by the engineer of record showing that the fuel cell was installed according to the approved documents, shall be submitted to the Board and Department of Public Works. The as-built plan shall show the building, and all final construction details of

the fuel cell installation improvement on-site, in its true relationship to the lot lines. In addition to the engineer of record, said plan shall be certified by a Massachusetts Registered Land Surveyor.

- b. There shall be filed with the Building Commissioner and Board a statement by the Department of Public Works certifying that the fuel cell has been constructed to the standards of the Town of Needham Department of Public Works and in accordance with the approved Plan.
 - c. There shall be filed with the Board and Building Commissioner a Final Construction Control Document signed by a registered structural engineer upon completion of construction.
 - d. There shall be filed with the Board and Building Commissioner an as-built Landscaping Plan showing the final location, number and type of plant material, final landscape features for the project. Said plan shall include a certification that such improvements were completed according to the approved documents.
 - e. There shall be filed by the Petitioner a supplemental letter from the Petitioner's acoustical engineer (see Exhibit 7) confirming that the fuel cell as installed and tested meets all applicable Federal, state and local regulations, including those addressing sound attenuation to protect the adjoining adjacent properties.
- 3.9 The applicant, by accepting this permit decision, warrants that the applicant has included all relevant documentation, reports, and information available to the applicant in the application submitted, and that this information is true and valid to the best of the applicant's knowledge.
- 3.10 Violation of any of the conditions of this Decision shall be grounds for revocation of any building permit or certificate of occupancy granted hereunder as follows: In the case of violation of any conditions of this Decision, the Town will notify the Petitioner of such violation and give the Petitioner reasonable time, not to exceed thirty (30) days, to cure the violation. If, at the end of said thirty (30) day period, the Petitioner has not cured the violation, or in the case of violations requiring more than thirty (30) days to cure, has not commenced the cure and prosecuted the cure continuously, the permit granting authority may, after notice to the Petitioner, conduct a hearing in order to determine whether the failure to abide by the conditions contained herein should result in a recommendation to the Building Inspector to revoke any building permit or certificate of occupancy granted hereunder. This provision is not intended to limit or curtail the Town's other remedies to enforce compliance with the conditions of this Decision including, without limitation, by an action for injunctive relief before any court of competent jurisdiction. The Petitioner agrees to reimburse the Town for its reasonable costs in connection with the enforcement of the conditions of this Decision if the Town prevails in such enforcement action.

LIMITATIONS

- 4.0 The authority granted to the Petitioner by this permit is limited as follows:
- 4.1 This permit applies only to the site and off-site improvements, which are the subject of this petition. All construction to be conducted on-site and off-site shall be conducted in accordance with the terms of this permit and shall be limited to the improvements on the Plan, as modified by this Decision.

- 4.2 There shall be no further development of this site without further site plan approval as required under Section 7.4 of the By-Law. The Board, in accordance with M.G.L., Ch. 40A, S.9 and said Section 7.4, hereby retains jurisdiction to (after hearing) modify and/or amend the conditions to, or otherwise modify, amend or supplement, this Decision and to take other action necessary to determine and ensure compliance with the Decision.
- 4.3 This Decision applies only to the requested Special Permits and Site Plan Review. Other permits or approvals required by the By-Law, other governmental boards, agencies or bodies having jurisdiction shall not be assumed or implied by this Decision.
- 4.4 No approval of any indicated signs or advertising devices is implied by this Decision.
- 4.5 The foregoing restrictions are stated for the purpose of emphasizing their importance but are not intended to be all-inclusive or to negate the remainder of the By-Law.
- 4.6 This Site Plan Special Permit Amendment shall lapse on November 4, 2022, if substantial use thereof has not sooner commenced, except for good cause. Any requests for an extension of the time limits set forth herein must be in writing to the Board at least 30 days prior to November 4, 2022. The Board herein reserves its rights and powers to grant or deny such extension without a public hearing. The Board, however, shall not grant an extension as herein provided unless it finds that the use of the property in question or the construction of the site has not begun, except for good cause.

This approval shall be recorded in the Norfolk District Registry of Deeds. This Special Permit Amendment shall not take effect until a copy of this decision bearing the certification of the Town Clerk that twenty (20) days have elapsed after the decision has been filed in the Town Clerk's office or that if such appeal has been filed, that it has been dismissed or denied is recorded with Norfolk District Registry Deeds and until the Petitioner has delivered a certified copy of the recorded document to the Board.

The provisions of this Special Permit Amendment shall be binding upon every owner or owner of the lots and the executors, administrators, heirs, successors and assigns of such owners, and the obligations and restrictions herein set forth shall run with the land, as shown on the Plan, in full force and effect for the benefit of and enforceable by the Town of Needham.

Any person aggrieved by this decision may appeal pursuant to the General Laws, Chapter 40A, Section 17 within twenty (20) days after filing of this decision with the Needham Town Clerk.

Witness our hands this 4th day of November, 2020.

NEEDHAM PLANNING BOARD

Jeanne S. McKnight, Chairperson

Paul S. Alpert

Martin Jacobs

Adam Block

Ted Owens

COMMONWEALTH OF MASSACHUSETTS

Norfolk, ss _____, 2020

On this ____ day of _____, 2020, before me, the undersigned notary public, personally appeared _____, one of the members of the Planning Board of the Town of Needham, Massachusetts, proved to me through satisfactory evidence of identification, which was _____, to be the person whose name is signed on the preceding or attached document, and acknowledged the foregoing to be the free act and deed of said Board before me.

Notary Public

My Commission Expires: _____

TO WHOM IT MAY CONCERN: This is to certify that the 20-day appeal period on the Amendment to Decision of the project proposed by TripAdvisor LLC, 400 First Avenue, Needham, MA, for property located at the 400 First Avenue, Needham, Massachusetts, has passed,

____and there have been no appeals filed in the Office of the Town Clerk or
____there has been an appeal filed.

Date

Theodora K. Eaton, Town Clerk

Copy sent to:

Petitioner-Certified Mail # _____
Design Review Board
Building Inspector
Conservation Commission

Select Board
Engineering
Fire Department
Police Department

Board of Health
Town Clerk
Director, PWD
Parties in Interest

**MAJOR PROJECT SITE PLAN SPECIAL PERMIT
Amendment
November 4, 2020**

**Normandy Real Estate Partners
Application No. 2012-07
(Original Decision dated October 16, 2012, amended and restated April 2, 2013, amended
September 17, 2013, January 6, 2015, April 28, 2015, November 10, 2015 and April 25, 2016)**

(Filed during the Municipal Relief Legislation, Chapter 53 of the Acts of 2020)

DECISION of the Planning Board (hereinafter referred to as the Board) on the petition of TripAdvisor LLC, 400 First Avenue, Needham, MA, (hereinafter referred to as the Petitioner), for property located at 400 First Avenue, Needham, Massachusetts. The property is shown on Assessor's Map 300 as Parcel 28 containing 13.68 acres in the New England Business Center Zoning District.

This Decision is in response to an application submitted to the Board and recorded with the Town Clerk on September 25, 2020, with a corrected application recorded with the Town Clerk on October 9, 2020, by the Petitioner to amend the Original Decision dated October 16, 2012, amended and restated April 2, 2013 (Section 3.38), amended September 17, 2013, January 6, 2015, April 28, 2015, November 10, 2015 and April 25, 2016. The requested amendment would, if granted, permit the Petitioner to install a fuel cell on site. The purpose of this project is to reduce electrical and heating costs while also reducing emissions of greenhouse gases and other air pollutants. The fuel cell would be mounted on a structural steel platform spanning the loading dock area fronting B street across from the Coca-Cola bottling facility. The platform will be screened using aluminum louvers specifically designed for mechanical screening.

After causing notice of the time and place of the public hearing and of the subject matter hereof to be published, posted and mailed to the Petitioner, abutters and other parties-in-interest as required by law, the hearing was called to order by the Chairperson, Jeanne S. McKnight on Tuesday, October 6, 2020 at 7:40 p.m. via remote meeting using Zoom ID 826-5899-3198. The hearing was continued to November 4, 2020 at 7:20 p.m. via remote meeting using Zoom ID 826-5899-3198 to allow for time to receive a corrected application and to re-notice with the proper applicant. Board members Jeanne S. McKnight Martin Jacobs, Paul S. Alpert, Ted Owens and Adam Block were present throughout the proceedings. The record of the proceedings and the submission upon which this decision is based may be referred to in the office of the Town Clerk or the office of the Board.

EVIDENCE

Submitted for the Board's review were the following exhibits:

- Exhibit 1 - Application Form for Site Plan Review completed by the applicant dated October 9, 2020 (as a correction to previously submitted application dated September 25, 2020).
- Exhibit 2 - Letter from Walter Bonola, Installation Project Manager, Doosan Fuel Cell America, Inc. to the Planning Board Members, dated September 3, 2020.
- Exhibit 3 - Design Review Board conditional approval dated August 10, 2020.
- Exhibit 4 - Plan Sheet M-700.00, entitled, "Section Sheet - 1," prepared by RST Technical Services, LLC, 101 Fellowship Road, Unit 43, Uwchland, PA, dated June 1, 2020.
- Exhibit 5 - Plan Sheet M-703.00, entitled, "Coordination Drawing," prepared by RST Technical Services, LLC, 101 Fellowship Road, Unit 43, Uwchland, PA, dated June 1, 2020.
- Exhibit 6 - Plan Sheet GA-003.00, entitled, "Fuel Cell Site Plan with Offsets," prepared by Genesys Engineering, 629 Fifth Avenue, Bldg 3, Suite 111, Pelham, NY, undated.
- Exhibit 7 - Airborne Noise Assessment, prepared by Acoustical Technologies Inc., 50 Myrock Ave, Waterford CT, dated August 25, 2020.
- Exhibit 8 - Interdepartmental Communication (IDC) to the Board from Thomas Ryder, Assistant Town Engineer, dated October 6, 2020; IDC to the Board from Tara Gurge, Health Department, dated September 30, 2020; IDC to the Board from Chief Dennis Condon, Fire Department, dated September 15, 2020; and IDC to the Board from the Building Commissioner, David Roche, dated September 16, 2020

FINDINGS AND CONCLUSIONS

The findings and conclusions made in Major Project Site Plan Special Permit No. 2012-07, dated October 16, 2012, amended and restated April 2, 2013, amended September 17, 2013, January 6, April 28, 2015, November 10, 2015 and April 25, 2016, were ratified and confirmed except as follows:

- 1.1. The property has been the subject of a number of site plan special permit decisions and amendments thereto. The original decision was dated October 16, 2012 and was amended and restated on April 2, 2013 and further amended on September 17, 2013, January 6, 2015, April 28, 2015, November 10, 2015 and April 25, 2016.
- 1.2. The requested amendment would, if granted, permit the Petitioner to install a fuel cell on site. The purpose of this project is to reduce electrical and heating costs while also reducing emissions of greenhouse gases and other air pollutants. The fuel cell would be mounted on a structural steel platform spanning the loading dock area fronting B street across from the Coca-Cola bottling facility. The platform will be screened using aluminum louvers specifically designed for mechanical screening.
- 1.3. The Petitioner describes the Fuel Cell as follows: Doosan's PureCell® Model 400 is a stationary phosphoric acid fuel cell (PAFC) power plant intended for distributed generation (DG) and combined heat and power (CHP) applications. It can produce ultra-clean, reliable electric power (460 kW in the first year and greater than 400 kW continuously for 10 years), and over 1.78 MMBtu/h of useful thermal energy. This heat can be used for space heating, hot water applications, and for driving an absorption chiller to provide cooling. With an optional grid-independent switchboard and controls, the Model 400 can also provide backup power when the

electric utility service fails. As long as natural gas is available, electric power and heat can be generated.

Natural gas is first converted to hydrogen in the fuel processing system (FPS) through a process known as catalytic steam reformation. Hydrogen and air are then supplied to four phosphoric acid fuel cell stacks, in which hydrogen and oxygen combine electrochemically to produce direct current (DC) electricity, heat, and water. Finally, alternating current (AC) electricity is produced through an on-board DC to AC inverter. Heat generated in the fuel cell process generates steam, which is returned to the FPS for use in the steam reformation process.

- 1.4 An acoustical study was included as part of this application (Exhibit 7). The acoustical study shows the project will be in compliance with all State of Massachusetts airborne noise requirements at all nearby properties.
- 1.5 The Petitioner appeared before the Design Review Board on August 10, 2020 and received conditional approval.
- 1.6 Under Section 7.4 of the By-Law and Section 4.2 of Major Project Site Plan Special Permit No. 2012-07, dated October 16, 2012 and last amended April 28, 2015, a Major Project Site Plan Special Permit Amendment may be granted in the New England Business Center Zoning District, if the Board finds that the proposed project complies with the standards and criteria set forth in the provisions of the By-Law. On the basis of the above findings and criteria, the Board finds that the Approved Plan Set, as conditioned and limited herein for Site Plan Review, to be in harmony with the purposes and intent of the By-Law, to comply with all applicable By-Law requirements, to have minimal adverse impact and to have proposed a development which is harmonious with the surrounding area.
- 1.7 Adjoining premises will be protected against any seriously detrimental uses of the proposed project by minimizing new impervious soil, screening with louvers, and acoustical levels that meet all state of Massachusetts airborne noise requirements.

The fuel cell will be mounted on a structural steel platform spanning the loading dock area fronting B street across from the Coca-Cola bottling facility. The platform will be screened using aluminum louvers specifically designed for mechanical screening. The louvers and the platform steel will be painted to match adjacent building envelope materials. The cooling module and purge gas manifold will be placed on the ground adjacent to the generator fuel tank and will be screened using the existing cedar fencing and an additional twenty feet of new fencing. Any landscaping plants removed for construction will be replaced once construction is complete.

An acoustical study was included as part of this application. The acoustical study shows the project will be in compliance with all State of Massachusetts airborne noise requirements at all nearby properties.

- 1.8 Convenience and safety of vehicular and pedestrian movement within the site and on adjacent streets and the location of driveway openings in relation to traffic or to adjacent streets has been assured. The proposed fuel cell will be mounted on a structural steel platform spanning the loading dock area some twenty feet in the air. The cooling module and purge gas manifold will be placed on the ground adjacent to the generator fuel tank and will be screened using the existing cedar fencing and an additional twenty feet of new fencing. The structural supports for the steel platform will be constructed in a manner to allow adequate pedestrian and vehicular traffic on the existing side-walks adjacent to the loading dock and will be protected by 12" concrete filled steel

bollards. The proposed project will have no impact to vehicular or pedestrian movement within the site or on the adjacent streets.

- 1.9 Adequacy of the arrangement of parking and loading spaces in relation to the proposed uses of the premises has been assured. The proposed project will have no impact on the arrangement of parking and loading spaces on the premises. During operation it is expected that a Doosan service vehicle will visit the project location approximately once per month, having no impact on the adequacy of parking and loading for the existing facility.
- 1.10 Adequate methods of disposal of refuse and other wastes resulting from the uses permitted on the site have been provided. Any waste generated during normal servicing of the fuel cell system will be disposed of by Doosan's technicians in accordance with all state and federal laws. A minimal amount of material is expected to be generated through normal replacement of internal components. This waste generation will not have an adverse impact on the facilities ability to dispose of refuse and waste. The fuel cell system does not produce any hazardous waste.
- 1.11 The proposed project will not have any adverse impacts on the Town's resources, including the effect on the Town's water supply and distribution system, sewer collection and treatment, fire protection and streets. The site is already developed. The proposed project will not have an adverse effect on the Town's resources, including the Town's water supply and distribution system, sewer collection and treatment, fire protection and streets.

The proposed project will connect to the towns water system and use approximately 3,000 gallons per year of water at a maximum flow of 2 gallons per minute, a minor impact to the Town's water system. The Fuel Cells are certified by CSA international to meet strict ANSI/CSA FC-1 2014 safety standards to protect against risks from electrical, mechanical, chemical, and combustion safety hazards. This project has been designed in accordance with NFPA 853 for the safe installation of stationary fuel cell systems. An emergency response plan will be shared with the Fire Chief as part of the building permit application process. The proposed project will have no appreciable generation of motor vehicle traffic, with approximately one service vehicle visiting per month.

The fuel cell system will provide 460 kW of clean renewable electric power and 1.8 million BTU/hour of available thermal energy to the building infrastructure reducing Trip Advisor's reliance on electric grid power and significantly reducing consumption of natural gas for heating the facility all without combustion of any kind. With heat and electricity utilized the installation will achieve a total efficiency of 78% and utilizing state of Massachusetts and power company incentives will result in a significant long-term cost savings to Trip Advisor and a reduction in their carbon footprint.

The addition of this system will have a positive impact on the Town, both from improving the financial performance of a key employer in town and providing a reduction in carbon footprint.

- 1.12 Relationship of structures and open spaces to the natural landscape, existing buildings and other community assets in the area and compliance with other requirements of the By-Law has been met. The fuel cell will be mounted on a structural steel platform spanning the loading dock area fronting B street across from the Coca-Cola bottling facility. The platform will be screened using aluminum louvers specifically designed for mechanical screening. The louvers and the platform steel will be painted to match adjacent building envelope materials. The cooling module and purge gas manifold will be placed on the ground adjacent to the generator fuel tank and will be

screened using the existing cedar fencing and an additional twenty feet of new fencing. Any landscaping plants removed for construction will be replaced once construction is complete.

- 1.13 Under Section 7.4 of the By-Law, a Major Project Site Plan Review Special Permit Amendment may be granted in the New England Business Center Zoning District, if the Board finds that the proposed development complies with the standards and criteria set forth in the provisions of the By-Law. On the basis of the above findings and conclusions, the Board finds that the proposed development Plan, as conditioned and limited herein for the site plan review, to be in harmony with the purposes and intent of the By-Law, to comply with all applicable By-Law requirements, to have minimal adverse impact and to have promoted a development which is harmonious with the surrounding area.

PLAN MODIFICATIONS

Prior to the issuance of a building permit or the start of any construction pertaining to this Decision, the Petitioner shall cause the Plan to be revised to show the following additional, corrected, or modified information. The Building Inspector shall not issue any building permit for the work proposed in this Decision nor shall he permit any construction activity pertaining to this Decision to begin on the site until and unless he finds that the Plan is revised to include the following additional corrected or modified information. Except where otherwise provided, all such information shall be subject to the approval of the Building Inspector. Where approvals are required from persons other than the Building Inspector, the Petitioner shall be responsible for providing a written copy of such approvals to the Building Inspector before the Inspector shall issue any building permit or permit for any construction on the site. The Petitioner shall submit four copies of the final Plans as approved for construction by the Building Inspector to the Board prior to the issuance of a Building Permit.

1. The Plan shall be revised consistent with the recommendations of the Design Review Board (Exhibit 3) as follows: Install a gate and panel to match the screen wall above the loading area and provide a cedar fence enclosure in place of the metal fence enclosure shown at the rear of the building. ~~No Plan Modifications are required.~~

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CONDITIONS AND LIMITATIONS

The plan modifications, conditions and limitations contained in Major Project Site Plan Special Permit No. 2012-07, dated October 16, 2012, amended and restated April 2, 2013, amended September 17, 2013, January 6, April 28, 2015, November 10, 2015 and April 25, 2016, are ratified and confirmed except as modified herein.

DECISION

NOW THEREFORE, by unanimous vote of the Planning Board, the Board votes that:

- 3.1 The plan modifications, conditions and limitations contained in Major Project Site Plan Special Permit No. 2012-07, dated October 16, 2012, amended and restated April 2, 2013, amended September 17, 2013, January 6, April 28, 2015, November 10, 2015 and April 25, 2016 are ratified and confirmed, except as follows:
- 3.2 The proposed fuel cell shall contain the dimensions and shall be located on that portion of the locus exactly as shown on the Plan, as modified by this Decision, and in accordance with the

applicable dimensional requirements of the By-Law. Any changes, revisions or modifications to the Plan, as modified by this Decision, shall require approval by the Board.

- 3.3 The proposed fuel cell shall be installed and operated as described in Sections 1.2, 1.3, and 1.4 of this Decision and as further described under Exhibits 1, 2, 3, 4, 5, 6 and 7. Any changes of such above-described use shall be permitted only by amendment of this Approval by the Board.
- 3.4 The Petitioner shall obtain all necessary Federal, state and local permits for the project. The facility shall operate in compliance with all applicable lawful requirements imposed by local, state and/or federal authorities, including those addressing sound attenuation to protect the adjoining properties and nearest inhabited residence.
- 3.5 All construction staging shall be on-site. No construction parking shall be on public streets. Construction parking shall be all on site or a combination of on-site and off-site parking at locations in which the Petitioner can make suitable arrangements. Construction staging plans shall be included in the final construction documents prior to the filing of a Building Permit and shall be subject to the review and approval of the Building Inspector.
- 3.6 The following interim safeguards shall be implemented during construction:
 - a. The hours of construction shall be 7:00 a.m. to 5:00 p.m. Monday through Saturday not at all on Sundays and holidays.
 - b. The Petitioner's contractor shall provide temporary security chain-link or similar type fencing around the portions of the project site, which require excavation or otherwise pose a danger to public safety.
 - c. The Petitioner's contractor shall designate a person who shall be responsible for the construction process. That person shall be identified to the Police Department, the Department of Public Works, the Building Inspector and the abutters and shall be contacted if problems arise during the construction process. The designee shall also be responsible for assuring that truck traffic and the delivery of construction material does not interfere with or endanger traffic flow on First Avenue or surrounding streets.
- 3.7 No building permit shall be issued for the proposed project in pursuance of the Special Permit and Site Plan Approval until:
 - a. The final plans shall be in conformity with those approved by the Board, and a statement certifying such approval shall have been filed by this Board with the Building Commissioner.
 - b. A construction management and staging plan shall have been submitted to the Police Chief and Building Commissioner for their review and approval.
 - c. The Petitioner shall have recorded with the Norfolk County Registry of Deeds a certified copy of this Decision granting this Special Permit and Site Plan Approval with the appropriate reference to the book and page number of the recording of the Petitioner's title deed or notice endorsed thereon.
- 3.8 The fuel cell installation that is subject to the Special Permits and Site Plan Approval shall not be activated until:

- a. An as-built plan, supplied by the engineer of record showing that the fuel cell was installed according to the approved documents, shall be submitted to the Board and Department of Public Works. The as-built plan shall show the building, and all final construction details of the fuel cell installation improvement on-site, in its true relationship to the lot lines. In addition to the engineer of record, said plan shall be certified by a Massachusetts Registered Land Surveyor.
 - b. There shall be filed with the Building Commissioner and Board a statement by the Department of Public Works certifying that the fuel cell has been constructed to the standards of the Town of Needham Department of Public Works and in accordance with the approved Plan.
 - c. There shall be filed with the Board and Building Commissioner a Final Construction Control Document signed by a registered structural engineer upon completion of construction.
 - d. There shall be filed with the Board and Building Commissioner an as-built Landscaping Plan showing the final location, number and type of plant material, final landscape features for the project. Said plan shall include a certification that such improvements were completed according to the approved documents.
 - e. There shall be filed by the Petitioner a supplemental letter from the Petitioner's acoustical engineer (see Exhibit 7) confirming that the fuel cell as installed and tested meets all applicable Federal, state and local regulations, including those addressing sound attenuation to protect the adjoining adjacent properties.
- 3.9 The applicant, by accepting this permit decision, warrants that the applicant has included all relevant documentation, reports, and information available to the applicant in the application submitted, and that this information is true and valid to the best of the applicant's knowledge.
- 3.10 Violation of any of the conditions of this Decision shall be grounds for revocation of any building permit or certificate of occupancy granted hereunder as follows: In the case of violation of any conditions of this Decision, the Town will notify the Petitioner of such violation and give the Petitioner reasonable time, not to exceed thirty (30) days, to cure the violation. If, at the end of said thirty (30) day period, the Petitioner has not cured the violation, or in the case of violations requiring more than thirty (30) days to cure, has not commenced the cure and prosecuted the cure continuously, the permit granting authority may, after notice to the Petitioner, conduct a hearing in order to determine whether the failure to abide by the conditions contained herein should result in a recommendation to the Building Inspector to revoke any building permit or certificate of occupancy granted hereunder. This provision is not intended to limit or curtail the Town's other remedies to enforce compliance with the conditions of this Decision including, without limitation, by an action for injunctive relief before any court of competent jurisdiction. The Petitioner agrees to reimburse the Town for its reasonable costs in connection with the enforcement of the conditions of this Decision if the Town prevails in such enforcement action.

LIMITATIONS

- 4.0 The authority granted to the Petitioner by this permit is limited as follows:
- 4.1 This permit applies only to the site and off-site improvements, which are the subject of this petition. All construction to be conducted on-site and off-site shall be conducted in accordance

with the terms of this permit and shall be limited to the improvements on the Plan, as modified by this Decision.

- 4.2 There shall be no further development of this site without further site plan approval as required under Section 7.4 of the By-Law. The Board, in accordance with M.G.L., Ch. 40A, S.9 and said Section 7.4, hereby retains jurisdiction to (after hearing) modify and/or amend the conditions to, or otherwise modify, amend or supplement, this Decision and to take other action necessary to determine and ensure compliance with the Decision.
- 4.3 This Decision applies only to the requested Special Permits and Site Plan Review. Other permits or approvals required by the By-Law, other governmental boards, agencies or bodies having jurisdiction shall not be assumed or implied by this Decision.
- 4.4 No approval of any indicated signs or advertising devices is implied by this Decision.
- 4.5 The foregoing restrictions are stated for the purpose of emphasizing their importance but are not intended to be all-inclusive or to negate the remainder of the By-Law.
- 4.6 This Site Plan Special Permit Amendment shall lapse on November 4, 2022, if substantial use thereof has not sooner commenced, except for good cause. Any requests for an extension of the time limits set forth herein must be in writing to the Board at least 30 days prior to November 4, 2022. The Board herein reserves its rights and powers to grant or deny such extension without a public hearing. The Board, however, shall not grant an extension as herein provided unless it finds that the use of the property in question or the construction of the site has not begun, except for good cause.

This approval shall be recorded in the Norfolk District Registry of Deeds. This Special Permit Amendment shall not take effect until a copy of this decision bearing the certification of the Town Clerk that twenty (20) days have elapsed after the decision has been filed in the Town Clerk's office or that if such appeal has been filed, that it has been dismissed or denied is recorded with Norfolk District Registry Deeds and until the Petitioner has delivered a certified copy of the recorded document to the Board.

The provisions of this Special Permit Amendment shall be binding upon every owner or owner of the lots and the executors, administrators, heirs, successors and assigns of such owners, and the obligations and restrictions herein set forth shall run with the land, as shown on the Plan, in full force and effect for the benefit of and enforceable by the Town of Needham.

Any person aggrieved by this decision may appeal pursuant to the General Laws, Chapter 40A, Section 17 within twenty (20) days after filing of this decision with the Needham Town Clerk.

Witness our hands this 4th day of November, 2020.

NEEDHAM PLANNING BOARD

Jeanne S. McKnight, Chairperson

Paul S. Alpert

Martin Jacobs

Adam Block

Ted Owens

COMMONWEALTH OF MASSACHUSETTS

Norfolk, ss _____, 2020

On this ____ day of _____, 2020, before me, the undersigned notary public, personally appeared _____, one of the members of the Planning Board of the Town of Needham, Massachusetts, proved to me through satisfactory evidence of identification, which was _____, to be the person whose name is signed on the preceding or attached document, and acknowledged the foregoing to be the free act and deed of said Board before me.

Notary Public

My Commission Expires: _____

TO WHOM IT MAY CONCERN: This is to certify that the 20-day appeal period on the Amendment to Decision of the project proposed by TripAdvisor LLC, 400 First Avenue, Needham, MA, for property located at the 400 First Avenue, Needham, Massachusetts, has passed,

____ and there have been no appeals filed in the Office of the Town Clerk or
____ there has been an appeal filed.

Date

Theodora K. Eaton, Town Clerk

Copy sent to:

Petitioner-Certified Mail # _____
Design Review Board
Building Inspector
Conservation Commission

Select Board
Engineering
Fire Department
Police Department

Board of Health
Town Clerk
Director, PWD
Parties in Interest

George Giunta, Jr.
ATTORNEY AT LAW*
281 Chestnut Street
Needham, MASSACHUSETTS 02492
*Also admitted in Maryland

TELEPHONE (781) 449-4520

FAX (781) 449-8475

October 29, 2020

Lee Newman
Planning Director
Town of Needham
1471 Highland Avenue
Needham, MA 02492

VIA EMAIL: LNewman@needhamma.gov

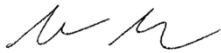
Re: Definitive Subdivision Application
Elisabeth Schmidt-Scheuber
390 Grove Street

Dear Lee,

Pursuant to our conversation yesterday, please accept this letter as a request to further continue the hearing on the Definitive Subdivision Application for 390 Grove Street until the second meeting of the Board in December, currently scheduled for December 15, 2020. It being understood that any revised plans shall be submitted no later than November 25, 2020, to provide ample time for review.

Furthermore, please also extend the applicable action deadline until January 31, 2021.

Sincerely,



George Giunta, Jr

To: Town Manager and Select Board Members
From: Dan Matthews
Re: 40B Guidelines – Specific Initial Review Items
September 15, 2020

This memo follows on the draft update for the town's 2012 Chapter 40B Guidelines submitted today.

Its purpose is to specifically note some initial areas within the Guidelines which require further attention from the Select Board, ZBA, staff, and other stakeholders.

1. Most importantly, now that the town is over ten percent SHI, the legal requirements and project path for 40B development are different than when the town was below 10% SHI. The draft includes summary language provided by counsel about this difference (see fifth para of section I-A). But it would seem that the guidelines need more detail and complete plain-language explanations of the "over ten percent" process for Needham 40B's going forward.

2. Stakeholders should review the ZBA Process description (section IV-C) to assure it conforms with current practice and procedure, and changes, if any, related to the "over 10%" process.

3. The 2012 list of areas preferred by the Town for 40B development (see: Sec III-G) should be reviewed and updated, and a new map showing the preference areas included as an exhibit.

4. Similarly, the draft language (Section III-I) regarding density goals should be reviewed.

Town of Needham Chapter 40B Guidelines

Approved By

[Recommended approving authorities for these guidelines: Select Board, Planning Board, Zoning Board of Appeals, School Committee, Needham Housing Authority, Council on Aging, Conservation Commission, Design Review Board]

_____ **2020**

Town of Needham Chapter 40B Guidelines

I. INTRODUCTION

These Guidelines provide information about the Town of Needham's policies, procedures, and requirements for comprehensive permits under G.L. c. 40B, §§ 20-23 ("**Chapter 40B**"). In addition, the Guidelines are intended to advise the Zoning Board of Appeals (**ZBA**) and other Town boards and departments with a role in the development review process. Applicants planning to apply for a Chapter 40B comprehensive permit in Needham should review these Guidelines and meet with the Director of Planning and Community Development as early as possible *before* submitting a Project Eligibility (Site Approval) application to a housing subsidy program.

Note: the Town's guidelines are not a substitute for the statute, the Department of Housing and Community Development's (**DHCD**) Chapter 40B regulations (760 CMR 56.00), or the requirements and policies of affordable housing subsidy programs. It is the applicant's responsibility to comply with these and other applicable state requirements.

A. CHAPTER 40B

Chapter 40B was enacted in 1969 to encourage the construction of low- and moderate-income housing in Massachusetts. The principal vehicle within Chapter 40B to accomplish that goal is authority for the municipal Zoning Board of Appeal (ZBA) to grant comprehensive permits for housing developments that meet the requirements of the statute and qualify for funding from a state or federal housing subsidy program. The 40B process simplifies the local permitting process, including bypassing many otherwise applicable zoning and regulatory controls which might delay or prevent development.

40B has become a central element of Massachusetts' affordable housing policy. In these guidelines "Affordable Housing," refers, in summary, to housing units meeting all applicable requirements for inclusion in the State's Chapter 40B Subsidized Housing Inventory (SHI). When other meanings for the terms "affordable" and "affordable housing" are intended, such as moderately priced non-SHI housing available on the open market, that meaning should clear from the context.

A mixed-income 40B development is considered eligible for a comprehensive permit if at least twenty-five percent of the units in it are affordable for households at 80% of the Area

Median Income (AMI) as determined by the federal Department of Housing and Urban Development (HUD). Developments may also be eligible for a comprehensive permit if at least twenty percent of the apartments are affordable to households at or below 50% AMI.

When less than ten percent of a community's housing is affordable as defined by Chapter 40B, the statute effectively supersedes many local regulations that would make it difficult for developers to build affordable housing. In such communities, affordable housing developers may file a single comprehensive permit application with the ZBA in lieu of separate applications to other local boards. The ZBA may grant, grant with conditions, or deny the comprehensive permit. If the ZBA denies an application or grants a comprehensive permit with conditions that make the development uneconomic, the applicant may appeal to the State's Housing Appeals Committee (**HAC**), which has authority to overrule the ZBA. HAC decisions may be appealed to Superior Court.

Needham's affordable housing percentage for purposes of Chapter 40B is over the ten percent minimum goal. The Town therefore has a greater degree of control in the 40B process. In the event that a developer files a comprehensive permit application, the ZBA may, within fifteen days after opening the public hearing, notify the developer and the Massachusetts Department of Housing and Community Development (DHCD) that the application may be denied because the Town has achieved the ten percent statutory minimum. The ZBA may then deny the comprehensive permit application on this basis alone. Alternatively, the ZBA may elect to consider the application and proceed with the public hearing, but it is no longer legally obligated to do so.

B. HOUSING CONDITIONS IN NEEDHAM

Needham is a developed suburb of Boston. Its 2018 population was 31,329 according to Town Clerk's census. The current population reflects an increase from the 2010 US census count of 28,886, in part as a result of new multifamily housing developed consonant to intentional town policies. Needham's Census 2010 housing stock included 11,047 year round units, of which approximately 17% were apartments, and the majority were owner occupied single family homes. At least some additional population increase is expected in the 2020 US Census.

Prior to 2010, Needham experienced several decades of relative population stability. Even during those years, however, there were significant demographic changes, both in terms of age and economic distribution.

There was a dramatic decline in school enrollment following the end of the Baby Boom, and more recently a recovery in school enrollments, and a significant increase in the number of senior

residents. Benefiting from a favorable location, excellent schools, a strong tax base, and other advantages, Needham has achieved steady economic improvement in recent decades, even by comparison with the success of metropolitan area communities generally. The town is seen as a desirable place to live, with high relative household incomes and property values.

A disadvantage of that success is that Needham has become a difficult place for low and moderate income households to find housing at a market affordable price. Most buildable lots are developed, and land values have increased significantly. Smaller single family houses have been replaced with larger, more expensive new construction, and that process is ongoing. Conversion of two-family home to singles or condominiums has reduced that form of rental option. Many of the newer apartments are characterized as luxury units with rents at the high end of the area market.

According to American Community Survey (**ACS**) data (2012-2016), over one-third of all renters in Needham spend more on housing costs than the benchmark standard of 30 percent of monthly gross income.

With limited vacant, developable land and high buildable lot values, it is unlikely that market economics alone will provide material numbers of new units priced for low and moderate income households. There is a role for the town government and policy makers to improve economic diversity and housing options for low and modern income households in the town.

A goal of the Select Board is for Needham to continue to have over ten percent its housing units eligible for and counted on the Chapter 40B Subsidized Housing Inventory (SHI), consistent with the best interests of the Town. Purposes of this policy include advancing economic diversity of community and protecting the Town's control of its own zoning. Needham's 2019 DHCD (Department of Housing and Community Development) Inventory included 1,394 SHI countable units, or 12.62 percent of the 11,047 total.

The majority of Needham's SHI units are in apartment developments built pursuant to Chapter 40B. Within those developments, approximately one-quarter are rent-restricted, means-tested units; the remainder within those developments are market rentals qualified as SHI countable under state regulations.

Needham's SHI inventory also includes somewhat over 300 low income units owned and managed by the Needham Housing Authority and approximately 50 owner-occupied condominiums built pursuant to Chapter 40B.

A substantial portion of Needham's SHI countable units are market rental apartments in 40B

developments. Availability of those units is an important option for moderate income households, and those units effectively subsidize the rent-restricted units in their developments under the 40B system. But with recent non-restricted unit rents (September, 2019) in the range of \$3,500 monthly for a two-bedroom unit (equal to 37% of the then Boston AMI of \$113,300 for a family of four), it is clear that adding additional units to the town's housing inventory at a lower price point will improve options for lower income households.

Additional considered development pursuant to Chapter 40B may contribute to that effort.

II. POLICY STATEMENT

It is a goal of the Select Board that at least ten percent of Needham's housing units continue to be eligible for and counted in the State Chapter 40B Subsidized Housing Inventory. This policy is intended to protect the Town's control of its own zoning and contribute to the economic diversity of the community. It is the policy of the Select Board that additional affordable housing options be considered consistent with the best interests of the Town.

All 40B applications will be addressed individually according to applicable laws and regulations, the facts and circumstances of the individual case, input from public participation, and the sound exercise of discretion by the Town and other public agencies. Developers and other affected parties are all encouraged to consider the factors set forth in these guidelines in planning, review, development, and management of 40B properties.

III. REVIEW CONSIDERATIONS

A. PERMANENT AFFORDABILITY

Affordable housing in Needham should be permanently affordable, i.e., the affordability restriction should not lapse with the passage of time. Except in unique circumstances, all parties should expect this principle to apply to all Chapter 40B development in Needham.

B. PREFERENCE FOR RENTAL DEVELOPMENTS

The Town prefers rental over homeownership affordable developments. Under current state policies, the market units in mixed-income 40B rental developments count towards the Town's Subsidized Housing Inventory, and the Town believes that rental housing provides greater affordability and flexibility than ownership units even when not specifically regulated as means-tested housing. Nevertheless, the town will consider projects consistent with these guidelines which provide for moderate income condominium ownership

C. PROPERTY MANAGEMENT AND COMPLIANCE WITH AFFORDABILITY RESTRICTION

Rental housing developers must provide qualified experienced property management personnel, on-site in the case of large projects. In addition, developers must demonstrate adequate capacity to comply with the project's affordable housing restriction, e.g., the income eligibility of tenants and monthly rent and utility charges consistent with limits imposed by the applicable housing subsidy program.

D. PERCENTAGE OF AFFORDABILITY

At least 25 percent and not more than 50 percent of the units in a comprehensive permit should be affordable. However, the Town will consider comprehensive permit rental development projects with 20 percent of the units affordable if those are affordable to low-income (at or below 50 percent of AMI) tenants.

E. INCOME TARGETS

Rental developments may utilize a continuum of affordability, such as units at 30 percent, 50 percent, 80 percent, and 110 percent of Area Median Income (AMI).

F. LOCATION: GENERAL

In general, the Town prefers that affordable housing be located near public transportation and retail services. Location near elementary schools is positive for family units, workforce housing in Needham Crossing, and units near the Center at the Heights for seniors. No section of Needham is precluded from affordable housing development.

G. LOCATION: SPECIFIC AREAS

The Town encourages affordable housing development in:

- Needham Crossing in the Highland Commercial – 128 District, Mixed Use – 128 District, and adjacent Industrial District, located in the area North of Kendrick Street bounded by Kendrick Street, the Charles River, Central Avenue, and the Route 128 right of way.
- Areas near Avery Square, shown in the Priority Areas Map, specifically the Hillside Avenue Business District, Avery Square Business District and the adjacent Industrial District, and
- the Center Business District and Chestnut Street Business District, as shown in the Priority Areas Map.

H. DESIGN

The Town recognizes that many factors determine appropriate design. The following points are general guidance for developers in designing projects. The Town understands that each

project is different and that some of the following points may not apply in particular cases.

- **Make every reasonable effort to comply with existing regulations.** Minimize the number and extent of waivers required for height, setback, or other requirements. Under Chapter 40B, waivers of local rules and regulations are not “automatic.” Rather, the Town’s responsibility is to consider waiving requirements that would make a project uneconomic to build. It is the applicant’s burden to demonstrate the need for each requested waiver.
- **Orient buildings toward the street wherever possible.** A portion of the project should continue the neighborhood street front. Orientation for other considerations such as solar access should also consider general site orientation to the street. Developers should choose design solutions that serve the interests of the site, sustainability, and preservation of the character of the neighborhood.
- **Pay attention to design elements found in the neighborhood, and make use of them where possible to help developments fit with the neighborhood.** The design should be as consistent as possible with the existing building frontage in scale and character. Use existing topography where possible to minimize the impacts of the massing of the new construction on adjacent properties.
- **Locate off-street parking to the side and rear of buildings.** This will help to ensure that buildings and landscaping, not parking, define views from the road.

I. DENSITY

In single residence districts, the Town generally seeks to limit affordable housing development to a density of eight to ten units per acre. In other zones, greater densities may be considered on a case by case basis, including instances such as apartment housing in Needham Crossing, mixed-use development in commercial zones proximate to public transportation, and special uses such as elder services and renovation of preexisting buildings.

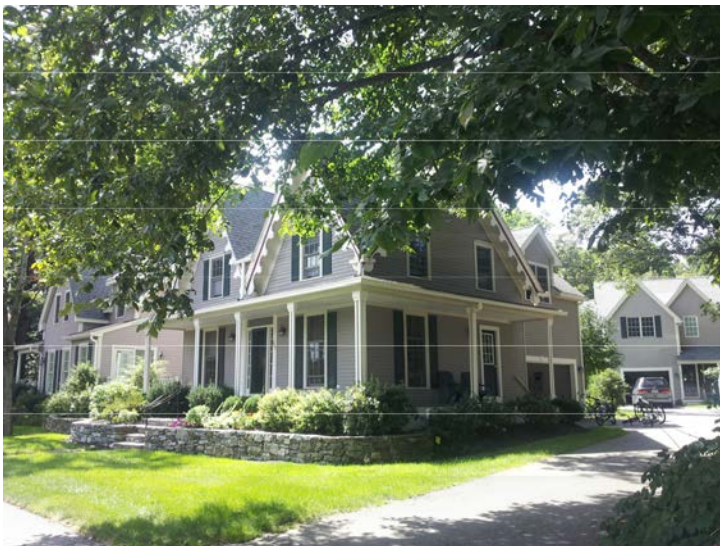
Density of Permitted Chapter 40B Developments in Needham (Examples)

Project name	Address	Zoning	Total Units	Total Acres	Units/Acre
Rental Projects					
The Kendrick	275 Second Avenue	NE Bus Cntr	390	5.13	76
Modera Needham	700 Greendale Avenue	SRA	136	6.02	16.7
Needham Place	50 Dedham Avenue	CntrBus/Overlay	10 + commercial	.23	40.0
One Wingate Way	235 Gould Street	Elder Services	52	3.42	41.8

The Residences of Wingate		Elder Services	91 Total: 12 independent living, 42 assisted living, 37 memory care		
Charles River Landing	300 Second Avenue	NE Bus Cntr	350	7.94	44.1
Nehoiden Glen	1035, 45 & 55 Central	SRB	61	4.6	13.3
Condominium					
Greendale Village	900 Greendale Avenue	SRA	20	2.55	7.8
Webster Street Green	30, 34 and 38 Webster Street	SRB	10	1.02	10.0
Suites of Needham	797 Highland	SRB	8	0.61	13.1
Craftsman Village	21 High Street	SRB	6	0.61	9.8
High Cliff Estates	199 St. Mary Street	SRB	12	1.46	8.2
Browne - Whitney Place	207-213 Garden St.	SRB	6	0.62	9.7
Junction Place	32 Junction Street	ChsntBus/Overlay	5	0.26	19.2

J. HISTORIC PRESERVATION

Preserve historically significant buildings and features. Buildings listed in the State Register of Historic Places or the Massachusetts Cultural Resources Inventory System (**MACRIS**) are presumed to be significant, but other buildings may be significant as well. Developers should consult with the Needham Historical Commission if their site includes an existing older building *before* submitting a Project Eligibility application to MassHousing or another Subsidizing Agency.



K. MIXED USE/VILLAGE DEVELOPMENT

Developers are encouraged to:

- Provide housing that is oriented to encourage and take advantage of public transportation.
- Reuse and redevelop existing buildings, e.g., older commercial, industrial, or institutional facilities, and
- Provide housing in mixed-use buildings, provided the location is zoned for compatible business uses.

L. ENVIRONMENTAL CONSIDERATIONS

- Use **environmentally responsible design**, whether Leadership in Energy and Environmental Design (LEED) certification or other generally accepted standards, taking steps to minimize adverse impacts on natural resources, conserve water and energy, use native plants, and use green building construction materials.
- **Incorporate landscaping treatments** that will help to blend the project with surrounding area, including retaining mature trees and existing vegetation where possible.
- **Take active steps to protect nearby wetlands and other open space**, including resource areas covered by the local wetlands bylaw even if not required by the Massachusetts Wetlands Protection Act.
- **Minimize impervious surfaces.**

M. NEIGHBORHOOD SUPPORT

Developers are encouraged to work with residents of affected neighborhoods. It is a favorable consideration for developers to address reasonable neighborhood concerns.

N. LOCAL PREFERENCE

To the maximum extent allowed by law, the Town wants local preference observed in tenant and buyer selection, including affordable housing lotteries. Local preference means:

- At least one member of the household currently lives in Needham;
- At least one member of the household works for the Town of Needham, or for a business or non-profit organization located in Needham; or
- The household includes at least one student attending the Needham Public Schools through the METCO Program.

State policies or other requirements may limit or preclude local preference for a specific development. However, the Town expects developers to advocate and make reasonable efforts

to secure applicability of local preference for their projects.

O. OTHER PUBLIC BENEFITS

Provide other public benefits in addition to affordable housing, e.g., 1) pass-through easements to adjacent public properties and open space; 2) streetscape improvements; or 3) pedestrian linkages.

IV. PROCEDURES

A. PRE-APPLICATION PHASE

When planning to apply for a comprehensive permit, an applicant should meet with Town staff and relevant Town boards at the earliest possible point in the planning process. These discussions should occur **before filing a Project Eligibility application** with MassHousing or another subsidizing agency. Many problems that occur during the permitting process can be reduced or avoided altogether if applicants take the time to consult with local officials and accommodate reasonable requests while a project is still at the conceptual stage. Furthermore, early consultation can help make local review of Project Eligibility applications much smoother.

Key Steps and considerations include:

- **Meet with the Director of Planning and Community Development** to discuss plans for the site. Ask about the site's history, the neighborhood, other projects or changes in planning or development nearby, and issues that might cause concern for Town boards.
- **Meet with the Town's Development Review Team (DRT)**, and be open to input and guidance from Town staff. DRT members have technical information that the applicant will need in order to plan the site and prepare for the meetings with Town boards. In addition to the Director of Planning and Community Development, the DRT includes the Assistant Town Manager/Operations, Building Commissioner, Director of Conservation, Director of Economic Development, Director of Public Works, Town Engineer, Highway Superintendent, Water and Sewer Superintendent, Chief of Police, Fire Chief, and Director of Public Health. A meeting with the DRT is an efficient way to obtain feedback about many aspects of the project without having to attend individual appointments with department heads.
- **Have a preliminary meeting with the Design Review Board (DRB)**. The degree to which

proposed buildings fit with surrounding development will weigh heavily in how a comprehensive permit application is received in Needham. The DRB can help applicants explore possibilities for building design, landscaping treatments, exterior lighting, and other elements, depending on the site and the types of housing the applicant intends to construct.

- **Have a preliminary meeting with the Conservation Commission** if the project will require approval under the state Wetlands Protection Act, G.L. c. 131, s. 40 and/or any waivers under the Needham Wetlands Bylaw. Chapter 40B developments that affect wetland resource areas usually require an Order of Conditions under G.L. c. 131, s. 40, but the local wetlands bylaw, like other local regulations, falls under the purview of the ZBA. It is in the applicant's interest to comply with the local wetlands bylaw because doing so may reduce the number of waivers needed for the project. Applicants should not assume the ZBA will grant local wetlands bylaw waivers simply because the applicant asks for them.
- **Meet with the Needham Historical Commission** if the project involves substantial alterations to or demolition of a historically significant building. (See Section III, Historic Preservation)
- The Town's elected and appointed policy making committees, including the Select Board, Planning Board, DRB, the Conservation Commission, Historical Commission, and others are governmental bodies under the State Open Meeting Law, and applicants should understand that meetings held with such committees are subject to that statute.
- The Town cannot require applicants to discuss the project with neighbors, but it is to the developer's advantage to do so as soon as possible - including before applying for a Project Eligibility letter.
- Pre-application consultations are not to create binding decisions. The purpose of the meetings is to give the applicant a chance to present the proposal for the property and to obtain information from the Town, and to give the Town a chance to learn about the proposed plans. If the ZBA is represented at any of these meetings, the ZBA member who participates will speak only as an individual, not in an official capacity as a ZBA member.

B. ELIGIBILITY TO APPLY FOR A COMPREHENSIVE PERMIT

The following prerequisites must be met by anyone applying for a Chapter 40B comprehensive permit:

- The applicant must have site control, such as a deed, purchase and sale agreement, or option to purchase;
- The applicant must be a public agency, non-profit organization, or limited dividend organization; and
- A housing subsidy program must have determined that the proposed project is fundable.

This third requirement means that developers have to obtain a pre-application eligibility letter from an agency that subsidizes low- or moderate-income housing. Doing so requires filing an application to a housing subsidy program. In most cases, MassHousing will be the housing subsidy agency that issues a **Project Eligibility** determination, but DHCD, the Massachusetts Housing Partnership (**MHP**), and MassDevelopment also subsidize low- or moderate-income housing and issue project eligibility letters. Developers wishing to build under a Local Initiative Program (**LIP**) comprehensive permit must obtain a project eligibility determination from DHCD, with approval of the Select Board.

Once an applicant submits a Project Eligibility application to MassHousing, the Select Board will be formally notified. MassHousing will request local comments within 30 days. In Needham, the Select Board seeks comments from Town departments and other Town boards, and compiles all comments received into a single submission to MassHousing.

In some instances, the Select Board may convene a meeting with representatives of other Town departments and committees in order to facilitate a conversation about the proposed development. Applicants will be afforded an opportunity to be heard, and may be invited to make a presentation and respond to questions.

C. APPLICATION, REVIEW, AND DECISION PROCEDURES

This section of the Guidelines summarizes the key features of Needham's comprehensive permit process. In accordance with Chapter 40B, however, the ZBA has adopted **Comprehensive Permit Rules**, which applicants should review. If there is a conflict between these Guidelines and the ZBA's Rules, the latter will control. An application will not be deemed received until all the information required by the ZBA Rules is provided and the required fee is paid.

WHAT DOES "7/14/30/15/15/30/180/40/20" MEAN?

- Within **7 days** of the receipt of the comprehensive permit application, the ZBA must distribute copies of the application to all Town departments, boards, and committees with

a role in the review process. In Needham, this means the Planning Board, Design Review Board, Conservation Commission, Board of Health, Public Works Department, and Select Board. (This is why pre-application meetings may be helpful both to the applicant and the participating Town officials.)

- Within **14 days** of receipt of the comprehensive permit application, the public hearing must be advertised, with proper legal notice and proper notice to abutters. (Applicants will be responsible for the cost of publishing the legal notice and mailing the notice to abutters.)
- Within **30 days** of receipt of a complete comprehensive application, the ZBA must open the public hearing unless the applicant grants permission in writing to hold the hearing at a later date.
- Within **15 days** of opening the public hearing, the ZBA must determine whether it wants to deny an application on one or more of the grounds identified in DHCD's Chapter 40B regulations at 760 CMR 56.03(1), following procedures under 760 CMR 56.03(8). The ZBA must provide written notice to the applicant and to DHCD.
- Within **15 days** of receiving the ZBA's notice, the applicant must file a written response with DHCD if she/he wants to challenge the ZBA's assertion that it can deny the application. The applicant must provide a copy of that response to the ZBA.
- Within **30 days** of receiving the applicant's appeal, DHCD must issue a decision. DHCD's failure to issue a timely decision will result in a determination in favor of the ZBA.
- Unless the applicant provides written consent, the ZBA cannot extend the public hearing beyond **180 days** of the initial hearing date. The 180 day limit assumes that the applicant will make timely submissions of materials reasonably requested by the ZBA.
- The ZBA must render a decision - a denial, approval, or approval with conditions - within **40 days** of the closing of the public hearing, unless the applicant agrees in writing to an extension.
- If the ZBA denies the permit or approves the permit with unacceptable conditions or requirements, the applicant has the right to appeal to the Housing Appeals Committee within **20 days** after the written decision has been filed with the Town Clerk. Similarly, any person aggrieved by the ZBA's issuance of a comprehensive permit may appeal in court within **20 days** of the date that the decision is filed with the Town Clerk.

MANAGING THE PROCESS

- The ZBA requires enough information to understand the physical characteristics of the site, the health, safety, and welfare impacts of the project, and the impact on the neighborhood.

The ZBA's minimum application requirements are designed to provide this information at the outset. A **complete comprehensive permit application** will help to minimize delays in the permitting process.

- The ZBA strongly encourages that applicants meet with the neighbors in advance of the first public hearing to explain the proposed project and receive input that will make the project more acceptable to the neighbors.
- In addition to considering the contents of an application, the ZBA may conduct a **site visit** in order to understand the site and neighborhood conditions, the proposed site plan and building design, and the location of abutters who will be most affected by the proposed development.
- Depending on the issues involved with the site or the proposed development plan, the ZBA may hire qualified **peer review consultants** to assist with the review process. The applicant will be responsible for paying the reasonable cost of these services. Needham has adopted the provisions of G.L. c. 44, s. 53G, so the applicant will be asked to deposit funds in an escrow account that the ZBA can use to pay the peer review consultants.
 - The ZBA may ask the applicant to participate in **work sessions** in order to examine specific issues in a setting less formal than that of a public hearing. Work sessions are advisory; they do not constitute an extension of the public hearing. The sessions will be announced at the public hearing and posted as public meetings under the Open Meeting Law so that interested people can attend and observe. No substantive decisions can be made at work sessions, however. At the next public hearing, one of the attendees will provide the full ZBA with a report about matters discussed at the work sessions. The ZBA has the discretion to hire a third party mediator to facilitate work sessions, to be paid for by the Applicant, or through the use of a consultant with experience in Chapter 40B at no cost through the Massachusetts Housing Partnership program.
- In its discretion, the ZBA may defer to the Town Manager to assemble a **mitigation team** or committee to negotiate with the applicant for mitigation to address the impacts of the project on traffic, infrastructure, public facilities, or public services. At the conclusion of its work, the mitigation team will make recommendations to the ZBA for conditions to be incorporated in the comprehensive permit decision.
- If the applicant and the ZBA cannot reach agreement about project changes the ZBA has requested, the applicant will be asked to prove that the requested changes will make the project uneconomic. This means the applicant will need to submit a **development pro forma** for the ZBA's review, and the ZBA may decide to hire a peer review consultant to examine the pro forma and its assumptions.

THE ZBA'S DECISION

- The ZBA will close the public hearing when all relevant information has been received and all parties have had opportunity to present their issues. After closing the hearing, the ZBA will deliberate and reach a decision.
- The ZBA has three members and two associate members. One or more of the associate members may participate in the public hearing. The affirmative vote of two persons of a three person panel is required to render a decision. The panel to render a decision will normally be the three members of the ZBA. If any regular member has not attended all sessions of the public hearing or is otherwise unavailable, the Chairman will designate an associate member to serve on the panel to render a decision.
- The ZBA will review the waivers the applicant has requested in the application. The ZBA will normally grant waivers needed to allow an affordable housing development to go forward, assuming the project's impacts can be mitigated in a manner that protects the Town and surrounding neighborhood. However, applicants should not assume that all of the requested waivers will be granted. The applicant has the burden to demonstrate that the waivers are essential for constructing the project.

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Town of Needham Chapter 40B Guidelines

Approved By

[Recommended approving authorities for these guidelines: Select Board, Planning Board, Zoning Board of Appeals, School Committee, Needham Housing Authority, Council on Aging, Conservation Commission, Design Review Board]

_____ **2020**

Town of Needham Chapter 40B Guidelines

I. INTRODUCTION

These Guidelines provide information about the Town of Needham's policies, procedures, and requirements for comprehensive permits under G.L. c. 40B, §§ 20-23 ("**Chapter 40B**"). In addition, the Guidelines are intended to advise the Zoning Board of Appeals (**ZBA**) and other Town boards and departments with a role in the development review process. Applicants planning to apply for a Chapter 40B comprehensive permit in Needham should review these Guidelines and meet with the Director of Planning and Community Development as early as possible *before* submitting a Project Eligibility (Site Approval) application to a housing subsidy program.

Note: the Town's guidelines are not a substitute for the statute, the Department of Housing and Community Development's (**DHCD**) Chapter 40B regulations (760 CMR 56.00) and DHCD Guidelines, or the requirements and policies of affordable housing subsidy programs. It is the applicant's responsibility to comply with these and other applicable state requirements.

A. CHAPTER 40B

Chapter 40B was enacted in 1969 to encourage the construction of low- and moderate-income housing in Massachusetts. The principal vehicle within Chapter 40B to accomplish that goal is authority for the municipal Zoning Board of Appeal (ZBA) to grant comprehensive permits for housing developments that meet the requirements of the statute and qualify for funding from a state or federal housing subsidy program or technical assistance by DHCD under the Local Initiative Program (LIP). The 40B process simplifies the local permitting process, including bypassing many otherwise applicable zoning and regulatory controls which might delay or prevent development.

40B has become a central element of Massachusetts' affordable housing policy. In these guidelines "Affordable Housing," refers, in summary, to housing units meeting all applicable requirements for inclusion in the State's Chapter 40B Subsidized Housing Inventory (SHI). When other meanings for the terms "affordable" and "affordable housing" are intended, such as moderately priced non-SHI housing available on the open market, that meaning should clear from the context.

A mixed-income 40B development is considered eligible for a comprehensive permit if at least twenty-five percent of the units in it are affordable for households at or below 80% of the Area Median Income (AMI) (moderate income) as determined by the federal Department of Housing and Urban Development (HUD). Developments may be also be eligible for a comprehensive permit if at least twenty percent of the apartments are affordable to households at or below 50% AMI (low income). [Provide information on current 80% and 50% income limits for family of 4?]

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When less than ten percent of a community's housing is affordable as defined by Chapter 40B, the statute effectively supersedes many local regulations that would make it difficult for developers to build affordable housing. In such communities, affordable housing developers may file a single comprehensive permit application with the ZBA in lieu of separate applications to other local boards. The ZBA may grant, grant with conditions, or deny the comprehensive permit. If the ZBA denies an application or grants a comprehensive permit with conditions that make the development uneconomic, the applicant may appeal to the State's Housing Appeals Committee (HAC), which has authority to overrule the ZBA. HAC decisions may be appealed to Superior Court.

Needham's affordable housing percentage for purposes of Chapter 40B is over the ten percent minimum goal. The Town therefore has a greater degree of control in the 40B process. In the event that a developer files a comprehensive permit application, the ZBA may, within fifteen days after opening the public hearing, notify the developer and the Massachusetts Department of Housing and Community Development (DHCD) that the application may be denied because the Town has achieved the ten percent statutory minimum. The ZBA may then deny the comprehensive permit application on this basis alone and the applicant has no right of appeal to HAC.

Alternatively, the ZBA may elect to consider the application and ~~proceed submit jointly with the developer an application to DHCD for approval of the project under the Local Initiative Program; such application must be approved by the Town's Chief Executive Officer [Select Board? Town Manager? (note that under Charter TMGR is Town's CEO)]~~. DHCD's LIP staff review the application, conduct a site visit and evaluate the application. If the project as proposed is approved, DHCD will issue a site eligibility letter so that the developer may apply to the ZBA for a Comprehensive Permit. The ZBA would then proceed with the public hearing, but if the ZBA denies the Comprehensive Permit or issues the Permit with conditions that may make the development uneconomic, the developer has no right of appeal to HAC, with the public hearing, but it is no longer legally obligated to do so.

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B. HOUSING CONDITIONS IN NEEDHAM

Needham is a developed suburb of Boston. Its 2018 population was 31,329

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according to Town Clerk's census. The current population reflects an increase from the 2010 US census count of 28,886, in part as a result of new multifamily housing developed consonant ~~with~~ intentional town policies. Needham's Census 2010 housing stock included 11,047 year round units, of which approximately 17% were apartments, and the majority were owner occupied single family homes. At least some additional population increase is expected in the 2020 US Census.

Prior to 2010, Needham experienced several decades of relative population stability. Even during those years, however, there were significant demographic changes, both in terms of age and economic distribution.

There was a dramatic decline in school enrollment following the end of the Baby Boom, and more recently a recovery in school enrollments, and a significant increase in the number of senior residents. Benefiting from a favorable location, excellent schools, a strong tax base, and other advantages, Needham has achieved steady economic improvement in recent decades, even by comparison with the success of metropolitan area communities generally. The town is seen as a desirable place to live, with high relative household incomes and property values.

A disadvantage of that success is that Needham has become a difficult place for low and moderate income households to find housing at a market affordable price. Most buildable lots are developed, and land values have increased significantly. Smaller single family houses have been replaced with larger, more expensive new construction, and that process is ongoing. Conversion of two-family homes to ~~l~~singles or ~~– is this really happening?~~ two-unit condominiums, typically by demolition followed by reconstruction of two much larger units, has reduced that form of rental option. Many of the newer market-rental apartments are characterized as luxury units with rents at the high end of the area market.

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According to American Community Survey (ACS) data (2012-2016), over one-third of all renters in Needham spend more on housing costs than the benchmark standard of 30 percent of monthly gross income.

With limited vacant, developable land, ~~and~~ high buildable lot values, and a zoning by-law that requires at least 10,000 sq. ft. of lot area for a single-family home and has limited areas where multi-family or mixed-use housing is allowable, it is unlikely that market economics alone will provide material numbers of new units priced for low and moderate income households. There is a role for the town government and policy makers to improve economic diversity and housing options for low, ~~and~~ moderate and middle income households in the town.

A goal of the Select Board is for Needham to continue to have over ten percent its housing units

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eligible for and counted on the Chapter 40B Subsidized Housing Inventory (SHI), consistent with the best interests of the Town. Purposes of this policy include advancing economic diversity of the community and protecting the Town's control of its own zoning. Needham's 2019 DHCD (Department of Housing and Community Development) Inventory included 1,394 SHI countable units, or 12.62 percent of the 11,047 total number of housing units in the Town.

The majority of Needham's SHI units are in apartment developments built pursuant to Chapter 40B. Within those developments, approximately one-quarter are rent-restricted, means-tested units; the remainder within those developments are market rentals qualified as SHI countable under state regulations.

Needham's SHI inventory also includes somewhat over 300 low income units owned and managed by the Needham Housing Authority and approximately 50 owner-occupied condominiums units built pursuant to Chapter 40B and restricted for sale at a price affordable to moderate-income households in accordance with DHCD marketing rules.

A substantial portion of Needham's SHI countable units are market rental apartments in 40B developments. Availability of those units is an important option for middle~~moderate~~ income households, and those units effectively subsidize the rent-restricted units in their developments under the 40B system. But with recent non-restricted unit rents (September, 2019) in the range of \$3,500 monthly for a two-bedroom unit (equal to 37% of the then Boston AMI of \$113,300 for a family of four), it is clear that adding additional units to the town's affordable housing inventory at a lower price point will improve options for lower and moderate income households.

Additional considered development pursuant to Chapter 40B under the LIP process may contribute to that effort.

II. POLICY STATEMENT

It is a goal of the Select Board that at least ten percent of Needham's housing units continue to be eligible for and counted in the State Chapter 40B Subsidized Housing Inventory. This policy is intended to protect the Town's control of its own zoning and contribute to the economic diversity of the community. It is the policy of the Select Board that additional affordable housing options be considered consistent with the best interests of the Town.

All 40B applications will be addressed individually according to applicable laws and regulations, the facts and circumstances of the individual case, input from public participation, and the sound exercise of discretion by the Town and other public agencies what other

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public agencies – DHCD?]. Developers and other affected parties are all encouraged to consider the factors set forth in these guidelines in planning, review, development, and management of 40B properties.

III. REVIEW CONSIDERATIONS

A. PERMANENT AFFORDABILITY

Affordable housing in Needham ~~should~~must be permanently affordable, i.e., the affordability restriction ~~should~~must not lapse with the passage of time. Except in unique circumstances, all parties should expect this principle to apply to all Chapter 40B development in Needham.

B. ~~PREFERENCE FOR HOMEOWNERSHIP AND RENTAL DEVELOPMENTS WILL BE CONSIDERED~~

The Town has, up to now, ~~preferred~~ rental over homeownership affordable developments for two reasons. Under current state policies, the market units in mixed-income 40B rental developments count towards the Town's Subsidized Housing Inventory, and the Town believes that rental housing provides greater affordability and flexibility than ownership units even when not specifically regulated as means-tested housing. Now that the Town has met and exceeded its 10% SHI goal, however, Nevertheless, the town will give equal consideration to 40B projects, consistent with these guidelines which provide for moderate income condominium ownership. Since the sale price of affordable ownership units is allowed to increase to the same extent as incomes in the metropolitan area, ownership helps moderate-income households to build wealth with home equity while providing stability. Furthermore, market-rate condominium units may provide a resource for the Town's seniors who wish to downsize from single-family homes while benefitting from the hedge against inflation that ownership may provide.

C. PROPERTY MANAGEMENT AND COMPLIANCE WITH AFFORDABILITY RESTRICTION

Rental and condominium multi-family housing developers must provide qualified experienced property management personnel, on-site in the case of large projects. In addition, developers must demonstrate adequate capacity to comply with the project's affordable housing restriction, e.g., the income eligibility of tenants and condominium unit buyers and monthly rent and utility charges consistent with limits imposed by the applicable housing subsidy program, if any, or LIP.

D. PERCENTAGE OF AFFORDABILITY

At least 25 percent and not more than 50 percent of the units in a comprehensive permit development should be affordable. However, the Town will consider comprehensive permit

rental development projects with 20 percent of the units affordable if those are affordable to low-income (at or below 50 percent of AMI) tenants.

E. INCOME TARGETS

Rental developments ~~shall be encouraged that may~~ utilize a continuum of affordability, such as units at 30 percent, 50 percent, 80 percent, and 110 percent of ~~Area Median Income (AMI)~~.

F. LOCATION: GENERAL

In general, the Town prefers that affordable housing be located near public transportation and retail services. Location near elementary schools is positive for family units; ~~Needham Crossing is especially suitable for~~ workforce housing ~~in Needham Crossing~~, and units near the Center at the Heights for seniors. No section of Needham is precluded from affordable housing development.

G. LOCATION: SPECIFIC AREAS

The Town encourages affordable housing development in ~~the following areas as shown on the Priority Areas Map attached as Exhibit~~ to these Guidelines:

- ~~Needham Crossing, being the area North of Kendrick Street bounded by Kendrick Street, the Charles River, Central Avenue, and the Route 128 right of way, located~~ ~~Needham Crossing~~ in the ~~New England Business Center District,~~ Highland Commercial – 128 Zoning District, Mixed Use – 128 District, and adjacent Industrial District; ~~located in the area North of Kendrick Street bounded by Kendrick Street, the Charles River, Central Avenue, and the Route 128 right of way.~~

- Areas near Avery Square, ~~shown in the Priority Areas Map~~, specifically the Hillside Avenue Business District, Avery Square Business District and the adjacent Industrial District; and
- the Center Business District and Chestnut Street Business District, ~~as shown in the Priority Areas Map.~~

H. DESIGN

The Town recognizes that many factors determine appropriate design. The following points are general guidance for developers in designing projects. The Town understands that each project is different and that some of the following points may not apply in particular cases.

- Make every reasonable effort to comply with existing regulations. Minimize the number and extent of waivers required for height, setback, or other requirements. Under Chapter 40B, waivers of local rules and regulations are not “automatic.” Rather, the Town’s

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responsibility is to consider waiving requirements that would make a project uneconomic to build. It is the applicant's burden to demonstrate the need for each requested waiver.

- **Orient buildings toward the street wherever possible.** A portion of the project should continue the neighborhood street front. Orientation for other considerations such as solar access should also consider general site orientation to the street. Developers should choose design solutions that serve the interests of the site, sustainability, and preservation of the architectural character of the neighborhood.
- **Pay attention to design elements found in the neighborhood, and make use of them where possible to help developments fit with the neighborhood.** The design should be as consistent as possible with the existing building frontage in scale and character. Use existing topography where possible to minimize the impacts of the massing of the new construction on adjacent properties.
- **Locate off-street parking underground or to the side and rear of buildings.** This will help to ensure that buildings and landscaping, not parking, define views from the road.

I. DENSITY

In single residence districts, the Town generally seeks to limit affordable housing development to a density of ~~eight to~~ ten units per acre. In other zones, greater densities may be considered on a case by case basis, including instances such as ~~apartment-multi-family~~ housing in Needham Crossing, mixed-use development in commercial zones proximate to public transportation, and special uses such as ~~over-55 housing/elder services~~ and ~~reuse/~~renovation of ~~pre~~existing buildings.

Density of Permitted Chapter 40B Developments in Needham (Examples)

Project name	Address	Zoning	Total Units	Total Acres	Units/Acre
Rental Projects					
The Kendrick	275 Second Avenue	NE Bus Cntr	390	5.13	76
Moderia Needham	700 Greendale Avenue	SRA	136	6.02	16.7
Needham Place?	50 Dedham Avenue	CntrBus/Overlay	10 + commercial	.23	40.0
One Wingate Way?	235 Gould Street	Elder Services	52	3.42	41.8
The Residences of Wingate		Elder Services	91 Total: 12 independent living, 42 assisted living, 37 memory care		
Charles River Landing	300 Second Avenue	NE Bus Cntr	350	7.94	44.1
Nehoiden Glen	1035, 45 & 55 Central	SRB	61	4.6	13.3

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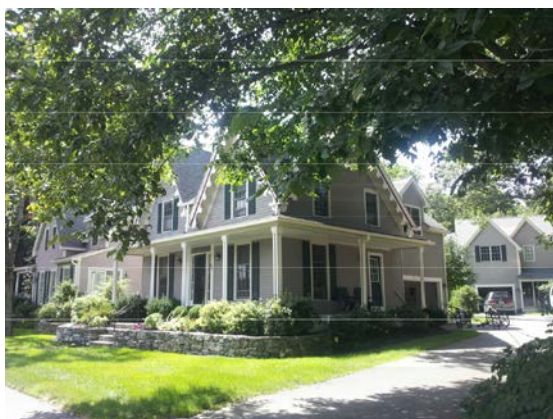
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Condominium					
Greendale Village	900 Greendale Avenue	SRA	20	2.55	7.8
Webster Street Green	30, 34 and 38 Webster Street	SRB	10	1.02	10.0
Suites of Needham	797 Highland	SRB	8	0.61	13.1
Craftsman Village	21 High Street	SRB	6	0.61	9.8
High Cliff Estates	199 St. Mary Street	SRB	12	1.46	8.2
Browne - Whitney Place	207-213 Garden St.	SRB	6	0.62	9.7
Junction Place	32 Junction Street	ChsntBus/Overlay	5	0.26	19.2

J. HISTORIC PRESERVATION

Preserve historically significant buildings and features. Buildings listed in the State Register of Historic Places or the Massachusetts Cultural Resources Inventory System (**MACRIS**) are presumed to be significant, but other buildings may be significant as well. Developers should consult with the Needham Historical Commission if their site includes an existing older building *before* submitting a Project Eligibility application to MassHousing or another Subsidizing Agency or to DHCD under LIP.



K. MIXED USE/VILLAGE DEVELOPMENT

Developers are encouraged to:

- Provide housing that is oriented to encourage and take advantage of public transportation.
- Reuse and redevelop existing buildings, e.g., older commercial, industrial, or institutional facilities, and
- Provide housing in mixed-use buildings, provided the location is zoned for compatible business uses for mixed use is appropriate for the site and is allowable as a 40B LIP?.

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L. ENVIRONMENTAL CONSIDERATIONS

- Use **environmentally responsible design**, whether Leadership in Energy and Environmental Design (**LEED**) certification or other generally accepted standards, taking steps to minimize adverse impacts on natural resources, conserve water and energy, use native plants, and use green building construction materials.
- **Incorporate landscaping treatments** that will help to blend the project with surrounding area, including retaining mature trees and existing vegetation where possible.
- **Take active steps to protect nearby wetlands and other open space**, including resource areas covered by the local wetlands bylaw even if not required by the Massachusetts Wetlands Protection Act.
- **Minimize impervious surfaces.**

M. NEIGHBORHOOD SUPPORT

Developers are encouraged to work with residents of affected neighborhoods. It is a favorable consideration for developers to address reasonable neighborhood concerns.

N. LOCAL PREFERENCE

To the maximum extent allowed by law, the Town wants local preference observed in tenant and buyer selection, including affordable housing lotteries. Local preference means:

- At least one member of the household currently lives in Needham;
- At least one member of the household works for the Town of Needham, or for a business or non-profit organization located in Needham; or
- The household includes at least one student attending the Needham Public Schools through the METCO Program.

State policies or other requirements may limit or preclude local preference for a specific development. However, the Town expects developers to advocate and make reasonable efforts to secure applicability of local preference for their projects.

O. OTHER PUBLIC BENEFITS

Provide other public benefits in addition to affordable housing, e.g., 1) pass-through easements to adjacent public properties and open space; 2) streetscape improvements; or 3) pedestrian linkages.

IV. PROCEDURES

A. PRE-APPLICATION PHASE

When planning to apply for a comprehensive permit, an applicant should meet with Town staff and relevant Town boards at the earliest possible point in the planning process. These discussions should occur before filing a Project Eligibility application with MassHousing or another subsidizing agency such as DHCD pursuant to the LIP process. Many problems that occur during the permitting process can be reduced or avoided altogether if applicants take the time to consult with local officials and accommodate reasonable requests while a project is still at the conceptual stage. Furthermore, early consultation can help make local review of Project Eligibility applications much smoother.

Key Steps and considerations include:

- **Meet with the Director of Planning and Community Development** to discuss plans for the site. Ask about the site's history, the neighborhood, other projects or changes in planning or development nearby, and issues that might cause concern for Town boards.
- **Meet with the Town's Development Review Team (DRT)**, and be open to input and guidance from Town staff. DRT members have technical information that the applicant will need in order to plan the site and prepare for the meetings with Town boards. In addition to the Director of Planning and Community Development, the DRT includes the Assistant Town Manager/Operations, Building Commissioner, Director of Conservation, Director of Economic Development, Director of Public Works, Town Engineer, Highway Superintendent, Water and Sewer Superintendent, **Tree Warden?**, Chief of Police, Fire Chief, and Director of Public Health. A meeting with the DRT is an efficient way to obtain feedback about many aspects of the project without having to attend individual appointments with department heads.
- **Have a preliminary meeting with the Design Review Board (DRB)**. The degree to which proposed buildings fit with surrounding development will weigh heavily in how a comprehensive permit application is received in Needham. The DRB can help applicants explore possibilities for building design, landscaping treatments, exterior lighting, and other elements, depending on the site and the types of housing the applicant intends to construct.
- **Have a preliminary meeting with the Conservation Commission** if the project will

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require approval under the state Wetlands Protection Act, G.L. c. 131, s. 40 and/or any waivers under the Needham Wetlands Bylaw. Chapter 40B developments that affect wetland resource areas usually require an Order of Conditions under G.L. c. 131, s. 40, but the local wetlands bylaw, like other local regulations, falls under the purview of the ZBA. It is in the applicant's interest to comply with the local wetlands bylaw because doing so may reduce the number of waivers needed for the project. Applicants should not assume the ZBA will grant local wetlands bylaw waivers simply because the applicant asks for them.

- **Meet with the Needham Historical Commission** if the project involves substantial alterations to or demolition of a historically significant building. (See Section III, Historic Preservation)
- The Town's elected and appointed policy making committees, including the Select Board, Planning Board, DRB, the Conservation Commission, Historical Commission, and others are governmental bodies under the State Open Meeting Law, and applicants should understand that meetings held with such committees are subject to that statute.
- The Town cannot require applicants to discuss the project with neighbors, but it is to the developer's advantage to do so as soon as possible - including before applying for a Project Eligibility letter.
- Pre-application consultations are not to create binding decisions. The purpose of the meetings is to give the applicant a chance to present the proposal for the property and to obtain information from the Town, and to give the Town a chance to learn about the proposed plans. If the ZBA is represented at any of these meetings, the ZBA member who participates will speak only as an individual, not in an official capacity as a ZBA member.

B. ELIGIBILITY TO APPLY FOR A COMPREHENSIVE PERMIT

The following prerequisites must be met by anyone applying for a Chapter 40B comprehensive permit:

- The applicant must have site control, such as a deed, purchase and sale agreement, or option to purchase;
- The applicant must be a public agency, non-profit organization, or limited dividend organization; and

- A housing subsidy program must have ~~issued a project eligibility determination determined that the proposed project is fundable.~~ Developers seeking a LIP comprehensive permit must obtain a project eligibility determination from DHCD, with approval of the Select Board ~~Town Manager?~~

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~~If the developer intends to use state or federal subsidies,~~ This third requirement means that developers have to obtain a pre-application eligibility letter from an agency that subsidizes low- or moderate-income housing. Doing so requires filing an application to a housing subsidy program. In most cases, MassHousing will be the housing subsidy agency that issues a Project Eligibility determination, but ~~[DHCD,?]—the Massachusetts Housing Partnership (MHP), and MassDevelopment also subsidize low- or moderate-income housing and issue project eligibility letters. Developers wishing to build under a Local Initiative Program (LIP) comprehensive permit must obtain a project eligibility determination from DHCD, with approval of the Select Board.~~

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Once an applicant submits a Project Eligibility application to ~~DHCD (under LIP) or~~ MassHousing, the Select Board will be formally notified. MassHousing ~~or DHCD~~ will request local comments within 30 days. In Needham, the Select Board seeks comments from Town departments and other Town boards, and compiles all comments received into a single submission to MassHousing ~~or DHCD~~.

In some instances, the Select Board may convene a meeting with representatives of other Town departments and committees in order to facilitate a conversation about the proposed development. Applicants will be afforded an opportunity to be heard, and may be invited to make a presentation and respond to questions.

C. APPLICATION, REVIEW, AND DECISION PROCEDURES

~~Since the focus of these Guidelines should be on the LIP process, this Section C should be revised to focus on the LIP Process, with a reference to an addendum that explains the process that would apply if Needham had not met its 40B goal.~~

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This section of the Guidelines summarizes the key features of Needham's comprehensive permit process. In accordance with Chapter 40B, however, the ZBA has adopted **Comprehensive Permit Rules**, which applicants should review. If there is a conflict between these Guidelines and the ZBA's Rules, the latter will control. An application will not be deemed received until all the information required by the ZBA Rules is provided and the required fee is paid.

WHAT DOES "7/14/30/15/15/30/180/40/20" MEAN?

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- Within **7 days** of the receipt of the comprehensive permit application, the ZBA must distribute copies of the application to all Town departments, boards, and committees with a role in the review process. In Needham, this means the Planning Board, Design Review Board, Conservation Commission, Board of Health, Public Works Department, and Select Board. (This is why pre-application meetings may be helpful both to the applicant and the participating Town officials.)
- Within **14 days** of receipt of the comprehensive permit application, the public hearing must be advertised, with proper legal notice and proper notice to abutters. (Applicants will be responsible for the cost of publishing the legal notice and mailing the notice to abutters.)
- Within **30 days** of receipt of a complete comprehensive application, the ZBA must open the public hearing unless the applicant grants permission in writing to hold the hearing at a later date.
- Within **15 days** of opening the public hearing, the ZBA must determine whether it wants to deny an application on one or more of the grounds identified in DHCD's Chapter 40B regulations at 760 CMR 56.03(1), following procedures under 760 CMR 56.03(8). The ZBA must provide written notice to the applicant and to DHCD.
- Within **15 days** of receiving the ZBA's notice, the applicant must file a written response with DHCD if she/he wants to challenge the ZBA's assertion that it can deny the application. The applicant must provide a copy of that response to the ZBA.
- Within **30 days** of receiving the applicant's appeal, DHCD must issue a decision. DHCD's failure to issue a timely decision will result in a determination in favor of the ZBA.
- Unless the applicant provides written consent, the ZBA cannot extend the public hearing beyond **180 days** of the initial hearing date. The 180 day limit assumes that the applicant will make timely submissions of materials reasonably requested by the ZBA.
- The ZBA must render a decision - a denial, approval, or approval with conditions - within **40 days** of the closing of the public hearing, unless the applicant agrees in writing to an extension.
- If the ZBA denies the permit or approves the permit with unacceptable conditions or requirements, the applicant has the right to appeal to the Housing Appeals Committee within **20 days** after the written decision has been filed with the Town Clerk. Similarly, any person aggrieved by the ZBA's issuance of a comprehensive permit may appeal in court within **20 days** of the date that the decision is filed with the Town Clerk.

MANAGING THE PROCESS

- The ZBA requires enough information to understand the physical characteristics of the site, the health, safety, and welfare impacts of the project, and the impact on the neighborhood. The ZBA's minimum application requirements are designed to provide this information at the outset. A **complete comprehensive permit application** will help to minimize delays in the permitting process.
- The ZBA strongly encourages that applicants meet with the neighbors in advance of the first public hearing to explain the proposed project and receive input that will make the project more acceptable to the neighbors.
- In addition to considering the contents of an application, the ZBA may conduct a **site visit** in order to understand the site and neighborhood conditions, the proposed site plan and building design, and the location of abutters who will be most affected by the proposed development.
- Depending on the issues involved with the site or the proposed development plan, the ZBA may hire qualified **peer review consultants** to assist with the review process. The applicant will be responsible for paying the reasonable cost of these services. Needham has adopted the provisions of G.L. c. 44, s. 53G, so the applicant will be asked to deposit funds in an escrow account that the ZBA can use to pay the peer review consultants.
 - The ZBA may ask the applicant to participate in **work sessions** in order to examine specific issues in a setting less formal than that of a public hearing. Work sessions are advisory; they do not constitute an extension of the public hearing. The sessions will be announced at the public hearing and posted as public meetings under the Open Meeting Law so that interested people can attend and observe. No substantive decisions can be made at work sessions, however. At the next public hearing, one of the attendees will provide the full ZBA with a report about matters discussed at the work sessions. The ZBA has the discretion to hire a third party mediator to facilitate work sessions, to be paid for by the Applicant, or through the use of a consultant with experience in Chapter 40B at no cost through the Massachusetts Housing Partnership program.
- In its discretion, the ZBA may defer to the Town Manager to assemble a **mitigation team** or committee to negotiate with the applicant for mitigation to address the impacts of the project on traffic, infrastructure, public facilities, or public services. At the conclusion of its work, the mitigation team will make recommendations to the ZBA for conditions to be incorporated in the comprehensive permit decision.
- If the applicant and the ZBA cannot reach agreement about project changes the ZBA has requested, the applicant will be asked to prove that the requested changes will make the project uneconomic. This means the applicant will need to submit a **development pro forma** for the ZBA's review, and the ZBA may decide to hire a peer review consultant to examine

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the pro forma and its assumptions.

THE ZBA'S DECISION

- The ZBA will close the public hearing when all relevant information has been received and all parties have had opportunity to present their issues. After closing the hearing, the ZBA will deliberate and reach a decision.
- The ZBA has three members and two associate members. One or more of the associate members may participate in the public hearing. The affirmative vote of two persons of a three person panel is required to render a decision. The panel to render a decision will normally be the three members of the ZBA. If any regular member has not attended all sessions of the public hearing or is otherwise unavailable, the Chairman will designate an associate member to serve on the panel to render a decision.
- The ZBA will review the waivers the applicant has requested in the application. The ZBA will normally grant waivers needed to allow an affordable housing development to go forward, assuming the project's impacts can be mitigated in a manner that protects the Town and surrounding neighborhood. However, applicants should not assume that all of the requested waivers will be granted. The applicant has the burden to demonstrate that the waivers are essential for constructing the project.

From: [Lee Newman](#)
To: [Karen Sunnarborg](#)
Cc: [Alexandra Clee](#)
Subject: RE: Housing Guidelines
Date: Tuesday, November 3, 2020 1:54:45 PM

Thanks Karen. Alex please include Karen's comments in the updated agenda package.

Lee

From: Karen Sunnarborg <ksunnarborg@needhamma.gov>
Sent: Tuesday, November 3, 2020 1:49 PM
To: Lee Newman <LNewman@needhamma.gov>
Subject: Housing Guidelines

I have the following comments related to the Housing Guidelines for consideration:

In regard to Section III.D., the Guidelines state that the Town will not approve a comp permit project when more than half the units are affordable. I believe that this would be a mistake as many non-profits develop projects where all of the units are affordable and extend this affordability to lower income thresholds through multiple layers of subsidy including Low Income Housing Tax Credits. For example, the Metro West CD proposal for 1180 Great Plain Avenue would have had all units affordable. Why remove the flexibility to create these types of projects? We know from cost burden data that so much of the need extends to very low income folks earning at or below 50% AMI.

The following Section E suggests a continuum of affordability, which is great, but might be reworded as encouraging projects with multiple income tiers instead of a continuum.

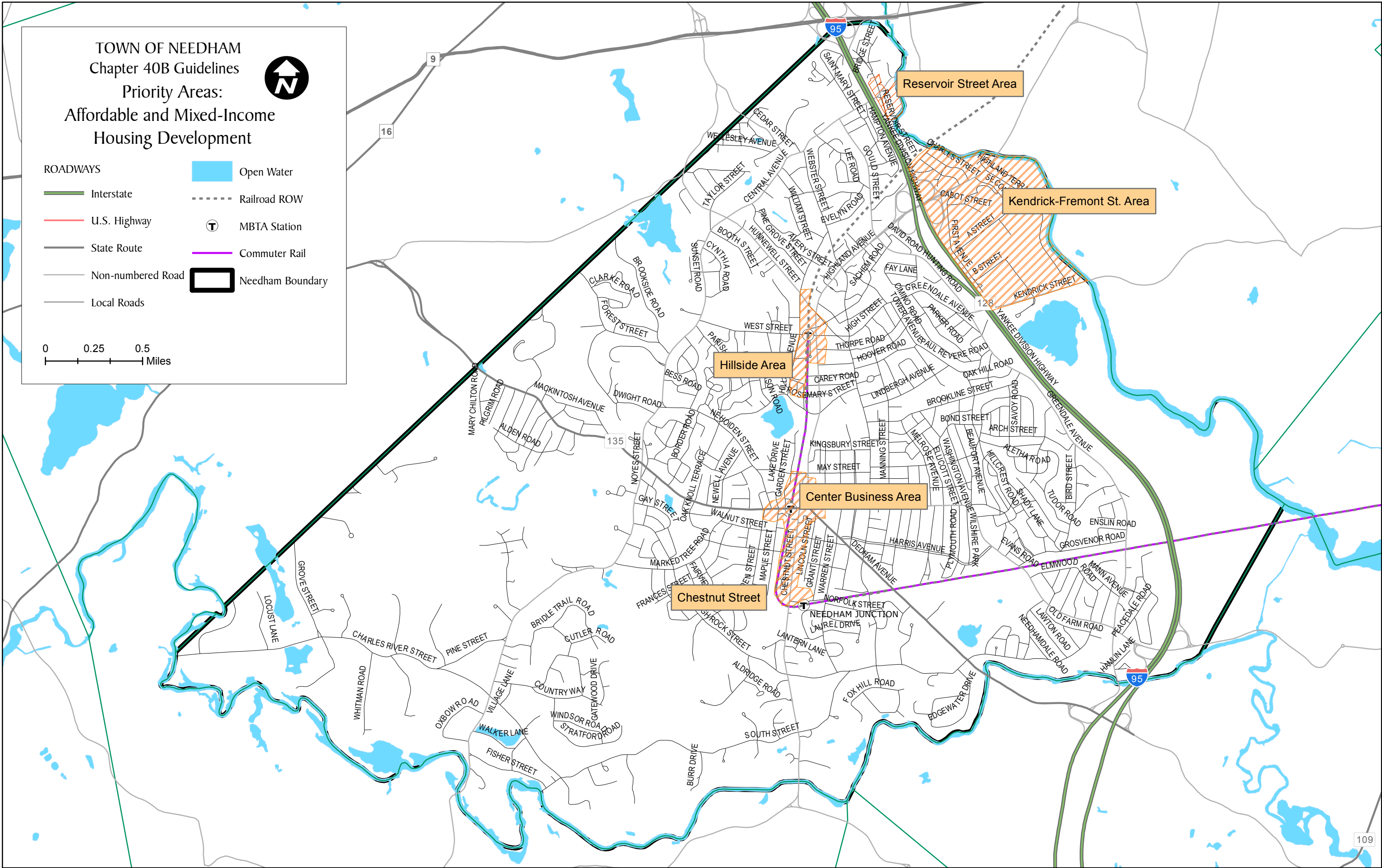
On page 12, Section IV.B. second to the last paragraph, MassHousing should be replaced by "a subsidizing agency", also replaced in the second sentence as "The subsidizing agency".

I think it would also be good to include a policy statement related to affordable housing resales. I think it might best fit into Section I.A. under Chapter 40B. I suggest something along the line of the following statement:

It is the Town's intention to maintain its inventory of Chapter 40B units and is requiring affordability restrictions in perpetuity for the greatest extent possible. Of particular concern is the resale of affordable homeownership units which need to be affirmatively marketed and meet all state requirements of the Local Initiative Program (LIP) or its successor program. This means that fair and equal access must be provided in the marketing and selection of purchasers.

There are numbers of typos but these are my thoughts on the substantive issues.

Karen



NEEDHAM PLANNING BOARD MINUTES

September 8, 2020

The Planning Board Virtual Meeting using Zoom was remotely called to order by Jeanne McKnight, Chairman, on Tuesday, September 8, 2020, at 7:15 p.m. with Messrs. Jacobs, Alpert, Owens and Block, as well as Planning Director, Ms. Newman and Assistant Planner, Ms. Clee.

Ms. McKnight took a roll call attendance of people expected to be on the agenda. She noted this is an open meeting that is being held remotely because of Governor Baker's executive order on March 12, 2020 due to the COVID Virus. All attendees are present by video conference. She reviewed the rules of conduct for zoom meetings. This meeting will include one continued public hearing and will ~~not~~ therefore allow public comment. She noted if any votes are taken at the meeting the vote will be conducted by roll call.

Special Town Meeting Zoning Articles: Assignment of Board presenter and review of process and timelines.

Ms. McKnight noted the spacing on page 3 for subsections (a), (b) and (c) should be corrected by adding spaces between each. Ms. Newman will make that edit when she gets the draft of the warrant. ~~She Ms. Newman~~ noted the Board needs to determine who will present the Articles and she wants to update the Board on procedures at Town Meeting. Mr. Block volunteered to present. All members agreed.

Ms. Newman noted the protocol is similar to the last time. The Planning Board's presentation as proponent will be recorded and uploaded to the website. Questions from Town Meeting members will be answered and posted on the website. Last time the Board made a recommendation ~~and werebut was~~ not the proponents. The town is setting up a space for the department to sit together so they can answer questions. A meeting will be posted for prior to Town Meeting. The same protocol as previous will be followed. The Board members discussed substance and the best ways to go about the presentation.

Upon a motion made by Mr. Jacobs, and seconded by Mr. Block, it was by a roll call vote of the five members present unanimously:

VOTED: to automatically continue the meeting to 9/22/20 at 7:15 p.m. with the same zoom ID number if any technical difficulties arise that keep the Planning Board from continuing this meeting tonight.

7:30 p.m. – 390 Grove Street Definitive Subdivision Amendment: Elisabeth Schmidt-Scheuber, 390 Grove Street, Needham, MA, Petitioner (Property located at 390 Grove Street, Needham, MA). Please note this is a renoted hearing that began on February 4, 2020 and is continued from the July 21, 2020 and August 11, 2020 Planning Board meetings and will be further continued.

Ms. Newman stated she has received a request from the applicant for a further continuance. The Board asked for additional information at the last meeting on the revised subdivision submittal. The applicant would like to do additional soil testing and that has not been done yet. The applicant is discussing with the abutter a solution to withdrawal of the application if successful. The request from the applicant is to continue ~~the hearing~~ to 11/4/20 and extend the action deadline to 12/31/20.

Upon a motion made by Mr. Jacobs, and seconded by Mr. Block, it was by a roll call vote of the five members present unanimously:

VOTED: to accept the request to continue the hearing to 12/4/20 and allow an extension of the Planning Board Minutes September 8, 2020

action deadline to 12/31/20.

Board of Appeals – September 17, 2020

Lexington 107 LLC – 107 Lexington Avenue.

Ms. McKnight stated she drove by the site. The plans are included in the packet. The 2 car part of the garage will stick out from the house. The 3rd garage will be back about 2 feet from the other garages. All the garages are out front and there are no other 3 car garages in the neighborhood. She commented she personally she does not like this. She would like to say the Planning Board is not in favor of a 3rd garage in this configuration. A discussion ensued. Mr. Alpert stated the Board could comment they request the Zoning Board of Appeals (ZBA) give special consideration to how the aesthetic presentation of this design would fit in with the neighborhood. All agreed.

Upon a motion made by Mr. Jacobs, and seconded by Mr. Alpert, it was by a roll call vote of the five members present unanimously:

VOTED: to comment the Board requests the ZBA give special consideration to how the aesthetic presentation of this design would fit in with the neighborhood.

Baker's Best, Inc. – 150 Gould Street.

Ms. McKnight noted she drove by this site and parked in the lot. There are not a lot of parking spaces. The relief requested is for 10 spaces for a take-out counter. The applicant wants to allow people to pick up food. She asked if take-out should be considered a temporary approval or a temporary waiver. Ms. Newman stated there was no specific information on parking. The ZBA would be considering that. Ms. McKnight asked if the Board could suggest relief on a temporary basis. Mr. Alpert stated they are doing this now on a temporary basis via the Select Board and it is about to expire. Presently this is a COVID related request. He is not sure the Board has any authority for temporary special permits. Ms. McKnight commented there ~~were~~are single family homes across the street.

Mr. Block noted the applicant is the sole tenant of the building. The ZBA will look at the parking. The Select Board and Planning Board have been supporting small businesses in town with relief during this time. Mr. Alpert noted they could ask the ZBA that if the relief granted is not temporary they give special consideration to the effect any additional traffic would have on the neighborhood that abuts this property. He has no problem if the ZBA can give a temporary permit. Ms. McKnight would like to add parking to that.

Upon a motion made by Mr. Jacobs, and seconded by Mr. Alpert, it was by a roll call vote of the five members present unanimously:

VOTED: to ask the ZBA that if the relief granted is not temporary they give special consideration to the effect any additional traffic and parking would have on the neighborhood that abuts this property.

Second Street DE, LLC – 100-124 Second Avenue.

Upon a motion made by Mr. Jacobs, and seconded by Mr. Alpert, it was by a roll call vote of the five members present unanimously:

VOTED: "No comment."

Minutes

Planning Board Minutes September 8, 2020

There were no minutes in final form to approve.

Correspondence

Ms. Newman stated she copied the Board members on correspondence to the Town Clerk regarding a request for withdrawal without prejudice for 770 Chestnut Street LLC. This withdrawal was contingent upon getting a letter from the applicant. She did not receive a letter and reached out to the applicant. She notified the Town Clerk the application for withdrawal without prejudice has thus been denied.

Report from Planning Director and Board members

Mr. Alpert stated he is the Planning Board representative to the Community Preservation Committee and he reviewed the CPC warrant articles. There are 2 articles from 2 churches with requests for Historic Preservation Funds. The First Baptist Church is requesting \$92,000, which is one third of the project cost. He has recused himself from this. The second is a request for \$25,000 from the First Parish Church to do repair work to the steeple. He noted this is actually a bell tower with a Paul Revere Bell. He is not sure this is preservation but perhaps regular maintenance. He needs to be convinced it is a preservation. The Community Farm is requesting \$10,000 due to COVID, and there is also a request for \$150,000 to help fund emergency rental assistance to be provided by the Town.

Mr. Alpert noted there are 2 articles by-for Park and Recreation project funding. One request is for Claxton Field lighting and skin renovations for the infields. DeFazio Field Park and Recreation also wants to resurface the DeFazio Field track. There has been pushback for residents for more rental assistance and not for Park and Recreation. He feels Park and Recreation is using this seeking CPA funds rather than going to the Town for funds. The Committee is running low on funds. He noted the Town will be requesting substantial funds for Emory Grover rehabilitation/preservation. Mr. Block asked if the Planning Director was aware of Park and Recreation using conservation funds for their piggy bank and not general funds. Ms. Newman was not aware. Mr. Block stated the Board should speak with Park and Recreation or the Finance Committee to see what is going on. It would be worthwhile to check this.

Ms. McKnight stated she looked at how the town spends their funds since the law changed in Affordable Care Community Preservation Act funding. This was changed to allow funding for outdoor athletic facilities. Hardly any money is used for athletic facilities open space land now but a lot to various athletic fields. She would support Mr. Alpert voting against Park and Recreation funding as there are other town needs coming up. She feels Mr. Alpert's vote would speak for the Planning Board. Mr. Alpert described the way the funding works. All the money for Park and Recreation has come out of the general bucket but it is taking away funds that could be used for affordable housing and historic funding.

Mr. Alpert noted the Planning Board was going to put together a Tree By-Law when he was first on the Board. They set up a Tree By-Law Committee and it seems to have been stopped. He noted there is a lot on the corner of Country Way and Central Avenue that has been clear cut with not a single tree left. He wants to see if the Tree By-Law Committee can be revived and put back on track. He explained the concept of the Tree By-Law. This would discourage developers from taking down a lot of mature trees. They would have to leave some mature trees. This would be for homeowners also. People would have to fund into a fund if they take down trees beyond a certain level.

Ms. Newman noted she met with GPI-Greenman-Pederson Inc. and Town Engineer Anthony DelGaizo this morning. They are in the process of the traffic study the Planning Board requested for the Industrial-1 land at the corner of Highland Avenue and Gould Street. The build out at 1.35 FAR is Planning Board Minutes September 8, 2020

evenly split between corporate office and research and development with 15% for ancillary ~~retain~~retail. They are using data the Town collected and state information. That piece should be done within 30 days. They will be looking at trip generation for commercial uses described versus a combination of commercial and destination retail. ~~Ms. McKnight noted there was going to be a study of residential uses in Highway Commercial 1. Ms. Newman stated there will be 3 scenarios and trip generation will be assessed for all three.~~

Mr. Block stated the Town is looking to implement a shop local, dine local campaign. He will bring this up at the Council of Economic Advisors (CEA) meeting tomorrow morning. ~~Ms. McKnight noted there was going to be a study of residential uses in Highway Commercial 1. Ms. Newman stated there will be 3 scenarios and trip generation will be assessed for all three.~~ Mr. Block noted he is the President of the Needham Heights Neighborhood Association. He was approached by LCB's Attorney Roy Cramer to see if ~~they~~ NHNA would be interested in hosting a meeting focused on the proposed rezoning of the Carter Mill property. LCB would like to participate. They have begun marketing outreach. The meeting will be held Monday, 9/14/20, at 7:00 p.m. via Zoom. There will be a presentation with questions and answers. He welcomes Planning Board participation. Mr. Alpert stated the Board should authorize Mr. Block to speak on behalf of the Planning Board if there are any questions for the Planning Board. Mr. Block noted he has no issue with that but may take the question and follow up with the Planning Board if technical or legal issues are brought up.

Upon a motion made by Mr. Alpert, and seconded by Mr. Jacobs, it was by a roll call vote of the five members present unanimously:

VOTED: to adjourn the meeting at 9:05 p.m.

Respectfully submitted,
Donna J. Kalinowski, Notetaker

Paul Alpert, Vice-Chairman and Clerk

NEEDHAM PLANNING BOARD MINUTES

September 22, 2020

The Planning Board Virtual Meeting using Zoom was remotely called to order by Jeanne McKnight, Chairman, on Tuesday, September 22, 2020, at 7:15 p.m. with Messrs. Jacobs, Alpert, Owens and Block, as well as Planning Director, Ms. Newman and Assistant Planner, Ms. Clee.

Ms. McKnight took a roll call attendance of people expected to be on the agenda. She noted this is an open meeting that is being held remotely because of Governor Baker's executive order on March 12, 2020 due to the COVID Virus. All attendees are present by video conference. She reviewed the rules of conduct for zoom meetings. This meeting has no public hearings and she does not expect public participation. She noted if any votes are taken at the meeting the vote will be conducted by roll call.

Upon a motion made by Mr. Block, and seconded by Mr. Jacobs, it was by a roll call vote of the five members present unanimously:

VOTED: to automatically continue the meeting to 10/6/20 at 7:15 p.m. with the same zoom ID number if any technical difficulties arise that keep the Planning Board from continuing this meeting tonight.

Request to discuss changes to the approved plan as well as request for Temporary Occupancy: Amendment to Major Project Site Plan Special Permit No. 2016-01: 57 Dedham Ave LLC, 471 Hunnewell Street, Needham, MA, Petitioner (Property located at 15 & 17 Oak Street, Needham, MA).

George Giunta Jr, representative for the applicant, noted this is a 12,000 plus square foot mixed use building with commercial on the first floor and 5 residential units on the second floor and the half story above. The project was approved for 30 underground parking spaces. The project is nearly complete. The building is complete and the infrastructure is essentially done. Landscaping needs to be put in and a handicap ramp. As part of construction there were a couple of deviations. He showed the approved plan. There were 13 parking spaces behind the building and a proposed transformer at the right front corner of the property line. NStar disagreed with the location, put the transformer on the other side and required a pole. The applicant had hoped to put the electrical underground but NStar did not like that and did not allow it. The applicant was made to put a pole and the electrical will run across the street to the pole.

Mr. Giunta Jr. noted there are 14 parking spaces in the back of the building today as some spaces were reconfigured. The spaces start at the beginning of the building where the sidewalk would have been that connected the rear to the front of the building. With the location NStar put the transformer there is room to put landscaping. Some arborvitae has already been put in to help screen it. This is a deviation from the original plan. Ms. McKnight stated she walked around the site with Mr. Tedoldi today. The decision says the first floor is exclusively commercial and the second and third floors are residential. The second floor is partially commercial and partially residential. This seems to be a discrepancy. Michael Tedoldi, Applicant, noted that was the plan that was always in front of the Planning Board. Ms. Clee, Assistant Planner, noted an amendment was done that completely replaced the first decision and has commercial on the second floor.

Mr. Owens stated he has no questions or objections to the changes. Mr. Jacobs and Mr. Block agreed. Mr. Block commented the project looks good and is well designed. Mr. Alpert stated his only question is the removal of the sidewalk. There are 14 spaces above ground and 30 spaces underground. He asked who will use the 14 above ground spaces. If they are for patients he is a little concerned with no sidewalk, particularly at night. It is ok if it is only for the residents. Mr. Tedoldi noted the main entrance is in the rear with the parking area. The ramp in front is superfluous and misleading to handicapped people. There is no place for them to go from the front entrance. He would prefer to remove the ramp and put in more landscaping. Everyone should come in the back of the building where the ramp, main lobby and elevator are.

Ms. Newman asked if there would be issues with ADA compliance if the ramp is removed. Mr. Tedoldi stated no, the project was all set with the access in the back. The front will be egress for first floor tenants only. The

project will meet building code and the ramp could always be put in at a later date if necessary. Mr. Alpert suggested the Planning Director and applicant consult with the Building Inspector about building code and ADA requirements. If the Building Inspector is ok with it and determines the ramp is not needed, the applicant can come back for a minor modification to remove the ramp. Mr. Alpert asked if the purpose of the ramp on Oak Street was to allow for people getting dropped off and picked up. Mr. Tedoldi noted he does not anticipate anyone being dropped off or picked up on Oak Street. Ms. McKnight stated it is a nice building and an enhancement to the neighborhood and town. The sidewalk is an issue with the Town. The Town does not even know where the sidewalk should be on Oak Street so it has been difficult for this developer. Ms. McKnight reviewed the requested changes.

Upon a motion made by Mr. Alpert, and seconded by Mr. Jacobs, it was by a roll call vote of the five members present unanimously:

VOTED: to consider the movement of the transformer, the installation of a utility pole, the increase of above ground parking from 13 spaces to 14 spaces and the removal of the sidewalk next to the building as de minimis changes.

Upon a motion made by Mr. Alpert, and seconded by Mr. Jacobs, it was by a roll call vote of the five members present unanimously:

VOTED: to approve the change of relocation of the transformer as shown on the As-Built plan, relocation of the utility pole as shown on the As-Built plan, removal of the sidewalk on the side of the building and the addition of a 14th parking space in the rear of the building.

Ms. Newman asked if the Board wanted to see a landscape plan if the ramp in front is eliminated. Ms. McKnight stated the Board would like to see a plan. The applicant should get assurance from the Building Inspector then come back with a landscape plan for a de minimis change. Mr. Giunta Jr. stated there is one residential tenant for one spot on the second floor. They are asking for a partial Occupancy Permit for the residential units only. Ms. Newman clarified the applicant is looking for approval for a temporary partial Occupancy Permit. She is still waiting for the As-Built landscaping plan and an estimate of unfinished and work items, inspection by engineering, sign off from the Building Inspector that the garage and elevator are available and certifications from architects. When she has those components, and the needed money to guarantee the remaining items, she can issue the temporary.

Mr. Tedoldi stated he does not know how long he will need. Things have been tabled with COVID. He is not sure how the Building Inspector will deal with this. He noted the site work will be 100% done before he asks for the inspection and 95% of the landscaping is done. The only thing not done is the sidewalks. Mr. Giunta Jr. stated the only question of time is the sidewalk on Oak Street and that is on the Town. He feels within 30 days the site work will be done. He believes maybe a 6 month extension with an option to extend may be best. Mr. Alpert asked if one condition is a deposit of funds. Ms. Newman noted, in the event all is not done, the Board should authorize her to get an estimate of the cost for the remaining items and add 1.35% on top of that.

Upon a motion made by Mr. Alpert, and seconded by Mr. Jacobs, it was by a roll call vote of the five members present unanimously:

VOTED: to authorize the Planning Director to issue a temporary Occupancy Permit for up to 6 months upon her satisfaction that the requirements set forth in the Special Permit have been fulfilled.

Special Town Meeting Zoning Articles: Town Meeting Preparation.

Mr. Block noted he sent all members a copy of an early draft without slides and has received comments. He will rebuild the presentation. He stated it seems to be consensus this is zoning one spot but is not spot zoning. Do we address this up front? The consensus seems to be no but he wants to see if it comes up. He also asked if the origination of a zoning article from a developer taints the process. He will address this if it comes up. He will restructure his outline and will focus on what they are doing and why. Mr. Owens stated he needs to hit the salient points in the beginning. He gave his feedback to Mr. Block. Mr. Alpert agreed with Mr. Owens. He feels he should say that the Planning Board supports this unanimously. He needs to add "unanimously."

Mr. Jacobs will look at the next draft and give comments. He would deemphasize spot zoning. He feels he should not talk about the developer aspect at the beginning or maybe not at all. The same issue happened at the Transit Oriented site. He would deal with it within the presentation. Some people will think it is a problem but it is not relevant. The key is if the changes are good for the town. Mr. Block is talking about zoning changes that would allow the project and the project is subject to Special Permit requirements. Ms. McKnight feels there is no need to bring up spot zoning or talk about developers. The project has been through hearings and been reviewed with the applicant by the Finance Committee. The Selectboard supports this. She feels it is worth verbalizing this. She feels Mr. Block should also note the 4th story will be set back and not visible from the street. Mr. Block intends to show renderings of the 4th story.

Ms. McKnight noted the number of affordable units should be mentioned and Mr. Jacobs agreed. Evans Huber, attorney for the applicant, noted Margaret Murphy will put together a taped presentation but he is not sure when that would be used. Ms. Newman stated that would come out of the Planning Board's 15 minutes. Mr. Owens advised against Ms. Murphy speaking if she is on the payroll of the developer and a Town Meeting member. This is a Planning Board article that we are sponsoring and presenting. He would not give any of our time to the developer. Ms. Newman explained how the setup would be for this Town Meeting. The Planning Board will sit in the front row with Mr. Jacobs at the aisle as a non-Town Meeting member. She will post a meeting prior to Town Meeting in case there are issues. There will be a specific area for the developer in case questions come up. Mr. Huber stated he will not be attending the meeting in person but will be watching remotely.

Mr. Owens stated nothing should be referred to the developer if questions arise. Mr. Jacobs agreed. Ms. Newman will not be at Town Meeting but will be watching and available by text and phone. Mr. Block will confer with colleagues if questions arise and he does not know how to respond. Mr. Jacobs will not be attending but will be watching on tv and be available by phone. The Board had a short discussion regarding questions that may arise and how to deal with them.

Minutes

Ms. McKnight noted a typo on the 7/7/20 minutes on page 5. Retail is missing the "l" at the end.

Upon a motion made by Mr. Block, and seconded by Mr. Jacobs, it was by a roll call vote of the five members present unanimously:

VOTED: to accept the minutes of 7/7/20 with the typo correction.

Upon a motion made by Mr. Block, and seconded by Mr. Alpert, it was by a roll call vote of the five members present unanimously:

VOTED: to accept the minutes of 7/21/20.

Correspondence

Mr. Alpert asked if the minutes could be finalized and sent to him via email. Ms. Clee stated she has not been having things signed during this time. Ms. Newman noted Century Bank is going into the Anton Cleaner's space. They were going to have an ATM but now there will only be a window for a teller. She asked how this would be permitted. Is it accessory with a special permit? The transactions are being done inside the building. People will walk up to the window and it is not accessible by motor vehicle. Mr. Jacobs noted it is part of the principal use. Mr. Owens agreed.

Ms. McKnight noted correspondence from the Planning Director regarding 225 Highland Avenue. A different tenant is coming in to where Gymboree used to be. There are slightly different hours and services with more staff. This will impact parking requirements and need a waiver of more parking. Could this be a minor modification? Ms. Newman noted the applicant was trying to get the permit transferred saying it was similar but the increased staff would need increased parking and a waiver. Mr. Alpert stated this needs to be a formal process. His question is if the applicant needs to start from scratch for a special permit. Ms. Newman feels the

applicant would be better served doing that. Mr. Jacobs stated he would advise them to start fresh but if they want to go the other route he would listen. Ms. Newman noted a straight transfer would trigger a special permit. All members agreed the applicant should be given the choice.

Ms Newman informed the Board the Zoning Board of Appeals denied the third garage case and granted Baker's Best eating place a permit for 2 years.

Upon a motion made by Mr. Alpert, and seconded by Mr. Jacobs, it was by a roll call vote of the five members present unanimously:

VOTED: to adjourn the meeting at 9:20 p.m.

Respectfully submitted,
Donna J. Kalinowski, Notetaker

DRAFT

NEEDHAM PLANNING BOARD MINUTES

October 4, 2020

The Planning Board Virtual Meeting using Zoom was remotely called to order by Jeanne McKnight, Chairman, on Sunday, October 4, 2020, at 11:30 a.m. with Messrs. Jacobs, Alpert, Owens and Block, as well as Planning Director, Ms. Newman and Assistant Planner, Ms. Clee.

Ms. McKnight noted they are preparing for the Special Town Meeting. There is a seating chart provided with the location of the seats. Ms. Newman will be available by conference call as will Mr. Jacobs. She has not heard of any amendments proposed. Mr. Owens stated he is not aware of any requests for affordable units for the assisted living or memory care units. Ms. McKnight noted that can be addressed during the special permit process. Ms. McKnight noted she wants to have the 2 articles considered together. Ms. Newman stated the Chair needs to ask the Moderator to discuss together and vote separately. Ms. Newman spoke to him about it.

Mr. Alpert stated Mr. Block feels the Finance Committee seemed to focus more on the developers than the zoning article. He should deflect those questions. He could say this is a zoning article and the developer may apply but there are no guarantees. Mr. Block stated that is correct. The Finance Committee referred more to the developers than the Article itself. The By-Law change has been on 5 agendas since May so there has been ample opportunity for input and questions. Mr. Owens understood the recommendation from the Finance Committee is the 2 Articles be adopted. He does not anticipate questions.

Mr. Block noted the Article 17 resolution. It is a Citizen's Petition dealing with racism in town. He hears it will be referred back to the Selectboard and part is systemic racism with regard to zoning. Mr. Jacobs stated he understands the Selectboard's request was only partially stated by Mr. Block. They want questions referred to the Selectboard with the understanding the Selectboard will bring it back to the next Town Meeting in May. Ms. McKnight fears the vote to refer back would be perceived as a negative vote and feels they should just support the article. Mr. Owens stated the reference to planning is that there is a certain segment of opinion that the whole issue of single family housing zoning is racist. They feel it is a social issue not a zoning issue. Personally he feels it is an extreme position and he does not believe the best way to establish racial equity and tolerance is through zoning. He feels the hidden agenda is they really want to fund the police. Some things are not given a proper airing and a proper vetting. The town needs to think about the consequences and trust the Selectboard to have a broad outreach to all parts of town.

Mr. Jacobs asked if the Planning Board wants to take a position on Article 17. He doubts the Board wants to take a position now. If it is referenced back he wants to be able to study it. Mr. Alpert agreed with Mr. Jacobs. There is a meeting scheduled for 10/15/20 for the Chairs and Vice-Chairs to meet. They could bring up the zoning portion of this so the Selectboard should consult with them. His understanding is this is just a resolution for the Planning Board to look at. Mr. Block suggested the Planning Board take a position that they unanimously oppose any form of racial discrimination and support an effort to ensure equity throughout the town. Mr. Alpert disagreed the Planning Board should take any position today. He does not feel they should speak as a Board. Ms. McKnight agreed.

Ms. McKnight noted they should discuss Articles 11 and 12. CPA funds are being requested for the Baptist Church porch and cornice and for the Unitarian Church bell tower. This is supported by the CPA and Selectboard. The Finance Committee has come out against both. They are questioning if this is the proper use of CPA funds. It came out they would only support if open to the general public. Both have general public welcome. She feels the Board should support both articles. The historic structures are on the state and local lists and rooms are used for community uses and will continue. Both are the fabric of the center of the town. Mr. Block stated the Finance Committee opposes using CPA funds for private uses on private land.

Mr. Alpert noted he is the Planning Board representative on the CPA Committee. He recused himself on the Baptist Church Article. They were discussing use of CPA funds in general. Selectman Moe Handel's presentation was carefully worded. He disagrees with the Finance Committee's position. The statute is clear

CPA funds can be used for private that meets the definition of historic and the Planning Board should support the use of CPA funds that meet the definition for CPA purposes. He feels the Board should support these 2 Articles.

Mr. Owens stated the Planning Board should not take a position. They have not discussed this at all. He would not volunteer a position. Mr. Alpert agreed. It is too rushed. Mr. Jacobs agreed.

Upon a motion made by Mr. Jacobs, and seconded by Mr. Alpert, it was by a roll call vote of the five members present unanimously:

VOTED: at 12:25 p.m. to continue to the Special Town Meeting at Memorial Field site and reconvene.

Respectfully submitted,
Donna J. Kalinowski, Notetaker

Paul Alpert, Vice-Chairman and Clerk

NEEDHAM PLANNING BOARD
TEMPORARY OUTDOOR SEATING /OUTDOOR DISPLAY POLICY

Enacted May 20, 2020,
revised August 11, 2020, ~~and~~ October 6, 2020 and November 4, 2020

Section 1 - Purpose and Scope

The 2020 COVID-19 pandemic has caused not only a public health crisis; it has also triggered a worldwide economic crisis. Public health requirements for social distancing have placed new burdens and challenges on the business community to provide more physical space between customers and staff. In an effort to respond to the new social distancing requirements, the Select Board has adopted a temporary outdoor seating policy that will allow the Town to create outdoor dining spaces on public open spaces, sidewalks, parking lots and on-street parking spaces, to create outdoor dining space opportunities for the open air consumption of takeout food and beverages from local restaurants. Initial implementation is planned for the Town Common, Needham Heights Common, and Eaton Square. This policy will be in effect until sixty days after the Declaration of Emergency is rescinded by the Governor~~until December 1, 2020~~

In an effort to further facilitate the re-opening of Needham businesses and recognizing the impacts of COVID-19, the Planning Board has approved this policy to allow additional temporary outdoor seating for restaurants and additional temporary outdoor display space for retail businesses with stand-alone entrances and exits. Restaurants may utilize available outdoor space for seating in addition to any existing approved interior restaurant seating and retail establishments may utilize outdoor space for display and sales in addition to interior store space. The enforcement of outdoor display requirements or prohibitions, take-out service requirements or prohibitions, outdoor seating limitations, and minimum parking standards as contained within any special permit applicable to the restaurant or retail establishment is hereby suspended to enable the above-described activities subject to the following guidelines. This policy will be in effect up to and including the sixtieth day after the Declaration of Emergency is rescinded by the Governor~~December 1, 2020~~.

Section 2 – Guidelines

All temporary outdoor seating areas and display areas must adhere to the following:

- A. Must comply with provisions of Executive Orders issued by the Governor to State, County, and Town entities, and the Centers for Disease Control and Prevention (CDC) guidelines for social distancing.
- B. Must comply with all Massachusetts and Town of Needham Health Department requirements.

- C. Must comply with all applicable Fire Department regulations and must not impede Police or Fire access.
- D. Must comply with the Massachusetts Division of Alcoholic Beverages & Tobacco consumption on premises requirements.
- E. Must not negatively impact ingress/egress to the building or property; safe ingress and egress shall be provided to the property and building, including emergency access measures at all times.
- F. Must have received the written approval of the Town Manager's office and the Needham Health Department having demonstrated compliance with applicable health and safety regulations. Some parking, including handicapped parking if required, remains available for the restaurant and adjacent businesses (if applicable).
- G. If located within a parking area, a temporary physical barrier must be placed separating the outdoor seating area or display area from the remaining parking.
- H. All tables in temporary outdoor seating areas and display areas shall be located a safe distance from drive aisles, usable parking, and so as to maintain proper distancing from usable parking.
- I. All temporary outdoor seating areas on property owned or leased by a restaurant and temporary retail display and/or sale areas on property owned or leased by a retail establishment, and all such seating areas and display/sale areas on other private or public property licensed to the restaurant or retail establishment for such purposes, and adjacent open areas and/or parking lots, must be maintained clean of litter.
- J. If a restaurant is not the property owner or lessee of the areas intended to be used for the temporary additional outdoor seating area or if the retail establishment is not the owner or lessee of the areas intended to be used for the temporary retail display and/or sale area, then written permission from the property owner must be obtained prior to approval and installation.
- K. If the outdoor seating area or retail display area is to be located upon property of the Town of Needham (e.g. sidewalks, on-street parking spaces, public parking areas adjacent to the restaurant or retail establishment), the use of such area must have received the written approval of the Town Manager's office.

Section 3 – Amendments

This policy may be amended by a majority vote of the members of the Planning Board.

Section 4 – Effective Date

This policy was adopted at a regular meeting of the Planning Board on May 20, 2020 and became effective as of that date. It was revised to extend the effective date at the Planning Board meeting of August 11, 2020, and again October 6, 2020 and November 4, 2020.